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FINAL CORRECTIVE MEASURES STUDY FOR SOLID WASTE MANAGEMENT UNITS 8, 9, 11 AND 51 REVISION 2 NS MAYPORT FL
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January 24, 2014

Project Number 112G00436

Naval Facilities Engineering Command, Southeast
ATTN: Mr. Dana Hayworth (OPC 6)
Remedial Project Manager
135 Ajax Street North
Naval Air Station Jacksonville
Jacksonville, FL 32212-0030

Reference: CLEAN IV Contract Number N62467-04-D-0055
Contract Task Order Number 0033

Subject: Final Corrective Measures Study, Revision 2, for Solid Waste Management Units 8, 9, 11, and 51
Naval Station Mayport, Jacksonville, Florida

Dear Mr. Hayworth:

Tetra Tech is pleased to submit the final Corrective Measures Study, Revision 2, for Solid Waste Management Units 8, 9, 11, and 51 at Naval Station (NAVSTA) Mayport, Jacksonville, Florida that was prepared for the United States Navy, Naval Facilities Engineering Command Southeast under CTO 0033 for the Comprehensive Long-term Environmental Action Navy (CLEAN) IV Contract Number N62467-04-D-0055.

If you have any questions with regard to this submittal, please do not hesitate to contact me by telephone at (904) 730-4669, extension 215, or via e-mail at Gregory.Roof@tetratech.com.

Sincerely,

Gregory S. Roof
Project Manager

GSR/lc

Enclosure

c: John Winters, FDEP (electronic only)
Paul Malewicki, NAVSTA Mayport (1 hardcopy, 1 CD)
Debra Humbert, Tetra Tech (Letter only)
RDM, Tetra Tech (1 unbound, 1 CD)
CTO 0033 Project File

Comprehensive Long-term Environmental Action Navy

CONTRACT NUMBER N62467-04-D-0055

Rev. 2
01/24/14

Correctives Measures Study

Solid Waste Management Units 8, 9, 11, and 51

Naval Station Mayport
Jacksonville, Florida

Contract Task Order 0033

January 2014

NAVFAC
Naval Facilities Engineering Command
NAVFAC SOUTHEAST
NAS Jacksonville
Jacksonville, Florida 32212-0030

TETRA TECH

FINAL
CORRECTIVE MEASURES STUDY
FOR
SOLID WASTE MANAGEMENT UNITS 8, 9, 11, AND 51

NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

Submitted to:
Naval Facilities Engineering Command
Southeast
NAS Jacksonville
Jacksonville, Florida 32212-0030

Submitted by:
Tetra Tech
661 Andersen Drive
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CONTRACT NUMBER N62467-04-D-0055
CONTRACT TASK ORDER 0033

JANUARY 2014

PREPARED UNDER THE SUPERVISION OF:	APPROVED FOR SUBMITTAL BY:
GREGORY S. ROOF, P.E. PROJECT MANAGER TETRA TECH JACKSONVILLE, FLORIDA	DEBRA M. HUMBERT PROGRAM MANAGER TETRA TECH PITTSBURGH, PENNSYLVANIA

Naval Facilities Engineering Command

The professional opinions rendered in this decision document identified as the *Corrective Measures Study for Solid Waste Management Units 8, 9, 11, and 51, Naval Station Mayport, Jacksonville, Florida*, dated January 24, 2014, were developed in accordance with commonly accepted procedures consistent with applicable standards of practice. This document was prepared under the supervision of the signing engineer and is based in part on information obtained from others. If conditions are determined to exist differently than those described in this document, then the undersigned professional engineer should be notified to evaluate the effects of any additional information on the project described in this document.

January 24, 2014
Gregory S. Roof, P.E.
Professional Engineering Number 50842
Tetra Tech Engineering Number 2429

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ACRONYMS AND ABBREVIATIONS

ABB-ES	ABB Environmental Services, Inc.
AOC	area of concern
BAP	benzo(a)pyrene
bls	below land surface
BSV	background screening value
CAMP	Corrective Action Management Plan
CAO	Corrective Action Objective
CMIP	Corrective Measures Implementation Plan
CMS	Corrective Measures Study
COC	contaminant of concern
COI	contaminant of interest
CTL	Cleanup Target Level
ESA	Environmental Science Associates, Inc.
F.A.C.	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FID	flame ionization detector
FRCSE	Fleet Readiness Center Southeast
GCTL	Groundwater Cleanup Target Level
GIR	General Information Report
HSWA	Hazardous and Solid Waste Amendments
IM	interim measure
ISV	In Situ Vitrification
LDR	land disposal restriction
LTM	long-term monitoring
LUC	land use control
LUCIP	Land Use Control Implementation Plan
µg/kg	microgram per kilogram
µg/L	microgram per liter
MCS	media cleanup standard
MCO	Media Cleanup Objective
mg/kg	milligram per kilogram
mg/L	milligram per liter
NAVFAC SE	Naval Facilities Engineering Command Southeast
NAVSTA	Naval Station
O&M	operations and maintenance

ACRONYMS AND ABBREVIATIONS (CONTINUED)

OSHA	Occupational Safety and Health Administration
OVA	organic vapor analyzer
OWTP	Oily Waste Treatment Plant
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
POTW	Publicly Owned Treatment Works
PPE	personal protective equipment
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RMO	Risk Management Option
SCTL	Soil Cleanup Target Level
SERMC	Southeast Region Maintenance Command
SVOC	semivolatile organic compound
SWMU	Solid Waste Management Unit
TPH	total petroleum hydrocarbons
TSDF	Treatment, Storage, and Disposal Facility
USEPA	United States Environmental Protection Agency
UST	underground storage tank
UV	ultraviolet
VOC	volatile organic compound

EXECUTIVE SUMMARY

A Corrective Measures Study (CMS) was conducted for Solid Waste Management Units (SWMUs) 8, 9, 11 and 51 at Naval Station (NAVSTA) Mayport in Jacksonville, Florida, by the United States Navy, Naval Facilities Engineering Command Southeast pursuant to the Resource Conservation and Recovery Act (RCRA). This CMS was conducted in accordance with the Hazardous and Solid Waste Amendments (HSWA) Permit FL9 170 024 260, revised and reissued by the Florida Department of Environmental Protection (FDEP) on August 17, 2009. The HSWA/RCRA 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:

1. The RCRA Facility Assessment (RFA) identifies SWMUs, evaluates the potential for releases of contaminants, and determines the need for future investigations.

2. The RCRA Facility Investigation (RFI) then determines the nature, extent, and fate of contaminant releases.

3. The CMS identifies and recommends measures to correct the releases.

The RFA Report for NAVSTA Mayport was issued in September 1989. The RFI Report for Group II, including SWMUs 8, 9 and 11, was issued in January 1996. The RFI Addendum Report for SWMUs 8, 9, 11 and 51 was issued in June 2012. This report presents the results of the CMS including the following:

- Determination of the Media Cleanup Objectives (MCOs) using the recently approved regulation Chapter 62-777, Florida Administrative Code.
- Selection of contaminants of concern (COCs).
- Determination of areas and volumes of impacted media exceeding the MCOs.
- Development, screening, and evaluation of corrective measure alternatives.
- Recommendation of corrective action to address contaminated media.

This CMS Report contains the results of the identification, screening, and evaluation of corrective measure alternatives for all media at the following sites:

- SWMU 8, Oily Waste Treatment Plant (OWTP) Percolation Pond
- SWMU 9, OWTP
- SWMU 11, Fuel Spill Area
- SWMU 51, Waste Oil Tanks

SWMU 8 – OWTP Percolation Pond

SWMU 8 is located in the northern portion of NAVSTA Mayport, situated between the airstrip and the southern shore of the St. Johns River. It is located on the southeastern boundary of SWMU 9 and the northwestern boundary of SWMU 10. SWMU 8 consists of a former OWTP effluent percolation pond that operated from 1979 until 1994. The pond was approximately 1,575 square feet in size with earthen berms approximately 5 feet above grade (ABB Environmental Services, Inc. [ABB-ES], 1996).

Until 1988, the percolation pond was unlined. Following an overflow of oily waste to the pond in 1988, the pond was emptied, cleaned out, and a liner consisting of 1 foot of gravel covered with 6 inches of compacted clay was added to the pond. In September 1992, a concrete plug was placed in a manhole that connected the discharge pipe from the percolation pond to the St. Johns River, and the wastewater was conveyed to the Station's wastewater treatment plant. This continued until 1994 while upgrades were being made to the OWTP (SWMU 9). The percolation pond was used temporarily from 1992 to 1994 for flow equalization, but was formally taken out of service in 1994 and no longer receives treated effluent (ABB-ES, 1996). Currently, the former percolation pond is covered with vegetation.

Surface Soil

No surface soil COCs were identified for SWMU 8 under either an industrial or a residential exposure scenario. The No Action alternative is recommended for surface soil at SWMU 8.

Subsurface Soil

No subsurface soil COCs were identified for SWMU 8 under either an industrial or a residential exposure scenario. The No Action alternative is recommended for subsurface soil at SWMU 8.

Groundwater

The results from monitoring well MPT-08-MW21S exceeded the Groundwater Cleanup Target Level (GCTL) of 300 micrograms per kilogram (µg/kg) for iron as well as the NAVSTA Mayport background value of 494 µg/kg. Iron was identified as a groundwater COC at SWMU 8. The alternative recommended for SWMU 8 groundwater is land use controls (LUCs) and monitoring.

SWMU 9 – OWTP

SWMU 9 is located in the northern portion of NAVSTA Mayport, situated between the airstrip and the southern shore of the St. Johns River. It lies adjacent to the northwestern boundary of SWMU 8. SWMU 9 consists of the OWTP that was constructed in 1979 to treat bilge water and other oily wastes generated at NAVSTA Mayport. The OWTP has remained in continuous operation since construction. Influent to the OWTP consists of ships' bilge water from which the oily fraction is separated by the OWTP process described in Section 3. After treatment, the system originally discharged effluent to the OWTP percolation pond (SWMU 8). The percolation pond was closed in 1994, and the discharge was rerouted to the main wastewater treatment plant.

The only reported release of contaminants from SWMU 9 was caused in 1988 by operator error in which oil was released to the OWTP Percolation Pond (SWMU 8). The RFA determined that the permeability of the soils in the area, the potential for leaks from underground or aboveground systems, the wastes managed in the system, and the presence of hazardous materials in the influent had the potential for impacts to soil and groundwater at SWMU 9 (Kearney, 1989). The treatment facility at SWMU 9 is currently in operation.

Surface Soil

The results from one surface soil sample (MPT-09-SB03) exceeded residential Soil Cleanup Target Levels (SCTLs) of 0.1 mg/kg for benzo(a)pyrene (BAP) and BAP equivalents at SWMU 9. The one sample location is included in the subsurface soil recommendations due to proximity and contaminants.

Subsurface Soil

Results from three subsurface soil samples (MPT-09-SB05, MPT-09-SB09, and MPT-09-SB14) exceeded the SCTLs for the polynuclear aromatic hydrocarbons (PAHs), naphthalene (55 milligrams per kilogram [mg/kg]), and 2-methylnapthalene (210 mg/kg). The results from one subsurface soil sample (MPT-09-SB03) exceeded the SCTL of 0.1 mg/kg for BAP and BAP equivalents at SWMU 9. Naphthalene, 2-methylnaphthalene, BAP, and BAP equivalents are identified as COCs in soil at SWMU 9. The alternative recommended for SWMU 9 soil is LUCs and LUC monitoring.

Groundwater

The results from one monitoring well (MPT-09-MW06S) exceeded the GCTLs for iron (300 µg/kg) and manganese (50 µg/kg) as well as the NAVSTA Mayport background screening values of 494 µg/kg and 141 µg/kg, respectively. The results from monitoring well MPT-09-MW05 exceeded both the GCTL and the NAVSTA Mayport background value for iron. Iron and manganese are identified as COCs for groundwater at SWMU 9. The alternative recommended for SWMU 9 groundwater is LUCs and monitoring.

SWMU 11 – Fuel Spill Area

SWMU 11 is located in the northwestern portion of NAVSTA Mayport on the southern shore of the St. Johns River east of SWMU 51 and west of the fuel farm. SWMU 11 includes the fuel loading rack, which is used to load tanker trucks. Soil borings were advanced in the mid-1980s to assess an identified release of petroleum fuel that was anticipated to be JP-4, JP-5, or diesel marine fuel. The release was suspected to originate from the waste oil pit formerly located to the east of the fuel farm area. In 1993 and 1994, RFI field activities were conducted and included soil boring and groundwater monitoring well sampling, and additional sampling was conducted for the RFI Addendum.

Surface Soil

No surface soil sample results exceeded SCTLs; therefore, no surface soil COCs were identified for SWMU 11. The No Action alternative is recommended for surface soil at SWMU 11.

Subsurface Soil

The results from four subsurface soil samples (MPT-11-SB01, MPT-11-SB06, MPT-11-SB09, and MPT-11-SB11) exceeded the residential direct exposure (460 mg/kg), industrial direct exposure (2700 mg/kg), and leachability (340 mg/kg) SCTLs for total petroleum hydrocarbons (TPH) at SWMU 11. The COC for subsurface soil at SWMU 11 is TPH. The alternative recommended for SWMU 11 soil is LUCs and LUC monitoring.

Groundwater

No groundwater COCs were identified at SWMU 11. The No Action alternative is recommended for the groundwater at SWMU 11.

SWMU 51 – Waste Oil Tanks

SWMU 51 is located in the northwestern portion of NAVSTA Mayport on the southern shore of the St. Johns River west of SWMU 11 and to the north of SWMU 9. SWMU 51 formerly contained three waste oil underground storage tanks (USTs) (former Tanks 99, 100, and 101) from the Fuel Depot Facility (FDEP Facility Identification Number 8626008). The tanks, which were each approximately 210,000 gallons in capacity, were reportedly installed in 1954 and had been used to store oily wastewater. The three USTs were demolished under the 1998 Military Construction Project P-468. Currently, SWMU 51 is a paved parking area.

Surface Soil

The results from one sample location (MPT-51-SB02-01) exceeded the residential direct exposure and leachability SCTLs (460 mg/kg and 340 mg/kg, respectively) for TPH. The sample location is within the subsurface soil contamination boundaries and is included in the recommendation for subsurface soil.

Subsurface Soil

The results from nine subsurface soil samples (MPT-51-SB01, MPT-51-SB02, MPT-51-SB06, MPT-51-SB08, MPT-51-SB09, MPT-51-SB10, MPT-51-SB12, MPT-51-SB15, and MPT-51-SB16) exceeded the SCTLs for PAHs including 1-methylaphthalene, 2-methylnaphthalene, acenaphthene, BAP, BAP equivalents, and TPH. The COCs identified for subsurface soil at SWMU 51 are TPH and PAH constituents. The alternative recommended for SWMU 51 soil is LUCs and LUC monitoring.

Groundwater

The sampling results from one monitoring well (MPT-51-MW02S) exceeded PAH and TPH GCTLs for both groundwater and marine surface water. The alternative recommended for SWMU 51 groundwater is LUCs and groundwater monitoring.

1.0 INTRODUCTION

A Corrective Measures Study (CMS) was conducted for Solid Waste Management Units (SWMUs) 8, 9, 11, and 51 at Naval Station (NAVSTA) Mayport, in Mayport, Florida, by the Naval Facilities Engineering Command Southeast (NAVFAC SE) pursuant to the Resource Conservation and Recovery Act (RCRA). Tetra Tech, Inc. was contracted by NAVFAC SE to complete the CMS under Comprehensive Long-term Environmental Action Navy IV Contract Number N62467-94-D-0055. This report presents the results of the CMS including the following:

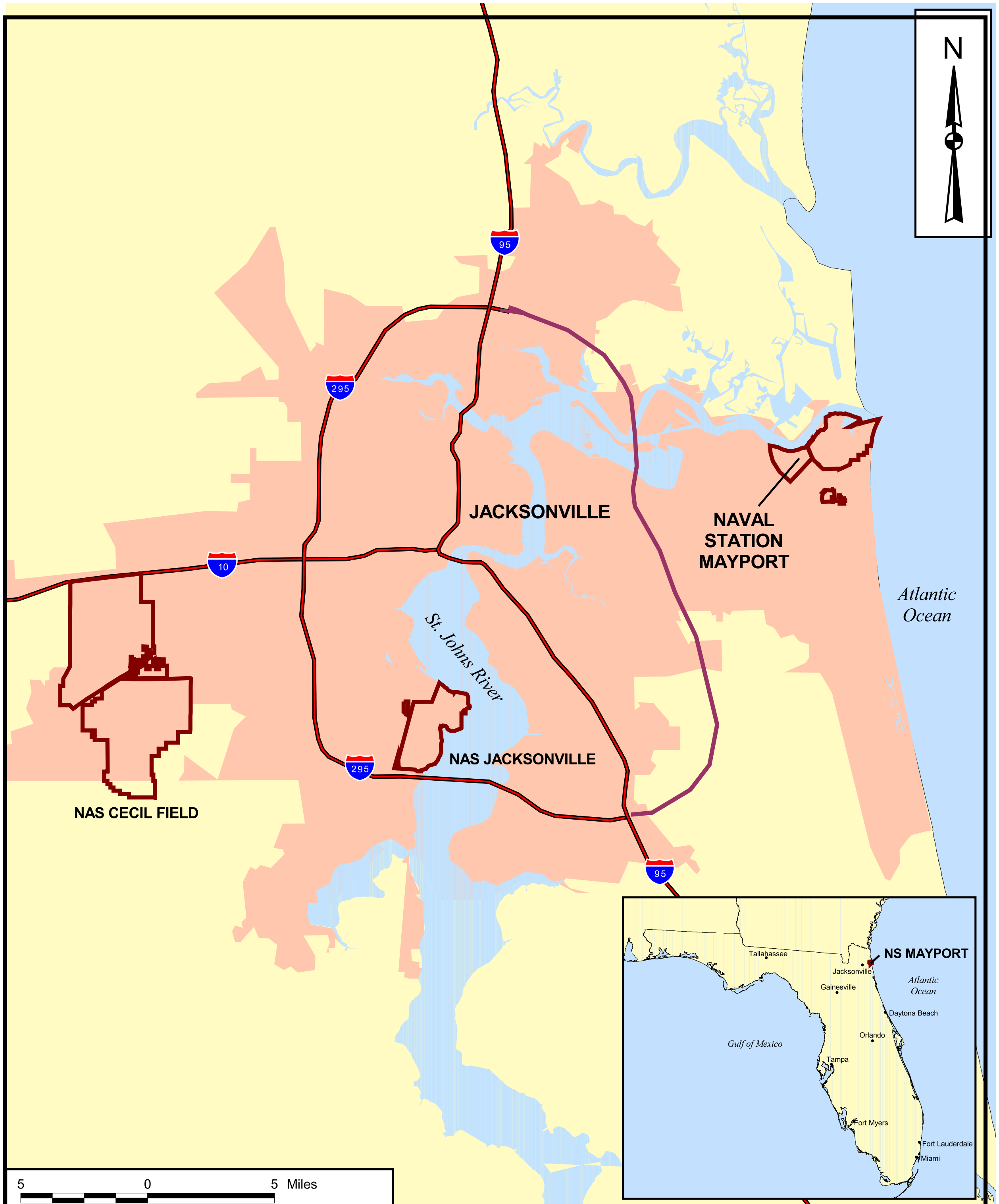
- Determination of the Media Cleanup Objectives (MCOs) using Chapter 62-777, Florida Administrative Code (F.A.C.), and NAVSTA Mayport background screening values (BSVs) (Tetra Tech, 2000; Tetra Tech, 2008).
- Selection of contaminants of concern (COCs).
- Determination of areas and volumes of impacted media exceeding the MCOs.
- Development, screening, and evaluation of corrective measure alternatives.
- Recommendation of corrective action to address contaminated media at SWMUs 8, 9, 11, and 51.

1.1 FACILITY DESCRIPTION

NAVSTA Mayport is located within the corporate limits of the city of Jacksonville, Duval County, Florida, approximately 12 miles to the northeast of downtown Jacksonville (see Figure 1-1). NAVSTA Mayport is located on the northern end of a peninsula bound by the Atlantic Ocean to the east and the St. Johns River to the north and west. The Station occupies the entire northern part of the peninsula except for the town of Mayport, which is located to the west between the Station and the St. Johns River.

NAVSTA Mayport was commissioned in 1942 on approximately 700 acres of land. The Station initially consisted of a harbor and an airfield located near the mouth of the St. Johns River. The harbor and airfield were constructed from the dredging and filling of Ribault Bay. The harbor was initially dredged to a depth of 29 feet below mean sea level and is referred to as the Mayport Turning Basin. The Mayport Turning Basin is surrounded on three sides by six ship piers/wharves (Alpha, Bravo, Charlie, Delta, Echo, and Foxtrot).

The original mission of NAVSTA Mayport included use by patrol craft, target boats, and rescue boats. The Station was placed in caretaker status from 1946 to 1948. In 1948, NAVSTA Mayport was reopened and, in 1952, an aircraft carrier was assigned to the Station. The turning basin was dredged to a depth of 40 feet to allow aircraft carriers and other large ships to berth at NAVSTA Mayport. Using dredge material to fill areas south of the turning basin increased the amount of uplands at NAVSTA Mayport.



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NAVSTA Mayport provides all necessary support services for the surface fleet and aircraft stationed at or visiting the Station including infrastructure, facility, and personnel support as well as ship and aircraft repair and maintenance.

Industrial operations conducted at NAVSTA Mayport involve intermediate level maintenance for both ships and aircraft and vehicle maintenance and repair. Maintenance activities that can be conducted without putting a ship into dry-dock are considered intermediate.

Maintenance and repair operations for ships are carried out by two organizations at NAVSTA Mayport: Southeast Region Maintenance Command (SERMC) and Fleet Readiness Center Southeast (FRCSE). SERMC conducts repair and maintenance operations onboard ships at the piers/wharves and in the SERMC operations buildings. SERMC also contracts out maintenance and repair work. Squadron personnel perform aircraft maintenance in the hangar buildings, while FRCSE conducts maintenance operations on aircraft launching and arresting systems in multiple buildings on NAVSTA Mayport.

1.2 REGULATORY SETTING AND BACKGROUND

The United States Environmental Protection Agency (USEPA) issued RCRA Permit Number H016-118598 and Hazardous and Solid Waste Amendments (HSWA) Permit Number FL9 170 024 260 to NAVSTA Mayport on March 25, 1988. Authority to issue HSWA permits was delegated to the state of Florida in November 2000. The Florida Department of Environmental Protection (FDEP) reissued and revised the HSWA permit to NAVSTA Mayport to address corrective action at the facility effective August 17, 2009.

A RCRA Facility Assessment (RFA) for NAVSTA Mayport was conducted for the USEPA Region IV in 1989 (Kearny, 1989). The RFA identified 56 SWMUs and 2 areas of concern (AOCs) at NAVSTA Mayport. These SWMUs and AOCs were included in the HSWA permit. Fifteen of these SWMUs were determined to require no further action. Twenty-three of the remaining SWMUs and the two AOCs were determined to require further assessment. The remaining 18 SWMUs (including SWMUs 8, 9, 11, and 51) were determined to require an RCRA Facility Investigation (RFI).

Because of the number of SWMUs, the diversity of their past and present operations, and the magnitude of the permit requirements, the USEPA recommended that a phased approach be used to implement the RFI and other corrective action activities at NAVSTA Mayport. A Corrective Action Management Plan (CAMP) was prepared in response to the USEPA recommendation and describes the strategy used to implement the RCRA corrective action program at NAVSTA Mayport (ABB Environmental Services, Inc. [ABB-ES], 1995b).

The corrective action program at NAVSTA Mayport described in the CAMP invoked a phased approach to assure collection of adequate site characterization data to support the selection of effective corrective measures. The structure of the corrective action program at NAVSTA Mayport is based on the establishment of four SWMU groups: Groups I, II, III, and IV, which were determined by the past use of the SWMU and geological/hydrogeological similarities. The corrective action activities at each SWMU group are being implemented in phases.

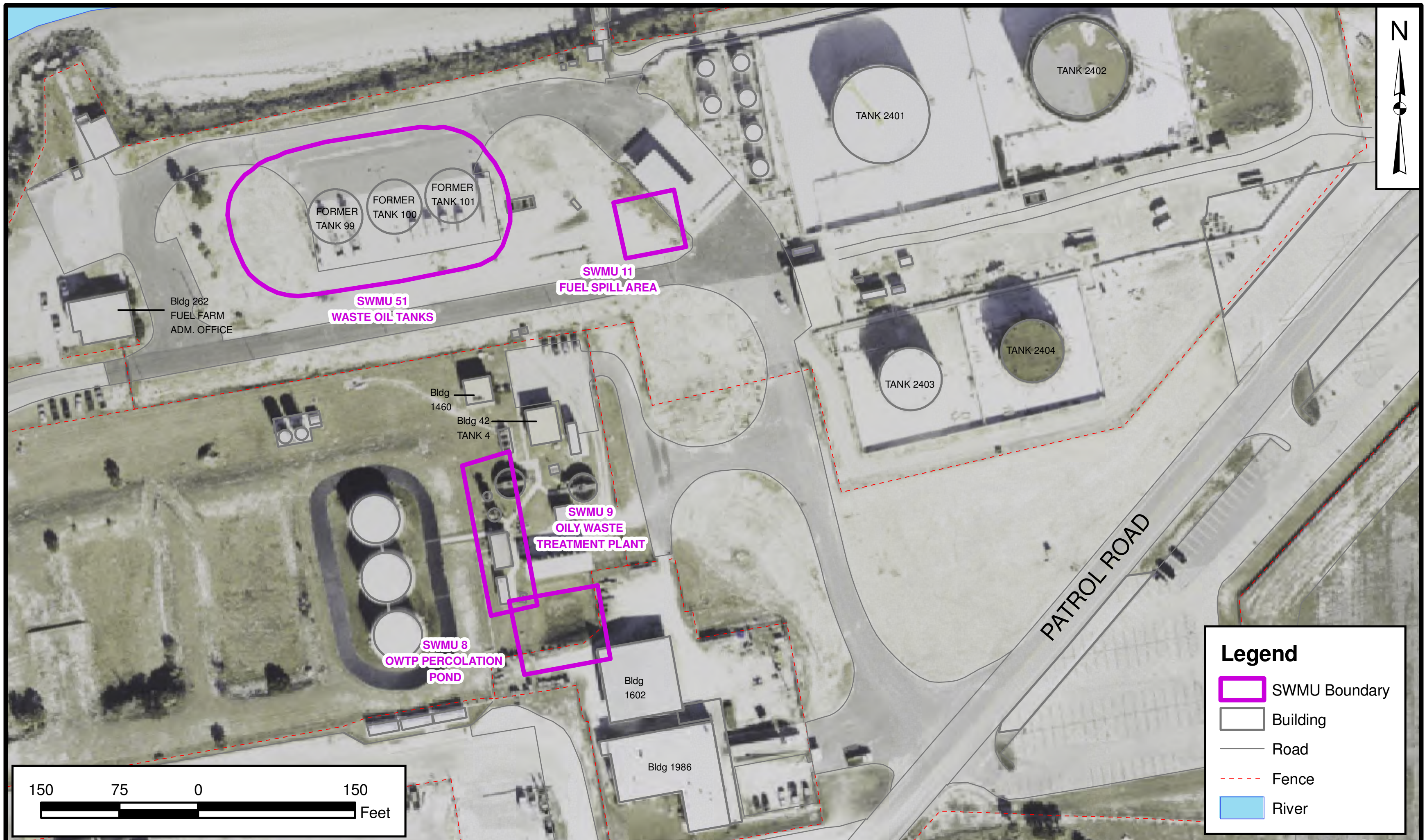
This CMS Report is for SWMUs 8, 9, 11, and 51 at NAVSTA Mayport (see Figure 1-2). The RFI Report for SWMUs 8, 9, 11, and 51 (ABB-ES, 1996) contains pertinent information about the site background, environmental setting, nature and extent of contamination, the identification of RFI COCs, seasonal or updated concentrations of contaminants in environmental media, and the results of remedial measures that have reduced or eliminated risks or exposure pathways between certain media and potential receptors for SWMUs 8, 9, 11, and 51. The RFI Addendum Report for SWMUs 8, 9, 11, and 51 (Tetra Tech, 2012) contains additional sampling results.

While information has been collected from all of the aforementioned reports to describe the current conditions of each SWMU presented in Sections 2.0 through 5.0 of this CMS, the original reports should be reviewed for complete background information.

1.3 ORGANIZATION OF THIS REPORT

This CMS Report consists of four sections that describe SWMUs 8, 9, 11, and 51; summarizes the previous investigation findings pertinent to conducting the CMS; identifies the contaminants and media that present unacceptable risk to human and ecological receptors; and evaluates and recommends a preferred alternative for addressing those risks. Section 1.0 includes a general facility description, identifies the primary sources of information, describes the physical and environmental setting of the SWMUs of interest, and presents the general methodology used in the CMS to identify contaminants and media of concern. Sections 2.0 through 5.0 describe the current conditions for each SWMU, present the evaluation and selection of COCs, identify and evaluate remedial alternatives, and select the recommended alternative for soil and groundwater at each SWMU.

Appendix A contains the CMS Data Sets for SWMUs 8, 9, 11, and 51. Appendix B contains the RFI Addendum Field Sheets. Appendix C contains the cost calculations for the corrective measures alternatives for each SWMU.



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1.4 PHYSICAL CHARACTERISTICS OF SWMUS 8, 9, 11, AND 51

A detailed description of the physical characteristics of NAVSTA Mayport including topography, demography, climate, soil types, and regional hydrogeology has been presented in Sections 1.0 and 3.0 of the NAVSTA Mayport General Information Report (GIR) (ABB-ES, 1995c). The following sections also provide summaries of the geologic and hydrologic data collected at the Group I and II SWMUs (specifically for SWMUs 8, 9, 11, and 51) that were presented in the RFI Report (ABB-ES, 1996).

1.4.1 Soils and Geology

In the areas where SWMUs 8, 9, 11, and 51 are located, 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 contour of the near-shore environments in which the dredge material was placed. The dredge material consists predominantly of fine-grained, well-sorted sands that may include marine shell fragments. Underlying the dredge materials are sediments that comprise the undifferentiated post-Hawthorn deposits. These sediments primarily consist of fairly uniform, well-sorted, fine-grained sand with a Unified Soil Classification System designation of SP (poorly graded sand). However, the undifferentiated deposits (CH [clay of high plasticity, fat clay] or MH [silt of high plasticity, elastic silt] visual classification) frequently include a very soft gray to dark gray silt clay layer that is 3 to 7 feet thick and likely represents recent estuarine deposition. This layer appears to be restricted to more landward, lower-energy depositional zones and is not found in former high-energy beach or river channel deposits. The undifferentiated post-Hawthorn deposits are likely the product of Miocene to Holocene fluvial and marine deposition and the erosion and re-deposition of Hawthorn Group sediments. The top of the Upper Hawthorn deposits was estimated to be at a depth of approximately 70 to 72 feet bls in the area of Groups I and II. Lithologically, the Hawthorn Group is quite variable and consists of calcareous, phosphatic sandy clays and clayey sands interbedded with thin discontinuous lenses of phosphatic sand, sandy limestone, limestone, and dolostone. The contact between the Hawthorn and the overlying undifferentiated Miocene and Pliocene deposits is marked by an unconformity expressed by coarse phosphatic sand and a gravel bed.

Shallow soil in the area of SWMUs 8, 9, 11, and 51 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 primarily dredge material with a minor amount of engineered fill material deposited over the last 55 years.

1.4.2 Hydrogeology

Three primary aquifer systems are recognized beneath NAVSTA Mayport (in descending order): the surficial aquifer, the Intermediate Hawthorn Aquifer, and the Floridan Aquifer System. The surficial aquifer, which extends from near the surface to a depth of nearly 100 feet bls at NAVSTA Mayport, is the first aquifer beneath SWMUs 8, 9, 11, and 51 and is the groundwater zone considered in this CMS. Depth to groundwater in this area ranges from approximately 5 to 13 feet bls. It includes all of the undifferentiated post-Hawthorn deposits (see Section 1.4.1) and consists of unconsolidated sand, shell, and clay, which vary horizontally and vertically in lithology, thickness, and permeability. It is recharged primarily by precipitation at a county-wide estimated rate of 10 to 16 inches per year. Discharge in the vicinity of NAVSTA Mayport is primarily by seepage into surface water bodies and evapotranspiration. At SWMUs 8, 9, 11, and 51, the direction of groundwater flow in the surficial aquifer is toward the St. Johns River and the Mayport Turning Basin, respectively. It has also been reported that groundwater becomes brackish below a depth of 40 feet at NAVSTA Mayport.

The surficial aquifer is underlain by the Hawthorn Aquifer. The Hawthorn Aquifer consists of sand and limestone layers interbedded with clayey sand and sandy clay. It was noted in the RFI Report that the most productive limestone layer in the upper part of the Hawthorn Aquifer is absent in the Mayport area. Thus, the Intermediate Hawthorn Aquifer may be in hydraulic contact with the surficial aquifer at NAVSTA Mayport. Overall, the Hawthorn Group is a complex aquiclude that acts as a confining bed to the underlying Floridan Aquifer. The primary recharge mechanism for the Intermediate Hawthorn Aquifer is precipitation in areas approximately 30 miles to the west of NAVSTA Mayport where the Hawthorn Group sediments occur at shallow depths. The Floridan Aquifer consists of Eocene sediments (primarily limestone) that lie approximately 400 feet below the surface at NAVSTA Mayport. This aquifer is under artesian conditions due to the presence of the overlying Hawthorn formation and is the principal source for fresh water in the area. Because the surficial aquifer is the preferred pathway for groundwater flow and contaminant migration at NAVSTA Mayport, groundwater in the Intermediate Hawthorn Aquifer and the Floridan Aquifer were not considered in the CMS.

The hydrogeology of SWMUs 8, 9, 11, and 51 was investigated during the RFA-Site Visit Report for Groups I and II and in the GIR Report (ABB-ES, 1995c). A Station-wide tidal study was performed, water levels were measured, the potentiometric surface was mapped at different points in time, aquifer conductivity testing was conducted, and aquifer material physical properties were tested. This information was presented in the RFA Report for the Groups I and II SWMUs and is summarized below for SWMUs 8, 9, 11, and 51 (ABB-ES, 1996).

1.4.3 Background Conditions

BSVs for the facility were originally calculated and presented in the RCRA GIR for NAVSTA Mayport (ABB-ES, 1995c). During review of the background data, it was determined that certain procedures used during the original background calculations were not consistent with regulatory guidelines. A recalculation of the BSVs was performed primarily to conform to newer regulatory guidance that includes specific mathematical treatment of non-detect concentrations in the data (Tetra Tech, 2000). The recalculation of the BSVs was reviewed by the FDEP in April 2001 and was determined acceptable for inorganics constituents (FDEP, 2001).

1.5 CORRECTIVE MEASURES STUDY METHODOLOGY

This CMS for SWMUs 8, 9, 11, and 51 uses the CMS process described in the CMS Work Plan (ABB-ES, 1995a) for NAVSTA Mayport with the incorporation of the newer USEPA guidance for conducting a CMS (USEPA, 1994). The purpose of the CMS is to identify, evaluate, and recommend corrective action for SWMUs that warrant such action based on the results of the RFI. The following key components were considered in identifying appropriate corrective action.

Investigation data documented in the station-wide GIR, the RFI Reports, and subsequent interim measure (IM) programs conducted at the SWMUs of concern were reviewed to gain an understanding of the SWMUs physical settings, past histories, current conditions, and future land uses. Available, validated analytical data for environmental media were assembled into a single CMS database.

Corrective Action Objectives (CAOs): CAOs are developed to specify the contaminants, media of interest, exposure pathways, and corrective action goals for a SWMU.

MCOs: MCOs are developed based on regulatory requirements, when available, site-specific risk-based factors, or other available information (e.g., leachability of contaminants from soil to groundwater). MCOs were developed based on Chapter 62-777, F.A.C., Cleanup Target Level (CTL) criteria for each medium of concern.

COCs: Contaminants detected in the media of concern were compared against promulgated regulatory standards. Those that exceed the regulatory standard (Chapter 62-777, F.A.C.) are compared with the NAVSTA Mayport background criteria. Contaminants that exceed criteria are defined as COCs and are evaluated for corrective action in the CMS.

Volumes of Media of Concern: The volumes (or areas) of media of concern at each SWMU are determined by considering the requirements for protectiveness as identified in the CAOs and the chemical and physical characterization of the site (i.e., the results and conclusions of the RFI and post-RFI activities).

Applicable Technologies: Technologies applicable to contaminated media at each SWMU are identified and screened. Technologies that cannot be implemented technically are eliminated.

Corrective Measure Alternatives: Technologies that pass the screening phase are assembled into corrective measure alternatives.

Evaluation of Corrective Measure Alternatives: Recommended corrective measure alternatives are described and evaluated using four criteria: technical, environmental, human health, and institutional factors.

Recommendation of Corrective Action: The results of the evaluation of alternatives are summarized and a corrective action is recommended for each SWMU.

These components are described further in the CMS Work Plan for NAVSTA Mayport (ABB-ES, 1995a). More detailed discussion of the methodology for CAOs, MCOs, and COCs used in this CMS is provided in the following sections.

1.5.1 Corrective Action Objectives

CAOs are aimed at protecting human health and the environment and are expressed for each media of concern. At SWMUs 8, 9, 11, and 51, the media of concern for the CMS included groundwater, surface soil, and subsurface soil. CAOs were based on the COCs, the exposure pathway, and the present and future receptors at each SWMU. The CAOs were developed by comparing the results of the RFI with the applicable Federal and State standards.

For this CMS, CAOs were formulated based on mitigation of unacceptable human health and ecological risk that exist for direct exposure to groundwater, surface soil, or subsurface soil based on the current and anticipated future use of the SWMUs. Exposure scenarios for human health receptors used the Chapter 62-777, F.A.C., CTL criteria for residential direct exposure. Exposure scenarios for ecological receptors were developed in the RFI Reports and used ecological benchmarks consistent with current values applicable and relevant to the state of Florida.

The current and future receptors are military residents, hypothetical future on-site residents, trespassers, construction workers, and base workers and shoreline benthic aquatic receptors in the St. Johns River and Mayport Turning Basin; potential exposure of terrestrial ecological receptors was not considered a pathway of concern in the RFI Report for these SWMUs. Based on the current and future use receptors, the following CAOs were developed for SWMUs 8, 9, 11, and 51.

1.5.1.1 Groundwater

CAO 1: Prevent ingestion of surficial aquifer groundwater containing carcinogens in excess of state of Florida Groundwater Cleanup Target Levels (GCTLs) (Chapter 62-777, F.A.C.) for groundwater criteria until CAO 3 has been met.

CAO 2: Prevent ingestion of aquifer groundwater containing noncarcinogens in excess of the state of Florida GCTLs (Chapter 62-777, F.A.C.) groundwater criteria until CAO 3 has been met.

CAO 3: Restore the groundwater aquifer to the state of Florida GCTLs (Chapter 62-777, F.A.C.) for groundwater criteria.

1.5.1.2 Soil

CAO 4: Protect human health from carcinogenic and noncarcinogenic risks associated with incidental ingestion of, inhalation of, and dermal contact with contaminated soil in excess of the state of Florida Soil Cleanup Target Levels (SCTLs) (Chapter 62-777, F.A.C.) for residential direct exposure criteria.

CAO 5: Prevent leaching of contaminants from soil that would result in groundwater concentrations that do not meet CAOs for groundwater.

CAO 6: Protect the environment from COCs in the soil that cause adverse biological effects.

1.5.2 <u>Media Cleanup Objectives</u>

MCOs establish acceptable exposure levels that are protective of human health and the environment and were estimated for SWMUs 8, 9, 11, and 51 using baseline assumptions and inputs. MCOs are determined based on Federal and State standards, contaminants and media of interest, and exposure pathways. These calculations are based on FDEP CTLs (Chapter 62-777, F.A.C.) and BSVs. The current and anticipated future use of SWMUs 8, 9, 11, and 51 is for industrial purposes. Therefore, the exposure pathways are to commercial/industrial workers. Specifically, MCOs are used to determine

COCs, to estimate areas and volumes of impacted media, and to set performance standards for potential remedial alternatives.

Cleanup of inorganic contaminants less than their established background concentrations will not be performed. Therefore, BSVs will be used as the lower limit for MCOs. The MCOs selection criteria are summarized below for each medium.

1.5.2.1 Groundwater

- The state of Florida GCTLs (Chapter 62-777, F.A.C.) for groundwater criteria.

- In areas where groundwater discharges to surface water, the state of Florida Surface Water CTLs (Chapter 62-777, F.A.C.) for protection of marine surface water criteria.

- NAVSTA Mayport BSVs will be used as the lower limit for the MCOs of inorganic COCs.

1.5.2.2 Soil

- The state of Florida SCTLs (Chapter 62-777, F.A.C.) for residential direct criteria and the leachability value based on groundwater and/or marine surface water criteria for SCTLs (Chapter 62-777, F.A.C.).

- NAVSTA Mayport BSVs will be used as the lower limit for the MCOs of inorganic COCs.

1.5.3 <u>Contaminants of Concern</u>

The determination of COCs for each medium involves a three-step process:

- Determine the Contaminants of Interest (COIs).
- Compare with appropriate CTLs and BSVs.
- Select the COCs.

COIs were determined in the RFI. Since the RFI Report was issued, additional data have been collected and new regulations were updated by the FDEP, effective April 17, 2005. Therefore, the COIs have been reevaluated.

1.5.3.1 Contaminants of Interest

The COIs include any contaminant detected at least once in validated analytical results for environmental samples in any medium at the site during any sampling event. For this CMS, the list of COIs originally presented in the RFI Report was revised by including any contaminants that were detected during any environmental sampling program conducted after the RFI (e.g., IM actions). The lists of COIs for SWMUs 8, 9, 11, and 51 are presented in Sections 2, 3, 4, and 5, respectively.

1.5.3.2 Contaminants of Concern

The COC screening evaluation directly compares concentrations of COIs with the FDEP CTLs. The COC selection considered all available validated soil and groundwater sample results and included several rounds of sampling conducted after the RFI Report was submitted.

For each medium, the following criteria were used to exclude detected analytes from the list of COCs. Each criterion by itself was justification for excluding the analyte:

Less than Background Screening Values: If the maximum detected concentration of an analyte in a medium was less than the BSV (inorganics only), the analyte was not selected as a COC (USEPA, 1995).

Less than Risk-based Screening Concentrations, Standards, and Guidelines: If the maximum detected concentration of the analyte in a medium was less than its corresponding adjusted CTL, the analyte was not selected as a COC. The FDEP SCTLs for residential direct exposure and the FDEP GCTLs were taken from the Chapter 62-777, F.A.C.

The maximum concentration of each COC was compared to the site-specific MCOs for each medium. The MCOs for each medium were calculated as the published CTLs or the NAVSTA Mayport Background Screening Concentration, whichever was larger. COCs whose concentration exceeded the MCOs were then evaluated in the CMS.

1.6 EVALUATION OF CORRECTIVE MEASURES

Each corrective measure alternative is evaluated using the criteria contained in the RCRA Corrective Action Plan (USEPA, 1994). The alternatives are evaluated against the standards listed below.

1. Protect human health and the environment.
2. Attain CTLs set by the Chapter 62-777, F.A.C.
3. Control the source of releases.
4. Comply with any applicable standards for management of wastes.
5. Other factors, such as treatment, timeframe, and cost.

The criteria and elements for the above standards to be used for the detailed analysis of alternatives are described below.

1.6.1 Protect Human Health and the Environment

Corrective action remedies must be protective of human health and the environment. Remedies may include those measures that are needed to be protective, but are not directly related to media cleanup, source control, or management of wastes. A discussion of what types of short-term remedies are appropriate for the site and how various corrective measure alternatives meet this standard should be presented.

1.6.2 Attain Closure Standards Set by the FDEP

Remedies are presented and recommended to attain site closure as defined in existing State regulations in Chapter 62-780, F.A.C. Information to address whether the potential remedy will achieve the remediation objective will be proposed to attain the CTLs.

1.6.3 Control the Sources of Releases

A critical objective of any remedy must be to stop further environmental degradation by controlling or eliminating further releases that may pose a threat to human health and the environment. The source control standard is not intended to mandate a specific remedy or class of remedies. Instead, a wide range of options should be examined. This standard should not be interpreted to preclude the equal consideration of using other protective remedies to control the source, such as partial waste removal, capping, slurry walls, in situ treatment/stabilization or consolidation. As part of the CMS Report, the issue of whether source control measures are necessary should be addressed, and, if so, the type of actions that would be appropriate should be outlined. Any source control measure proposed should include a discussion on how well the method is anticipated to work given the particular situation at the facility and the known track record of the specific technology.

1.6.4 Comply with any Applicable Standards for Management of Wastes

A discussion of how the specific waste management activities will be conducted in compliance with all applicable Federal or State regulations (e.g., closure requirements and land disposal restrictions) should be presented.

1.6.5 Other Factors

Five general factors represent a combination of technical measures and management controls for addressing the environmental problems at the facility. These factors will be considered as appropriate by the implementing agency in selecting/approving a remedy that meets the four standards listed above. The five general decision factors and relevant information that may be requested are as follows.

a. Long-term Reliability and Effectiveness

Demonstrated and expected reliability is a way of assessing the risk and effect of failure. It may be considered whether the technology or a combination of technologies have been used effectively under analogous site conditions, whether failure of any one technology in the alternative would have an immediate impact on receptors, and whether the alternative would have the flexibility to deal with uncontrollable changes at the site (e.g., heavy rain storms, earthquakes). Each corrective measure alternative should be evaluated in terms of the projected useful life of the overall alternative and of its component technologies.

b. Reduction in the Toxicity, Mobility, or Volume of Wastes

As a general goal, remedies that are capable of eliminating or substantially reducing the inherent potential for the contaminants to cause future environmental releases or other risks to human health and the environment are considered. There may be some situations, however, where substantial reductions in toxicity, mobility, or volume may not be practicable or even desirable. Estimates of how much the corrective measure alternatives will reduce the waste toxicity, volume, and/or mobility may be helpful in applying this factor. This may be done through a comparison of initial site conditions to expected post corrective measure conditions.

c. Short-term Effectiveness

Short-term effectiveness may be particularly relevant when remedial alternatives will be conducted in densely populated areas or where waste characteristics are such that risks to workers or to the environment are high and special protective measures are needed. Possible factors to consider include fire, explosion, exposure to hazardous substances, and potential threats associated with treatment, excavation, transportation, and re-disposal or containment of waste material.

d. Implementability

Implementability will often be a determining variable in shaping remedies. Some technologies will require State or local approvals prior to construction and there may be some restrictions or concerns for some remedial approaches. Typical factors to be considered include administrative activities (e.g., permits, right of way, off-site approvals) and the length of time these activities will take, constructability of the remedial measure and time for beneficial results, availability of off-site treatment, storage, and disposal facility services, and availability of prospective technology.

e. Cost

The relative cost of a remedy may be an appropriate consideration especially in those situations where several different technical alternatives to remediation will offer equivalent protection of human health and the environment. Cost estimates could include costs for engineering, site preparation, construction, materials, labor, sampling/analysis, waste management/disposal, permitting, health and safety measures, training, operation and maintenance, etc.

2.0 SWMU 8 – OWTP PERCOLATION POND

SWMU 8 is located in the northern portion of NAVSTA Mayport situated between the airstrip and the southern shore of the St. Johns River. It is located on the southeastern boundary of SWMU 9 and the northwestern boundary of SWMU 10 (see Figure 1-2).

SWMU 8 consists of a former Oily Waste Treatment Plant (OWTP) effluent percolation pond that operated from 1979 until 1994. SWMU 8 was formerly the final treatment unit of the OWTP prior to discharge of the effluent at a National Pollutant Discharge Elimination System permitted discharge point into the St. Johns River. The OWTP percolation pond was originally designed to allow treated effluent to percolate into overlying sediments and/or discharge to the St. Johns River. In the event water levels became too high in the pond, effluent was discharged to the St. Johns River via an overflow pipe. The pond was approximately 1,575 square feet in size with earthen berms approximately 5 feet above grade (ABB-ES, 1996).

Until 1988, the percolation pond was unlined. Following an overflow of oily waste to the pond in 1988, the pond was emptied, cleaned out, and a liner consisting of 1 foot of gravel covered with 6 inches of compacted clay was added to the pond. In September 1992, a concrete plug was placed in a manhole that connected the discharge pipe from the percolation pond to the St. Johns River, and the wastewater was conveyed to NAVSTA Mayport's wastewater treatment plant. This continued until 1994 while upgrades were being made to the OWTP (SWMU 9). The percolation pond was used temporarily from 1992 to 1994 for flow equalization, but was formally taken out of service in 1994 and no longer receives treated effluent (ABB-ES, 1996). Currently, the former percolation pond is covered with vegetation.

2.1 DESCRIPTION OF CURRENT CONDITIONS

The description of current conditions is based on descriptions and data collected by Tetra Tech during surface sampling conducted in February 2007. This information was taken from the Group II RFI Report (ABB-ES, 1996) and the RFI Addendum for SWMUs 8, 9, 11, and 51 (Tetra Tech, 2012) and is summarized in the following sections. Referenced documents should be reviewed for further details and in-depth analyses of the data presented herein. The information and analytical data from the reports were utilized to form an understanding of the current conditions at SWMU 8 from which COCs were identified and for which remedial actions were selected.

2.1.1 RFI Field Evaluation

The initial RFI for SWMUs 8, 9, and 11 was conducted in 1993 and 1994. SWMUs 8, 9 and 11 were investigated for soil and groundwater contamination as part of the RFI conducted for the Group II SWMUs (ABB-ES, 1996). Although SWMU 51 was not formally included in the scope of the RFI, the perimeter area of SWMU 51 was assessed for soil and groundwater impacts.

The RFI assessment included soil screening for the presence of petroleum-based volatile organic compounds (VOCs) in subsurface soil in numerous locations throughout the area of SWMUs 8, 9, 11, and 51. Screening results indicated the presence of petroleum related contamination in subsurface soils for each SWMU, as identified in Appendix A data tables. In addition, groundwater in boring locations was screened for VOCs and indicated the presence of petroleum related contamination. Using the field screening results as a guide, several soil samples were analyzed in a field laboratory and results indicated petroleum impacts.

RFI groundwater screening of samples from numerous soil boring locations indicated petroleum-based contamination in the groundwater. Throughout the area of SWMUs 8, 9, 11, and 51, groundwater samples were also collected from installed monitoring wells and analyzed for VOCs, semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs)/pesticides, and metals. Analytical results indicated groundwater contamination was present upgradient of SWMU 51.

The RFI reported detections of VOCs and SVOCs at SWMU 8; however, no risk to human health was recognized based on the land use restrictions and lack of soil and groundwater exceedances.

In summary, the RFI did not recognize any risk to human health or the environment based on the current and future industrial land use at SWMUs 8, 9, and 11. Per the FDEP, additional groundwater monitoring was necessary to adequately address contamination in the OWTP area. Hence, additional assessment was planned for the areas that included SWMUs 8, 9, 11, and 51.

2.1.2 RFI Addendum Field Investigation

The data from the RFI was collected and evaluated prior to the change in the CTLs promulgated by FDEP in 2005; therefore, an RFI Addendum was conducted. Surface soil samples for SWMU 8 were collected during two sampling events from October to November 2006 and in February 2007. Surface soil samples were collected from boring locations MPT-08-SB25 through MPT-08-SB38 (boring labels SB26 and SB28 were not used) during the October/November 2006 sampling event. These borings were placed to determine the nature and extent of impacts for the former percolation pond and discharge pipe. In

February 2007, four additional soil borings (MPT-08-SB39 through MPT-08-SB42) were advanced to collect surface soil samples for further assessment. Boring MPT-08-SB42 was placed to further assess the former percolation pond. Surface soil samples were collected from 0 to 1 foot bls for all borings locations with the exception of MPT-08-SB42, which was collected at 0 to 2 feet bls. Soil boring samples collected during October 2006 were screened for VOCs using an organic vapor analyzer (OVA) equipped with a flame ionization detector (FID). Results of the OVA-FID screenings are provided in Appendix B. The surface soil samples were analyzed for VOCs, SVOCs, polynuclear aromatic hydrocarbons (PAHs), PCBs, metals, sulfide, and cyanide. These boring locations are shown on Figure 2-1.

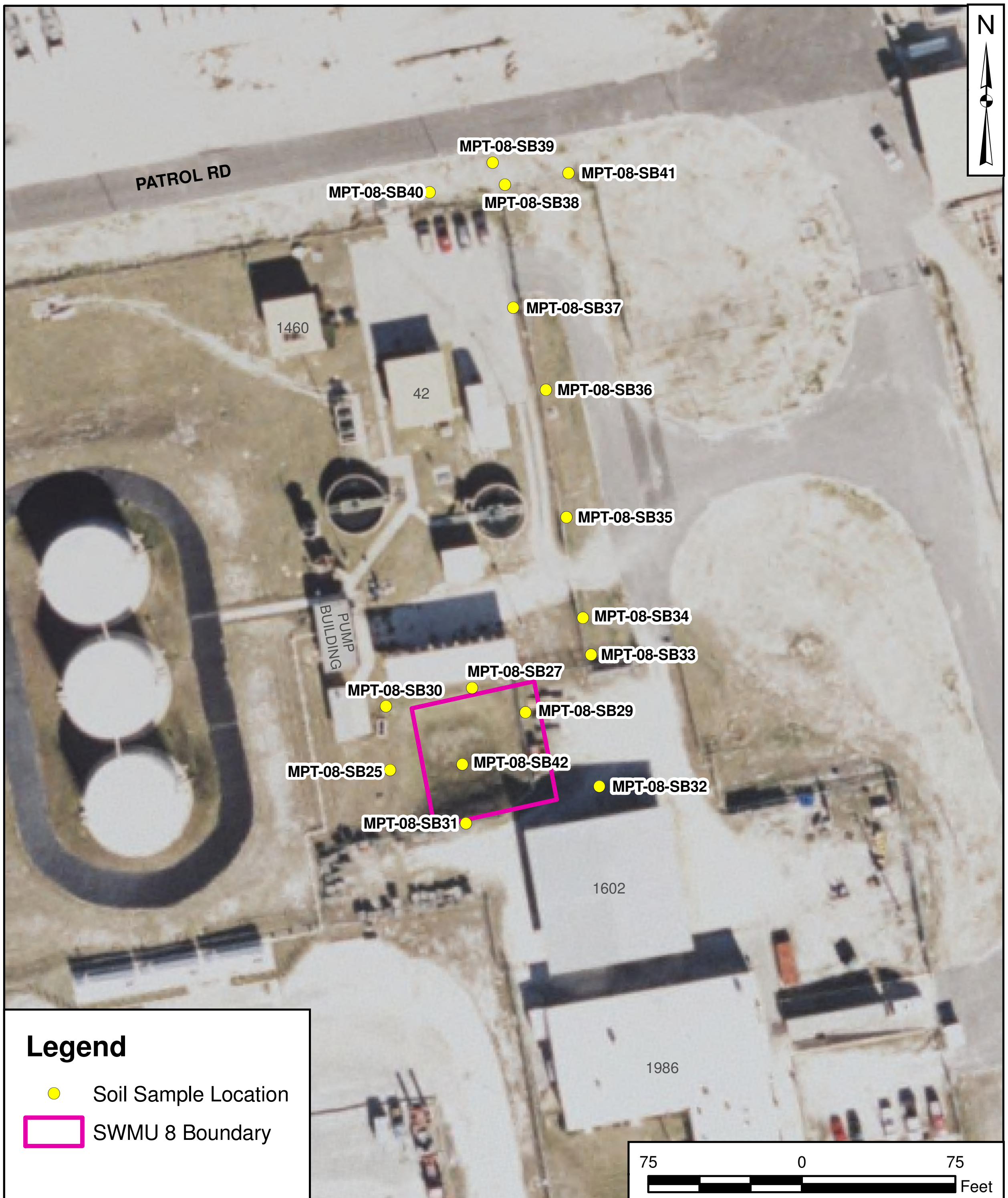
Subsurface soil samples for SWMU 8 were collected during one sampling event in October 2006. In October 2006, subsurface soil samples in the 8- to 9-foot bls interval were collected from boring locations MPT-08-SB25 through MPT-08-SB37 (boring labels SB26 and SB28 were not used). These borings were placed to assess the former percolation pond and former discharge pipe area nature and extent. Soil boring samples collected in October 2006 were screened for VOCs using an OVA-FID (results are provided in Appendix B). The subsurface soil samples were analyzed for VOCs, SVOCs, PCBs, metals, sulfide, and cyanide. These boring locations are shown on Figure 2-1.

Monitoring wells MPT-08-MW21S, MPT-08-MW22S, and MPT-10-MW01S (as depicted on Figure 2-2) were selected to assess the groundwater impacts at SWMU 8. Two shallow monitoring wells (MPT-08-MW21S and MPT-08-MW22S) were installed near the former percolation pond at SWMU 8 in November 2006. Monitoring well MPT-08-MW21S was installed in the northwestern corner of the former percolation pond, and monitoring well MPT-08-MW22S was installed along the southern boundary of the former percolation pond. Monitoring wells MPT-08-MW21S and MPT-08-MW22S were sampled in November 2006 for VOCs, SVOCs, metals, sulfide, cyanide, and PCBs. Monitoring well MPT-10-MW01S was installed in November 2006, is associated with SWMU 10, and is located near the southeastern corner of the percolation pond. This monitoring well was also sampled in November 2006 for VOCs, SVOCs, metals, and PCBs.

2.1.3 RFI Addendum Evaluation

The target analytes detected in the surface and subsurface soil samples were compared to BSVs computed from station-wide surface and subsurface soil samples (Tetra Tech, 2000) and Chapter 62-777, F.A.C.

P:\GIS\MAYPORT_NS\MAPDOCS\MXD\SWMU08_SB_LOCS.MXD 1/10/11 KM



DRAWN BY	DATE		CONTRACT NUMBER
T. WHEATON	06/24/10	SOIL SAMPLE LOCATIONS COLLECTED 2006 - 2007 SWMU 8 - OWTP PERCOLATION POND NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CTO 0033
CHECKED BY	DATE		OWNER NUMBER
B. MARSHALL	1/10/11		—
REVISED BY	DATE		APPROVED BY / DATE
—	—		— / —
SCALE			FIGURE NO. / REV
AS NOTED			FIGURE 2-1 / 0

P:\GIS\MAYPORT_NS\MAPDOCS\MXD\SWMU08_GW_TAGS.MXD 1/10/11 KM

DRAWN BY	DATE		GROUNDWATER MONITORING WELL MAP SWMU 8 - OWTP PERCOLATION POND NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 0033	
T. WHEATON	12/17/10	NAVFAC		OWNER NUMBER —	
CHECKED BY	DATE				
B. MARSHALL	1/10/11			APPROVED BY —	DATE —
REVISED BY —	DATE —				
SCALE AS NOTED				FIGURE NO. FIGURE 2-2	REV 0

2.1.3.1 Surface Soil

The COC screening evaluation for surface soil involves an evaluation of COIs for direct exposure and leaching to groundwater. Two SVOCs (PAHs), 2 pesticides, and 11 metals were detected in the surface soil samples. The direct exposure COC screening results for surface soil are shown in Appendix A, and identified one sample with benzo(a) pyrene (BAP) and BAP equivalents that exceeded the SCTLs for residential direct exposure. The sample was collected adjacent to what was presumed to be the discharge pipe for SWMU 8, but further investigation showed that the SWMU 8 overflow pipe discharged to the St Johns River, and the sample location is located in a stormwater pond built in 2001 for the Fuel Farm north of the Patrol Road. The sample location is adjacent to an asphalt road and parking area and is further than 200 feet away from SWMU 8; therefore, is not considered to be a COC for SWMU 8. Figure 2-3 shows soil sample locations.

2.1.3.2 Subsurface Soil

Subsurface soil samples were also collected from each surface soil sample location as depicted in Figure 2-3. No target analytes exceeded SCTLs in the subsurface soil samples taken for SWMU 8, including sample MPT-08-SB38-09-102606, which was collected beneath MPT-08-SB38-01-102606. Metals were detected in subsurface soil samples at SWMU 8; however, none of these analytes exceeded FDEP SCTLs in the subsurface soil samples for SWMU 8.

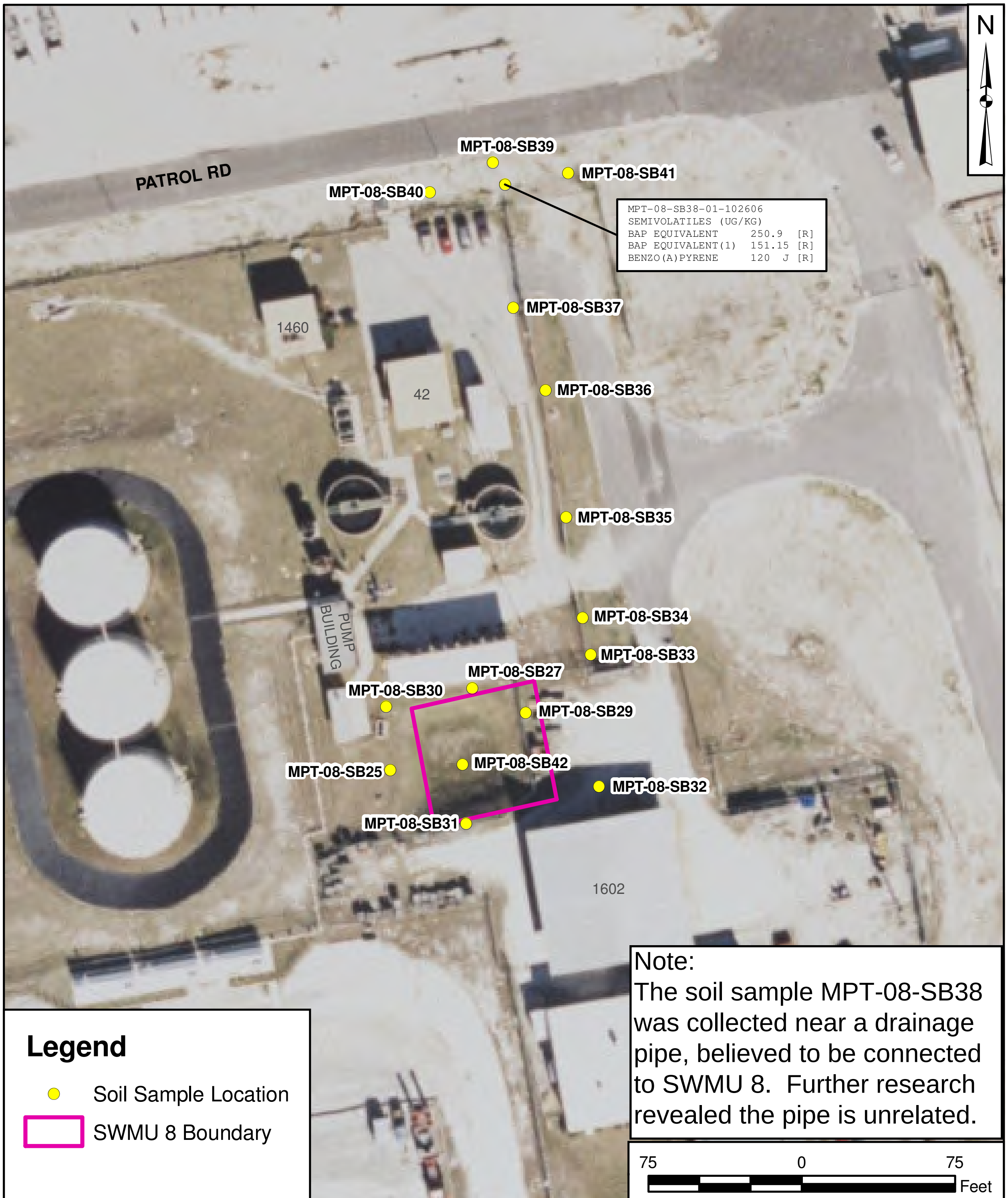
2.1.3.3 Groundwater

Groundwater samples were selected from monitoring wells based on the well's proximity to SWMU 8 as shown in Figure 2-4. Monitoring wells MPT-08-MW21S, MPT-08-MW22S, and MPT-10-MW01S (as depicted on Figure 2-2) were selected to assess the groundwater impacts at SWMU 8.

2.1.4 CMS Data Set

Sample results collected during the RFI and RFI Addendum investigation were used to select COCs in this CMS. Tables listing the complete analytical results of all sampling events per medium are included in Appendix A.

P:\GIS\MAYPORT_NS\MAPDOCS\MXD\SWMU08_SB_TAGS.MXD 3/04/11 SS



DRAWN BY K. MOORE — DATE 1/12/11	NAVFAC	SOIL SAMPLE EXCEEDANCE TAG MAP SWMU 8 - OWTP PERCOLATION POND NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 0033
CHECKED BY B. MARSHALL — DATE 3/04/11			OWNER NUMBER —
REVISED BY — — DATE —			APPROVED BY — DATE —
SCALE AS NOTED			FIGURE NO. FIGURE 2-3 — REV 0

JAX: M:\GIS\Projects\Mayport\MXD\CMS\swmu08_gw_tags_r.mxd

DRAWN BY K. MOORE	DATE 01/13/11	GROUNDWATER EXCEEDANCE TAG MAP SWMU 8 - OWTP PERCOLATION POND NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 033	
CHECKED BY D.FEARS	DATE 03/07/13		OWNER NUMBER —	
REVISED BY J.MADDEN	DATE 03/07/13		APPROVED BY —	DATE —
SCALE AS NOTED			FIGURE NO. FIGURE 2-4	REV 0

2.2 CONTAMINANTS OF CONCERN

The detected concentrations of analytes for each environmental medium were compared to the State of Florida CTLs (Chapter 62-777, F.A.C.) for surface soil, subsurface soil, and groundwater, as appropriate. Section 1.5.3.2 provides a detailed description of the process for the identification of COCs.

2.2.1 Evaluation of Surface Soil

The COC screening evaluation for surface soil involves an evaluation of COIs for direct exposure and leaching to groundwater. Two SVOCs (PAHs), 2 pesticides, and 11 metals were detected in the surface soil samples. The direct exposure COC screening results for surface soil are shown in Appendix A, and identified one sample with BAP and BAP equivalents that exceeded the SCTLs for residential direct exposure. The location of the sample result is adjacent to an asphalt road and parking area, and is further than 200 feet away from SWMU 8; therefore, is not considered to be a COC for SWMU 8.

Surface water (i.e., the St. Johns River) is located within 300 feet of SWMU 8; therefore, the soil leachability to marine surface water and groundwater was evaluated. The leachability to surface water and groundwater evaluation are shown in Appendix A. The evaluation determined that no concentrations exceeded the leachability criteria. Therefore, no contaminants were selected as COCs for surface soil based on the surface water and groundwater leachability.

2.2.2 Evaluation of Subsurface Soil

The COC screening evaluation for subsurface soil involves an evaluation of COIs for direct exposure and leaching to groundwater. The direct exposure and leachability COC screening for subsurface soil is shown in Appendix A and identified no contaminants exceeding SCTLs for residential or leachability.

2.2.3 Evaluation of Groundwater

The COC screening evaluation for groundwater involves an evaluation of COIs directly to the GCTLs to determine COCs. Iron and manganese exceeded the GCTLs of 300 micrograms per liter (µg/L) and 50 µg/L in monitoring well MPT-08-MW21S with concentrations of 517 µg/L and 72.4 µg/L, respectively. Manganese exceeded GCTLs with 88.1 µg/L in monitoring well MPT-08-MW22S. Iron exceeded the GCTL of 300 µg/L in monitoring well MPT-08-MW21S with a concentration of 517 µg/L. Manganese was detected in monitoring wells MPT-08-MW21S and MPT-08-MW22S exceeding the GCTL of 50 µg/L. The manganese and iron levels, however, do not exceed the BSV of 141 µg/L for manganese and slightly exceeds the BSV of 494 µg/L for iron. An additional sample was obtained from monitoring well

MPT-08-MW21S in November 2012 to determine if iron remained a COC. The result was 11,100 µg/L; thus, iron remains a COC.

2.2.4 Selection of Soil COCs

The location of the sample result is adjacent to an asphalt road and parking area, and is further than 200 feet away from SWMU 8, therefore, is not considered to be a COC for SWMU 8. A soil COC evaluation is not required for SWMU 8.

2.2.5 Selection of Groundwater COCs

Iron is identified as a COC for groundwater for SWMU 8.

2.3 CONTAMINANTS OF CONCERN IN SOIL – ECOLOGICAL

Based on the RFA findings for sediment, it is unlikely that there is an ecological concern at SWMU 8.

COC Summary
No COCs for surface soil or sediment were identified at SWMU 8.

2.4 VOLUME OF CONTAMINATED MEDIA – GROUNDWATER

Using existing wells, the area of contaminated groundwater at SWMU 8 is shown in Figure C-1 in Appendix C and totals approximately 40,000 gallons.

2.5 IDENTIFICATION AND SCREENING OF CORRECTIVE MEASURE TECHNOLOGIES

The purpose of this section is to identify and screen appropriate technologies for corrective measure alternatives addressing the CAOs identified.

Table 2-1 presents the groundwater corrective measure technologies that are potentially applicable for addressing the CAOs. This table also presents the results of the evaluation of those technologies. The technology screening process reduces the number of potentially applicable technologies by evaluating the applicability of each technology to site and contaminant factors. Technologies deemed ineffective or not implementable were eliminated from further consideration.

TABLE 2-1
SWMU 8, PRELIMINARY SCREENING OF CORRECTIVE MEASURES TECHNOLOGIES FOR GROUNDWATER
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA
PAGE 1 OF 3

General Corrective Action	Corrective Measures Technology	Technology	Description	General Screening Comments
No Action	None	Not Applicable	No remedial actions taken.	Retained. Will be considered for baseline comparison and for areas that have not experienced any releases of hazardous substances or for areas determined to have minimal short-term or long-term effects on groundwater quality.
Institutional Controls	Access Restrictions	Land use controls (LUCs)	LUCs for groundwater would include restrictions on groundwater use.	Retained. LUCs are viable and will be considered where contaminants exceeding CMS objectives remain in place.
Monitoring	Monitoring	Groundwater monitoring	Periodic monitoring of wells in the area of potential groundwater contamination.	Retained. Groundwater monitoring is viable for assessing the effectiveness of natural attenuation on certain applicable COCs, containment, or treatment measures during and following implementation of corrective measures.
Containment	Hydrodynamic Control	Extraction Wells	Control of plume migration by a system consisting of extraction of the contaminated groundwater.	Eliminated. Asymptotic conditions and elevated costs associated with groundwater extraction typically create an undesirable scenario.
		Collection Trench	Control of plume migration by a collection trench and extraction of the contaminated groundwater	Eliminated. Asymptotic conditions and elevated costs associated with groundwater extraction typically create an undesirable scenario.
		Slurry Wall	Trench around areas of contamination is filled with a soil (or cement) bentonite slurry to obstruct/divert the groundwater flow.	Eliminated. Lack of a confining layer at a reasonable depth.
		Grout Curtain	Pressure injection of grout in a regular pattern of drilled holes. Requires integration with confining layer to be effective.	Eliminated. Lack of a confining layer at a reasonable depth
	Subsurface Barriers	Sheet Piling	Driving interconnecting lengths of steel into the ground to form a thin, impermeable barrier. Requires integration with confining layer to be effective.	Eliminated. Lack of a confining layer at a reasonable depth
Removal	Extraction	Extraction Wells	Series of pumping wells to extract contaminated groundwater.	Eliminated. Asymptotic conditions and elevated costs associated with groundwater extraction typically create an undesirable scenario.
		Collection Trenches	Perforated pipe in trenches backfilled with porous media to collect groundwater. May include sumps and gravity drains.	Eliminated. Asymptotic conditions and elevated costs associated with groundwater extraction typically create an undesirable scenario.
In Situ Treatment	Bioremediation	Aerobic	Degradation of organics using microorganisms in an oxygen-enriched environment.	Eliminated. Aerobic treatment is not effective in addressing metal contamination.
		Anaerobic	Degradation of organics using microorganisms in an oxygen-deficient environment.	Eliminated because treatment is not effective in addressing metal contamination.

TABLE 2-1
SWMU 8, PRELIMINARY SCREENING OF CORRECTIVE MEASURES TECHNOLOGIES FOR GROUNDWATER
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA
PAGE 2 OF 3

General Corrective Action	Corrective Measures Technology	Technology	Description	General Screening Comments
In Situ Treatment (continued)	Physical / Chemical	Air Sparging	Injection of air below the water table. Rising bubbles volatilize dissolved and adsorbed phase contaminants and transport them to the vadose where they are removed by a method of collection such as vapor extraction or by in situ aerobic degradation.	Eliminated. Air sparging along with vapor extraction/ bioventing is not effective for the removal of metals.
		Permeable Reactive Barriers	An in situ barrier composed of a permeable reactive material that reacts with the contaminants in the water, reducing their concentrations by physical and chemical processes.	Eliminated. Treatment is not effective for metals.
Ex Situ treatment (On-site)	Bioremediation	Aerobic	Degradation of organics using microorganisms in an oxygen-enriched environment.	Eliminated because metals will be unaffected.
	Physical / Chemical	Precipitation	Conversion of heavy metals into insoluble solid forms through the addition of precipitating agents such as hydroxides and sulfides.	Eliminated. Groundwater extraction and ex-situ treatment/disposal is not typically preferred due to high costs and undesirable performance and results.
		Air Stripping	Mixing large volumes of air with groundwater in a packed column or aerated basin to promote transfer of VOCs to air.	Eliminated because the contaminants at the site are not volatile.
		Steam Stripping	Mixing large volumes of steam with groundwater in a packed column or aerated basin to promote transfer of VOCs to air.	Eliminated because the technology is ineffective for metals.
		Flocculation/ Coagulation	Use of chemicals to neutralize surface charges and promote particle size growth.	Eliminated. Groundwater extraction and ex-situ treatment/disposal is not typically preferred due to high costs and undesirable performance and results.
		Filtration	Removal of suspended solids by passing contaminated water through a filter media.	Eliminated. Groundwater extraction and ex-situ treatment/disposal is not typically preferred due to high costs and undesirable performance and results.
		Adsorption	Adsorption of contaminants onto activated carbon by passing water through carbon column.	Eliminated. Groundwater extraction and ex-situ treatment/disposal is not typically preferred due to high costs and undesirable performance and results.
		Oxidation	Chemical oxidation (increase in oxidation state) of contaminants into less toxic or soluble forms through the use of oxidizing agent(s). Includes ozone, ultraviolet (UV) light, peroxide, permanganate, and manganese oxidation.	Eliminated because the technology is ineffective for metals.

TABLE 2-1
SWMU 8, PRELIMINARY SCREENING OF CORRECTIVE MEASURES TECHNOLOGIES FOR GROUNDWATER
NAVAL STATION MAYPORT
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General Corrective Action	Corrective Measures Technology	Technology	Description	General Screening Comments
Disposal	Surface Discharge	Direct to local stream	Treated groundwater discharged to local streams.	Eliminated. Groundwater extraction and ex-situ treatment/disposal is not typically preferred due to high costs and undesirable performance and results.
	Subsurface Discharge	Discharge to local treatment facility	Treated groundwater discharged to local Publicly Owned Treatment Works (POTW) treatment plant	Eliminated. Groundwater extraction and ex-situ treatment/disposal is not typically preferred due to high costs and undesirable performance and results.
		Injection wells	Series of injection wells to discharge collected/treated groundwater to subsurface. Requires regulatory approval.	Eliminated. Reinjection of untreated groundwater is not a viable option. Reinjection of treated water may be appropriate.

2.6 DEVELOPMENT OF CORRECTIVE MEASURES ALTERNATIVES

The corrective measure alternatives were developed to address the groundwater impacts related to SWMU 8. The purpose of providing a range of alternatives is to insure that reasonable corrective actions are represented and evaluated in a diligent and effective manner. The technologies, which are selected to represent various alternatives for groundwater cleanup, are presented in Table 2-2. Groundwater alternatives developed using the representative technologies are presented in Table 2-3.

TABLE 2-2
SWMU 8, REPRESENTATIVE GROUNDWATER CORRECTIVE MEASURE TECHNOLOGIES
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

General Corrective Action	Corrective Measures Technology	Technology	Rationale
No Action	No Action	None	Required
Institutional Controls	Access Restrictions Water use Restrictions	LUCs	To impose water and residential use restrictions
Monitoring	Monitoring	Monitoring	Required until CAO 3 is achieved or site closure under Chapter 62-780, F.A.C., is achieved.

TABLE 2-3
SWMU 8, ASSEMBLY OF GROUNDWATER ALTERNATIVES
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

Alternative	Alternative Type	Representative Technologies Combined Into Alternatives	Alternative Description
Alternative 1: No Action	No Action	None	No Action
Alternative 2: LUCs and Monitoring	Limited Action – No or Limited Treatment	LUCs and Monitoring	LUCs Periodic groundwater sampling to monitor result trends on COCs not affected by natural attenuation (i.e., iron). LUC Monitoring

2.7 EVALUATION OF CORRECTIVE MEASURES ALTERNATIVES

The corrective measures alternatives were developed to address the combined groundwater contamination at SWMU 8. Iron is the contaminant in groundwater, and the alternatives are as follows:

Groundwater Alternative 1: No Action
Groundwater Alternative 2: LUCs and Monitoring

2.7.1 Alternative 1: No Action

The No Action alternative serves as a baseline consideration or addresses sites that do not require active remediation. This alternative assumes that no corrective action would occur. No remedy would remain or be implemented. There would be no monitoring of conditions. Natural attenuation might eventually reduce low concentrations of contaminants in groundwater to acceptable levels, but the progress of attenuation would not be monitored.

2.7.2 Alternative 2: LUCs and Monitoring

Alternative 2 is of the limited action alternative. LUCs are rules, directives, policies, and other measures (e.g., preventing the extraction or use of groundwater, and posting signs) adopted by the appropriate authorities in a manner consistent with applicable Federal, State, and local laws. Land use at this SWMU is expected to remain industrial. LUCs and groundwater use controls would be implemented to ensure that access to the site is restricted, ensure proper personal protection procedures are followed, and to ensure appropriate future land use. Restrictions would be in place to ban any new drinking water wells and prohibit residential or residential-like use.

Monitoring consists of ensuring that LUCs remain in place and are enforced. The contaminant exceeding the GCTLs is iron. LUC implementation would occur via preparation of a site-specific Land Use Control Implementation Plan (LUCIP) that will describe the site location, the prohibition itself and its objectives, groundwater monitoring, and other pertinent information. The LUCIP and requirements for LUC oversight will be specified in the Corrective Measures Implementation Plan (CMIP) executed between the Navy and the FDEP.

Groundwater monitoring would be conducted to establish evidence that Risk Management Option (RMO) II or RMO III is acceptable, after which one of these would be used as the exit strategy.

2.8 EVALUATION OF GROUNDWATER CORRECTIVE MEASURES ALTERNATIVES

The identified corrective measure alternatives for groundwater are evaluated using the criteria described in Section 1.6.

2.8.1 Alternative 1: No Action

Protect Human Health and the Environment

No Action would allow unacceptable risks to human health and the environment. The No Action alternative would do nothing to effectively address contaminated groundwater or control its migration to off base areas.

Attain Media Cleanup Standards

No Action may attain the GCTLs in a reasonable period of time, but would not be documented. Natural geochemistry might eventually reduce low concentrations of contaminants to acceptable levels, but the progress would not be monitored.

Control the Source of Releases

No Action would not control or eliminate the source of contamination. Natural geochemistry might eventually eliminate the source; however, the progress would not be monitored.

Comply with any Applicable Standards for Management of Wastes

No Action would not involve any waste management activities and, therefore, no standards for management of wastes would apply.

Other Factors

a. Long-term Reliability and Effectiveness

The No Action alternative would not provide long-term effectiveness or permanence. Contaminants could migrate and might pose a long-term risk to human health and the environment. Aside from natural geochemical processes, this alternative would offer no reduction in risk over long periods of time.

b. Reduction in the Toxicity, Mobility, or Volume of Wastes

Groundwater with contaminant concentrations exceeding GCTLs would remain in the surficial aquifer. No Action would allow unacceptable risks to human health and the environment. Reduction of toxicity, mobility, or volume might occur, but only through natural processes. Changes would not be documented in the absence of monitoring, and contaminated groundwater could migrate off base.

c. Short-term Effectiveness

The No Action alternative would not include any construction or remedial implementation; therefore, there would be no short-term risks to workers, the community, or the environment. Neither the public nor the workers would be exposed to potential threats associated with construction or transportation.

d. Implementability

No technical implementability issues would exist because no corrective action would occur. Once the alternative was approved, there would be no administrative issues and no need to coordinate with other agencies or acquire permits. Future remedial actions, if needed, would not be hindered by the No Action alternative.

e. Cost

No corrective action would occur, and there would be no associated cost.

2.8.2 Groundwater Alternative 2: LUCs and Monitoring

Protect Human Health and the Environment

LUCs would effectively prevent direct human contact with contaminated groundwater by controlling the access and preventing residential use of contaminated groundwater. Monitoring would assess the groundwater quality, ensure that restrictions on land use are in place, and assess the progress of natural attenuation.

Attain Media Cleanup Standards

Alternative 2 would document attainment of the GCTLs over an assumed period of 30 years.

Control the Source of Releases

LUCs and monitoring would not control or eliminate the source of contamination. Natural geochemical processes might eventually eliminate the source for certain applicable COCs.

Comply with any Applicable Standards for Management of Wastes

LUCs and monitoring would not involve any waste management activities other than disposal of sampled water and waste from monitoring well construction that would be disposed of following applicable standards. No other standards for management of wastes would apply.

Other Factors

a. Long-term Reliability and Effectiveness

Monitoring would indicate if unacceptable risk occurs in the groundwater. LUCs would prevent residential or residential-like groundwater use. Long-term management would consist of LUCs and LUC monitoring and would be expected to last 30 years or more.

b. Reduction in the Toxicity, Mobility, or Volume of Wastes

Reduction of toxicity, mobility, or volume might occur, but only through natural geochemical processes for certain applicable COCs.

c. Short-term Effectiveness

The construction activity would be minimal and there would be no short-term risks to workers, the community, or the environment. Exposure to potential threats to the public or the workers would be minimal due to construction or transportation.

d. Implementability

Groundwater Alternative 2 would be readily implementable. Administrative issues associated with preparing and implementing the LUCs via a CMIP are anticipated to be minimal. Future remedial actions, if needed, would not be hindered by this alternative.

e. Cost

The estimated capital cost for Groundwater Alternative 2 would be approximately $33,000. The annual operations and maintenance (O&M) costs would be approximately $24,000 for the first 5 years and about $14,000 for the next 25 years (with increases each 5th year for periodic review). Present worth cost over a period of 30 years would be approximately $436,000. Detailed cost estimates are provided in Appendix C.

2.9 RECOMMENDATION FOR A FINAL GROUNDWATER CORRECTIVE MEASURES ALTERNATIVE

The recommendation for a final groundwater corrective measures alternative will be based on a comparative analysis of groundwater alternatives.

2.9.1 Comparative Analysis of Groundwater Alternatives

A comparative analysis of groundwater alternatives is presented to address how effectively each alternative will comply with the standards listed in the guidance (USEPA, 1994). Alternative 1, No Action, is considered for baseline purposes and is not expected to satisfy any of the requirements.

Protect Human Health and Environment

Alternative 2 is effective in protecting human health and the environment. Alternative 1 would not address unacceptable risks to human health and the environment. Alternative 2 would provide protection to human health and the environment. The shallow groundwater does not meet the requirements of a drinking water source, the surficial aquifer is not currently and will not be used in the future as a potable water source, and site-specific ecological assessment in the RFI indicated no potential effects to the ecological receptors at these SWMUs. In addition, with institutional controls in place and being that the SWMUs are located on an active military base, access will be extremely limited. Under these conditions, Alternative 2 would be able to protect human health and the environment in a cost-effective manner. This alternative would require long-term monitoring (LTM) and LUCs to ensure effectiveness.

Attain Media Cleanup Standards

Both alternatives may eventually meet GCTLs through natural geochemical processes, but the time to achieve the standards cannot be determined. Alternative 2 would document attainment of the cleanup standards.

Control the Sources of Releases

No source of contamination is identified. Neither alternative would directly control the source. Alternative 1 may eventually meet GCTLs, but the time period cannot be quantified.

Comply with Any Applicable Standards for Management of Wastes

Alternative 1 would not generate any wastes. Alternative 2 would generate a minimal amount of waste and it would be disposed of properly following Federal, State, and local requirements and, therefore, complies with all applicable standards more effectively than the other alternatives. Alternative 2 would not involve the generation/management of waste when implemented except for a small quantity during the development of monitoring wells.

Other Factors

a. Long-term Reliability and Effectiveness

Alternative 2 would rely on natural geochemical processes in addressing applicable COCs within the contaminated water and the reliability would be low. The shallow groundwater does not meet the requirements of a drinking water source and the Surficial Aquifer is not currently used as a potable water source. Under these conditions, Alternative 2 would be able to provide adequate long-term reliability and effectiveness in a cost-effective manner. Alternative 1 would not provide for long-term reliability and effectiveness.

b. Reduction in the Toxicity, Mobility, or Volume of Waste

Alternatives 1 and 2 would rely on natural processes for the reduction of toxicity. Neither alternative reduces the toxicity, mobility, or volume of contaminated groundwater. Alternative 1 does not monitor any changes.

c. Short-term Effectiveness

None of the alternatives require major construction activity. None of these alternatives pose any threat to local communities or on-site personnel during the implementation of the corrective measures. Alternative 2 requires periodic groundwater monitoring, which could pose an exposure hazard. On-site workers would be protected from exposure to hazardous substances through appropriate use of personal protective equipment (PPE).

d. Implementability

Both alternatives are implementable. Groundwater monitoring has been implemented at several sites. Administrative issues and coordination with other agencies or acquiring permits are easily achievable. Future remedial actions would not be hindered by the alternatives.

e. Cost

Costs associated with Alternative 1 would be the lowest. The estimated capital, O&M, and net present worth costs are presented in Table 2-4. Detailed cost estimates are provided in Appendix C.

TABLE 2-4
SWMU 8, COSTS FOR GROUNDWATER ALTERNATIVES
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

ALTERNATIVE	CAPITAL COSTS	ANNUAL O&M COSTS*	TOTAL PRESENT WORTH COSTS**
1	$0	• $0	$0 by definition
2	$33,000	• $24,000 for 5 years and $14,000 for 25 years • with an additional $6,700 every 5 years	$257,000

Notes:
* Labor and material costs are for comparison value only.
** 30-YEAR, 7% INTEREST RATE

2.9.2 Recommendation

Based on the screening of technologies and assessment of various alternatives performed, Groundwater Alternative 2 is recommended for addressing the groundwater contamination at SWMU 8.

2.10 DESCRIPTION OF THE RECOMMENDED GROUNDWATER CORRECTIVE MEASURES ALTERNATIVE

2.10.1 Summary of the Groundwater Corrective Measure and Rationale

a. Description of the Corrective Measure and Rationale for Selection

The recommended corrective measure alternative involves LUCs and monitoring to address limited groundwater contamination at the site. Any elaborate treatment system would not be justified because the surficial aquifer is not currently used as a potable water source and impact to the ecological receptors is minimal. Alternative 2 relies on natural attenuation for applicable COCs whose progress would be monitored by the periodic sampling. Groundwater monitoring has been successfully implemented at many sites, and has been effective in reducing applicable COC levels in a reasonable amount of time.

b. Performance Expectations

The recommended corrective measure alternative would prevent potential human exposure pathways.

c. Preliminary Design Criteria and Rationale

LUCs would be in place to prevent residential or residential-like use of groundwater. Groundwater sampling would be conducted as outlined in the CMIP.

d. General O&M Requirements

LUC inspections and groundwater monitoring would be conducted as outlined in the CMIP.

e. LTM Requirements

LUC inspections and groundwater monitoring would be conducted as outlined in the CMIP.

2.10.2 Design and Implementation Precautions

a. Special Technical Problems

No technical problems are anticipated in implementing the corrective measures.

b. Additional Engineering Data Required

No additional engineering data are required.

c. Permits and Regulatory Requirements

Permits for installing monitoring wells may be required. RCRA groundwater monitoring requirements have to be satisfied. The CMIP would require approval by the FDEP.

d. Health and Safety Requirements

Occupational Safety and Health Administration (OSHA) requirements have to be satisfied during sampling activities.

e. Community Relations Activities

The selection of preferred corrective measures and details on how they would be implemented would be presented to the local community.

2.10.3 Cost Estimate and Schedule

a. Capital Cost Estimate

The capital costs involved in the implementation of the recommended corrective measure alternative are presented in Table 2-4. Detailed cost estimates are provided in Appendix C.

b. O&M Cost Estimate

O&M costs for the recommended corrective measures are presented in Table 2-4.

c. Project Schedule

The estimated schedule to implement LUCs and monitoring is 1 to 2 years.

3.0 SWMU 9 – OILY WASTE TREATMENT PLANT

SWMU 9 is located on the northern portion of NAVSTA Mayport, situated between the airstrip and the southern shore of the St. Johns River. It lies adjacent to the northwestern boundary of SWMU 8 (see Figure 1-2).

SWMU 9 consists of the OWTP that was constructed in 1979 to treat bilge water and other oily wastes generated at NAVSTA Mayport. The OWTP has remained in continuous operation since construction. SWMU 9 utilizes the following key treatment plant components:

- Rapid mix-flocculation tank
- Clarifier tank
- Neutralization tank
- Dissolved air flotation unit
- Connected piping

Influent to the OWTP consists of ships' bilge water from which the oily fraction is separated by settling in holding tanks. After separation of the oily fraction, the bilge water is pumped through underground lines to the rapid mix-flocculation tank that has a rapid mix and a flocculation (slow mix) section. Hydrated lime is added to assist in the flocculation process. Effluent from the rapid mix-flocculation tank flows through an aboveground line to the clarifier where particles in the influent are allowed to settle to the bottom of the tank. Settled sludge, floating solids, oil, and grease are removed for off-site disposal. The water effluent from the clarifier is pumped through an 8-inch diameter underground pipeline to the underground neutralization tank. Sulfuric acid is added to the influent to adjust the pH prior to discharge. The system originally discharged to the OWTP percolation pond (SWMU 8) however when the percolation pond was closed in 1994 the discharge was rerouted to the main wastewater treatment plant.

The only reported release of contaminants from SWMU 9 was caused in 1988 by operator error in which oil was released to the OWTP Percolation Pond (SWMU 8) as previously discussed (ABB-ES, 1996). Due to the permeability of the soils in the area, however, the potential for leaks from underground or aboveground systems, the wastes managed in the system, and the presence of hazardous materials in the influent, a potential for impacts to soil and groundwater at SWMU 9 was identified. The treatment facility at SWMU 9 is currently in operation.

3.1 DESCRIPTION OF CURRENT CONDITIONS

The description of current conditions is based on descriptions and data collected by Tetra Tech during surface sampling conducted in February 2007. This information was taken from the RFI Addendum for SWMUs 8, 9, 11, and 51 and is summarized in the following sections. However, the RFI Addendum and referenced documents should be reviewed for further details and in-depth analyses of the data presented herein. The information and analytical data from the RFI Report were utilized to form an up-to-date understanding of the current conditions at SWMU 9 from which COCs were identified and for which remedial actions were selected.

3.1.1 RFI Field Investigation

In 1993 and 1994, SWMUs 8, 9 and 11 were investigated for soil and groundwater contamination as part of the RFI conducted for the Group II SWMUs (ABB-ES, 1996). The RFI assessment did not identify soil or groundwater exceedances at SWMU 9.

3.1.2 RFI Addendum Field Investigation

Surface soil samples for SWMU 9 were collected during two sampling events during October to November 2006 and in February 2009. From October to November 2006, surface soil samples were collected from boring locations MPT-09-SB01 through MPT-09-SB13, and in February 2009, a surface soil sample was collected from MPT-09-SB19. These sample locations were placed to assess the area inside SWMU 9 and the areas to the west and northwest of SWMU 9. Soil boring samples collected from October to November 2006 were screened for VOCs using an OVA-FID. Results of the OVA-FID screenings are provided in Appendix B. Surface soil samples were collected from 0 to 1 foot bls for all borings locations and were analyzed for VOCs, SVOCs, PCBs, metals, sulfide, and cyanide. These boring locations are depicted on Figure 3-1.

Subsurface soil samples for SWMU 9 were collected during three sampling events in October and November 2006, February 2007, and February 2009. During October to November 2006, subsurface soil samples in the 8- to 9-foot bls interval were collected from boring locations MPT-09-SB01 through MPT-09-SB13. In February 2007, subsurface soil samples in the 8- to 9-foot bls interval were collected from boring locations MPT-09-SB14 through MPT-09-SB17. The subsurface soil sample collected from MPT-09-SB18 was from the 4- to 5-foot bls interval. Soil boring samples collected in October and November 2006 were screened for VOCs using an OVA-FID (results are provided in Appendix B). These sample locations were placed to assess the area inside SWMU 9 and the areas to the west and northwest of SWMU 9.

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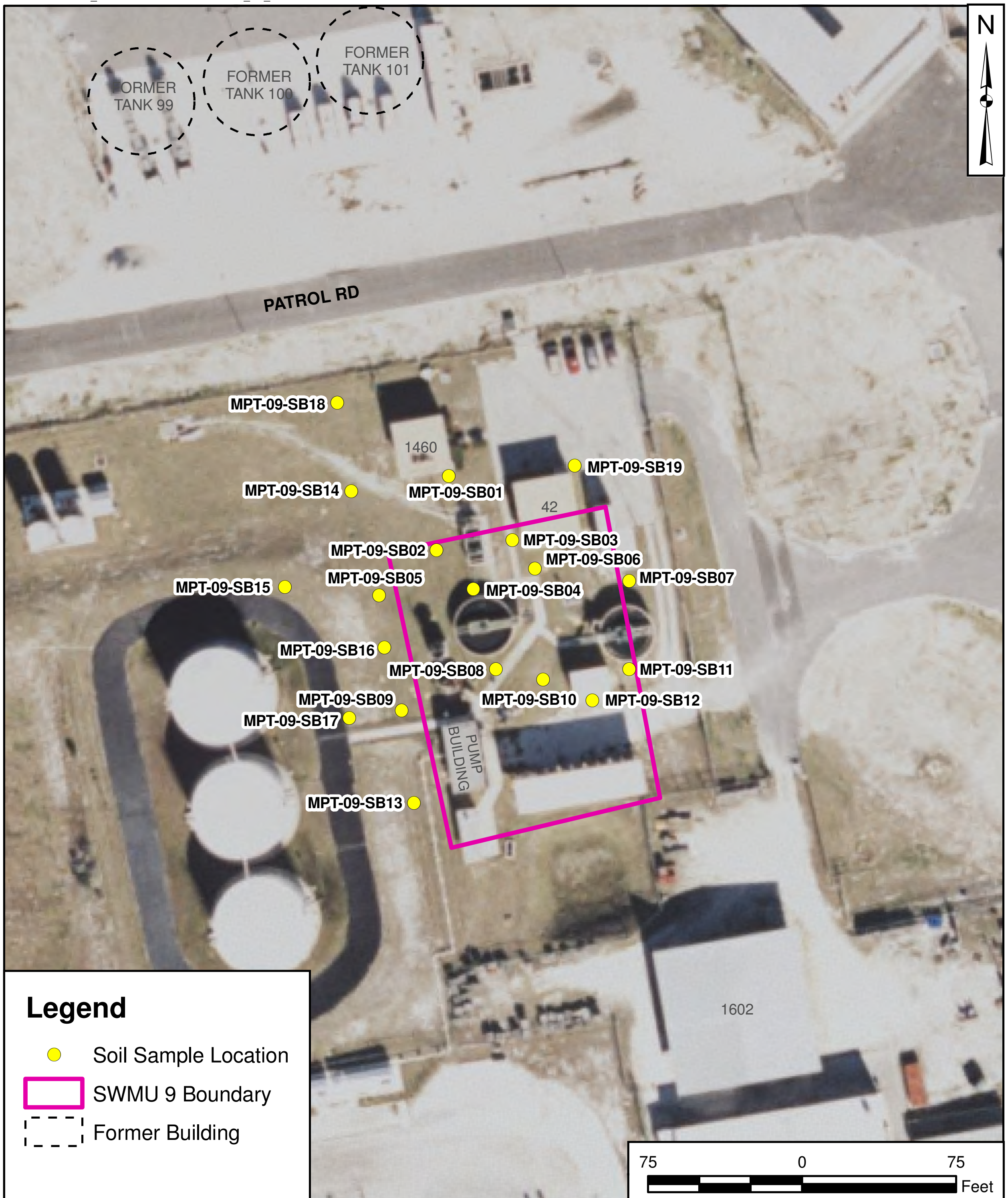

DRAWN BY T. WHEATON — DATE 06/29/10		SOIL SAMPLE LOCATIONS COLLECTED 2006 - 2009 SWMU 9 - OILY WASTE TREATMENT PLANT NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 0033
CHECKED BY B. MARSHALL — DATE 1/10/11			OWNER NUMBER —
REVISED BY — DATE —			APPROVED BY — DATE —
SCALE AS NOTED	NAVFAC		FIGURE NO. FIGURE 3-1 — REV 0

Soil samples from MPT-09-SB01 through MPT-09-SB13 were analyzed for VOCs, SVOCs, PCBs, metals, sulfide, and cyanide. Soil samples from MPT-09-SB14 through MPT-09-SB17 were analyzed for PAHs. The sample from MPT-09-SB18 was analyzed for SVOCs and TPH, and the sample from MPT-09-SB19 was analyzed for SVOCs. These boring locations are depicted on Figure 3-1.

To assess the groundwater impacts at SWMU 9, monitoring wells MPT-08-MW07S, MPT-08-MW08S, MPT-08-MW09S, MPT-09-MW04S, MPT-09-MW05S, and MPT-09-MW06S (as depicted on Figure 3-2) were selected for evaluation. In November 2006, three shallow monitoring wells (MPT-09-MW04S, MPT-09-MW05S, and MPT-09-MW06S) were installed at SWMU 9. Monitoring well MPT-09-MW04S is located just outside the western boundary of SWMU 9 at the location of soil boring MPT-09-SB04. Monitoring well MPT-09-MW05S is located in the north-central portion of SWMU 9, south of Building 42, at the location of soil boring MPT-09-SB06. Monitoring well MPT-09-MW06S is located east of the neutralization tank at soil boring MPT-09-SB11. After the installations, the monitoring wells were developed and sampled in November 2006 for VOCs, SVOCs, metals, sulfide, cyanide, and PCBs. An existing shallow monitoring well (MPT-09-MW09S), which is located downgradient approximately 50 feet north of the northern boundary of SWMU 9, was included in the sampling event for the same parameters as the newly installed wells.

Soil and groundwater samples were analyzed for the same target analytes: VOCs, SVOCs, pesticides, PCBs, metals, and cyanide.

3.1.3 RFI Evaluation

The analytes detected in the surface and subsurface soil and groundwater samples were compared to the state of Florida CTLs (FDEP, 2005).

3.1.3.1 Surface Soil

One surface soil sample collected at SWMU 9 (MPT-09-SB03-01-103006) contains BAP and BAP equivalent concentrations exceeding residential SCTLs. Sample MPT-09-SB03-01 is located near the southwestern corner of Building 42. The surface soil samples MPT-09-SB02, MPT-09-SB04, and MPT-09-SB06, which surround MPT-09-SB03, did not exceed SCTLs for target analytes. These results indicate the surficial extent of soil impacts exceeding SCTLs has been defined for SWMU 9. Figure 3-1 depicts each soil sample location, and Figure 3-3 identifies the MPT-09-SB03 location with analytical results exceeding SCTLs, along with the subsurface soil locations that exceed SCTLs.

Other VOCs, SVOCs, PCBs, PAHs, and metals were detected in surface soil samples for SWMU 9; however, concentrations of these analytes did not exceed FDEP SCTLs.

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DRAWN BY T. WHEATON	DATE 12/17/10	NAVFAC	GROUNDWATER MONITORING WELL MAP SWMU 9 - OILY WASTE TREATMENT PLANT NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 0033
CHECKED BY B. MARSHALL	DATE 1/10/11			OWNER NUMBER —
REVISED BY —	DATE —			APPROVED BY — DATE —
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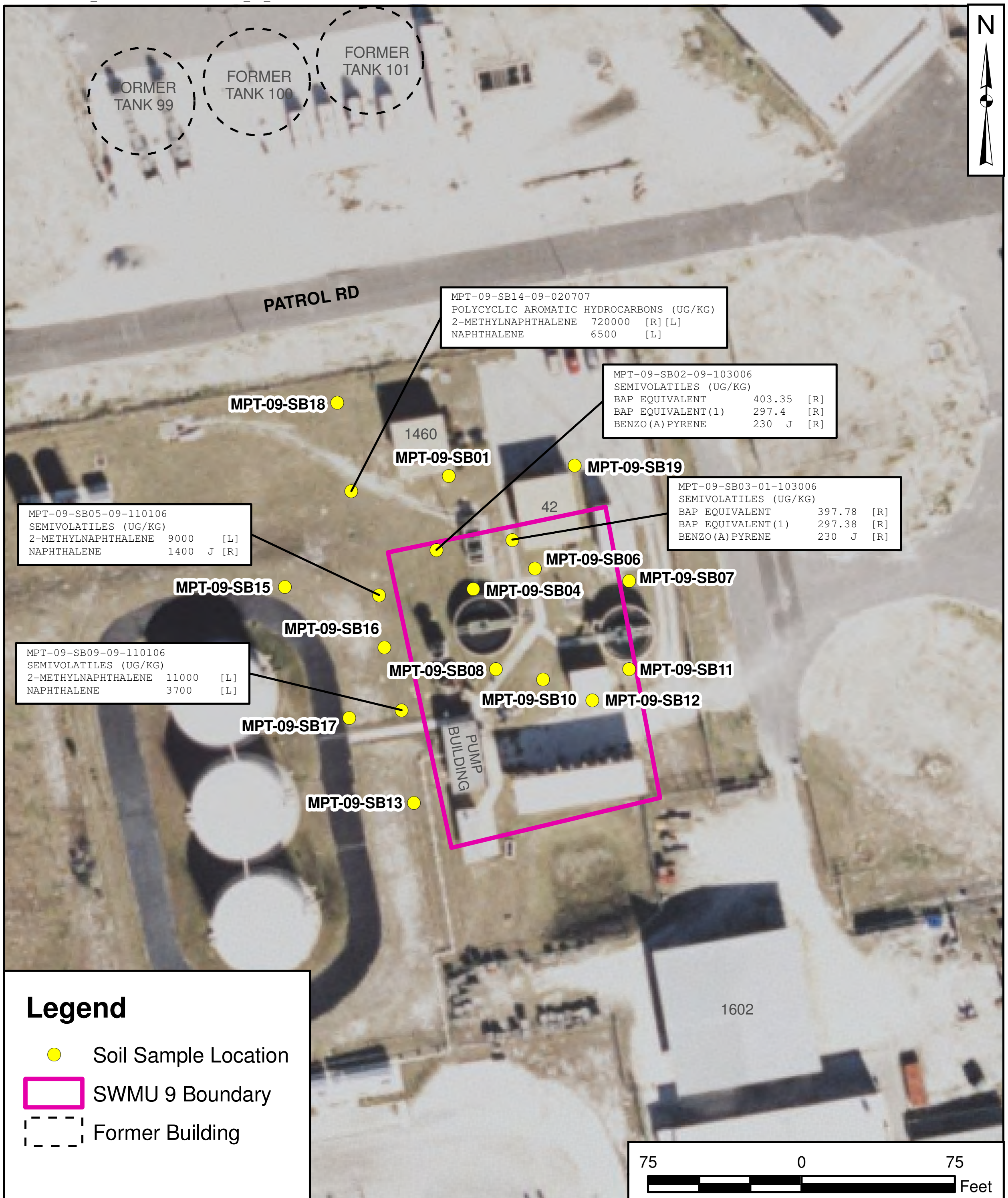

DRAWN BY T. WHEATON / DATE 06/29/10	NAVFAC	SOIL SAMPLE EXCEEDANCE TAG MAP SWMU 9 - OILY WASTE TREATMENT PLANT NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 0033
CHECKED BY B. MARSHALL / DATE 3/04/11			OWNER NUMBER —
REVISED BY — / DATE —			APPROVED BY — / DATE —
SCALE AS NOTED			FIGURE NO. FIGURE 3-3 / REV 0

3.1.3.2 Subsurface Soil

Unsaturated subsurface soil samples were also collected from each surface soil sample location at 9 feet bls, as shown on Figure 3-1. The subsurface soil sample results at location MPT-09-SB02 exceeded residential SCTLs for BAP and BAP equivalent, and subsurface samples results for locations MPT-09-SB05, MPT-09-SB09, and MPT-09-SB14 exceeded either residential or leachability SCTLs for 2-methylnaphthalene and naphthalene. The subsurface soil samples results in boring locations surrounding MPT-09-SB02, MPT-09-SB05, and MPT-09-SB09 did not exceed SCTLs. Figure 3-3 displays surface and subsurface soil sample locations with the corresponding analytical results exceeding SCTLs.

Other VOCs, SVOCs, PCBs, PAHs, and metals were detected in subsurface soil samples for SWMU 9; however, none of these analytes exceeded FDEP SCTLs.

3.1.3.3 Groundwater

Two groundwater samples results at SWMU 9 exceeded iron and manganese GCTLs (300 µg/L and 50 µg/L, respectively) in monitoring wells MPT-09-MW05S and MPT-09-MW06S in November 2006. The groundwater sample results from monitoring well MPT-09-MW04S exceeded the GCTL for manganese. The concentrations detected in monitoring wells MPT-09-MW05S and MPT-09-MW06S exceeded the NAVSTA Mayport BSV for iron (494 µg/L), and the results in MPT-09-MW06S exceeded the BSV for manganese (141 µg/L). Additional samples were taken from monitoring wells MPT-09-MW05S and MPT-09-MW06S in November 2012. The iron concentration in MPT-09-MW05S did not exceed the GCTL (300 µg/L). The manganese concentration in MPT-09-MW06S was 98 µg/L, and did not exceed the BSV (141 µg/L). The iron concentration in MPT-09-MW06S was 744 µg/L, which exceeded the GCTL (300 µg/L) and BSV (494 µg/L).

Figure 3-4 depicts the monitoring well sample locations taken for SWMU 9 and locations of wells with COC that exceed GCTLs.

3.1.4 <u>CMS Data Set</u>

The results of environmental samples collected during the RFA investigation were used to evaluate COIs and to select COCs in this CMS. Tables listing the complete analytical results of all sampling events per medium are included in Appendix A.

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DRAWN BY K. MOORE	DATE 1/13/11		GROUNDWATER EXCEEDANCE TAG MAP SWMU 9 - OILY WASTEWATER TREATMENT PLANT NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO033	
CHECKED BY B. MARSHALL	DATE 03/03/11	NAVFAC		OWNER NUMBER —	
REVISED BY D. FEARS	DATE 03/06/13			APPROVED BY —	DATE —
SCALE AS NOTED				FIGURE NO. FIGURE 3-4	REV 0

3.2 CONTAMINANTS OF CONCERN

The determination of COCs for surface soil, subsurface soil, and groundwater at SWMU 9 involved a three-step process as described in Section 1.5.3. The COIs for SWMU 9 are evaluated in the following sections to select the COCs to be carried forward in the CMS remedy selection process.

3.3 CONTAMINANTS OF INTEREST

The COIs included any contaminant detected at least once in validated analytical results for environmental samples in any medium collected at SWMU 9. The maximum concentration of the COIs for each environmental medium was compared to the Florida CTLs (Chapter 62-777, F.A.C.) for surface soil, subsurface soil, and groundwater, as appropriate. Section 1.5.3.2 provides a detailed description of the process for the identification of COCs.

3.3.1 Evaluation of Surface Soil

The COC screening evaluation for surface soil involves an evaluation of COIs for direct exposure and leaching to groundwater. As shown in Figure 3-3, the direct exposure COC screening process for surface soil identified BAP equivalents calculated for MPT-09-SB03-01 at 0.498 milligram per kilogram, which exceeds the residential SCTL.

Surface water (i.e., the St. Johns River) is not located within 300 feet of SWMU 9; therefore, leaching of soil to marine surface water was not evaluated. The leaching to groundwater evaluation involves a direct comparison to the leaching to GCTLs. Appendix A tables also show the groundwater leachability evaluation.

3.3.2 Evaluation of Subsurface Soil

The COC screening evaluation for subsurface soil involves an evaluation of COIs for direct exposure and leaching to groundwater. The direct exposure COC screening process for subsurface soil is shown in Figure 3-3. The results showed naphthalene and 2-methylnaphthalene in samples MPT-09-SB05-09, MPT-09-SB09-09, and MPT-09-SB14-09; and BAP and BAP equivalents contaminants in sample MPT-09-SB02-09 at concentrations exceeding the SCTLs for direct residential exposure and/or leachability.

3.3.3 Evaluation of Groundwater

The COC screening process for groundwater begins with comparing concentrations directly to the GCTLs to determine COCs. The SWMU is located more than 300 feet away from the nearest surface water body; therefore, the discharge of groundwater into surface water was not evaluated as a pathway of concern. The COC screening process identified two contaminants, iron and manganese, which exceeded both GCTLs and BSVs of 494 milligrams per liter (mg/L) and 141 mg/L respectively, as shown in Figure 3-4. Because the screening criteria for COCs are all based upon maximum contaminant levels for drinking water, iron and manganese are COCs in groundwater.

One well, MPT-08-MW07S, exceeded the TPH GCTL. An evaluation of other groundwater samples in the area indicated that the contamination is associated with SWMUs 6 and 7 and is being addressed with those SWMUs.

3.4 CONTAMINANTS OF CONCERN

The concentration of the COCs for each environmental medium was compared to the CTLs (per Chapter 62-777, F.A.C.) for surface soil, subsurface soil, and groundwater, as appropriate. Section 1.5.3.3 provides a detailed description of the process for the identification of COCs.

3.4.1 Selection of Surface Soil COCs

One sample exceeded SCTLs for BAP and BAP equivalents.

3.4.2 Selection of Subsurface Soil COCs

Three unsaturated subsurface soil samples exceeded SCTLs for the PAHs naphthalene and 2-methylnapthalene at 9 feet bls, and one subsurface soil sample exceeded BAP and BAP equivalents at 9 feet bls.

3.4.3 Selection of Groundwater COCs

One monitoring well exceeded iron for both GCTLs and BSVs.

3.5 CONTAMINANTS OF CONCERN IN SOIL – ECOLOGICAL

Based on the RFI findings on sediment, it is unlikely that there is an ecological concern for SWMU 9.

COC Summary

The results for 1 surface soil and 4 subsurface soils sample locations exceeded SCTLs for PAHs, BAP and BAP equivalents. Results in one groundwater monitoring well exceeded the GCTL for iron.

3.6 VOLUME OF CONTAMINATED MEDIA – SOIL

The volume of contaminated soil in SWMU 9 is shown in Figure C-2 in Appendix C and totals approximately 4,425 cubic yards. This assumes the contaminated soil (unsaturated) extends to a depth of 10 feet at or below groundwater.

3.7 IDENTIFICATION AND SCREENING OF CORRECTIVE MEASURE TECHNOLOGIES

The purpose of this section is to identify and screen appropriate technologies for corrective measure alternatives addressing the CAOs identified. Using Chapter 62-780, F.A.C., criteria, the CAOs have been met and screening of corrective action measures was performed to demonstrate the applicability of using LUCs and LUC monitoring.

Table 3-1 presents the soil corrective measure technologies that are potentially applicable for addressing the CAOs. This table also presents the results of the screening of those technologies. The technology screening process reduces the number of potentially applicable technologies by evaluating the applicability of each technology to site and contaminant factors. Technologies deemed ineffective or not implementable were eliminated from further consideration.

3.8 DEVELOPMENT OF CORRECTIVE MEASURES ALTERNATIVES

The corrective measure alternatives were developed to address the soil impacts related to SWMU 9. Groundwater assessment and corrective action recommendations for SWMU 9 are detailed in Section 3.18 of this CMS. The purpose of providing a range of alternatives is to ensure reasonable general corrective actions are represented and evaluated. The technologies, which were selected to represent various alternatives for soil, are presented in Table 3-2. Alternatives are developed using the representative technologies and are presented in Table 3-3.

3.9 EVALUATION OF CORRECTIVE MEASURE ALTERNATIVES

The identified corrective measures alternatives were evaluated using the criteria contained in the RCRA Corrective Action Plan, Final (USEPA, 1994) and outlined in Section 1.6.

TABLE 3-1
SWMU 9, PRELIMINARY SCREENING OF CORRECTIVE MEASURES TECHNOLOGIES FOR SOIL
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA
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General Corrective Action	Corrective Measures Technology	Technology	Description	General Screening Comments
No Action	None	Not Applicable	No remedial actions taken.	Retained. Will be considered for baseline comparison and for areas that have not experienced any releases of hazardous substances or for areas determined to have minimal short-term or long-term effects on soil, air, and groundwater quality.
Institutional Controls	Access Restrictions	LUCs	LUCs for property in area would include restrictions on excavation/construction or future land use.	Retained. LUCs are viable and will be considered where contaminants exceeding CMS objectives remain in place.
Containment	Capping	Soil	Use of soil to provide a physical barrier to limit erosion and to promote growth of vegetative cover.	Eliminated. Impractical to cap small area of surface soil contamination and subsurface soil contamination is covered with more than 2 feet of soil.
		Clay	Use of a compacted clay layer over contaminated areas to reduce infiltration and provide a physical barrier.	Eliminated. Impractical to cap small area of surface soil contamination and subsurface soil contamination is covered with more than 2 feet of soil.
		Asphalt	Application of an asphalt layer over contaminated areas to prevent infiltration and provide a physical barrier.	Eliminated. Impractical to cap small area of surface soil contamination and subsurface soil contamination is covered with more than 2 feet of soil.
	Underground Barriers	Vertical Walls	Vertical slurry walls, grout curtains, sheet piles, or concrete walls around contaminated soil.	Eliminated. Not applicable to this site.
Removal	Excavation	Soil/Waste Removal via Heavy Equipment	Remove contaminated soil for ex situ treatment and/or disposal.	Retained.

TABLE 3-1
SWMU 9, PRELIMINARY SCREENING OF CORRECTIVE MEASURES TECHNOLOGIES FOR SOIL
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

General Corrective Action	Corrective Measures Technology	Technology	Description	Screening Comments
In Situ Treatment	Bioremediation	Aerobic Biodegradation	Degradation of organics using microorganisms in an oxygen-enriched environment.	Eliminated. The depth of the contaminated soil is at or below the water table. Soil contamination is PAH and BAPs, but groundwater contamination is metals, and not typically remediated via this method.
		Anaerobic Biodegradation	Degradation of organics using microorganisms in an oxygen-deficient environment.	Eliminated. The depth of the contaminated soil is at or below the water table. Soil contamination is PAH and BAPs, but groundwater contamination is metals, and not typically remediated via this method.
		Bioventing	Bioremediation in which air is injected through wells to the subsurface to supply oxygen and increase biodegradation.	Eliminated. The depth of the contaminated soil is at or below the water table. Soil contamination is PAH and BAPs, but groundwater contamination is metals, and not typically remediated via this method.
	Thermal	In Situ Vitrification (ISV)	In-place heating of the soil by electrodes to convert soil to chemically inert and stable glass-like obsidian or crystalline material.	Eliminated. The depth of the contaminated soil is at or below the groundwater table, which makes the treatment more difficult and costly.
	Physical/ Chemical	Soil Flushing	Spray application of water or aqueous solutions upgradient to flush contaminants through the soil to downgradient wells or trenches for collection.	Eliminated. The depth of the contaminated soil is at or below the water table. Soil contamination is PAH and BAPs, but groundwater contamination is metals, and not typically remediated via this method.
		Vapor Extraction (Vacuum extraction)	Uses an induced vacuum created by an extraction/injection well system around the contaminated area to desorb, transport, and collect volatile contaminants in the vadose (unsaturated) zone.	Eliminated. The depth of the contaminated soil is at or below the water table. Soil contamination is PAH and BAPs, but groundwater contamination is metals, and not typically remediated via this method.
		Aeration	Surface tilling of soil to volatilize organics.	Eliminated. The depth of the contaminated soil is at or below the water table. Soil contamination is PAH and BAPs, but groundwater contamination is metals, and not typically remediated via this method.
		Photolysis (photodegradation)	Uses UV radiation (light energy) to break chemical bonds.	Eliminated. The depth of the contaminated soil is at or below the water table. Soil contamination is PAH and BAPs, but groundwater contamination is metals, and not typically remediated via this method.
Ex Situ Treatment	Bioremediation	Aerobic Biodegradation	Degradation of organics using microorganisms in an oxygen-enriched environment. Includes slurry phase (mixing of soil with water in a vessel) and solid phase (treatment bed or land farming) processes.	Eliminated. The depth of the contaminated soil is at or below the water table. Soil contamination is PAH and BAPs, but groundwater contamination is metals, and not typically remediated via this method.
		Anaerobic Biodegradation	Degradation of organics using microorganisms in an oxygen-deficient environment. Includes slurry phase (mixing of soil with water in a vessel) and solid phase (treatment bed or land farming) processes.	Eliminated. The depth of the contaminated soil is at or below the water table. Soil contamination is PAH and BAPs, but groundwater contamination is metals, and not typically remediated via this method.

TABLE 3-1
SWMU 9, PRELIMINARY SCREENING OF CORRECTIVE MEASURES TECHNOLOGIES FOR SOIL
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA
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General Corrective Action	Corrective Measures Technology	Technology	Description	Screening Comments
Ex Situ Treatment (continued)	Thermal	Incineration	Heating of the soil to a high temperature in an enclosed, controlled reactor to destroy organic contaminants. Includes rotary kiln, wet air oxidation, or fluidized/circulating bed processes.	Eliminated. The depth of the contaminated soil is at or below the water table. Soil contamination is PAH and BAPs, but groundwater contamination is metals, and not typically remediated via this method.
	Physical/ Chemical	Soil Washing	Desorption of contaminants using mechanical action and water based fluids such as water, aqueous surfactants, and acids.	Eliminated. The depth of the contaminate BAPs, but groundwater contamination is metals, and not typically remediated via this method.
		Aeration	After excavation, soil are placed on an impermeable surface and tilled to volatilize organics.	Eliminated. The depth of the contaminated soil is at or below the water table. Soil contamination is PAH and BAPs, but groundwater contamination is metals, and not typically remediated via this method.
		Chemical Stabilization/Fixation	To chemically bind the contaminants and prevent them from leaching	Eliminated. The depth of the contaminated soil is at or below the water table. Soil contamination is PAH and BAPs, but groundwater contamination is metals, and not typically remediated via this method.
		Solvent Extraction	Organics are removed from the soil by introducing a solvent that will transfer the organic compounds (attached to the soil particles) to the solvent phase.	Eliminated. The depth of the contaminated soil is at or below the water table. Soil contamination is PAH and BAPs, but groundwater contamination is metals, and not typically remediated via this method.
Disposal	On-site Disposal	Backfill	Place treated soil back in place.	Eliminated. Soil treatment methods eliminated due to metal contamination in groundwater.
	Off-site Disposal	Nonhazardous Landfill	Nonhazardous landfill qualified to receive the contaminated soil at SWMU 9.	Retained.
		Hazardous Waste Landfill	Double-lined and capped permanent disposal facility.	Eliminated. The waste is deemed not hazardous.
		Treatment, Storage, and Disposal Facility (TSDF)	Treatment, storage, and disposal of waste at a regulated TSDF.	Eliminated. The waste is deemed not hazardous.

TABLE 3-2
SWMU 9, REPRESENTATIVE SOIL CORRECTIVE MEASURES TECHNOLOGIES
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

General Corrective Action	Corrective Measures Technology	Technology	Representative Technology	Rationale
No Action	No Action	• None	None	Required
Institutional Controls	Access Restrictions	• LUCs	LUCs	LUCs offer controls.
Removal	Excavation	• Soil removal via heavy equipment	Soil/waste removal via heavy equipment	Will eliminate contamination at SWMU.
Disposal	Off-site Disposal	• Nonhazardous landfill • Hazardous Waste landfill • TSDF	Nonhazardous landfill	Will eliminate contamination at SWMU.

TABLE 3-3
SWMU 9, ASSEMBLY OF SOIL ALTERNATIVES
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

Alternative	Alternative Type	Representative Process Options Combined Into Alternatives	Alternative Description
Alternative 1: No Action	No Action	None	• No Action.
Alternative 2: LUCs and LUC Monitoring	Containment/Limited Action – No or Limited Treatment	LUCs and LUC monitoring	• LUCs. • Periodic site reviews. • LUC Monitoring.
Alternative 3: Excavation and Off-site Disposal	Bulk Removal – Eliminates or Minimizes Long-term Management	Heavy equipment to remove soil	• Delineation/confirmatory sampling of subsurface soil. • Excavation of contaminated soil using heavy equipment and disposal at approved landfill. • Backfill excavation with clean fill. • Establish vegetative cover. • One-year post-remediation groundwater monitoring

3.10 CORRECTIVE MEASURE ALTERNATIVES FOR SOIL

The corrective measure for soil at SWMU 9 will include preventing exposure to the surface and subsurface soil, which is impacted with PAH and BAPs at concentrations exceeding the residential SCTL. The unsaturated contaminated soil is to a depth of 9 feet bls. Groundwater samples in this area do not contain either compound. One surface soil sample exceeds BAP and BAP equivalents at 0 to 1 foot bls, although the subsurface soil sample at this location did not exceed SCTLs for any constituents. Three subsurface soil samples exceed PAHs, and one subsurface soil sample exceeds BAP and BAP equivalents at 8 to 9 feet bls. The groundwater table was encountered at 9 feet bls.

Three alternatives were developed to address soil contamination at SWMU 9. The alternatives are as follows:

Soil Alternative 1:	No Action
Soil Alternative 2:	LUCs and LUC Monitoring
Soil Alternative 3:	Excavation, Off-site Disposal, and LUCs

3.10.1 Soil Alternative 1: No Action

The No Action alternative serves as a baseline consideration or addresses sites, which do not require active remediation. This alternative assumes that no corrective action would occur. No LUCs would remain or be implemented. There would be no monitoring of conditions. Natural attenuation might eventually reduce low concentrations of contaminants to acceptable levels, but the progress of attenuation would not be monitored.

3.10.2 Soil Alternative 2: LUCs and LUC Monitoring

Alternative 2 would be of the limited action type. Alternative 2 would not require maintenance of the existing vegetative cover. LUCs are rules, directives, policies, and other measures (e.g., warning signs) adopted by the appropriate authorities in a manner consistent with applicable Federal, State, and local laws. Land use at SWMU 9 is to remain industrial. LUCs would be implemented in the form of a soil disturbance prohibition. Current security measures at the OWTP include fencing, which limits access to the SWMU.

The implemented LUC would serve to both protect human health by precluding exposure to contamination and also serve to prevent contaminant migration to other areas of the Station. LUCs are imposed on areas that exceed residential standards. Contaminants that exceed residential standards include BAPs and equivalents in the surface soils, and PAHs, BAP, and equivalents in subsurface soil in SWMU 9. LUC implementation would occur via preparation of a site-specific LUCIP that would describe the site location, the prohibition itself and its objectives, and other pertinent information. Once implemented, LUC oversight would be implemented by a CMIP executed between the Navy and the FDEP.

3.10.3 Soil Alternative 3: Excavation and Off-site Disposal

Soil Alternative 3 would eliminate long-term management by addressing contaminated soil through excavation and disposal. This alternative would offer aggressive remediation through excavation and transportation of contaminated soil to an appropriate landfill. An estimated 4,425 cubic yards of soil would be excavated for disposal.

Excavation would involve the removal of surface and subsurface soil in SWMU 9 to a minimum depth of 10 feet bls, to include 1 foot below documented subsurface contamination. Material would be excavated with heavy equipment, loaded onto trucks, and hauled off site to an approved disposal facility. The effectiveness of the technique has been demonstrated in many full-scale operations. Backfilling would be performed in conjunction with excavation. Post-remediation groundwater monitoring would be conducted quarterly for 1 year per Chapter 62-780, F. A. C.

Dust suppression, air monitoring, run-on/runoff controls, and other erosion and sediment controls, as necessary for the protection of human health and the environment, would be conducted during remedial activities on-site.

3.11 EVALUATION OF SOIL CORRECTIVE MEASURE ALTERNATIVES

The identified corrective measure alternatives for soil are evaluated using the criteria described in Section 1.6.

3.11.1 Soil Alternative 1: No Action

Protect Human Health and the Environment

No Action would allow unacceptable risks to human health and the environment. The No Action alternative would do nothing to effectively isolate contaminant sources.

Attain Media Cleanup Standards

No Action may attain the SCTLs in a reasonable period of time, but would not be documented. Natural attenuation might eventually reduce low concentrations of contaminants to acceptable levels, but the progress of this attenuation would not be monitored.

Control the Source of Releases

No Action would not control or eliminate the source of contamination. Natural attenuation might eventually eliminate the source; however, the progress of attenuation would not be monitored.

Comply with any Applicable Standards for Management of Wastes

No Action would not involve any waste management activities, and, therefore, no standards for management of wastes would apply.

Other Factors

a. Long-term Reliability and Effectiveness

The No Action alternative would not provide long-term effectiveness or permanence. Contaminants could migrate and might pose a long-term risk to human health and the environment. Aside from natural attenuation, this alternative would offer no reduction in risk over long periods.

b. Reduction in the Toxicity, Mobility, or Volume of Wastes

Soil with COC concentrations above SCTLs would remain on site. No Action would allow unacceptable risks to human health and the environment. Reduction of toxicity, mobility, or volume might occur but only through natural processes. Natural biodegradation would not be documented in the absence of monitoring, and contaminants could leach to groundwater and migrate off the station.

c. Short-term Effectiveness

The No Action alternative would not include any construction or remedial implementation; therefore, there would be no short-term risks to workers, the community, or the environment. Neither the public nor the workers would be exposed to potential threats associated with construction or transportation.

d. Implementability

No technical implementability issues would exist because no corrective action would occur. Once the alternative is approved, there would be no administrative issues and no need to coordinate with other agencies or acquire permits. Future remedial actions, if needed, would not be hindered by the No Action alternative.

e. Cost

No corrective action would occur. There would be no cost associated with this alternative.

3.11.2 Soil Alternative 2: LUCs and LUC Monitoring

Protect Human Health and the Environment

LUCs applied to SWMU 9 would effectively prevent direct human contact with contaminated soil by limiting activities at the site and restricting access to the site. Soil with contaminant concentrations exceeding residential SCTLs would remain in place. Contaminated surface soil currently has vegetative cover and access to the site is limited. The subsurface soil has more than 2 feet of soil cover. Use of the land will be monitored to prevent residential or residential-like use of SWMU 9 and limit human exposure to the contamination by workers.

Attain Media Cleanup Standards

Monitoring would not ensure attainment of CTLs. Natural attenuation might eventually reduce low concentrations of certain contaminants to acceptable levels.

Control the Source of Releases

LUCs and LUC monitoring would not control or eliminate the source of contamination. Existing soil and vegetation would control the erosion which might expose the contaminated soil.

Comply with Any Applicable Standards for Management of Wastes

LUCs would not involve any waste management activities and, therefore, no standards for management of wastes would apply.

Other Factors

a. Long-term Reliability and Effectiveness

Monitoring would indicate if unacceptable risk occurs. COCs could leach to groundwater and potentially pose a long-term risk to human health and the environment. Long-term management would consist of LUCs and LUC monitoring and would be expected to last 30 years or more.

b. Reduction in the Toxicity, Mobility, or Volume of Wastes

Reduction of toxicity, mobility, or volume might occur but only through natural processes.

c. Short-term Effectiveness

Alternative 2 would not include any construction or remedial implementation; therefore, there would be no short-term risks to workers, the community, or the environment. Neither the public nor the workers would be exposed to potential threats associated with construction or transportation.

d. Implementability

Alternative 2 would be readily implementable. Administrative issues associated with preparing and implementing the LUCs via a CMIP are anticipated to be minimal. Future remedial actions, if needed, would not be hindered by this alternative.

e. Cost

The cost estimates reflect costs to the nearest approximate $1,000. The estimated capital cost for Soil Alternative 2 would be approximately $37,000. The annual O&M costs would be about $3,000, with a periodic review cost of approximately $7,000 every five years. Present worth cost over a period of 30 years would be approximately $84,000. This assumes the required land maintenance would be minor and covered under normal base operating budgets. Detailed cost estimates are provided in Appendix C.

3.11.3 Soil Alternative 3: Excavation and Off-site Disposal

Protect Human Health and the Environment

Alternative 3 would remove the source areas and prevent potential migration of contaminants. All contaminated soil exceeding the residential SCTLs would be excavated and properly disposed off-site in an approved disposal facility. Contaminated soil would be excavated and disposed off-site, and clean soil would be backfilled on site. Post-remediation groundwater monitoring would be conducted quarterly for 1 year per Chapter 62-780, F. A. C. Soil with contaminant concentrations exceeding residential SCTLs would not remain on-site. This alternative provides protection to human health and environment by source removal. No direct human contact with contaminated soil would occur after the corrective measures are implemented. Groundwater would be monitored for 1 year to ensure no migration of contamination.

Attain Media Cleanup Standards

Excavation and disposal would attain the soil media cleanup standards (MCSs). The soil cleanup standards should be attainable within 6 months.

Control the Source of Releases

Excavation and disposal would eliminate the source of contamination to concentrations acceptable for residential use and would prevent further releases that may pose a threat to human health and the environment. Confirmation sampling would ensure that all contaminated soil is removed. Groundwater would be monitored for 1 year to ensure no migration of contamination.

Comply with Any Applicable Standards for Management of Wastes

Excavation of contaminated soil would generate waste, which would be disposed of in a licensed and approved off-site landfill following all Federal, State, and local regulations. Generation of wastes subject to land disposal restrictions (LDRs) is not anticipated.

Other Factors

a. Long-term Reliability and Effectiveness

Alternative 3 involves excavation of contaminated soil and backfilling with clean soil. There would be no machinery or equipment at the site on a long-term basis. Soil removal using construction equipment such as backhoes would be reliable in addressing the contaminated media. As the contaminated soil would effectively be removed and disposed of followed by backfilling with clean soil, and the groundwater monitored for 1 year, the level of effectiveness would be very high.

b. Reduction in the Toxicity, Mobility, or Volume of Wastes

The contaminated soil would be excavated from the site and the groundwater would be monitored. Removal of the waste results in reduction of toxicity, mobility, and volume of waste in the environment.

c. Short-term Effectiveness

Contaminated soil would be excavated and properly disposed off-site in a permitted landfill, and clean soil would be backfilled on-site. Soil with contaminant concentrations exceeding residential SCTLs would not remain on-site. Dust suppression during remedial activities would be employed to minimize fugitive emissions from the site. Implementation of this alternative would not pose any safety concerns to nearby communities, the environment, or on-site workers with the use of appropriate engineering and construction management controls. Exposure to workers during excavation and off-site disposal would be minimal and could be controlled by the use of appropriate PPE.

d. Implementability

Alternative 3 would be implementable. Equipment and personnel to implement this alternative would be available. Excavation of soil is a standard construction practice, but extra care would be required because of the depth of contamination. The alternative is very reliable because the contaminated soil would be removed. This alternative should take less than two years to implement as it includes 1 year of post-remediation groundwater monitoring. Permits for excavation and disposal of buried waste and contaminated soil would be required. Administrative issues and coordination with other agencies or acquiring permits are easily achievable. Future remedial actions such as excavating new areas would not be hindered by this alternative.

e. Cost

The cost estimates reflect cost to the nearest approximate $1,000. The estimated capital cost for Alternative 3 would be approximately $1,700,000. The post-remediation groundwater monitoring, required by Chapter 62-780, F.A.C., would be included in the monitoring program recommended for the current groundwater COCs at SWMU 9. The actual cost for additional analytes to be sampled would be minimal. Present worth cost over a period of 2 years would be approximately $1,700,000. Detailed cost estimates are provided in Appendix C.

3.12 RECOMMENDATION FOR A FINAL SOIL CORRECTIVE MEASURE ALTERNATIVE

The recommendation for a final soil corrective measure alternative will be based on a comparative analysis of soil alternatives.

3.12.1 Comparative Analysis of Soil Alternatives

A comparative analysis of alternatives is presented to address how effectively each alternative will comply with the standards listed in the guidance (USEPA, 1994). Alternative 1, No Action, is considered for baseline purposes and is not expected to satisfy any of the requirements.

Protect Human Health and Environment

Alternative 3 is highly effective in protecting human health and the environment at this site, but would move the contaminated soil to another location. Alternative 1 would not be monitored to determine if it would protect human health or the environment. Alternative 2 is effective in protecting human health and the environment. Alternative 2 would be protective because of the limited access, the existing vegetative cover over the surface soil, and the soil cover over the subsurface soil contamination. Alternative 2 would require monitoring to ensure effectiveness.

Attain Media Cleanup Standards

Alternatives 1 and 2 may attain the similar results after a long period of time as they rely on natural processes.

Control the Sources of Releases

Alternative 3 would remove all contaminated soil. Alternatives 1 and 2 would depend on natural processes to degrade COCs in the source areas.

Comply with any Applicable Standards for Management of Wastes

Alternatives 1 and 2 would not involve waste generation. Alternative 3 would generate approximately 4,425 cubic yards of waste. The waste generated would be disposed of off-site following all applicable Federal, State, and local requirements. None of the waste streams are expected to have LDRs.

Other Factors

a. Long-term Reliability and Effectiveness

Alternative 3 would have the highest long-term reliability and effectiveness because of source removal. Alternatives 1 and 2 rely on natural attenuation processes, only Alternative 2 would be monitored. None of these alternatives would have any treatment system in-place. Alternative 1 would not provide any degree of long-term reliability.

b. Reduction in the Toxicity, Mobility, or Volume of Waste

Alternative 3 would remove the potential for mobility of contamination. None of the other alternatives would reduce toxicity, mobility or volume of waste.

c. Short-term Effectiveness

None of these alternatives would pose any threat to local communities or on-site personnel during the implementation of the corrective measures. On-site workers would be protected from exposure to hazardous substances through appropriate use of PPE.

d. Implementability

All alternatives are readily implementable. The technologies involved and required services are easily available. Administrative issues and coordination with other agencies or acquiring permits are easily achievable. Future remedial actions would not be hindered by the alternative.

e. Cost

The estimated capital, O&M, and net present worth costs are presented in Table 3-4.

TABLE 3-4
SWMU 9, COSTS FOR SOIL ALTERNATIVES
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

ALTERNATIVE	CAPITAL COSTS	ANNUAL O&M COSTS*	TOTAL PRESENT WORTH COSTS**
1	$0	• No cost.	$30,000
2	$37,000	• $2,581 for 1-30 years • with an additional $7,016 every 5 years	$84,000
3	$1,700,000	• $48,000 for 1 year post-remediation included in groundwater remediation	$1,700,000

Notes:
* Labor and material costs are for comparison value only.
** 30-YEAR, 7% INTEREST RATE

3.12.2 Recommendation

Based on the evaluation of technologies and assessment of various alternatives performed, Soil Alternative 2 is recommended for addressing the soil contamination at SWMU 9.

3.13 DESCRIPTION OF THE RECOMMENDED SOIL CORRECTIVE MEASURES ALTERNATIVE

Based on the evaluation of technologies and assessment of various alternatives performed, Alternative 2 is recommended for addressing the soil contamination at the site.

3.13.1 Summary of the Soil Corrective Measure and Rationale

a. Description of the Corrective Measure and Rationale for Selection

The recommended corrective measure alternative involves implementing LUCs at SWMU 9. The level of contamination at the site is not to the extent that excavating the contaminated soil would provide any additional protection to human health or the environment. The LUCs would provide adequate and cost effective protection of human health and the environment.

b. Performance Expectations

The recommended corrective measure alternative would prevent potential human exposure pathways. Based on the RFI conclusions, there were no ecological impacts.

c. Preliminary Design Criteria and Rationale

LUCs would be in place to prevent residential construction at the site.

d. General O&M Requirements

LUC inspections would be conducted as outlined in the CMIP.

e. LTM Requirements

LUC inspections would be conducted as outlined in the CMIP.

3.13.2 Design and Implementation Precautions

a. Special Technical Problems

No technical problems are anticipated in implementing the corrective measures.

b. Additional Engineering Data Required

No additional engineering data are required.

c. Permits and Regulatory Requirements

The CMIP would require approval by FDEP.

d. Health and Safety Requirements

OSHA requirements will be satisfied during all site activities.

e. Community Relations Activities

The selection of preferred corrective measures and details on how they would be implemented will be presented to the local community.

3.13.3 Cost Estimate and Schedule

a. Capital Cost Estimate

The capital costs involved in the implementation of the recommended corrective measure alternative are presented in Table 3-4.

b. O&M Cost Estimate

O&M costs for the recommended corrective measure alternative are presented in Table 3-4.

c. Project Schedule

The estimated schedule to implement LUCs is less than 1 year.

3.14 VOLUME OF CONTAMINATED MEDIA – GROUNDWATER

The area of contaminated groundwater at SWMU 9 is shown in Figure C-2A in Appendix C and totals approximately 168,000 gallons.

3.15 IDENTIFICATION AND SCREENING OF CORRECTIVE MEASURE TECHNOLOGIES

The purpose of this section is to identify and screen appropriate technologies for corrective measure alternatives addressing the CAOs identified. Table 3-5 presents the groundwater corrective measure technologies that are potentially applicable for addressing the CAOs. This table also presents the results

TABLE 3-5
SWMU 9, PRELIMINARY SCREENING OF CORRECTIVE MEASURES TECHNOLOGIES FOR GROUNDWATER
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA
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General Corrective Action	Corrective Measures Technology	Technology	Description	General Screening Comments
No Action	None	Not Applicable	No remedial actions taken.	Retained. Will be considered for baseline comparison and for areas that have not experienced any releases of hazardous substances or for areas determined to have minimal short-term or long-term effects on groundwater quality.
Institutional Controls	Access Restrictions	LUCs	LUCs for groundwater would include restrictions on groundwater use.	Retained. LUCs are viable and will be considered where contaminants exceeding CMS objectives remain in place.
Monitoring	Monitoring	Groundwater monitoring	Periodic monitoring of wells in the area of potential groundwater contamination.	Retained. Groundwater monitoring is viable for assessing the effectiveness of natural attenuation on certain applicable COCs, containment, or treatment measures during and following implementation of corrective measures.
Containment	Hydrodynamic Control	Extraction Wells	Control of plume migration by a system consisting of extraction of the contaminated groundwater.	Eliminated. Asymptotic conditions and elevated costs associated with groundwater extraction typically create an undesirable scenario.
		Collection Trench	Control of plume migration by a collection trench and extraction of the contaminated groundwater	Eliminated. Asymptotic conditions and elevated costs associated with groundwater extraction typically create an undesirable scenario.
		Slurry Wall	Trench around areas of contamination is filled with a soil (or cement) bentonite slurry to obstruct/divert the groundwater flow.	Eliminated. Lack of a confining layer at a reasonable depth.
		Grout Curtain	Pressure injection of grout in a regular pattern of drilled holes. Requires integration with confining layer to be effective.	Eliminated. Lack of a confining layer at a reasonable depth.
	Subsurface Barriers	Sheet Piling	Driving interconnecting lengths of steel into the ground to form a thin, impermeable barrier. Requires integration with confining layer to be effective.	Eliminated. Lack of a confining layer at a reasonable depth.
Removal	Extraction	Extraction Wells	Series of pumping wells to extract contaminated groundwater.	Eliminated. Asymptotic conditions and elevated costs associated with groundwater extraction typically create an undesirable scenario.
		Collection Trenches	Perforated pipe in trenches backfilled with porous media to collect groundwater. May include sumps and gravity drains.	Eliminated. Asymptotic conditions and elevated costs associated with groundwater extraction typically create an undesirable scenario.
In Situ Treatment	Bioremediation	Aerobic	Degradation of organics using microorganisms in an oxygen-enriched environment.	Eliminated. Aerobic treatment is not effective in addressing metal contamination.
		Anaerobic	Degradation of organics using microorganisms in an oxygen-deficient environment.	Eliminated because treatment is not effective in addressing metal contamination.

TABLE 3-5
SWMU 9, PRELIMINARY SCREENING OF CORRECTIVE MEASURES TECHNOLOGIES FOR GROUNDWATER
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA
PAGE 2 OF 3

General Corrective Action	Corrective Measures Technology	Technology	Description	General Screening Comments
In Situ Treatment (continued)	Physical / Chemical	Air Sparging	Injection of air below the water table. Rising bubbles volatilize dissolved and adsorbed phase contaminants and transport them to the vadose where they are removed by a method of collection such as vapor extraction or by in situ aerobic degradation.	Eliminated. Air sparging along with vapor extraction/ bioventing is not effective for the removal of metals.
		Permeable Reactive Barriers	An in situ barrier composed of a permeable reactive material that reacts with the contaminants in the water, reducing their concentrations by physical and chemical processes.	Eliminated. Treatment is not effective for metals.
Ex Situ treatment (On-site)	Bioremediation	Aerobic	Degradation of organics using microorganisms in an oxygen-enriched environment.	Eliminated because metals will be unaffected.
	Physical / Chemical	Precipitation	Conversion of heavy metals into insoluble solid forms through the addition of precipitating agents such as hydroxides and sulfides.	Eliminated. Groundwater extraction and ex-situ treatment/disposal is not typically preferred due to high costs and undesirable performance and results.
		Air Stripping	Mixing large volumes of air with groundwater in a packed column or aerated basin to promote transfer of VOCs to air.	Eliminated because the contaminants at the site are not volatile.
		Steam Stripping	Mixing large volumes of steam with groundwater in a packed column or aerated basin to promote transfer of VOCs to air.	Eliminated because the technology is ineffective for metals.

TABLE 3-5
SWMU 9, PRELIMINARY SCREENING OF CORRECTIVE MEASURES TECHNOLOGIES FOR GROUNDWATER
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA
PAGE 3 OF 3

General Corrective Action	Corrective Measures Technology	Technology	Description	General Screening Comments
Disposal	Surface Discharge	Flocculation/ Coagulation	Use of chemicals to neutralize surface charges and promote particle size growth.	Eliminated. Groundwater extraction and ex-situ treatment/disposal is not typically preferred due to high costs and undesirable performance and results.
		Filtration	Removal of suspended solids by passing contaminated water through a filter media.	Eliminated. Groundwater extraction and ex-situ treatment/disposal is not typically preferred due to high costs and undesirable performance and results.
		Adsorption	Adsorption of contaminants onto activated carbon by passing water through carbon column.	Eliminated. Groundwater extraction and ex-situ treatment/disposal is not typically preferred due to high costs and undesirable performance and results.
		Oxidation	Chemical oxidation (increase in oxidation state) of contaminants into less toxic or soluble forms through the use of oxidizing agent(s). Includes ozone, UV light, peroxide, permanganate, and manganese oxidation.	Eliminated because the technology is ineffective for metals.
		Direct to local stream	Treated groundwater discharged to local streams.	Eliminated. Groundwater extraction and ex-situ treatment/disposal is not typically preferred due to high costs and undesirable performance and results.
	Subsurface Discharge	Discharge to local treatment facility	Treated groundwater discharged to local POTW treatment plant.	Eliminated. Groundwater extraction and ex-situ treatment/disposal is not typically preferred due to high costs and undesirable performance and results.
		Injection wells	Series of injection wells to discharge collected/treated groundwater to subsurface. Requires regulatory approval.	Eliminated. Reinjection of untreated groundwater is not a viable option. Reinjection of treated water may be appropriate.

of the evaluation of those technologies. The technology screening process reduces the number of potentially applicable technologies by evaluating the applicability of each technology to site and contaminant factors. Technologies deemed ineffective or not implementable were eliminated from further consideration.

3.16 DEVELOPMENT OF CORRECTIVE MEASURES ALTERNATIVES

The corrective measure alternatives were developed to address the groundwater impacts related to SWMU 9. The purpose of providing a range of alternatives is to ensure that reasonable corrective actions are represented and evaluated in a diligent and effective manner. The technologies, which are selected to represent various alternatives for groundwater cleanup, are presented in Table 3-6. Groundwater alternatives developed using the representative technologies are presented in Table 3-7.

TABLE 3-6
SWMU 9, REPRESENTATIVE GROUNDWATER CORRECTIVE MEASURE TECHNOLOGIES
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

General Corrective Action	Corrective Measures Technology	Technology	Rationale
No Action	No Action	None	Required
Institutional Controls	Access Restrictions Water use Restrictions	LUCs	To impose water and residential use restrictions.
Groundwater Monitoring	Groundwater Monitoring	Groundwater Monitoring	Required until CAOs achieved or site closure using Chapter 62-780, F.A.C. is achieved.

TABLE 3-7
SWMU 9, ASSEMBLY OF GROUNDWATER ALTERNATIVES
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

Alternative	Alternative Type	Representative Technologies Combined Into Alternatives	Alternative Description
Alternative 1: No Action	No Action	None	No Action
Alternative 2: LUCs and Groundwater Monitoring	Limited Action – No or Limited Treatment	LUCs and Groundwater Monitoring	LUCs Periodic groundwater sampling to monitor natural attenuation on certain applicable COCs and result trends on COCs not affected by natural attenuation (i.e., metals). LUC Monitoring

3.17 EVALUATION OF CORRECTIVE MEASURES ALTERNATIVES

The corrective measures alternatives were developed to address the combined groundwater contamination at SWMU 9. Iron is the contaminant in groundwater, and the alternatives are as follows:

Groundwater Alternative 1: No Action
Groundwater Alternative 2: LUCs and Groundwater Monitoring

3.17.1 Alternative 1: No Action

The No Action alternative serves as a baseline consideration or addresses sites that do not require active remediation. This alternative assumes that no corrective action would occur. No remedy would remain or be implemented. There would be no monitoring of conditions. Natural attenuation might eventually reduce low concentrations of contaminants in groundwater to acceptable levels, but the progress of attenuation would not be monitored.

3.17.2 Alternative 2: LUCs and Groundwater Monitoring

Alternative 2 is of the limited action type. LUCs are rules, directives, policies, and other measures (e.g., preventing the usage of groundwater, and posting signs) adopted by the appropriate authorities in a manner consistent with applicable Federal, State, and local laws. Land use at this SWMU is expected to remain industrial. LUCs and groundwater use controls would be implemented to ensure that access to the site is restricted, proper personal protection procedures are followed, and to ensure appropriate future land use. Restrictions would be in place to ban any new drinking water or irrigation wells and prohibit residential or residential-like use.

Monitoring consists of ensuring that LUCs remain in place. The contaminant that exceeds MCSs is iron. LUC implementation would occur via preparation of a site-specific LUCIP that will describe the site location, the prohibition itself and its objectives, groundwater monitoring, and other pertinent information. Once implemented, LUC oversight will be specified in the CMIP executed between the Navy and the FDEP.

Groundwater monitoring would be conducted to establish evidence that RMO II or RMO III is acceptable, after which one of these would be used as the exit strategy, and monitoring discontinued.

3.18 EVALUATION OF GROUNDWATER CORRECTIVE MEASURES ALTERNATIVES

The identified corrective measure alternatives for groundwater are evaluated using the criteria described in Section 1.6.

3.18.1 Alternative 1: No Action

Protect Human Health and the Environment

No Action would allow unacceptable risks to human health and the environment. The No Action alternative would do nothing to prevent human consumption of the groundwater.

Attain Media Cleanup Standards

No Action may attain the MCSs, but would not be documented. Natural geochemical processes may eventually reduce low concentrations of contaminants to acceptable levels, but the progress of attenuation would not be monitored.

Control the Source of Releases

No Action would not control or eliminate the source of contamination. Natural processes might eventually eliminate the source; however, the change would not be monitored.

Comply with any Applicable Standards for Management of Wastes

No Action would not involve any waste management activities and, therefore, no standards for management of wastes would apply.

Other Factors

a. Long-term Reliability and Effectiveness

The No Action alternative would not provide long-term effectiveness or permanence. Contaminants could migrate and might pose a long-term risk to human health and the environment. Aside from natural attenuation, this alternative would offer no reduction in risk over long periods of time.

b. Reduction in the Toxicity, Mobility, or Volume of Wastes

Groundwater with contaminant concentrations exceeding MCSs would remain in the surficial aquifer. No Action would allow unacceptable risks to human health and the environment. Reduction of toxicity, mobility, or volume might occur, but only through natural processes. Natural geochemical processes would not be documented in the absence of monitoring, and contaminated groundwater could migrate off base.

c. Short-term Effectiveness

The No Action alternative would not include any construction or remedial implementation; therefore, there would be no short-term risks to workers, the community, or the environment. Neither the public nor the workers would be exposed to potential threats associated with construction or transportation.

d. Implementability

No technical implementability issues would exist because no corrective action would occur. Once the alternative was approved, there would be no administrative issues and no need to coordinate with other agencies or acquire permits. Future remedial actions, if needed, would not be hindered by the No Action alternative.

e. Cost

No corrective action would occur, and there would be no associated cost.

3.18.2 <u>Groundwater Alternative 2: LUCs and Groundwater Monitoring</u>

<u>Protect Human Health and the Environment</u>

LUCs would effectively prevent direct human contact with contaminated groundwater by controlling the access and preventing residential use of contaminated groundwater. Groundwater monitoring would assess the groundwater quality, ensure that restrictions on land use are in place, and assess the progress of natural geochemical changes. Over time, the contaminant concentrations in groundwater would reach levels that are protective to human health and the environment.

<u>Attain Media Cleanup Standards</u>

Alternative 2 would document attainment of the MCSs over an assumed period of 30 years.

<u>Control the Source of Releases</u>

LUCs and groundwater monitoring would not control or eliminate the source of contamination. Natural geochemical processes may eventually eliminate the source for certain applicable COCs.

<u>Comply with any Applicable Standards for Management of Wastes</u>

LUCs and groundwater monitoring would not involve any waste management activities other than disposal of sampled water and waste from monitoring well construction that would be disposed of following applicable standards. No other standards for management of wastes would apply.

Other Factors

a. Long-term Reliability and Effectiveness

Groundwater monitoring would indicate if unacceptable risk occurs in the groundwater. LUCs would prevent residential or residential-like groundwater use. Long-term management would consist of LUCs and LUC monitoring and would be expected to last 30 years or more.

b. Reduction in the Toxicity, Mobility, or Volume of Wastes

Reduction of toxicity, mobility, or volume might occur.

c. Short-term Effectiveness

The construction activity would be minimal and there would be no short-term risks to workers, the community, or the environment. Exposure to potential threats to the public or the workers would be minimal due to construction or transportation.

d. Implementability

Groundwater Alternative 2 would be readily implementable. Administrative issues associated with preparing and implementing the LUCs via a CMIP are anticipated to be minimal. Future remedial actions, if needed, would not be hindered by this alternative.

e. Cost

The estimated capital cost for Groundwater Alternative 2 would be approximately $33,000. The annual O&M costs would be approximately $31,000 for groundwater monitoring for the first 5 years and, assuming reduction in concentrations, about $17,000 for the next 25 years. Present worth cost over a period of 30 years would be approximately $316,000. Detailed cost estimates are provided in Appendix C.

3.19 RECOMMENDATION FOR A FINAL GROUNDWATER CORRECTIVE MEASURES ALTERNATIVE

The recommendation for a final groundwater corrective measures alternative will be based on a comparative analysis of groundwater alternatives.

3.19.1 Comparative Analysis of Groundwater Alternatives

A comparative analysis of groundwater alternatives is presented to address how effectively each alternative will comply with the standards listed in the guidance (USEPA, 1994). Alternative 1, No Action, is considered for baseline purposes and is not expected to satisfy any of the requirements.

Protect Human Health and Environment

Alternative 2 is effective in protecting human health and the environment. Alternative 1 would not address unacceptable risks to human health and the environment. Alternative 2 would provide protection to human health and the environment. The shallow groundwater does not meet the requirements of a drinking water source; the surficial aquifer is not currently and will not be used in the future as a potable water source. In addition, the SWMU is an active treatment plant and access is extremely limited. Under these conditions, Alternative 2 would be able to protect human health and the environment in a cost-effective manner. This alternative would require LTM and LUCs to ensure effectiveness.

Attain Media Cleanup Standards

Both alternatives may eventually meet MCSs, but the time to achieve the standards cannot be determined. Alternative 2 would document attainment of the cleanup standards.

Control the Sources of Releases

The likely source of contamination is the reduced oxygen in the groundwater. Neither alternative would directly control the source. Alternative 1 would eventually meet MCSs, but the time period cannot be quantified.

Comply with Any Applicable Standards for Management of Wastes

Alternative 1 would not generate any wastes. Alternative 2 would generate a minimal amount of waste and it would be disposed of properly following all Federal, State, and local requirements and, therefore, complies with all applicable standards more effectively than the other alternatives. Alternative 2 would not involve the generation/management of waste when implemented except for a small quantity during the development of monitoring wells.

Other Factors

a. Long-term Reliability and Effectiveness

Alternative 2 would rely on natural geochemical processes in addressing applicable COCs within the contaminated water and the reliability would be low. The shallow groundwater does not meet the requirements of a drinking water source and the Surficial Aquifer is not currently used as a potable water source. Under these conditions, Alternative 2 would be able to provide adequate long-term reliability and effectiveness in a cost-effective manner. Alternative 1 would not provide for long-term reliability and effectiveness.

b. Reduction in the Toxicity, Mobility, or Volume of Waste

Alternative 2 would rely on natural processes for the reduction of toxicity. Alternative 2 would be able to provide adequate reduction in the toxicity, mobility, or volume of contaminated groundwater in a cost-effective manner. Alternative 1 may eventually reduce contaminant concentrations but it would not be monitored.

c. Short-term Effectiveness

Alternatives 1 and 2 would offer short-term effectiveness. Neither involves construction activity. None of these alternatives, however, would pose any threat to local communities or on-site personnel during the implementation of the corrective measures. On-site workers would be protected from exposure to hazardous substances through appropriate use of PPE.

d. Implementability

Both alternatives are implementable. Administrative issues and coordination with other agencies or acquiring permits are easily achievable. Future remedial actions would not be hindered by the alternatives.

e. Cost

Costs associated with Alternative 1 would be the lowest. The estimated capital, O&M, and net present worth costs are presented in Table 3-8. Detailed cost estimates are provided in Appendix C.

TABLE 3-8
SWMU 9, COSTS FOR GROUNDWATER ALTERNATIVES
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

ALTERNATIVE	CAPITAL COSTS	ANNUAL O&M COSTS*	TOTAL PRESENT WORTH COSTS**
1	$0	• $0	$0 by definition
2	$33,000	• $31,000 for 5 years and $17,000 for 24 years with an additional $6700 every 5 years	$316,000

Notes:
* Labor and material costs are for comparison value only.
** 30-YEAR, 7% INTEREST RATE

3.19.2 Recommendation

Based on the screening of technologies and assessment of various alternatives performed, Groundwater Alternative 2 is recommended for addressing the groundwater contamination at SWMU 9.

3.20 DESCRIPTION OF THE RECOMMENDED GROUNDWATER CORRECTIVE MEASURES ALTERNATIVE

3.20.1 Summary of the Groundwater Corrective Measure and Rationale

a. Description of the Corrective Measure and Rationale for Selection

The recommended corrective measure alternative involves LUCs and groundwater monitoring to address limited groundwater contamination at the site. Any elaborate treatment system would not be justified because the surficial aquifer is not currently used as a potable water source and impact to the ecological receptors is minimal. Alternative 2 monitors the natural geochemical processes for applicable COCs with periodic sampling.

b. Performance Expectations

The recommended corrective measure alternative would prevent potential human exposure pathways and achieve GCTLs through natural changes over a period of time.

c. Preliminary Design Criteria and Rationale

LUCs would be in place to prevent residential or residential-like use of groundwater. Groundwater sampling would be conducted as outlined in the CMIP.

d. General O&M Requirements

LUC inspections and groundwater monitoring would be conducted as outlined in the CMIP.

e. LTM Requirements

LUC inspections and groundwater monitoring would be conducted as outlined in the CMIP.

3.20.2 Design and Implementation Precautions

a. Special Technical Problems

No technical problems are anticipated in implementing the corrective measures.

b. Additional Engineering Data Required

No additional engineering data are required.

c. Permits and Regulatory Requirements

Permits for installing monitoring wells may be required. RCRA groundwater monitoring requirements have to be satisfied. The CMIP would require approval by the FDEP.

d. Health and Safety Requirements

OSHA requirements have to be satisfied during sampling activities.

e. Community Relations Activities

The selection of preferred corrective measures and details on how they would be implemented would be presented to the local community.

3.20.3 Cost Estimate and Schedule

a. Capital Cost Estimate

The capital costs involved in the implementation of the recommended corrective measure alternative are presented in Table 3-8. Detailed cost estimates are provided in Appendix C.

b. O&M Cost Estimate

O&M costs for the recommended corrective measures are presented in Table 3-8.

c. Project Schedule

The estimated schedule to initially implement LUCs and monitoring is 1 to 2 years.

4.0 SWMU 11 – FUEL LOADING RACK

SWMU 11 is located in the northwestern portion of NAVSTA Mayport on the southern shore of the St. Johns River, east of SWMU 51, and west of the fuel farm (see Figure 1-2). SWMU 11 is adjacent to the fuel loading rack, which is used to load tanker trucks. Soil borings were advanced in the mid-1980s to assess an identified release of petroleum fuel that was anticipated to be JP-4, JP-5, or diesel marine fuel. The release was suspected to originate from the waste oil pit formerly located to the east of the fuel farm area. An expanded investigation into the release was completed in 1987 and consisted of soil boring samples and installation and sampling of three groundwater monitoring wells (Kearney, 1989).

4.1 DESCRIPTION OF CURRENT CONDITIONS

The description of current conditions is based on descriptions and data collected by Tetra Tech during surface sampling conducted in February 2007. This information was taken from the RFI Addendum for SWMUs 8, 9, 11, and 51 and is summarized in the following sections. However, the RFI Addendum and referenced documents should be reviewed for further details and in-depth analyses of the data presented herein. The information and analytical data from the RFI Report were utilized to form an up-to-date understanding of the current conditions at SWMU 11 from which COCs were identified and for which remedial actions were selected.

4.1.1 RFI Field Evaluation

In 1993 and 1994, SWMUs 8, 9 and 11 were investigated for soil and groundwater contamination as part of the RFI conducted for the Group II SWMUs (ABB-ES, 1996). For SWMU 11, the RFI recognized a release of petroleum had occurred based on subsurface soil sample exceedances for TPH; however, no specific actions were recommended for remediation for SWMU 11.

4.1.2 RFI Addendum Field Investigation

Surface and subsurface soil samples for SWMU 11 were collected during three sampling events in October 2006, April 2007, and February 2009. Soil samples were collected in October 2006 from boring locations MPT-11-SB01 through MPT-11-SB08 in April 2007 from borings MPT-11-SB09 through MPT-11-SB12, and in February 2009 from MPT-11-SB15 (see Figure 4-1). These borings were placed to assess the areal extent of contamination to the southwestern area of the fuel loading rack. Surface soil samples were taken from the 0- to 1-foot bls interval for all borings locations, and subsurface soil samples were taken at 10- to 13-foot bls interval. Soil samples were analyzed for VOCs, SVOCs, PCBs, metals, and TPH.

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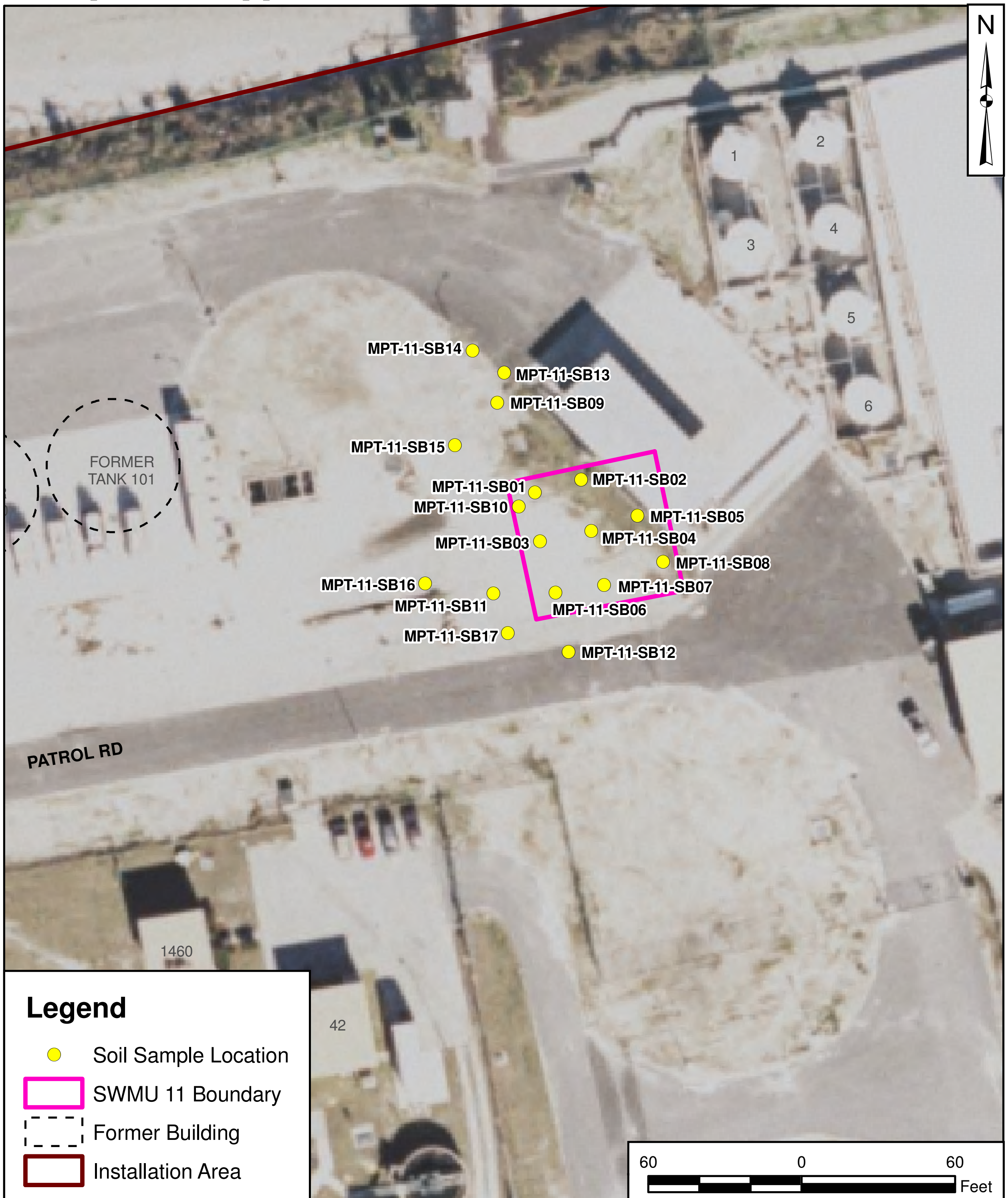

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B. MARSHALL	1/10/11
REVISED BY	DATE
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SCALE AS NOTED	

NAVFAC

SOIL SAMPLE LOCATIONS
COLLECTED 2006 - 2009
SWMU 11 - FUEL SPILL AREA
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

CONTRACT NUMBER	
CTO 0033	
OWNER NUMBER	
—	
APPROVED BY	DATE
—	—
FIGURE NO.	REV
FIGURE 4-1	0

Monitoring wells MPT-08-MW12S, MPT-08-MW13S, MPT-08-MW13I, MPT-09-MW01S, MPT-09-MW02S, and MPT-11-MW05S were selected to assess the groundwater impacts at SWMU 11. These wells are depicted on Figure 4-2. Monitoring wells MPT-11-MW05S and MPT-08-MW12S are located inside SWMU 11 and are where the release was reported. Monitoring wells MPT-08-MW13S and MPT-08-MW13I are located downgradient, and monitoring wells MPT-09-MW01S and MPT-09-MW02S are located on the side gradient to the east. Monitoring well MPT-11-MW05S was installed and sampled in November 2006 for VOCs, PAHs, and TPH and sampled in August 2008 for VOCs, SVOCs, PCBs, and metals. Monitoring well MPT-08-MW12S was sampled in April 2008, May 2010, and July 2010 for analytes that included VOCs, SVOCs, PCBs, metals, and TPH. In addition, monitoring wells MPT-08-MW13S and MPT-08-MW13I were sampled on several occasions in 1999, 2000, and 2002 for analytes that included VOCs, SVOCs, and TPH.

4.1.3 RFI Evaluation

The target analytes detected in the surface soils, subsurface soil, and groundwater samples were compared to the state of Florida CTLs and NAVSTA Mayport BSVs (Tetra Tech, 2000).

4.1.3.1 Surface Soil

COC concentrations in the surface soil samples did not exceed SCTLs. Figure 4-3 depicts the soil sample locations collected for SWMU 11.

4.1.3.2 Subsurface Soil

Subsurface soil samples were also collected from each surface soil sample location depicted in Figure 4-3. In the RFI Addendum, the analytical results exceeded TPH residential, industrial, and leachability SCTLs for subsurface soil at sample locations MPT-11-SB01, MPT-11-SB06, MPT-11-SB09, and MPT-11-SB11.

Other VOCs, SVOCs, PAHs, and metals were detected in subsurface soil samples for SWMU 11; however, concentrations of these analytes did not exceed the FDEP SCTLs.

4.1.3.3 Groundwater

Groundwater samples for SWMU 11 did not exceed GCTLs for the monitoring wells sampled from 2006 to 2010. In addition, several groundwater samples taken in 1999, 2000, and 2002 from monitoring wells MPT-08-MW13I and MPT-08-MW13S did not exceed PAH, metals, and TPH GCTLs.

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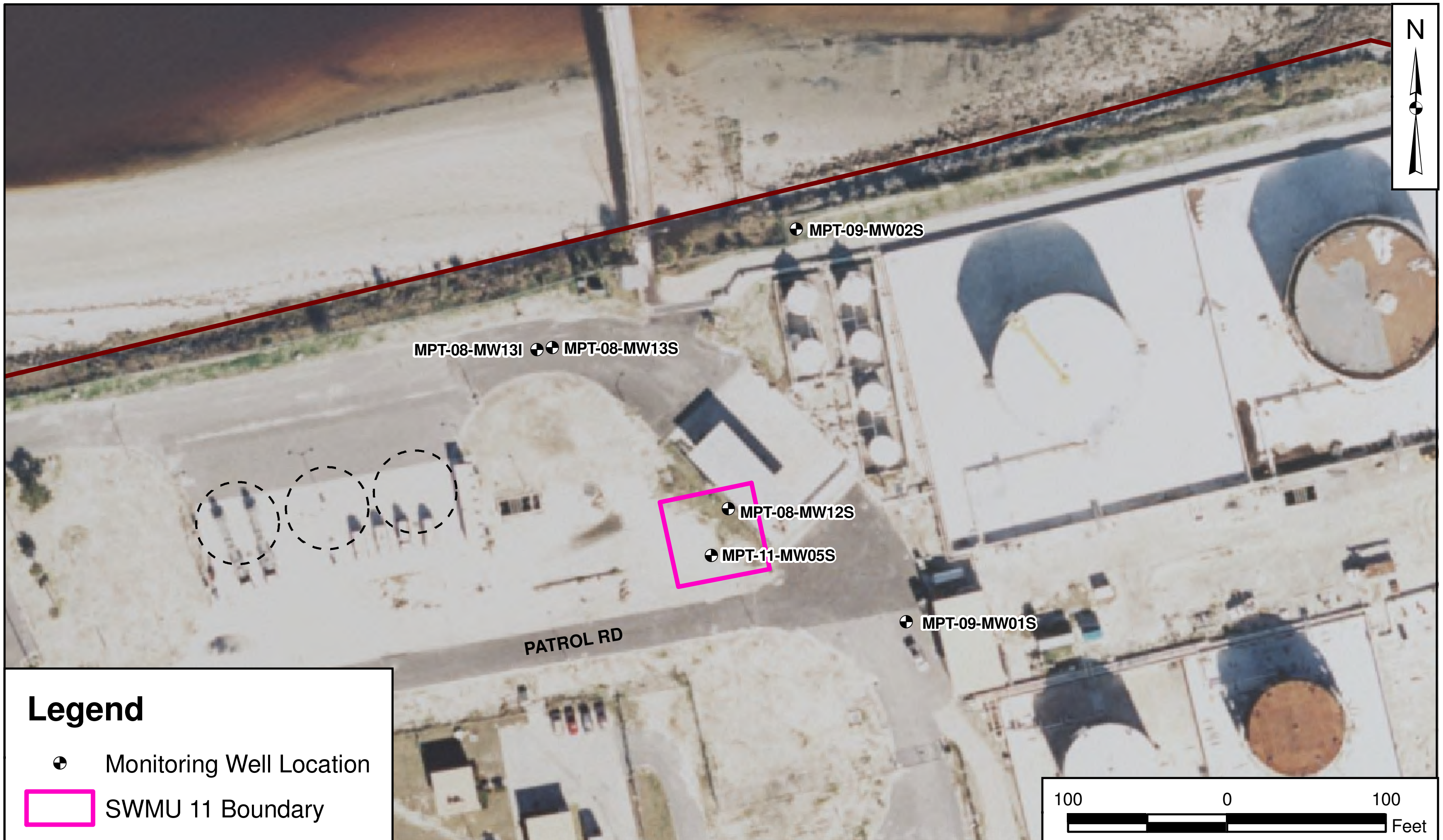

DRAWN BY T. WHEATON	DATE 12/17/10	GROUNDWATER MONITORING WELL MAP SWMU 11 - FUEL SPILL AREA NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 0033	
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COST/SCHEDULE AREA			APPROVED BY ___	DATE ___
SCALE AS NOTED			FIGURE NO. FIGURE 4-2	REV 0

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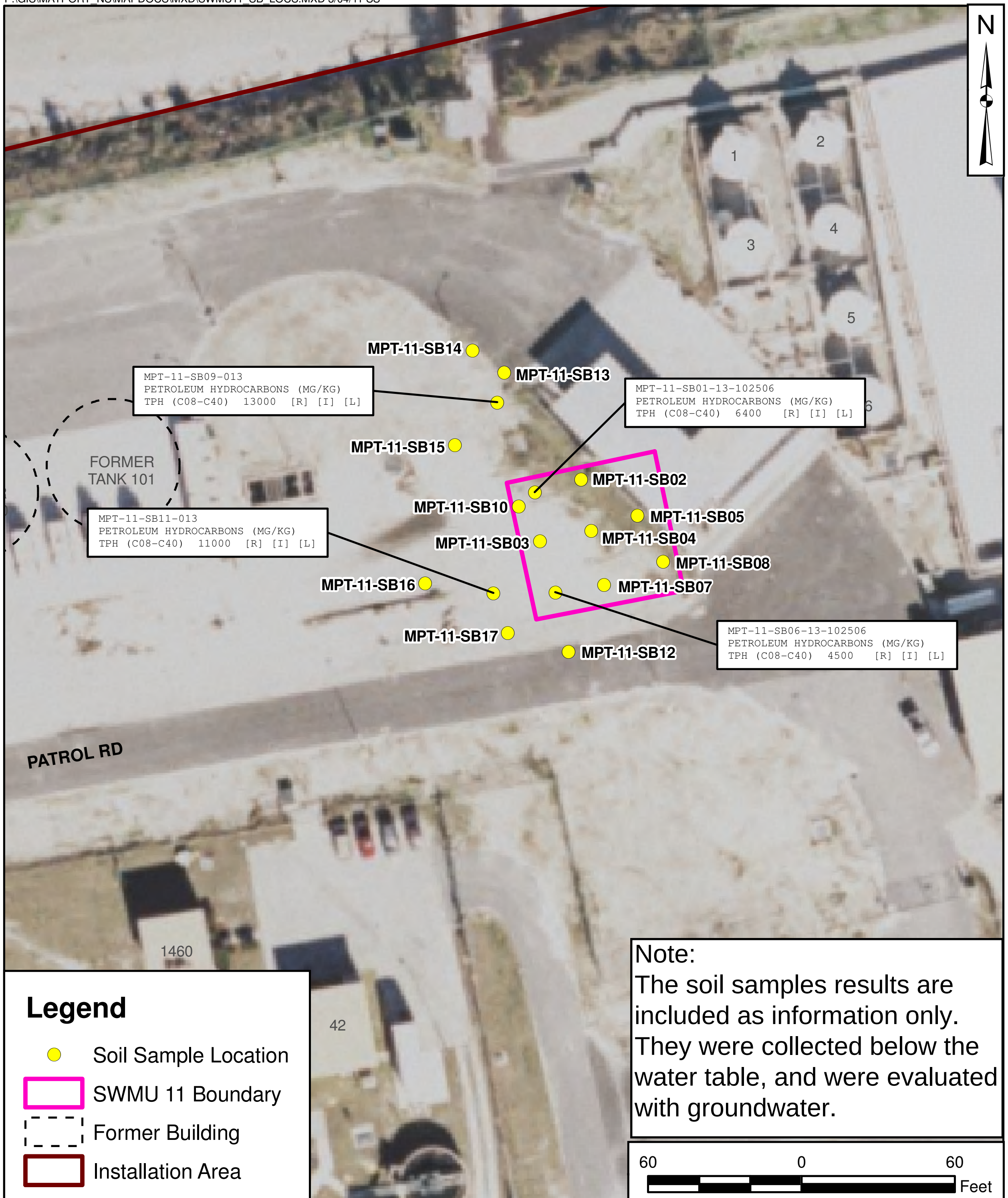

Note:
The soil samples results are included as information only. They were collected below the water table, and were evaluated with groundwater.

DRAWN BY K. MOORE — DATE 1/12/11 CHECKED BY B. MARSHALL — DATE 3/04/11 REVISED BY — DATE — SCALE AS NOTED	NAVFAC	SOIL SAMPLE EXCEEDANCE TAG MAP SWMU 11 - FUEL SPILL AREA NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 0033 OWNER NUMBER — APPROVED BY — DATE — FIGURE NO. FIGURE 4-3 — REV 0

4.1.4 CMS Data Set

The results of environmental samples collected during the RFA and RFI investigations were used to select COCs in this CMS. Tables listing the complete analytical results of all sampling events per medium are included in Appendix A.

4.2 CONTAMINANTS OF CONCERN

The COCs for surface soil, subsurface soil, and groundwater at SWMU 11 involved a three-step process as described in Section 1.5.3. COIs were determined in the RFI or the RFA Reports and are independently evaluated in the following sections to select the COCs to be carried forward in the CMS remedy selection process.

4.3 CONTAMINANTS OF INTEREST

The COIs included any contaminant detected at least once in validated analytical results for environmental samples in any medium collected at SWMU 11. The concentration of the COIs for each environmental medium was compared to the Florida CTLs (per Chapter 62-777, F.A.C.) for surface soil, subsurface soil, and groundwater, as appropriate. Section 1.5.3.2 provides a detailed description of the process for the identification of COCs.

4.3.1 Selection of Surface Soil COCs

The COC screening evaluation for surface soil involves an evaluation of COIs for direct exposure and leaching to groundwater, as shown in Appendix A. No surface soil samples exceeded SCTLs; therefore, no contaminants were selected as COCs for surface soils.

4.3.2 Selection of Subsurface Soil COCs

The COC screening evaluation for subsurface soil involves an evaluation of COIs for direct exposure and leaching to groundwater. The COC screening results for subsurface soil are shown in Appendix A, and identified four samples with TPH that exceeded the SCTLs for residential and industrial direct exposure and leachability. These unsaturated soil samples are approximately 13 feet bls.

4.3.3 Selection of Groundwater COCs

The COC screening process for groundwater begins with comparing the maximum concentration directly to the GCTLs. Because SWMU 11 is located less than 300 feet away from the nearest surface water body, the discharge of groundwater into surface water was evaluated as a pathway of concern. The COC screening process identified no contaminants that exceeded the GCTLs as shown in Appendix A; therefore, no contaminants were identified as COCs for groundwater.

4.3.4 Contaminants of Concern in Soil – Ecological

No ecological COCs were identified at SWMU 11.

4.3.5 COC Summary

No COCs for surface soil, subsurface soil, or groundwater were identified for SWMU 11.

4.4 VOLUME OF CONTAMINATED MEDIA – SOIL

No COCs were identified for surface soil, subsurface soil, or groundwater at SWMU 11; therefore, contamination maps were not prepared.

4.5 IDENTIFICATION AND SCREENING OF CORRECTIVE MEASURE TECHNOLOGIES

Corrective measure technologies are identified and screened to address the CAOs identified for SWMU 11 (see Section 1.5.1). Neither soil nor groundwater technologies are required because there are no COCs at SWMU 11.

4.6 DEVELOPMENT OF CORRECTIVE MEASURES ALTERNATIVES

No Action is recommended for addressing the soil and groundwater at SWMU 11.

5.0 SWMU 51 – FUEL DEPOT WASTE OIL USTS

SWMU 51 is located in the northwestern portion of NAVSTA Mayport on the southern shore of the St. Johns River, west of SWMU 11, and to the north of SWMU 9 (see Figure 1-2).

SWMU 51 was identified in the RFA as three cut-and-cover waste oil tanks (former Tanks 99, 100, and 101, FDEP Facility Identification Number 8626008). The underground storage tanks (USTs), which were each approximately 210,000 gallons in capacity, were reportedly installed in 1954. Leak detection methods were integrated into their design and configuration with a ring drain system surrounding the tanks that would collect any leaks and return the leaked liquid to Tanks 99 or 100 (Kearney, 1989). In addition, these former tanks were used as the oily wastewater receiving tanks from the OWTP effluent generated at SWMU 9. Waste oil was separated from the oily wastewater in Tanks 99 and 100 through the Oily Waste Collection System (SWMU 47). The oil phase from Tanks 99 and 100 was conveyed to Tank 101, and the oil was then pumped from Tank 101 into tanker trucks. The oil transported via tanker trucks from Tank 101 was used to fuel boilers and refuse burners at NAVSTA Mayport. The three USTs were demolished during the 1998 Military Construction Project P-468, which completely re-configured the Fuel Farm. Currently, the SWMU 51 area is a paved parking area for fuel tanker trucks.

5.1 DESCRIPTION OF CURRENT CONDITIONS

The description of current conditions is based on descriptions and data collected by Tetra Tech during surface sampling conducted in February 2007. Information was taken from the RFI, Limited Tank Closure Assessment, and RFI Addendum for SWMUs 8, 9, 11, and 51 and is summarized in the following sections. The referenced documents should be reviewed for further details and in-depth analyses of the data presented herein.

5.1.1 RFI Field Evaluation

In 1993 and 1994, SWMUs 8, 9, and 11 were investigated for soil and groundwater contamination as part of the RFI conducted for the Group II SWMUs (ABB-ES, 1996). Although SWMU 51 was not formally included in the scope of the RFI, the perimeter area of SWMU 51 was assessed for soil and groundwater impacts. Results of the screening and sampling did not indicate a release had occurred in the area of SWMU 51.

5.1.2 Limited Tank Closure Assessment

In May 2000, Environmental Science Associates, Inc. (ESA) performed a limited closure assessment at the SWMU 51 following the removal of Tanks 99, 100, and 101. Per the ESA Limited Closure Summary Report, the purpose of the limited closure assessment was to evaluate potential releases near the waste oil storage tanks. The limited closure assessment was reportedly performed in accordance with the requirements of Chapter 62-761, F.A.C., and the FDEP guidance document “Pollutant Storage Tank Closure Assessment Requirements”. During the 2000 ESA limited tank closure assessment, soil and groundwater samples were collected in locations surrounding former Tanks 99, 100, and 101 (ESA, 2000).

Groundwater samples collected from monitoring wells near the former tanks exceeded FDEP GCTLs for PAH and TPH compounds. Soil samples did not exceed SCTLs. Groundwater sample locations from the limited tank closure assessment are detailed in the RFI Work Plan (Tetra Tech, 2006). The temporary and permanent monitoring wells installed during the closure assessment are no longer present at SWMU 51; presumably the wells were destroyed when the parking area was constructed.

Surface and Subsurface Soil

Surface soil samples for SWMU 51 were collected during three sampling events in October 2006, April 2007, and February 2009. Surface soil samples were collected in October 2006 from boring locations MPT-51-SB01 through MPT-51-SB04 and MPT-51-SB08 through MPT-51-SB11, in April 2007 from borings MPT-51-SB14 and MPT-51-SB15 and in February 2009 from borings MPT-51-SB17 and MPT-51-SB20. Surface soil samples were collected from 0 to 1 foot bls for all borings locations. These borings were placed to assess the area surrounding the former Tanks 99, 100, and 101. Soil boring samples collected in October 2006 were screened for VOCs using an OVA-FID.

Results of the OVA-FID screenings are provided in Appendix B. Samples from borings MPT-51-SB01 through MPT-51-SB04 and MPT-51-SB08 through MPT-51-SB11 were analyzed for VOCs, PAHs, PCBs, metals, and TPH. Samples from borings MPT-51-SB14 and MPT-51-SB15 were analyzed for TPH. Samples from borings MPT-51-SB17 and MPT-51-SB20 were analyzed for PAHs and TPH. These boring locations are shown on Figure 5-1.

Figure 5-2 depicts historic and current soil screening locations for SWMUs 8, 9, 11, and 51.

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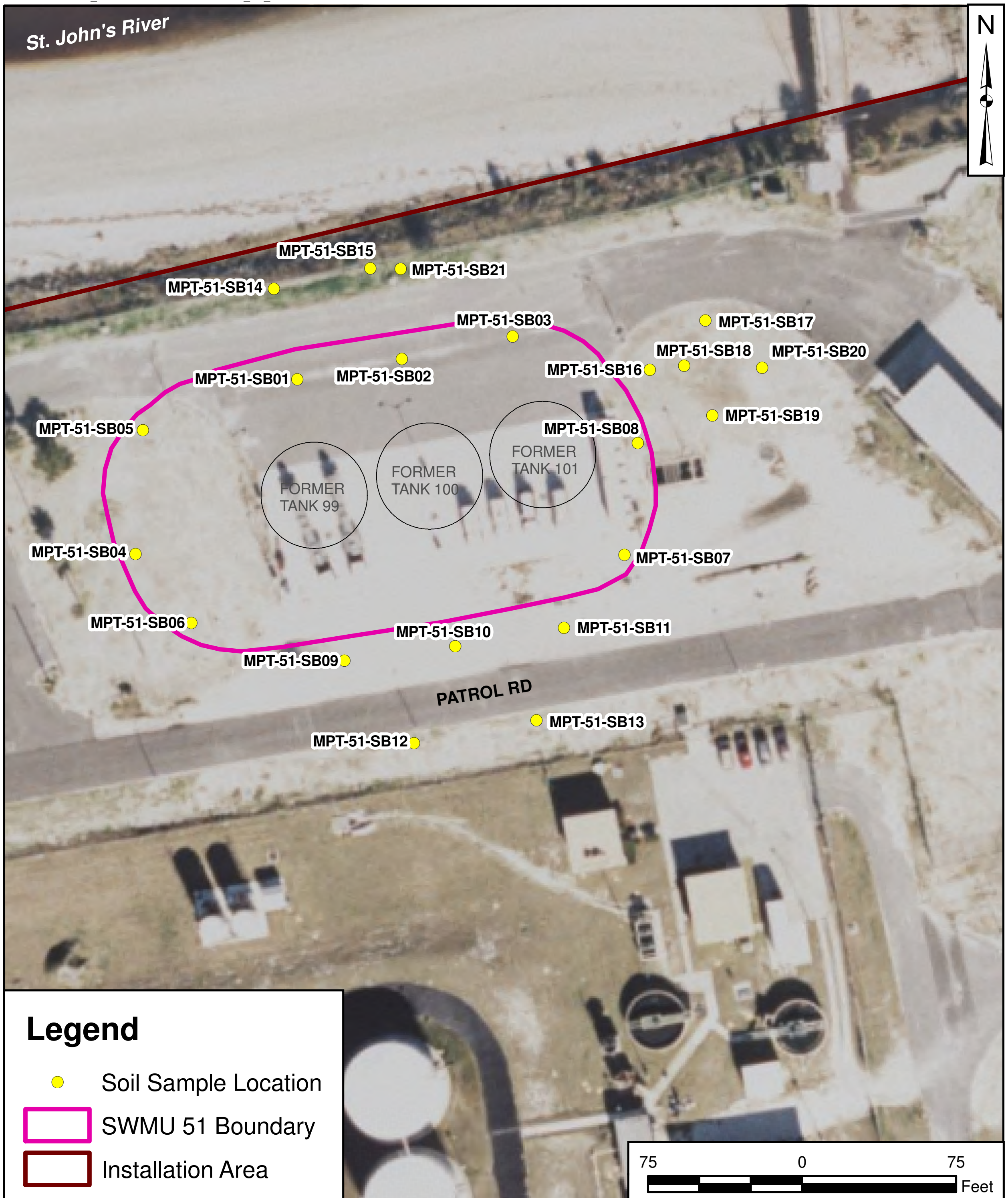

DRAWN BY T. WHEATON — DATE 06/24/10	NAVFAC	SOIL SAMPLE LOCATIONS COLLECTED 2006 - 2009 SWMU 51 -WASTE OIL TANKS NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 0033
CHECKED BY B. MARSHALL — DATE 1/10/11			OWNER NUMBER —
REVISED BY — DATE —			APPROVED BY — DATE —
SCALE AS NOTED			FIGURE NO. FIGURE 5-1 — REV 0

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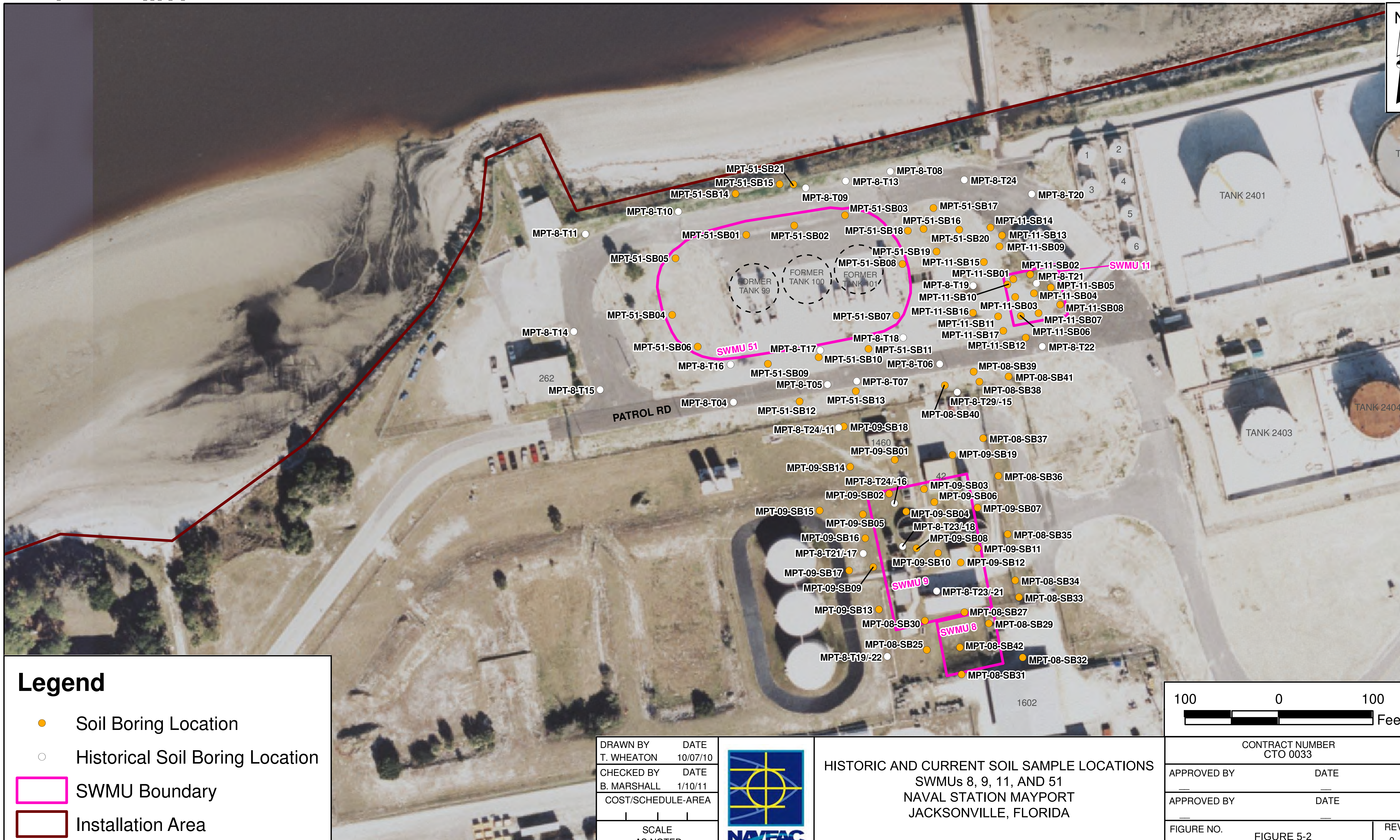

Legend

- Soil Boring Location
- Historical Soil Boring Location
- SWMU Boundary
- Installation Area

DRAWN BY T. WHEATON	DATE 10/07/10	HISTORIC AND CURRENT SOIL SAMPLE LOCATIONS SWMUs 8, 9, 11, AND 51 NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 0033
CHECKED BY B. MARSHALL	DATE 1/10/11		APPROVED BY — DATE —
COST/SCHEDULE-AREA			APPROVED BY — DATE —
SCALE AS NOTED			FIGURE NO. FIGURE 5-2 / REV 0

Subsurface soil samples for SWMU 51 were collected during four sampling events in October 2006, February 2007, April 2007, and February 2009. In October 2006, subsurface soil samples were collected from the 9- to 10-, 10- to 11-, or 12- to 13-foot bls intervals from boring locations MPT-51-SB01 through MPT-51-SB04 and MPT-51-SB08 through MPT-51-SB11. In February 2007, subsurface soil samples were collected from either the 10- to 11- or 12- to 13-foot bls interval from boring locations MPT-51-SB05 through MPT-51-SB07 and MPT-51-SB13. In April 2007, subsurface soil samples were collected from either the 10- to 11- or 12- to 13-foot bls interval from boring locations MPT-51-SB14 through MPT-51-SB16. In February 2009, a subsurface soil sample in the 9- to 10-foot bls interval was collected from boring location MPT-51-SB21. The samples were collected approximately 1 foot above groundwater at each location. These borings were placed to assess the perimeter area of the former Tanks 99, 100, and 101. Soil boring samples collected in October 2006 were screened for VOCs using an OVA-FID (results are provided in Appendix B).

Subsurface soil samples from MPT-51-SB01 through MPT-51-SB04 and MPT-51-SB08 through MPT-51-SB11 were analyzed for VOCs, SVOCs, PAHs, TPH, PCBs, and metals. Soil samples from MPT-51-SB05 through MPT-51-SB07, soil sample MPT-51-SB13, soil samples MPT-51-SB14 through MPT-51-SB16, and MPT-51-SB21 were analyzed for PAHs and TPH. These boring locations are shown on Figure 5-1.

<u>Groundwater</u>

To assess the groundwater impacts at SWMU 51, monitoring wells MPT-07-TW04S (renamed MPT-51-MW07S), MPT-08-MW15SR, MPT-08-MW16S, MPT-51-MW01S, MPT-51-MW02S, MPT-51-MW03S, MPT-51-MW04S, MPT-51-MW05S, MPT-51-MW06S, MPT-51-TW01S, and MPT-51-TW02S were selected for evaluation. These wells are depicted on Figure 5-3.

Three shallow monitoring wells (MPT-51-MW01S, MPT-51-MW02S, and MPT-51-MW03S) were installed at SWMU 51 in November 2006. These monitoring wells were located along the northern boundary of SWMU 51 and are downgradient of the SWMU. Two monitoring wells (MPT-51-TW01S and MPT-51-TW02S) were installed in February 2007, and three monitoring wells (MPT-51-MW04S, MPT-51-MW05S, and MPT-51-MW06S) were installed in April 2007. Downgradient monitoring wells MPT-51-MW01S, MPT-51-MW02S, MPT-51-MW03S, MPT-51-TW01S, and MPT-51-TW02S were installed north of SWMU 51 between the former waste oil tanks and the St. Johns River bank. Monitoring wells MPT-51-MW04S, MPT-51-MW05S, and MPT-51-MW06S were installed west of SWMU 51 near the bank of the St. Johns River.

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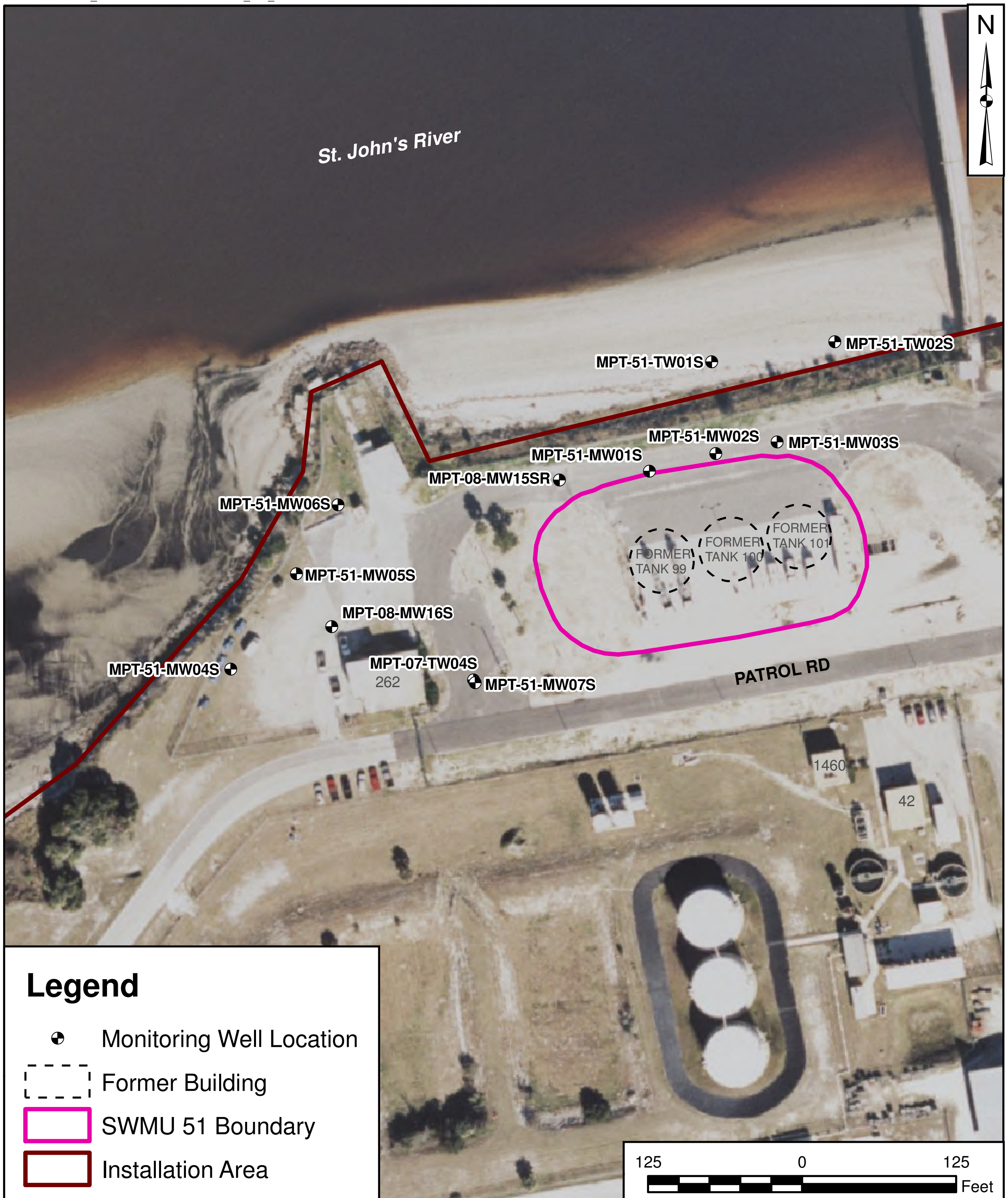

DRAWN BY T. WHEATON	DATE 12/17/10	NAVFAC	GROUNDWATER MONITORING WELL MAP SWMU 51 - WASTE OIL TANKS NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 0033
CHECKED BY B. MARSHALL	DATE 1/10/11			OWNER NUMBER —
REVISED BY —	DATE —			APPROVED BY — DATE —
SCALE AS NOTED				FIGURE NO. FIGURE 5-3 REV 0

Monitoring wells MPT-51-MW01S, MPT-51-MW02S, MPT-51-MW03S, MPT-08-MW15SR, MPT-08-MW16S, and MPT-07-TW04S (renamed to MPT-51-MW07S) were sampled in November 2006 for VOCs, SVOCs, and PAHs. Monitoring wells MPT-51-TW01S and MPT-51-TW02S were sampled in February 2007 for PAHs and TPH. Monitoring wells MPT-51-MW04S, MPT-51-MW05S, and MPT-51-MW06S were sampled in April 2007 for PAHs and TPH. Monitoring wells MPT-51-MW01S, MPT-51-MW02S, MPT-51-MW03S, and MPT-51-MW07S were sampled in August 2008 for VOCs, SVOCs, PCBs, and metals.

For reference, all the monitoring wells selected for assessment of groundwater at SWMUs 8, 9, 11, and 51 are depicted on Figure 5-4.

5.1.3 CMS Data Set

The results of environmental samples collected during the RFI investigation were used to evaluate and select COCs in this CMS. Tables listing the complete analytical results of all sampling events per medium are included in Appendix A.

5.2 CONTAMINANTS OF CONCERN

The determination of COCs for surface soil, subsurface soil, and groundwater at SWMU 51 involved the three-step process as described in Section 1.5.3. The COIs for SWMU 51 are independently evaluated in the following sections to select the COCs to be carried forward in the CMS remedy selection process.

5.3 CONTAMINANTS OF INTEREST

The COIs included any contaminant detected at least once in validated analytical results for environmental samples in any medium collected at SWMU 51. The soil sampling locations at SWMU 51 are shown in Figure 5-1**.** The maximum concentration of the COIs for each environmental medium was compared to the Florida CTLs (per Chapter 62-777, F.A.C.) for surface soil, subsurface soil, and groundwater, as appropriate.

5.3.1 Selection of Surface Soil COCs

The COC screening evaluation for surface soil involves an evaluation of COIs for direct exposure and leaching to groundwater. One sample location, MPT-51-SB02-01, exceeded the residential direct exposure SCTL for TPH and is shown on Figure 5-5.

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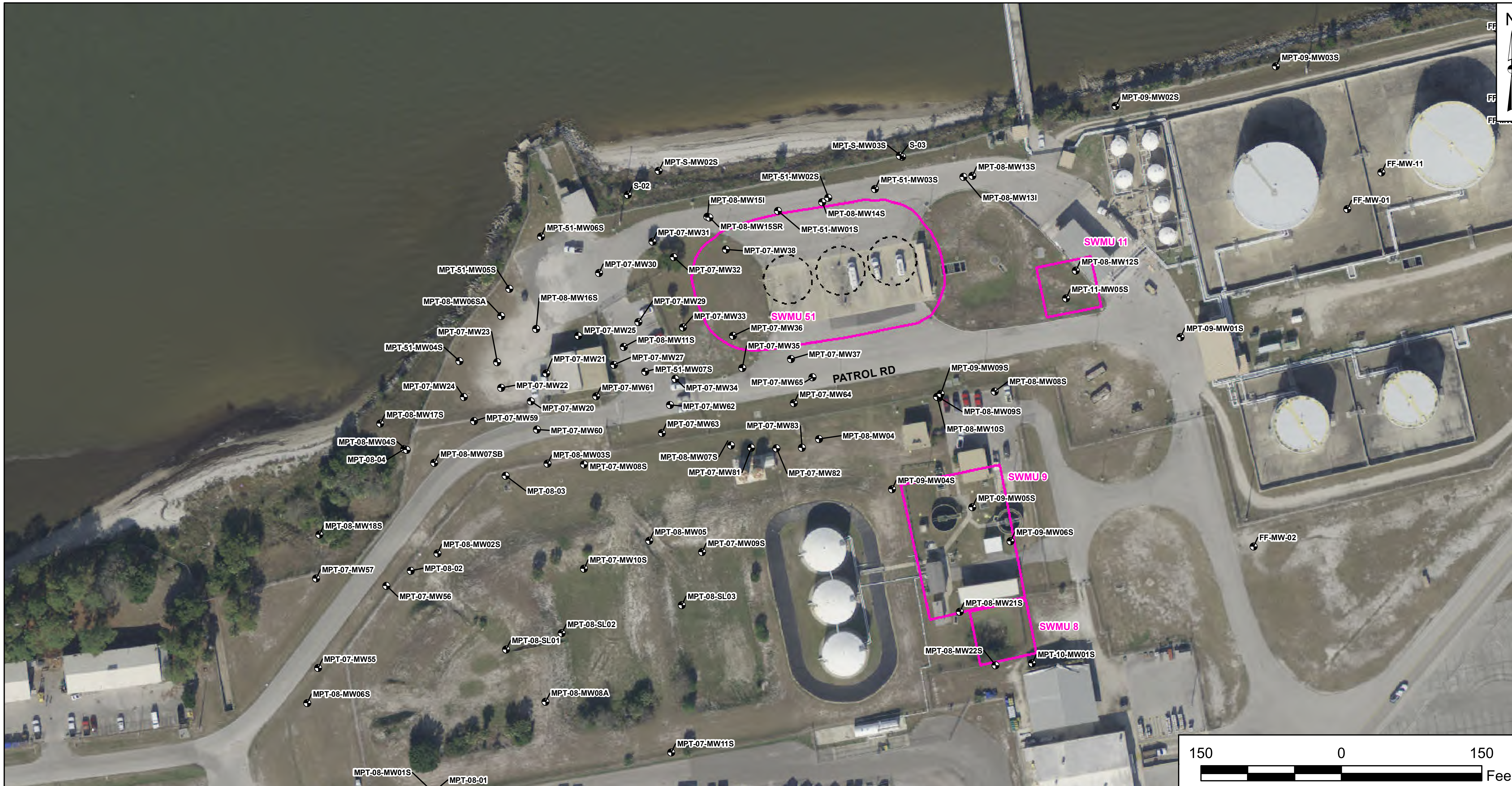

Legend

- MW_Locations
- SWMU Boundary
- Former Building

DRAWN BY T. WHEATON	DATE 12/17/10
CHECKED BY B. MARSHALL	DATE 03/04/11
COST/SCHEDULE-AREA	
SCALE AS NOTED	

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MONITORING WELL LOCATIONS
SWMUs 8, 9, 11, AND 51
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

CONTRACT NUMBER CTO 033	
APPROVED BY	DATE
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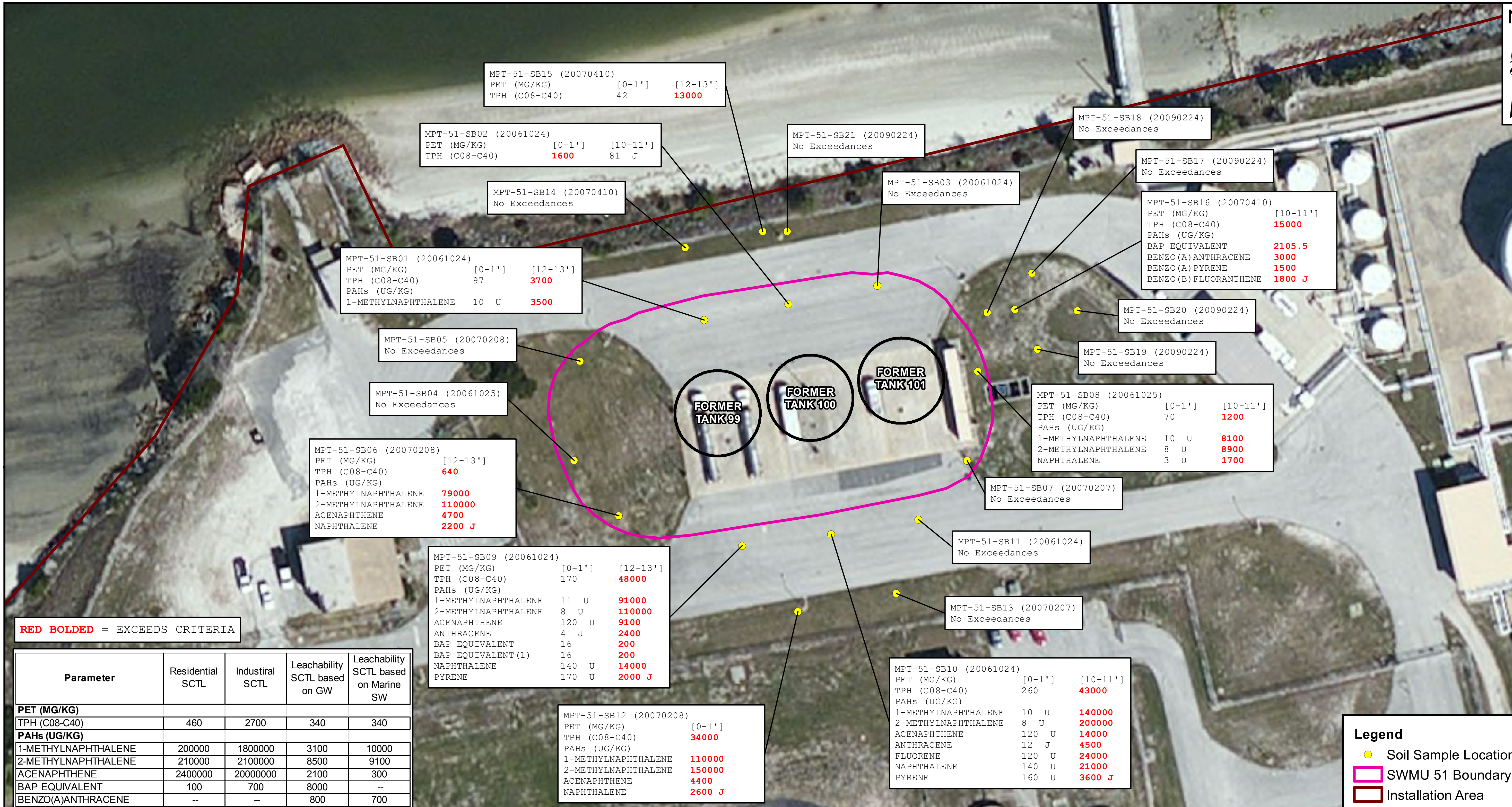
FIGURE NO. FIGURE 5-4	REV 0



RED BOLDED = EXCEEDS CRITERIA

Parameter	Residential SCTL	Industrial SCTL	Leachability SCTL based on GW	Leachability SCTL based on Marine SW
PET (MG/KG)				
TPH (C08-C40)	460	2700	340	340
PAHs (UG/KG)				
1-METHYLNAPHTHALENE	200000	1800000	3100	10000
2-METHYLNAPHTHALENE	210000	2100000	8500	9100
ACENAPHTHENE	2400000	20000000	2100	300
BAP EQUIVALENT	100	700	8000	--
BENZO(A)ANTHRACENE	--	--	800	700
BENZO(A)PYRENE	100	700	8000	1200
BENZO(B)FLUORANTHENE	--	--	2400	1600
ANTHRACENE	21000000	300000000	2500000	400
FLUORENE	2600000	33000000	160000	17000
NAPHTHALENE	55000	300000	1200	2200
PYRENE	2400000	45000000	880000	1300

80 0 80 Feet

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CHECKED BY T.DECK	DATE 4/17/2013
REVISED BY J.MADDEN	DATE 4/17/2013
SCALE AS NOTED	

NAVFAC

SOIL EXCEEDANCES
SWMU 51 - WASTE OIL TANKS
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

CONTRACT NUMBER CTO 0033	CTO NUMBER
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO. 5-5	REV 0

Surface water (i.e., the St. Johns River) is located within 300 feet of SWMU 51; thus, leaching of soil to marine surface water was evaluated. The groundwater leachability evaluation involves a direct comparison to the leaching to groundwater CTLs. One sample location, MPT-51-SB02-01, exceeded the leachability SCTL for TPH.

5.3.2 Selection of Subsurface Soil COCs

The COC screening for subsurface soil is also shown on Figure 5-5, with eight sample locations (MPT-51-SB01-13, MPT-51-SB06-13, MPT-51-SB08-11, MPT-51-SB09-13, MPT-51-SB10-11, MPT-51-SB12-11, MPT-51-SB15-013, and MPT-51-SB16-011) exceeding residential SCTLs, and six sample locations (MPT-51-SB01-13, MPT-51-SB09-13, MPT-51-SB10-11, MPT-51-SB12-11, MPT-51-SB15-013, and MPT-51-SB16-011) exceeding industrial SCTLs for PAH constituents and/or TPH.

The soil leachability to groundwater evaluation involves a direct comparison to the leachability CTLs, as shown in Appendix A. SWMU 51 is within 300 feet of the St Johns River, so the leachability to marine waters was also evaluated. One sample location, MPT-51-SB03-09, exceeded the chromium leachability SCTL for marine waters, but was not detected in any groundwater samples, therefore, was not determined to be a COC. Sample locations MPT-51-SB01-13, MPT-51-SB06-13, MPT-51-SB08-11, MPT-51-SB09-13, MPT-51-SB10-11, MPT-51-SB12-11, MPT-51-SB15-013, and MPT-51-SB16-011 exceeded the leachability SCTLs for naphthalene, acenaphthalene, PAH constituents, and/or TPH as shown on Figure 5-5.

5.3.3 Selection of Groundwater COCs

The COC screening process for groundwater begins with comparing the maximum concentration directly to the GCTLs to determine COCs. The groundwater to surface water pathway was evaluated since SWMU 51 is located less than 300 feet away from the St Johns River.

The results from monitoring well MPT-51-MW02S exceeded PAH and TPH GCTLs for both groundwater and marine surface water. The monitoring wells downgradient did not exceed GCTLs as shown in Figure 5-6.

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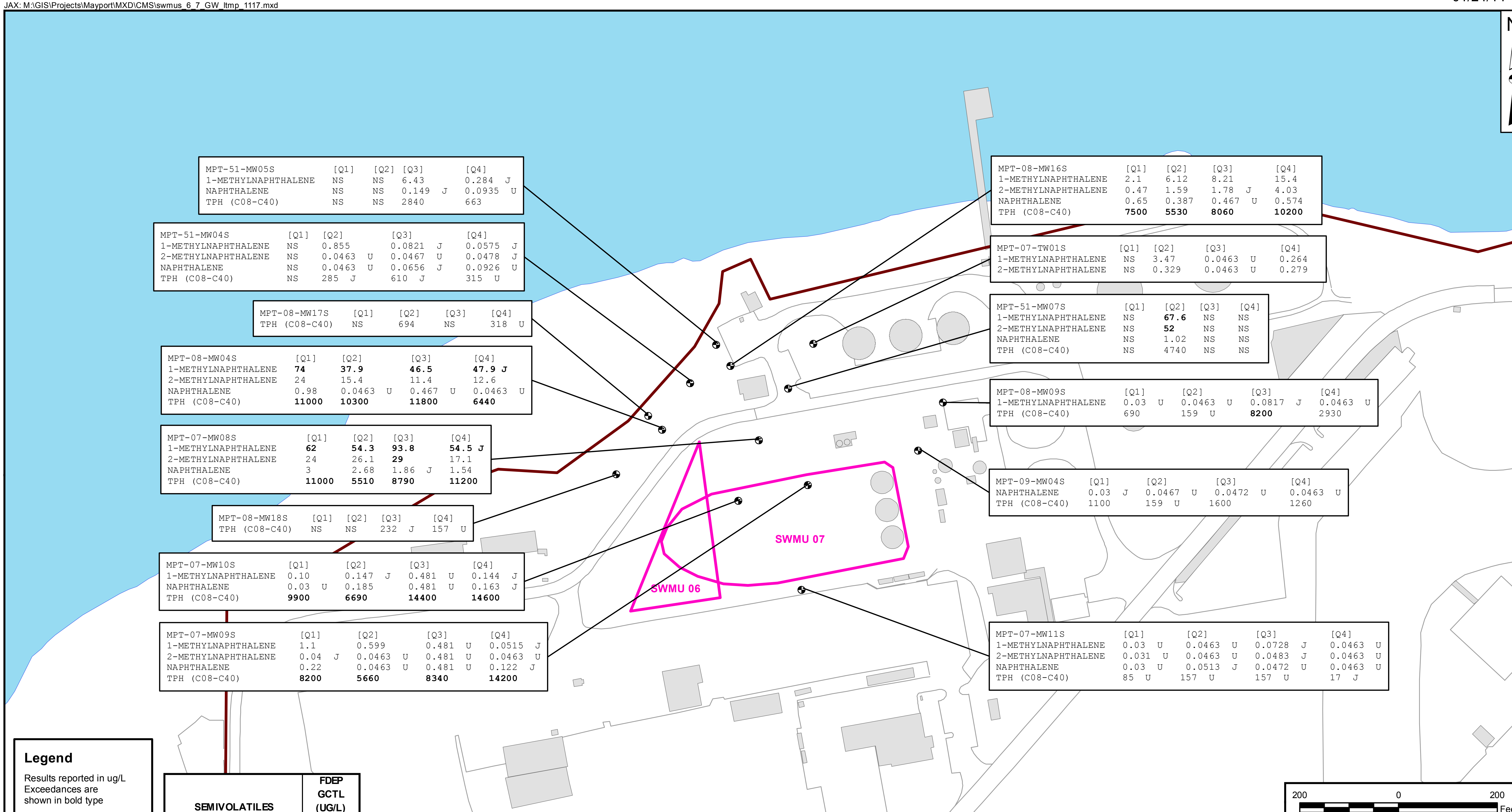

SEMIVOLATILES	FDEP GCTL (UG/L)
1-METHYLNAPHTHALENE	28
2-METHYLNAPHTHALENE	28
NAPHTHALENE	14
PETROLEUM HYDROCARBONS	**FDEP GCTL (UG/L)**
TPH (C08-C40)	5000

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B. RANDALL	10/27/11
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2011 QUARTERLY
GROUNDWATER ANALYTICAL RESULTS FOR
MONITORING WELLS DOWN/GRADIENT OF SWMU 51
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

CONTRACT NUMBER	CTO NUMBER
2766	JM32
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO. FIGURE 5-6	REV 0

The results from monitoring wells MPT-08-MW07S, MPT-08-MW16S, MPT-51-MW04S and MPT-07-TW04S (renamed MPT-51-MW07S) exceeded PAH and/or TPH GCTLs for groundwater and marine surface water. These wells are shown in Figure 5-7, are upgradient of SWMU 51, and are associated with SWMUs 6 and 7. This area will not be evaluated in this CMS as they are being monitored in conjunction with groundwater contamination at SWMUs 6 and 7.

5.4 CONTAMINANTS OF CONCERN IN SOIL – ECOLOGICAL

The subsurface soil COCs are 10 feet bls, and it is unlikely that there is an ecological concern for SWMU 51.

COC Summary

No COCs are identified for surface soil. The COCs identified for subsurface soil and groundwater are PAHs and TPH.

5.5 VOLUME OF CONTAMINATED MEDIA – SOIL

The total volume of contaminated soil in SWMU 51 is shown in Figure C-4 in Appendix C and totals approximately 27,000 cubic yards. This assumes the contaminated soil extends to a depth of 14 feet at or below groundwater.

5.6 IDENTIFICATION AND SCREENING OF CORRECTIVE MEASURE TECHNOLOGIES

The purpose of this section is to identify and screen appropriate technologies for corrective measure alternatives addressing the CAOs identified. Using Chapter 62-780, F.A.C., criteria, the CAOs have been met and screening of corrective action measures was performed to demonstrate the applicability of using LUCs and LUC monitoring.

Table 5-1 presents the soil corrective measure technologies that are potentially applicable for addressing the CAOs. This table also presents the results of the screening of those technologies. The technology screening process reduces the number of potentially applicable technologies by evaluating the applicability of each technology to site and contaminant factors. Technologies deemed ineffective or not implementable were eliminated from further consideration.

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DRAWN BY K. MOORE	DATE 1/13/11	GROUNDWATER EXCEEDANCE TAG MAP	CONTRACT NUMBER CTO 033	
CHECKED BY D.FEARS	DATE 03/07/13	SWMU 51 - WASTE OIL TANKS	OWNER NUMBER —	
REVISED BY J.MADDEN	DATE 03/07/13	NAVAL STATION MAYPORT	APPROVED BY —	DATE —
SCALE AS NOTED		JACKSONVILLE, FLORIDA	FIGURE NO. FIGURE 5-7	REV 0

NAVFAC

**TABLE 5-1
SWMU 51, PRELIMINARY SCREENING OF CORRECTIVE MEASURES TECHNOLOGIES FOR SOIL
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA
PAGE 1 OF 3**

General Corrective Action	Corrective Measures Technology	Technology	Description	General Screening Comments
No Action	None	Not Applicable	No remedial actions taken.	Retained. Will be considered for baseline comparison and for areas that have not experienced any releases of hazardous substances or for areas determined to have minimal short-term or long-term effects on soil, air, and groundwater quality.
Institutional Controls	Access Restrictions	LUCs	LUCs for property in area would include restrictions on excavation/construction or future land use.	Retained. LUCs are viable and will be considered where no active corrective measures are required and/or in combination with any technology where contaminants exceeding CMS objectives remain in place.
Containment	Capping	Soil	Use of soil to provide a physical barrier to limit erosion and to promote growth of vegetative cover.	Eliminated. Soil contamination covered with existing asphalt/concrete cover.
		Clay	Use of a compacted clay layer over contaminated areas to reduce infiltration and provide a physical barrier.	Eliminated. Soil contamination covered with existing asphalt/concrete cover.
		Asphalt	Application of an asphalt layer over contaminated areas to prevent infiltration and provide a physical barrier.	Eliminated. Soil contamination covered with existing asphalt/concrete cover.
	Underground Barriers	Vertical Walls	Vertical slurry walls, grout curtains, sheet piles, or concrete walls around contaminated soil.	Eliminated. Not applicable to this site.
Removal	Excavation	Soil/Waste Removal via Heavy Equipment	Remove contaminated soil for ex situ treatment and/or disposal.	Retained.

TABLE 5-1
SWMU 51, PRELIMINARY SCREENING OF CORRECTIVE MEASURES TECHNOLOGIES FOR SOIL
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA
PAGE 2 OF 3

General Corrective Action	Corrective Measures Technology	Technology	Description	Screening Comments
In Situ Treatment	Bioremediation	Aerobic Biodegradation	Degradation of organics using microorganisms in an oxygen-enriched environment.	Eliminated. The depth of the contaminated soil makes this technology impractical.
		Anaerobic Biodegradation	Degradation of organics using microorganisms in an oxygen-deficient environment.	Eliminated. The depth of the contaminated soil makes this technology impractical.
		Bioventing	Bioremediation in which air is injected through wells to the subsurface to supply oxygen and increase biodegradation.	Eliminated. The depth of the contaminated soil makes this technology impractical.
	Thermal	ISV	In-place heating of the soil by electrodes to convert soil to chemically inert and stable glass-like obsidian or crystalline material.	Eliminated. The depth of the contaminated soil makes this technology impractical.
	Physical/ Chemical	Soil Flushing	Spray application of water or aqueous solutions upgradient to flush contaminants through the soil to downgradient wells or trenches for collection.	Eliminated. The depth of the contaminated soil makes this technology impractical.
		Vapor Extraction (Vacuum extraction)	Uses an induced vacuum created by an extraction/injection well system around the contaminated area to desorb, transport, and collect volatile contaminants in the vadose (unsaturated) zone.	Eliminated. The depth of the contaminated soil makes this technology impractical.
		Aeration	Surface tilling of soil to volatilize organics.	Eliminated. The depth of the contaminated soil makes this technology impractical.
		Photolysis (photodegradation)	Uses UV radiation (light energy) to break chemical bonds.	Eliminated. The depth of the contaminated soil makes this technology impractical.
Ex Situ Treatment	Bioremediation	Aerobic Biodegradation	Degradation of organics using microorganisms in an oxygen-enriched environment. Includes slurry phase (mixing of soil with water in a vessel) and solid phase (treatment bed or land farming) processes.	Eliminated. The depth of the contaminated soil makes this technology impractical.
		Anaerobic Biodegradation	Degradation of organics using microorganisms in an oxygen-deficient environment. Includes slurry phase (mixing of soil with water in a vessel) and solid phase (treatment bed or land farming) processes.	Eliminated. The depth of the contaminated soil makes this technology impractical.

TABLE 5-1
SWMU 51, PRELIMINARY SCREENING OF CORRECTIVE MEASURES TECHNOLOGIES FOR SOIL
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

General Corrective Action	Corrective Measures Technology	Technology	Description	Screening Comments
Ex Situ Treatment (continued)	Thermal	Incineration	Heating of the soil to a high temperature in an enclosed, controlled reactor to destroy organic contaminants. Includes rotary kiln, wet air oxidation, or fluidized/circulating bed processes.	Eliminated. The depth of the contaminated soil makes this technology impractical.
	Physical/ Chemical	Soil Washing	Desorption of contaminants using mechanical action and water based fluids such as water, aqueous surfactants, and acids.	Eliminated. The depth of the contaminated soil makes this technology impractical.
		Aeration	After excavation, soil are placed on an impermeable surface and tilled to volatilize organics.	Eliminated. Soil contamination is PAH and BAPs, and the depth of the contaminated soil makes this technology impractical.
		Chemical Stabilization/Fixation	To chemically bind the contaminants and prevent them from leaching.	Eliminated. The depth of the contaminated soil makes this technology impractical.
		Solvent Extraction	Organics are removed from the soil by introducing a solvent that will transfer the organic compounds (attached to the soil particles) to the solvent phase.	Eliminated. Soil contamination is PAH and BAPs, and the depth of the contaminated soil makes this technology impractical.
Disposal	On-site Disposal	Backfill	Place treated soil back in place.	Eliminated. The depth of the contaminated soil makes this technology impractical.
	Off-site Disposal	Nonhazardous Landfill	Nonhazardous landfill qualified to receive the contaminated soil at SWMU 51.	Retained.
		Hazardous Waste Landfill	Double-lined and capped permanent disposal facility.	Eliminated. The waste is deemed not hazardous.
		TSDF	Treatment, storage, and disposal of waste at a regulated TSDF.	Eliminated. The waste is deemed not hazardous.

5.7 DEVELOPMENT OF CORRECTIVE MEASURES ALTERNATIVES

The corrective measure alternatives were developed to address the subsurface soil impacts related to SWMU 51. The purpose of providing a range of alternatives is to ensure reasonable general corrective actions are represented and evaluated. The technologies, which were selected to represent various alternatives for soil, are presented in Table 5-2. Alternatives are developed using the representative technologies and are presented in Table 5-3.

**TABLE 5-2
SWMU 51, REPRESENTATIVE SOIL CORRECTIVE MEASURES TECHNOLOGIES
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA**

General Corrective Action	Corrective Measures Technology	Technology	Representative Technology	Rationale
No Action	No Action	• None	None	Required
Institutional Controls	Access Restrictions	• LUCs	LUCs	LUCs offer controls.
Removal	Excavation	• Soil removal via heavy equipment	Soil/waste removal via heavy equipment	Will eliminate contamination at SWMU.
Disposal	Off-site Disposal	• Nonhazardous landfill • Hazardous Waste landfill • TSDF	Nonhazardous landfill	Will eliminate contamination at SWMU.

**TABLE 5-3
SWMU 51, ASSEMBLY OF SOIL ALTERNATIVES
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA**

Alternative	Alternative Type	Representative Process Options Combined Into Alternatives	Alternative Description
Alternative 1: No Action	No Action	None	• No Action.
Alternative 2: LUCs and LUC Monitoring	Containment/Limited Action – No or Limited Treatment	LUCs and LUC Monitoring	• LUCs. • Periodic site reviews. • LUC Monitoring.
Alternative 3: Excavation and Off-site Disposal	Bulk Removal – Eliminates or Minimizes Long-term Management	Heavy equipment to remove soil	• Delineation/confirmatory sampling of subsurface soil. • Excavation of contaminated soil using heavy equipment and disposal at approved landfill. • Backfill excavation with clean fill. • Replace concrete parking pad.

5.8 EVALUATION OF SOIL CORRECTIVE MEASURE ALTERNATIVES

The identified corrective measure alternatives for soil are evaluated using the criteria described in Section 1.6.

5.9 CORRECTIVE MEASURE ALTERNATIVES FOR SOIL

The corrective measure for soil at SWMU 51 will include preventing exposure to the surface soil, which is impacted with TPH at concentrations exceeding the residential and the leachability SCTLs. The surface soil location that exceeds SCTLs is MPT-51-SB02-01. The corrective measure will also prevent exposure to the subsurface soil impacted with PAH and/or TPH at concentrations exceeding the residential and industrial SCTLs as well as the leachability SCTL. The subsurface soil sample locations that exceed SCTLs are MPT-51-SB01-13, MPT-51-SB06-13, MPT-51-SB08-013, MPT-51-SB09-013, MPT-51-SB10-013, MPT-51-SB12-011, MPT-51-SB15-013, and MPT-11-SB16-013, all at the depth of 11 to 13 feet bls.

Three alternatives were developed to address subsurface soil contamination at SWMU 51. The alternatives are as follows:

Soil Alternative 1: No Action
Soil Alternative 2: LUCs and LUC Monitoring
Soil Alternative 3: Excavation, Off-site Disposal, and LUCs

5.9.1 Soil Alternative 1: No Action

The No Action alternative serves as a baseline consideration or addresses sites, which do not require active remediation. This alternative assumes that no corrective action would occur. No LUCs would remain or be implemented. There would be no monitoring of conditions. Natural attenuation might eventually reduce low concentrations of contaminants to acceptable levels, but the progress of attenuation would not be monitored.

5.9.2 Soil Alternative 2: LUCs and LUC Monitoring

Alternative 2 would be of the limited action type. Alternative 2 would not maintain the existing asphalt/concrete cover. LUCs are rules, directives, policies, and other measures (e.g., warning signs) adopted by the appropriate authorities in a manner consistent with applicable Federal, State, and local laws. Land use at SWMU 51 is to remain industrial. LUCs would be implemented in the form of a soil disturbance prohibition. Fencing around the fueling operations currently limits public access to SWMU 51.

The implemented LUC would serve to both protect human health by precluding exposure to contamination and also serve to prevent contaminant migration to other areas of the base. LUCs are imposed on areas that exceed residential standards. The contaminants that exceed residential, industrial, and leachability standards are PAHs and/or TPH in surface and subsurface soil in SWMU 51. LUC implementation would occur via preparation of a site-specific LUCIP that would describe the site location, the prohibition itself and its objectives, and other pertinent information. Once implemented, LUC oversight would be implemented by a CMIP executed between the Navy and the FDEP.

5.9.3 Soil Alternative 3: Excavation and Off-site Disposal

Soil Alternative 3 would eliminate long-term management by addressing contaminated soil through excavation and disposal. This alternative would offer aggressive remediation through excavation and transportation of contaminated soil to an appropriate landfill. An estimated 26,943 cubic yards of soil would be excavated for disposal.

Excavation would involve soil removal in SWMU 51 to a depth of 14 feet bls at or below groundwater. Material would be excavated with heavy equipment, loaded onto trucks, and hauled off site to an approved disposal facility. The effectiveness of the technique has been demonstrated in many full-scale operations. Backfilling would be performed in conjunction with excavation.

Dust suppression, air monitoring, run-on/runoff controls, and other erosion and sediment controls, as necessary for the protection of human health and the environment, would be conducted during remedial activities on-site.

5.9.4 Soil Alternative 1: No Action

Protect Human Health and the Environment

No Action would allow unacceptable risks to human health and the environment. The No Action alternative would do nothing to effectively isolate contaminant sources.

Attain Media Cleanup Standards

No Action may attain the CTLs in a reasonable period of time, but would not be documented. Natural attenuation might eventually reduce low concentrations of contaminants to acceptable levels, but the progress of this attenuation would not be monitored.

Control the Source of Releases

No Action would not control or eliminate the source of contamination. Natural attenuation might eventually eliminate the source; however, the progress of attenuation would not be monitored.

Comply with any Applicable Standards for Management of Wastes

No Action would not involve any waste management activities, and, therefore, no standards for management of wastes would apply.

Other Factors

a. Long-term Reliability and Effectiveness

The No Action alternative would not provide long-term effectiveness or permanence. Contaminants could migrate and might pose a long-term risk to human health and the environment. Aside from natural attenuation, this alternative would offer no reduction in risk over long periods.

b. Reduction in the Toxicity, Mobility, or Volume of Wastes

Soil with COC concentrations above residential, industrial, and leachability SCTLs would remain on site. No Action would allow unacceptable risks to human health and the environment by not restricting access. Reduction of toxicity, mobility, or volume might occur but only through natural processes. Natural biodegradation would not be documented in the absence of monitoring, and contaminants could leach to groundwater and migrate off the station.

c. Short-term Effectiveness

The No Action alternative would not include any construction or remedial implementation; therefore, there would be no short-term risks to workers, the community, or the environment. Neither the public nor the workers would be exposed to potential threats associated with construction or transportation.

d. Implementability

No technical implementability issues would exist because no corrective action would occur. Once the alternative is approved, there would be no administrative issues and no need to coordinate with other agencies or acquire permits. Future remedial actions, if needed, would not be hindered by the No Action alternative.

e. Cost

No corrective action would occur. There would be no cost associated with this alternative.

5.9.5 Soil Alternative 2: LUCs and LUC Monitoring

Protect Human Health and the Environment

LUCs applied to SWMU 51 would effectively prevent direct human contact with contaminated soil by limiting activities at the site and restricting access to the site. Soil with contaminant concentrations above residential, industrial, and leachability SCTLs would remain in place. Contaminated soil is covered by an existing asphalt and/or concrete cover. Use of the land will be monitored to prevent residential or residential-like use of SWMU 51 and limit human exposure to the contamination by workers.

Attain Media Cleanup Standards

Monitoring would not ensure attainment of CTLs. Natural attenuation might eventually reduce low concentrations of certain contaminants to acceptable levels.

Control the Source of Releases

LUCs and LUC monitoring would not control or eliminate the source of contamination. Existing soil and vegetation would control the erosion which might expose the contaminated soil.

Comply with Any Applicable Standards for Management of Wastes

LUCs would not involve any waste management activities and, therefore, no standards for management of wastes would apply.

Other Factors

a. Long-term Reliability and Effectiveness

Monitoring would indicate if unacceptable risk occurs. COCs could leach to groundwater and potentially pose a long-term risk to human health and the environment. Long-term management would consist of LUCs and LUC monitoring and would be expected to last 30 years or more.

b. Reduction in the Toxicity, Mobility, or Volume of Wastes

Reduction of toxicity, mobility, or volume might occur but only through natural processes.

c. Short-term Effectiveness

Alternative 2 would not include any construction or remedial implementation; therefore, there would be no short-term risks to workers, the community, or the environment. Neither the public nor the workers would be exposed to potential threats associated with construction or transportation.

d. Implementability

Alternative 2 would be readily implementable. Administrative issues associated with preparing and implementing the LUCs via a CMIP are anticipated to be minimal. Future remedial actions, if needed, would not be hindered by this alternative.

e. Cost

The cost estimates reflect costs to the nearest approximate $1,000. The estimated capital cost for Soil Alternative 2 would be approximately $37,000. The annual O&M costs would be about $3,000, with a periodic review cost of approximately $7,000 every five years. Present worth cost over a period of 30 years would be approximately $84,000. This assumes the required land maintenance would be minor and covered under normal base operating budgets. Detailed cost estimates are provided in Appendix C.

5.9.6 Soil Alternative 3: Excavation, Off-site Disposal, and LUCs

Protect Human Health and the Environment

Alternative 3 would remove the source areas and prevent potential migration of contaminants. All contaminated soil exceeding the residential, industrial, and leachability SCTLs would be excavated and properly disposed off-site in an approved disposal facility. Contaminated soil would be excavated and disposed off-site, and clean soil would be backfilled on site. Soil with contaminant concentrations above residential SCTLs would not remain on-site. This alternative provides protection to human health and environment by source removal. No direct human contact with contaminated soil would occur after the corrective measures are implemented. Existing contaminant concentrations would reduce over time due to source removal.

Attain Media Cleanup Standards

Excavation and disposal would attain the soil MCSs. The soil cleanup standards should be attainable within 1 year.

Control the Source of Releases

Excavation and disposal would eliminate the source of contamination to concentrations acceptable for residential use and would prevent further releases that may pose a threat to human health and the environment. Confirmation sampling would ensure that all contaminated soil is removed.

Comply with Any Applicable Standards for Management of Wastes

Excavation of contaminated soil would generate waste, which would be disposed of in a licensed and approved off-site landfill following all Federal, State, and local regulations. Generation of wastes subject to LDRs is not anticipated.

Other Factors

a. Long-term Reliability and Effectiveness

Alternative 3 involves excavation of contaminated soil, backfilling with clean soil, and replacing the exiting concrete and asphalt. There would be no machinery or equipment at the site on a long-term basis. Soil removal using construction equipment such as backhoes would be reliable in addressing the contaminated media. As the contaminated soil would effectively be removed and disposed of followed by backfilling with clean soil, the level of effectiveness would be very high.

b. Reduction in the Toxicity, Mobility, or Volume of Wastes

As the contaminated soil would be excavated from the site, the reduction in the mobility would be close to 100 percent based on the data collected during the RFI Addendum.

c. Short-term Effectiveness

All contaminated soil would be excavated and properly disposed off-site in a permitted landfill, and clean soil would be backfilled on-site. Soil with contaminant concentrations above the residential, industrial, or leachability SCTLs would not remain on-site. Dust suppression during remedial activities would be employed to minimize fugitive emissions from the site. Implementation of this alternative would not pose any safety concerns to nearby communities, the environment, or on-site workers with the use of appropriate engineering and construction management controls. Exposure to workers during sampling would be minimal and could be controlled by the use of appropriate PPE.

d. Implementability

Alternative 3 would be implementable. Equipment and personnel to implement this alternative would be available. Excavation of soil is a standard construction practice, but extra care would be required because of the depth of contamination. The alternative is very reliable because the contaminated soil would be removed. This alternative should take less than 1 year to implement. Permits for excavation and disposal of buried waste and contaminated soil would be required. Administrative issues and coordination with other agencies or acquiring permits are easily achievable. Future remedial actions such as excavating new areas would not be hindered by this alternative.

e. Cost

The cost estimates reflect cost to the nearest approximate $1,000. The estimated capital cost for Alternative 3 would be approximately $9,721,000. The annual O&M costs would be about $3,000 for the first 2 years. Present worth cost over a period of 30 years would be approximately $9,726,000. Detailed cost estimates are provided in Appendix C.

5.10 RECOMMENDATION FOR A FINAL SOIL CORRECTIVE MEASURE ALTERNATIVE

The recommendation for a final soil corrective measure alternative will be based on a comparative analysis of soil alternatives.

5.10.1 Comparative Analysis of Soil Alternatives

A comparative analysis of alternatives is presented to address how effectively each alternative will comply with the standards listed in the guidance (USEPA, 1994). Alternative 1, No Action, is considered for baseline purposes and is not expected to satisfy any of the requirements.

Protect Human Health and Environment

Alternative 3 is highly effective in protecting human health and the environment at this site, but would move the contaminated soil to another location. Alternative 1 would not be monitored to determine if it would protect human health or the environment. Alternative 2 is effective in protecting human health and the environment. Alternative 2 would be protective because of the limited access and the asphalt cover over the surface and subsurface soil contamination. Alternative 2 would require monitoring to ensure effectiveness.

Attain Media Cleanup Standards

Alternatives 1 and 2 may attain the similar results after a long period of time as they rely on natural processes.

Control the Sources of Releases

Alternative 3 would remove all contaminated soil. Alternatives 1 and 2 would depend on natural processes to degrade COCs in the source areas.

Comply with any Applicable Standards for Management of Wastes

Alternatives 1 and 2 would not involve waste generation. Alternative 3 would generate approximately 26,943 cubic yards of waste. The waste generated would be disposed of off-site following all applicable Federal, State, and local requirements. None of the waste streams are expected to have LDRs.

Other Factors

a. Long-term Reliability and Effectiveness

Alternative 3 would have the highest long-term reliability and effectiveness because of source removal. Alternatives 1 and 2 rely on natural attenuation processes, only Alternative 2 would be monitored. None of these alternatives would have any treatment system in-place. Alternative 1 would not provide any degree of long-term reliability.

b. Reduction in the Toxicity, Mobility, or Volume of Waste

Alternative 3 would remove the potential for mobility of contamination. None of the other alternatives would reduce toxicity, mobility or volume of waste.

c. Short-term Effectiveness

None of these alternatives would pose any threat to local communities or on-site personnel during the implementation of the corrective measures. On-site workers would be protected from exposure to hazardous substances through appropriate use of PPE.

d. Implementability

All alternatives are readily implementable. The technologies involved and required services are easily available. Administrative issues and coordination with other agencies or acquiring permits are easily achievable. Future remedial actions would not be hindered by the alternative.

e. Cost

The estimated capital, O&M, and net present worth costs are presented in Table 5-4.

TABLE 5-4
SWMU 51, COSTS FOR SOIL ALTERNATIVES
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ALTERNATIVE	CAPITAL COSTS	ANNUAL O&M COSTS*	TOTAL PRESENT WORTH COSTS**
1	$0	• No cost.	$30,000
2	$37,000	• $2,581 for 1-30 years • with an additional $7,016 every 5 years	$84,000
3	$9,721,000	• $3,000 for 1-2 years	$9,726,000

Notes:
* Labor and material costs are for comparison value only.
** 30-YEAR, 7% INTEREST RATE

5.10.2 Recommendation

Based on the evaluation of technologies and assessment of various alternatives performed, Soil Alternative 2 is recommended for addressing the soil contamination at SWMU 51.

5.11 DESCRIPTION OF THE RECOMMENDED SOIL CORRECTIVE MEASURES ALTERNATIVE

Based on the evaluation of technologies and assessment of various alternatives performed, Alternative 2 is recommended for addressing the soil contamination at the site.

5.11.1 Summary of the Soil Corrective Measure and Rationale

a. Description of the Corrective Measure and Rationale for Selection

The recommended corrective measure alternative involves implementing LUCs at SWMU 51. The level of contamination at the site is not to the extent that excavating the contaminated soil would provide any additional protection to human health or the environment. The LUCs and groundwater monitoring would provide adequate and cost effective protection of human health and the environment.

b. Performance Expectations

The recommended corrective measure alternative would prevent potential human exposure pathways. The soil COCs are 10 feet bls, and it is not likely there are ecological impacts.

c. Preliminary Design Criteria and Rationale

LUCs would be in place to prevent residential construction at the site.

d. General O&M Requirements

LUC inspections would be conducted as outlined in the CMIP.

e. LTM Requirements

LUC inspections would be conducted as outlined in the CMIP.

5.11.2 Design and Implementation Precautions

a. Special Technical Problems

No technical problems are anticipated in implementing the corrective measures.

b. Additional Engineering Data Required

No additional engineering data are required.

c. Permits and Regulatory Requirements

The CMIP would require approval by FDEP.

d. Health and Safety Requirements

OSHA requirements will be satisfied during all site activities.

e. Community Relations Activities

The selection of preferred corrective measures and details on how they would be implemented will be presented to the local community.

5.11.3 Cost Estimate and Schedule

a. Capital Cost Estimate

The capital costs involved in the implementation of the recommended corrective measure alternative are presented in Table 5-4.

b. O&M Cost Estimate

O&M costs for the recommended corrective measure alternative are presented in Table 5-4.

c. Project Schedule

The estimated schedule to implement LUCs and monitoring is 1 to 2 years.

5.12 VOLUME OF CONTAMINATED MEDIA – GROUNDWATER

The area of contaminated groundwater at SWMU 51 is shown in Figure C-4A in Appendix C and totals approximately 5.05 million gallons.

5.13 IDENTIFICATION AND SCREENING OF CORRECTIVE MEASURE TECHNOLOGIES

The purpose of this section is to identify and screen appropriate technologies for corrective measure alternatives addressing the CAOs identified.

Table 5-5 presents the groundwater corrective measure technologies that are potentially applicable for addressing the CAOs. This table also presents the results of the evaluation of those technologies. The technology screening process reduces the number of potentially applicable technologies by evaluating the applicability of each technology to site and contaminant factors. Technologies deemed ineffective or not implementable were eliminated from further consideration.

5.14 DEVELOPMENT OF CORRECTIVE MEASURES ALTERNATIVES

The corrective measure alternatives were developed to address the groundwater impacts related to SWMU 51. The purpose of providing a range of alternatives is to insure that reasonable corrective actions are represented and evaluated in a diligent and effective manner. The technologies, which are selected to represent various alternatives for groundwater cleanup, are presented in Table 5-6. Groundwater alternatives developed using the representative technologies are presented in Table 5-7.

5.15 EVALUATION OF CORRECTIVE MEASURES ALTERNATIVES

The corrective measures alternatives were developed to address the combined groundwater contamination at SWMU 51. PAH and TPH are the contaminants in groundwater, and the alternatives are as follows:

Groundwater Alternative 1: No Action
Groundwater Alternative 2: LUCs and Groundwater Monitoring

TABLE 5-5
SWMU 51, PRELIMINARY SCREENING OF CORRECTIVE MEASURES TECHNOLOGIES FOR GROUNDWATER
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PAGE 1 OF 3

General Corrective Action	Corrective Measures Technology	Technology	Description	General Screening Comments
No Action	None	Not Applicable	No remedial actions taken.	Retained. Will be considered for baseline comparison and for areas that have not experienced any releases of hazardous substances or for areas determined to have minimal short-term or long-term effects on groundwater quality.
Institutional Controls	Access Restrictions	LUCs	LUCs for groundwater would include restrictions on groundwater use.	Retained. LUCs are viable and will be considered where contaminants exceeding CMS objectives remain in place.
Monitoring	Monitoring	Groundwater monitoring	Periodic monitoring of wells in the area of potential groundwater contamination.	Retained. Groundwater monitoring is viable for assessing the effectiveness of natural attenuation on certain applicable COCs, containment, or treatment measures during and following implementation of corrective measures.
Containment	Hydrodynamic Control	Extraction Wells	Control of plume migration by a system consisting of extraction of the contaminated groundwater.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
		Collection Trench	Control of plume migration by a collection trench and extraction of the contaminated groundwater.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
		Slurry Wall	Trench around areas of contamination is filled with a soil (or cement) bentonite slurry to obstruct/divert the groundwater flow.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
		Grout Curtain	Pressure injection of grout in a regular pattern of drilled holes. Requires integration with confining layer to be effective.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
	Subsurface Barriers	Sheet Piling	Driving interconnecting lengths of steel into the ground to form a thin, impermeable barrier. Requires integration with confining layer to be effective.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
Removal	Extraction	Extraction Wells	Series of pumping wells to extract contaminated groundwater.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
		Collection Trenches	Perforated pipe in trenches backfilled with porous media to collect groundwater. May include sumps and gravity drains.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
In Situ Treatment	Bioremediation	Aerobic	Degradation of organics using microorganisms in an oxygen-enriched environment.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
		Anaerobic	Degradation of organics using microorganisms in an oxygen-deficient environment.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.

TABLE 5-5
SWMU 51, PRELIMINARY SCREENING OF CORRECTIVE MEASURES TECHNOLOGIES FOR GROUNDWATER
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General Corrective Action	Corrective Measures Technology	Technology	Description	General Screening Comments
In Situ Treatment (continued)	Physical / Chemical	Air Sparging	Injection of air below the water table. Rising bubbles volatilize dissolved and adsorbed phase contaminants and transport them to the vadose where they are removed by a method of collection such as vapor extraction or by in situ aerobic degradation.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
		Permeable Reactive Barriers	An in situ barrier composed of a permeable reactive material that reacts with the contaminants in the water, reducing their concentrations by physical and chemical processes.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
Ex Situ treatment (On-site)	Bioremediation	Aerobic	Degradation of organics using microorganisms in an oxygen-enriched environment.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
	Physical / Chemical	Precipitation	Conversion of heavy metals into insoluble solid forms through the addition of precipitating agents such as hydroxides and sulfides.	Eliminated. No metal contaminants.
		Air Stripping	Mixing large volumes of air with groundwater in a packed column or aerated basin to promote transfer of VOCs to air.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
		Steam Stripping	Mixing large volumes of steam with groundwater in a packed column or aerated basin to promote transfer of VOCs to air.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
		Flocculation/ Coagulation	Use of chemicals to neutralize surface charges and promote particle size growth.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
		Filtration	Removal of suspended solids by passing contaminated water through a filter media.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
		Adsorption	Adsorption of contaminants onto activated carbon by passing water through carbon column.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
		Oxidation	Chemical oxidation (increase in oxidation state) of contaminants into less toxic or soluble forms through the use of oxidizing agent(s). Includes ozone, UV light, peroxide, permanganate, and manganese oxidation.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.

TABLE 5-5
SWMU 51, PRELIMINARY SCREENING OF CORRECTIVE MEASURES TECHNOLOGIES FOR GROUNDWATER
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General Corrective Action	Corrective Measures Technology	Technology	Description	General Screening Comments
Disposal	Surface Discharge	Direct to Local Stream	Treated groundwater discharged to local streams.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
	Subsurface Discharge	Discharge to Local Treatment Facility	Treated groundwater discharged to local POTW treatment plant.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.
		Injection Wells	Series of injection wells to discharge collected/treated groundwater to subsurface. Requires regulatory approval.	Eliminated. Tidal influence and small area of contamination make this treatment impractical.

**TABLE 5-6
SWMU 51, REPRESENTATIVE GROUNDWATER CORRECTIVE MEASURE TECHNOLOGIES
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA**

General Corrective Action	Corrective Measures Technology	Technology	Rationale
No Action	No Action	None	Required
Institutional Controls	Access Restrictions Water use Restrictions	LUCs	To impose water and residential use restrictions
Groundwater Monitoring	Groundwater Monitoring	Groundwater Monitoring	Required until CAOs achieved.

**TABLE 5-7
SWMU 51, ASSEMBLY OF GROUNDWATER ALTERNATIVES
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA**

Alternative	Alternative Type	Representative Technologies Combined Into Alternatives	Alternative Description
Alternative 1: No Action	No Action	None	No Action
Alternative 2: LUCs and Monitoring	Limited Action – No or Limited Treatment	LUCs and Groundwater Monitoring	LUCs. Periodic groundwater sampling to monitor natural attenuation on COCs. LUC Monitoring.

5.15.1 Alternative 1: No Action

The No Action alternative serves as a baseline consideration or addresses sites that do not require active remediation. This alternative assumes that no corrective action would occur. No remedy would remain or be implemented. There would be no monitoring of conditions. Natural attenuation might eventually reduce low concentrations of contaminants in groundwater to acceptable levels, but the progress of attenuation would not be monitored.

5.15.2 Alternative 2: LUCs and Monitoring

Alternative 2 is of the limited action type. LUCs are rules, directives, policies, and other measures (e.g., preventing the usage of groundwater, and posting signs) adopted by the appropriate authorities in a manner consistent with applicable Federal, State, and local laws. Land use at this SWMU is expected to remain industrial. LUCs and groundwater use controls would be implemented to ensure that access to the site is restricted, proper personal protection procedures are followed, and to ensure appropriate future land use. Restrictions would be in place to ban any new drinking water wells and prohibit residential or residential-like use.

Monitoring consists of ensuring that LUCs remain in place. The contaminants that exceed MCSs are PAH and TPH. LUC implementation would occur via preparation of a site-specific LUCIP that will describe the site location, the prohibition itself and its objectives, groundwater monitoring, and other pertinent information. Once implemented, LUC oversight will be specified in the CMIP executed between the Navy and the FDEP.

Groundwater monitoring would be conducted to establish evidence that RMO II or RMO III is acceptable, after which one of these would be used as the exit strategy.

5.16 EVALUATION OF GROUNDWATER CORRECTIVE MEASURES ALTERNATIVES

The identified corrective measure alternatives for groundwater are evaluated using the criteria described in Section 1.6.

5.16.1 Alternative 1: No Action

Protect Human Health and the Environment

No Action would allow unacceptable risks to human health and the environment. The No Action alternative would do nothing to prevent human consumption of the groundwater.

Attain Media Cleanup Standards

No Action may attain the MCS in a reasonable period of time, but would not be documented. Natural attenuation might eventually reduce low concentrations of contaminants to acceptable levels, but the progress of attenuation would not be monitored.

Control the Source of Releases

No Action would not control or eliminate the source of contamination. Natural attenuation might eventually eliminate the source; however, the progress of attenuation would not be monitored.

Comply with any Applicable Standards for Management of Wastes

The No Action alternative would not involve any waste management activities and, therefore, no standards for management of wastes would apply.

Other Factors

a. Long-term Reliability and Effectiveness

The No Action alternative would not provide long-term effectiveness or permanence. Contaminants could migrate and might pose a long-term risk to human health and the environment. Aside from natural attenuation, this alternative would offer no reduction in risk over long periods of time.

b. Reduction in the Toxicity, Mobility, or Volume of Wastes

Groundwater with contaminant concentrations exceeding MCSs would remain in the surficial aquifer. No Action would allow unacceptable risks to human health and the environment. Reduction of toxicity, mobility, or volume might occur, but only through natural processes. Natural biodegradation would not be documented in the absence of monitoring, and contaminated groundwater could migrate off base.

c. Short-term Effectiveness

The No Action alternative would not include any construction or remedial implementation; therefore, there would be no short-term risks to workers, the community, or the environment. Neither the public nor the workers would be exposed to potential threats associated with construction or transportation.

d. Implementability

No technical implementability issues would exist because no corrective action would occur. Once the alternative was approved, there would be no administrative issues and no need to coordinate with other agencies or acquire permits. Future remedial actions, if needed, would not be hindered by the No Action alternative.

e. Cost

No corrective action would occur, and there would be no associated cost.

5.16.2 Groundwater Alternative 2: LUCs and Monitoring

Protect Human Health and the Environment

LUCs would effectively prevent direct human contact with contaminated groundwater by controlling the access and preventing residential use of contaminated groundwater. Monitoring would assess the groundwater quality, ensure that restrictions on land use are in place, and assess the progress of natural attenuation. Over time, the contaminant concentrations in groundwater would reach levels that are protective to human health and the environment.

Attain Media Cleanup Standards

Alternative 2 would document attainment of the MCS over an assumed period of 30 years.

Control the Source of Releases

LUCs and monitoring would not control or eliminate the source of contamination. Natural attenuation might eventually eliminate the source for COCs.

Comply with any Applicable Standards for Management of Wastes

LUCs and monitoring would not involve any waste management activities other than disposal of sampled water and waste from monitoring well construction that would be disposed of following applicable standards. No other standards for management of wastes would apply.

Other Factors

a. Long-term Reliability and Effectiveness

Monitoring would indicate if unacceptable risk occurs in the groundwater. LUCs would prevent residential or residential-like groundwater use. Long-term management would consist of LUCs and LUC monitoring and would be expected to last 30 years or more.

b. Reduction in the Toxicity, Mobility, or Volume of Wastes

Reduction of toxicity, mobility, or volume might occur, but only through natural attenuation for certain applicable COCs.

c. Short-term Effectiveness

The construction activity would be minimal and there would be no short-term risks to workers, the community, or the environment. Exposure to potential threats to the public or the workers would be minimal due to construction or transportation.

d. Implementability

Groundwater Alternative 2 would be readily implementable. Administrative issues associated with preparing and implementing the LUCs via a CMIP are anticipated to be minimal. Future remedial actions, if needed, would not be hindered by this alternative.

e. Cost

The estimated capital cost for Groundwater Alternative 2 would be approximately $33,000. The annual O&M costs would be approximately $52,000 for the first 5 years, and about $28,000 for the next 25 years.

Present worth cost over a period of 30 years would be approximately $488,000. Detailed cost estimates are provided in Appendix C.

5.17 RECOMMENDATION FOR A FINAL GROUNDWATER CORRECTIVE MEASURES ALTERNATIVE

The recommendation for a final groundwater corrective measures alternative will be based on a comparative analysis of groundwater alternatives.

5.17.1 Comparative Analysis of Groundwater Alternatives

A comparative analysis of groundwater alternatives is presented to address how effectively each alternative will comply with the standards listed in the guidance (USEPA, 1994). Alternative 1, No Action, is considered for baseline purposes and is not expected to satisfy any of the requirements.

Protect Human Health and Environment

Alternative 2 is effective in protecting human health and the environment. Alternative 1 would not address unacceptable risks to human health and the environment. Alternative 2 would provide protection to human health and the environment. The shallow groundwater does not meet the requirements of a drinking water source, the surficial aquifer is not currently and will not be used in the future as a potable water source. In addition, with institutional controls in place and the SWMU is an active fuel farm, access is extremely limited. Under these conditions, Alternative 2 would be able to protect human health and the environment in a cost-effective manner. This alternative would require LTM and LUCs to ensure effectiveness.

Attain Media Cleanup Standards

Both alternatives may eventually meet MCS, but the time to achieve the standards cannot be determined. Alternative 2 would document attainment of the cleanup standards.

Control the Sources of Releases

The likely source of contamination is the reduced oxygen in the groundwater. Neither alternative would directly control the source. Alternative 1 would eventually meet MCS, but the time period cannot be quantified.

Comply with Any Applicable Standards for Management of Wastes

Alternative 1 would not generate any wastes. Alternative 2 would generate a minimal amount of waste and it would be disposed of properly following all Federal, State, and local requirements and, therefore, complies with all applicable standards more effectively than the other alternatives. Alternative 2 would not involve the generation/management of waste when implemented except for a small quantity during the development of monitoring wells.

Other Factors

a. Long-term Reliability and Effectiveness

Alternative 2 would rely on natural attenuation processes in addressing applicable COCs within the contaminated water and the reliability would be low. Monitored natural attenuation has been successfully implemented at many sites to address limited extent of contamination. The shallow groundwater does not meet the requirements of a drinking water source and the surficial aquifer is not currently used as a potable water source. Under these conditions, Alternative 2 would be able to provide adequate long-term reliability and effectiveness in a cost-effective manner. Alternative 1 would not provide for long-term reliability and effectiveness.

b. Reduction in the Toxicity, Mobility, or Volume of Waste

Alternative 2 would rely on natural processes for the reduction of toxicity. Alternative 2 would be able to provide adequate reduction in the toxicity, mobility, or volume of contaminated groundwater in a cost-effective manner. Alternative 1 would eventually reduce contaminant concentrations but it would not be monitored.

c. Short-term Effectiveness

Alternatives 1 and 2 would offer short-term effectiveness. Neither involves construction activity. None of these alternatives, however, would pose any threat to local communities or on-site personnel during the implementation of the corrective measures. On-site workers would be protected from exposure to hazardous substances through appropriate use of PPE.

d. Implementability

Both alternatives are implementable. Monitored natural attenuation has been implemented at several sites. Administrative issues and coordination with other agencies or acquiring permits are easily achievable. Future remedial actions would not be hindered by the alternatives.

e. Cost

Costs associated with Alternative 1 would be the lowest. The estimated capital, O&M, and net present worth costs are presented in Table 5-8. Detailed cost estimates are provided in Appendix C.

TABLE 5-8
SWMU 51, COSTS FOR GROUNDWATER ALTERNATIVES
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

ALTERNATIVE	CAPITAL COSTS	ANNUAL O&M COSTS*	TOTAL PRESENT WORTH COSTS**
1	$0	• $0	$0 by definition
2	$33,000	• Approximately $52,000 for 5 years and $28,000 for 25 years with an additional $7,000 every 5 years	$488,000

Notes:
* Labor and material costs are for comparison value only.
** 30-YEAR, 7% INTEREST RATE

5.17.2 Recommendation

Based on the screening of technologies and assessment of various alternatives performed, Groundwater Alternative 2 is recommended for addressing the groundwater contamination at SWMU 51.

5.18 DESCRIPTION OF THE RECOMMENDED GROUNDWATER CORRECTIVE MEASURES ALTERNATIVE

5.18.1 Summary of the Groundwater Corrective Measure and Rationale

a. Description of the Corrective Measure and Rationale for Selection

The recommended corrective measure alternative involves LUCs and monitoring to address limited groundwater contamination at the site. Any elaborate treatment system would not be justified because the surficial aquifer is not currently used as a potable water source, proximity to the St Johns River involves significant tidal influence, and impact to the ecological receptors is minimal. Alternative 2 relies on natural attenuation for applicable COCs whose progress would be monitored by the periodic sampling. Monitored natural attenuation has been successfully implemented at many sites, and has been effective in reducing applicable COC levels in a reasonable amount of time.

b. Performance Expectations

The recommended corrective measure alternative would prevent potential human exposure pathways and achieve GCTLs through natural attenuation over a period.

c. Preliminary Design Criteria and Rationale

LUCs would be in place to prevent residential or residential-like use of groundwater. Groundwater sampling would be conducted as outlined in the CMIP.

d. General O&M Requirements

LUC inspections and groundwater monitoring would be conducted as outlined in the CMIP.

e. LTM Requirements

LUC inspections and groundwater monitoring would be conducted as outlined in the CMIP.

5.18.2 Design and Implementation Precautions

a. Special Technical Problems

No technical problems are anticipated in implementing the corrective measures.

b. Additional Engineering Data Required

No additional engineering data are required.

c. Permits and Regulatory Requirements

Permits for installing monitoring wells may be required. RCRA groundwater monitoring requirements have to be satisfied. The CMIP would require approval by FDEP.

d. Health and Safety Requirements

OSHA requirements have to be satisfied during sampling activities.

e. Community Relations Activities

The selection of preferred corrective measures and details on how they would be implemented would be presented to the local community.

5.18.3 Cost Estimate and Schedule

a. Capital Cost Estimate

The capital costs involved in the implementation of the recommended corrective measure alternative are presented in Table 5-8. Detailed cost estimates are provided in Appendix C.

b. O&M Cost Estimate

O&M costs for the recommended corrective measures are presented in Table 5-8.

c. Project Schedule

The estimated schedule to implement LUCs and monitoring is 1 to 2 years.

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APPENDIX A

CMS DATA SHEETS

TABLE A1-1
SWMU 8, GROUNDWATER POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE IDENTIFICATION	NAVSTA Mayport Background	FL CTL 62-777 GW-Table I	MPT-08-MW04S					MPT-08-MW05I	MPT-08-MW05S	MPT-08-MW09S				
LOCATION			MPT-08-MW04S-20080828	MPT-08-MW04S-20101207	MPT-08-MW04S-20110120	MPT-08-MW04S-20110427	MPT-08-MW04S-20110728	MPT-08-MW05I-20121109	MPT-08-MW05S-20121109	MPT-08-MW09S-20080827	MPT-08-MW09S-20101207	MPT-08-MW09S-20110119	MPT-08-MW09S-20110427	MPT-08-MW09S-20110728
SAMPLE DATE			20080828	20101207	20110120	20110427	20110728	20121109	20121109	20080827	20101207	20110119	20110427	20110728
METALS (µg/L)														
ALUMINUM	NC	200	NA	NA	NA	NA	NA	**85.3 J**	**86.9 J**	19 U	NA	NA	NA	NA
ARSENIC	NC	10	**2.5**	NA	NA	NA	NA	0.75 U	**0.906 J**	0.98 U	NA	NA	NA	NA
BARIUM	NC	2,000	NA	NA	NA	NA	NA	NA	NA	**4.6**	NA	NA	NA	NA
CADMIUM	NC	5	0.1 U	NA	NA	NA	NA	NA	NA	0.1 U	NA	NA	NA	NA
CALCIUM	226,125	--	NA	NA	NA	NA	NA	NA	NA	**72,600**	NA	NA	NA	NA
CHROMIUM	NC	100	1.5 U	NA	NA	NA	NA	0.5 U	0.5 U	1.3 U	NA	NA	NA	NA
IRON	494	300	NA	NA	NA	NA	NA	**24.6 J**	**237**	6.8 U	NA	NA	NA	NA
LEAD	NC	15	**2**	NA	NA	NA	NA	0.75 U	0.75 U	1 U	NA	NA	NA	NA
MAGNESIUM	184,393	--	NA	NA	NA	NA	NA	NA	NA	**3,720**	NA	NA	NA	NA
MANGANESE	141	50	NA	NA	NA	NA	NA	**15.1**	**153**	0.93 U	NA	NA	NA	NA
POTASSIUM	NC	--	NA	NA	NA	NA	NA	NA	NA	**1,300**	NA	NA	NA	NA
SODIUM	1,524,588	160,000	NA	NA	NA	NA	NA	NA	NA	**15,900**	NA	NA	NA	NA
VANADIUM	NC	49	NA	NA	NA	NA	NA	1.25 U	1.25 U	**2.4**	NA	NA	NA	NA
ZINC	NC	5000	NA	NA	NA	NA	NA	**6.62 J**	2.5 U	3.5 U	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (mg/L)														
AMMONIA-N	NC	--	NA	NA	NA	NA	NA	**1.71**	**0.607**	NA	NA	NA	NA	NA
SULFATE	NC	250	NA	NA	NA	NA	NA	**175**	**233**	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (mg/L)														
TOTAL PETROLEUM HYDROCARBONS	NC	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TPH (C08-C40)	NC	5	NA	**11**	**10.3**	**11.8**	**6.44**	NA	NA	NA	**0.69**	0.159 U	**8.2**	**2.93**
POLYCYCLIC AROMATIC HYDROCARBONS (µg/L)														
1-METHYLNAPHTHALENE	NC	28	NA	**74**	**37.9**	**46.5**	**47.9 J**	NA	NA	NA	0.03 U	0.0463 U	**0.0817 J**	0.0463 U
2-METHYLNAPHTHALENE	NC	28	NA	**24**	**15.4**	**11.4**	**12.6**	NA	NA	NA	0.031 U	0.0463 U	0.049 U	0.0463 U
FLUORENE	NC	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NC	14	NA	**0.98**	0.0463 U	0.467 U	0.0463 U	NA	NA	NA	0.03 U	0.0463 U	0.049 U	0.0463 U
PHENANTHRENE	NC	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (µg/L)														
ACENAPHTHENE	NC	20	2 U	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	6	2 U	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA
FLUORENE	NC	280	**1 J**	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA
VOLATILES (µg/L)														
O-XYLENE	NC	--	0.3 U	NA	NA	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA

TABLE A1-1
SWMU 8, GROUNDWATER POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE IDENTIFICATION	NAVSTA Mayport Background	FL CTL 62-777 GW-Table I	MPT-08-MW12S				MPT-08-MW15SR	MPT-08-MW16S					MPT-08-MW17S	
LOCATION			MPT-08-MW12S-0408	MPT-08-MW12S-20080828	MPT-08-MW12S-20100525	MPT-08-MW12S-20100709	MPT-08-MW15SR-20080827	MPT-08-MW16S-20080828	MPT-08-MW16S-20101207	MPT-08-MW16S-20110119	MPT-08-MW16S-20110427	MPT-08-MW16S-20110728	MPT-08-MW17S-20080828	MPT-08-MW17S-20110124
SAMPLE DATE			20080423	20080828	20100525	20100709	20080827	20080828	20101207	20110119	20110427	20110728	20080828	20110124
METALS (µg/L)														
ALUMINUM	NC	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ARSENIC	NC	10	NA	0.98 U	NA	NA	**1.7**	**5.3**	NA	NA	NA	NA	0.98 U	NA
BARIUM	NC	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CADMIUM	NC	5	NA	0.1 U	NA	NA	**0.38**	0.1 U	NA	NA	NA	NA	0.1 U	NA
CALCIUM	226,125	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHROMIUM	NC	100	NA	1.8 U	NA	NA	**12.7**	1.2 U	NA	NA	NA	NA	1.1 U	NA
IRON	494	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LEAD	NC	15	NA	1 U	NA	NA	**9.3**	**2.3**	NA	NA	NA	NA	**1.2**	NA
MAGNESIUM	184,393	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MANGANESE	141	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
POTASSIUM	NC	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SODIUM	1,524,588	160,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VANADIUM	NC	49	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ZINC	NC	5000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (mg/L)														
AMMONIA-N	NC	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SULFATE	NC	250	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (mg/L)														
TOTAL PETROLEUM HYDROCARBONS	NC	5	NA	NA	**0.041 J**	0.085 U	NA	NA	NA	NA	NA	NA	NA	NA
TPH (C08-C40)	NC	5	**0.057 J**	NA	NA	NA	NA	NA	**7.5**	**5.53**	**8.06**	**10.2**	NA	**0.694**
POLYCYCLIC AROMATIC HYDROCARBONS (µg/L)														
1-METHYLNAPHTHALENE	NC	28	0.02 U	NA	0.025 U	0.03 U	NA	NA	**2.1**	**6.12**	**8.21**	**15.4**	NA	0.0463 U
2-METHYLNAPHTHALENE	NC	28	0.03 U	NA	0.031 U	**0.034 J**	NA	NA	**0.47**	**1.59**	**1.78 J**	**4.03**	NA	0.0463 U
FLUORENE	NC	280	0.02 U	NA	**0.029 J**	0.03 U	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NC	14	0.02 U	NA	0.023 U	**0.043 J**	NA	NA	**0.65**	**0.387**	0.467 U	**0.574**	NA	0.0463 U
PHENANTHRENE	NC	210	0.02 U	NA	**0.033 J**	0.03 U	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (µg/L)														
ACENAPHTHENE	NC	20	NA	2 U	NA	NA	2 U	**2 J**	NA	NA	NA	NA	2 U	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	6	NA	2 U	NA	NA	**4 J**	2 U	NA	NA	NA	NA	2 U	NA
FLUORENE	NC	280	NA	1 U	NA	NA	1 U	**3 J**	NA	NA	NA	NA	1 U	NA
VOLATILES (µg/L)														
O-XYLENE	NC	--	NA	0.3 U	0.25 U	NA	0.3 U	**0.3 J**	NA	NA	NA	NA	0.3 U	NA

TABLE A1-1
SWMU 8, GROUNDWATER POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE IDENTIFICATION	**NAVSTA Mayport Background**	**FL CTL 62-777 GW-Table I**	**MPT-08-MW17S**	**MPT-08-MW18S**			**MPT-08-MW21S**
LOCATION			MPT-08-MW17S-20110728	MPT-08-MW18S-20080828	MPT-08-MW18S-20110427	MPT-08-MW18S-20110801	MPT-08-MW21S-20121109
SAMPLE DATE			20110728	20080828	20110427	20110801	20121109
METALS (µg/L)							
ALUMINUM	NC	200	NA	NA	NA	NA	NA
ARSENIC	NC	10	NA	**1.1**	NA	NA	NA
BARIUM	NC	2,000	NA	NA	NA	NA	NA
CADMIUM	NC	5	NA	0.1 U	NA	NA	NA
CALCIUM	226,125	--	NA	NA	NA	NA	NA
CHROMIUM	NC	100	NA	1 U	NA	NA	NA
IRON	494	300	NA	NA	NA	NA	**11,100**
LEAD	NC	15	NA	**1.2**	NA	NA	NA
MAGNESIUM	184,393	--	NA	NA	NA	NA	NA
MANGANESE	141	50	NA	NA	NA	NA	NA
POTASSIUM	NC	--	NA	NA	NA	NA	NA
SODIUM	1,524,588	160,000	NA	NA	NA	NA	NA
VANADIUM	NC	49	NA	NA	NA	NA	NA
ZINC	NC	5000	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (mg/L)							
AMMONIA-N	NC	--	NA	NA	NA	NA	NA
SULFATE	NC	250	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (mg/L)							
TOTAL PETROLEUM HYDROCARBONS	NC	5	NA	NA	NA	NA	NA
TPH (C08-C40)	NC	5	0.318 U	NA	**0.232 J**	0.157 U	NA
POLYCYCLIC AROMATIC HYDROCARBONS (µg/L)							
1-METHYLNAPHTHALENE	NC	28	0.0935 U	NA	0.0463 U	0.0463 U	NA
2-METHYLNAPHTHALENE	NC	28	0.0935 U	NA	0.0463 U	0.0463 U	NA
FLUORENE	NC	280	NA	NA	NA	NA	NA
NAPHTHALENE	NC	14	0.0935 U	NA	0.0463 U	0.0463 U	NA
PHENANTHRENE	NC	210	NA	NA	NA	NA	NA
SEMIVOLATILES (µg/L)							
ACENAPHTHENE	NC	20	NA	2 U	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	6	NA	2 U	NA	NA	NA
FLUORENE	NC	280	NA	1 U	NA	NA	NA
VOLATILES (µg/L)							
O-XYLENE	NC	--	NA	0.3 U	NA	NA	NA

Notes:
-- = The chemical was not analyzed or no value was available.
NC = no criteria
NA = not analyzed
J = The chemical was detected but the concentration reported is an estimated value.
U = The chemical was not detected.
R = The chemical was rejected.

TABLE A1-2
SWMU 8, SOIL POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	FDEP SCTL RESIDENTIAL [R]	FDEP SCTL INDUSTRIAL [I]	NAVSTA MAYPORT BACKGROUND CRITERIA	FDEP SCTL LEACHABILITY [L]	MPT-08-SB25		MPT-08-SB27		MPT-08-SB29		MPT-08-SB30		MPT-08-SB31	
SAMPLE IDENTIFICATION					MPT-08-SB25-01-102706	MPT-08-SB25-09-102706	MPT-08-SB27-01-102706	MPT-08-SB27-09-102706	MPT-08-SB29-01-102706	MPT-08-SB29-09-102706	MPT-08-SB30-01-110206	MPT-08-SB30-09-102706	MPT-08-SB31-01-102706	MPT-08-SB31-09-102706
SAMPLE DATE					20061027	20061027	20061027	20061027	20061027	20061027	20061102	20061027	20061027	20061027
TOP DEPTH					0	8	0	8	0	8	0	8	0	8
BOTTOM DEPTH					1	9	1	9	1	9	1	9	1	9
VOLATILES (µg/kg)														
2-BUTANONE	16000000	110000000	NC	17000	6 U	8 U	5 U	8 J	7 U	8 U	14 U	8 U	6 U	7 U
ACETONE	11000000	68000000	NC	25000	6 U	7 U	68 J	46 J	7 U	8 U	13 U	8 U	5 U	6 U
ACROLEIN	50	300	NC	10	4 UR	5 UR	3 UR	6 J	5 UR	6 UR	10 UR	6 UR	4 UR	5 UR
CARBON DISULFIDE	270000	1500000	NC	5600	0.4 U	0.6 U	0.4 U	4	0.5 U	0.6 U	1 U	0.6 U	0.4 U	0.5 U
CHLOROFORM	400	600	NC	400	0.4 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	0.9 U	0.5 U	0.4 U	0.5 U
ETHYLBENZENE	1500000	9200000	NC	600	0.4 U	0.4 U	0.3 J	0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	0.3 U	0.4 U
SEMIVOLATILES (µg/kg)			NC											
BAP EQUIVALENT	100	700	NC	8000	120 U	130 U	110 U	140 U	120 U	150 U	110 U	140 U	120 U	140 U
BAP EQUIVALENT(1)	100	700	NC	8000	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U
BENZO(A)PYRENE	100	700	NC	8000	120 U	130 U	110 U	140 U	120 U	150 U	110 U	140 U	120 U	140 U
BENZO(B)FLUORANTHENE	NC	NC	NC	2400	150 U	160 U	140 U	180 U	140 U	180 U	140 U	180 U	140 U	180 U
BIS(2-ETHYLHEXYL)PHTHALAT	72000	390000	NC	3600000	360 U	400 U	340 U	430 U	350 U	440 U	330 U	430 U	350 U	430 U
CHRYSENE	NC	NC	NC	77000	130 U	140 U	120 U	160 U	130 U	160 U	120 U	160 U	130 U	160 U
FLUORENE	2600000	33000000	NC	160000	120 U	130 U	110 U	140 U	120 U	150 U	110 U	140 U	120 U	140 U
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)														
BAP EQUIVALENT	100	700	NC	8000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BAP EQUIVALENT(1)	100	700	NC	8000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	100	700	NC	8000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NC	NC	NC	2400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	NC	77000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES/PCBS (µg/kg)														
TOTAL AROCLOR HALFND	NC	NC	NC	NC	41.55	44.9	39	48.35	44.95	49.65	37.7	47.75	39.15	48.3
METALS (mg/kg)														
ALUMINUM	80000	NC	NC	NC	1450	411	1660	3370	5650 J	755 J	1360 J	611	2640 J	693 J
ANTIMONY	27	370	NC	5.4	0.27 U	0.26 U	0.28 U	0.25 U	0.26 U	0.36 UJ	0.25 U	0.35 U	0.21 UJ	0.34 UJ
ARSENIC	2.1	12	13.9	NC	1.3 U	0.5 U	1.5 U	0.56 U	1.2 U	1.2 U	1.2 U	0.61 U	1.3 U	1.4 U
BARIUM	120	130000	NC	1600	8.2	4.9	8.9	9.3	13.4	7.4	6.3	6.4	6.5	4
BERYLLIUM	120	1400	NC	63	0.12 U	0.09 U	0.2 U	0.18 U	0.14 U	0.17 U	0.12 U	0.15 U	0.14 U	0.17 U
CADMIUM	82	1700	NC	7.5	0.07 J	0.05 U	0.05 U	0.1 J	0.05 U	0.07 UJ	0.05 U	0.06 U	0.04 UJ	0.06 UJ
CALCIUM	NC	NC	NC	NC	86400	81500	83200	97000	7460	147000	75900	164000	31400	72300
CHROMIUM	210	470	NC	38	4.4	2.5	4.7	8.5	7.4	3.5 J	3.4	4.5	5.5	3.4 J
COBALT	1700	42000	NC	NC	0.3	0.12 U	0.2	0.7	0.36	0.16 U	0.35	0.33	0.36	0.15 U
COPPER	150	89000	NC	NC	2.5 J	0.59 U	2.4 J	1.2 J	2.6	0.68 J	1.7 U	0.45 U	3.9 J	0.34 J
IRON	53000	NC	NC	NC	1180	445	1230	2820	2360	715	1130	677	1930	740
LEAD	400	1400	NC	NC	4.8	0.29 J	5.9	1.2 J	9.7	0.8 J	3.6 J	0.24 J	8.3	0.86 J
MAGNESIUM	NC	NC	NC	NC	544 J	443 J	594 J	1370 J	220	740	461 J	1510 J	448	406
MANGANESE	3500	43000	NC	NC	42.6 J	18.3 J	42.2 J	45.7 J	9.5	28.2	31.9 J	46.3 J	24.2	18
MERCURY	3	17	NC	2.1	0.01 U	0.01 U	0.02	0.01 U	0.02	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
NICKEL	340	35000	NC	130	2.1	1 U	2	2.2	3.5	1	1.5 J	1.1 U	2.4	1

TABLE A1-2
SWMU 8, SOIL POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	FDEP SCTL RESIDENTIAL [R]	FDEP SCTL INDUSTRIAL [I]	NAVSTA MAYPORT BACKGROUND CRITERIA	FDEP SCTL LEACHABILITY [L]	**MPT-08-SB25**		**MPT-08-SB27**		**MPT-08-SB29**		**MPT-08-SB30**		**MPT-08-SB31**	
SAMPLE IDENTIFICATION					MPT-08-SB25-01-102706	MPT-08-SB25-09-102706	MPT-08-SB27-01-102706	MPT-08-SB27-09-102706	MPT-08-SB29-01-102706	MPT-08-SB29-09-102706	MPT-08-SB30-01-110206	MPT-08-SB30-09-102706	MPT-08-SB31-01-102706	MPT-08-SB31-09-102706
SAMPLE DATE					20061027	20061027	20061027	20061027	20061027	20061027	20061102	20061027	20061027	20061027
TOP DEPTH					0	8	0	8	0	8	0	8	0	8
BOTTOM DEPTH					1	9	1	9	1	9	1	9	1	9
METALS (mg/kg)														
POTASSIUM	NC	NC	NC	NC	105 J	65.05 U	147 J	258 J	118	89.36 UJ	115	204 J	107 J	106 J
SELENIUM	440	11000	NC	5.2	0.53 J	0.4 UJ	0.43 UJ	0.46 J	0.39 U	0.54 U	0.38 UJ	0.52 UJ	0.31 U	0.51 U
SODIUM	NC	NC	NC	NC	778 J	739 J	670 J	591 J	4.27 U	1350 J	720 J	889 J	264 J	716 J
VANADIUM	67	10000	NC	980	3.1	1.5 J	3.6	7.1	6.4	2.1	3	2.3 J	4.6	1.9
ZINC	26000	630000	NC	NC	7.9	2.5 J	11	8.5	16.1 J	2.9 U	8.9	2.4 J	12.5 J	4.9 J
MISCELLANEOUS PARAMETERS (%)														
TOTAL SOLIDS	NC	NC	NC	NC	88	81	93	75	93	73	96	75	92	75
MISCELLANEOUS PARAMETERS (mg/kg)														
SULFIDE	NC	NC	NC	NC	31 U	30 U	27 U	32 U	27 U	30 U	29 U	31 U	26 U	31 U

TABLE A1-2
SWMU 8, SOIL POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	FDEP SCTL RESIDENTIAL [R]	FDEP SCTL INDUSTRIAL [I]	NAVSTA MAYPORT BACKGROUND CRITERIA	FDEP SCTL LEACHABILITY [L]	MPT-08-SB32		MPT-08-SB33		MPT-08-SB34		MPT-08-SB35		MPT-08-SB36	
SAMPLE IDENTIFICATION					MPT-08-SB32-01-102706	MPT-08-SB32-09-102706	MPT-08-SB33-01-102606	MPT-08-SB33-09-102606	MPT-08-SB34-01-102606	MPT-08-SB34-09-102606	MPT-08-SB35-01-102606	MPT-08-SB35-09-102606	MPT-08-SB36-01-102706	MPT-08-SB36-09-102706
SAMPLE DATE					20061027	20061027	20061026	20061026	20061026	20061026	20061026	20061026	20061027	20061027
TOP DEPTH					0	8	0	8	0	8	0	8	0	8
BOTTOM DEPTH					1	9	1	9	1	9	1	9	1	9
VOLATILES (µg/kg)														
2-BUTANONE	16000000	110000000	NC	17000	7 U	7 U	5 U	7 U	6 U	6 U	5 U	6 U	6 U	6 U
ACETONE	11000000	68000000	NC	25000	6 U	6 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	6 U
ACROLEIN	50	300	NC	10	4 UR	5 UR	3 UR	5 UR	4 UR	4 UR	4 UR	4 UR	4 UR	4 UR
CARBON DISULFIDE	270000	1500000	NC	5600	0.5 U	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
CHLOROFORM	400	600	NC	400	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
ETHYLBENZENE	1500000	9200000	NC	600	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
SEMIVOLATILES (µg/kg)			NC											
BAP EQUIVALENT	100	700	NC	8000	120 U	140 U	110 U	150 U	130 U	140 U	110 U	130 U	110 U	130 U
BAP EQUIVALENT(1)	100	700	NC	8000	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U
BENZO(A)PYRENE	100	700	NC	8000	120 U	140 U	110 U	150 U	130 U	140 U	110 U	130 U	110 U	130 U
BENZO(B)FLUORANTHENE	NC	NC	NC	2400	150 U	170 U	140 U	190 U	160 U	170 U	140 U	160 U	140 U	160 U
BIS(2-ETHYLHEXYL)PHTHALAT	72000	390000	NC	3600000	360 U	410 U	330 U	450 U	390 U	410 U	320 U	380 U	580	380 U
CHRYSENE	NC	NC	NC	77000	130 U	150 U	120 U	160 U	140 U	150 U	120 U	140 U	120 U	140 U
FLUORENE	2600000	33000000	NC	160000	120 U	140 U	110 U	150 U	130 U	140 U	110 U	130 U	110 U	130 U
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)														
BAP EQUIVALENT	100	700	NC	8000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BAP EQUIVALENT(1)	100	700	NC	8000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	100	700	NC	8000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NC	NC	NC	2400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	NC	77000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES/PCBS (µg/kg)														
TOTAL AROCLOR HALFND	NC	NC	NC	NC	41.55	46.35	36.5	50.9	44.85	46.35	36.5	42.4	36.5	43.05
METALS (mg/kg)														
ALUMINUM	80000	NC	NC	NC	613 J	1010 J	1140 J	684 J	1000 J	645 J	546 J	777 J	1400 J	489 J
ANTIMONY	27	370	NC	5.4	0.26 UJ	0.29 UJ	0.3 J	0.35 UJ	0.26 UJ	0.25 UJ	0.22 J	0.34 J	0.25 UJ	0.32 J
ARSENIC	2.1	12	13.9	NC	1.4 U	1.7 U	3.1 J	1.1 U	4.3 J	1.3 U	0.69 U	0.92 U	1.4 U	1.2 U
BARIUM	120	130000	NC	1600	8.1	6.7	10.2	4.8	8.4	2.8	5.5	6.9	6.7	5.8
BERYLLIUM	120	1400	NC	63	0.12 U	0.14 U	0.13 U	0.17 U	0.14 U	0.14 U	0.08 U	0.15 U	0.18 U	0.1 U
CADMIUM	82	1700	NC	7.5	0.05 UJ	0.05 UJ	0.08 J	0.06 UJ	0.05 UJ	0.05 UJ	0.04 UJ	0.05 UJ	0.07 J	0.05 UJ
CALCIUM	NC	NC	NC	NC	120000	142000	86300	102000	170000	40200	139000	125000	102000	94600
CHROMIUM	210	470	NC	38	2.6 J	5.2	3.9	3.2 J	4.1	2.2 J	3.4	3.2 J	4.4	2.8 J
COBALT	1700	42000	NC	NC	0.18	0.25	0.33	0.16 U	0.27	0.17	0.11	0.24	0.21	0.2
COPPER	150	89000	NC	NC	0.8 J	1.1 J	1.5 J	1.2 J	1 J	0.3 J	0.57 J	0.37 J	1.9 J	0.78 J
IRON	53000	NC	NC	NC	722	1000	1080	909	994	761	558	947	1390	798
LEAD	400	1400	NC	NC	0.53 J	0.8 J	2.6 J	0.62 J	1.1 J	0.51 J	0.47 J	0.45 J	3.4 J	0.66 J
MAGNESIUM	NC	NC	NC	NC	677	1370	373	468	781	206	810	612	471	690
MANGANESE	3500	43000	NC	NC	32.9	72.7	50.1	66.1	56.7	17.1	42.5	36.5	36.1	39.5
MERCURY	3	17	NC	2.1	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
NICKEL	340	35000	NC	130	1.1	2.2	1.7	0.95	1.2	0.67	1.1	0.72	1.8	0.62

TABLE A1-2
SWMU 8, SOIL POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA
PAGE 4 OF 6

LOCATION	FDEP SCTL RESIDENTIAL [R]	FDEP SCTL INDUSTRIAL [I]	NAVSTA MAYPORT BACKGROUND CRITERIA	FDEP SCTL LEACHABILITY [L]	**MPT-08-SB32**		**MPT-08-SB33**		**MPT-08-SB34**		**MPT-08-SB35**		**MPT-08-SB36**	
SAMPLE IDENTIFICATION					MPT-08-SB32-01-102706	MPT-08-SB32-09-102706	MPT-08-SB33-01-102606	MPT-08-SB33-09-102606	MPT-08-SB34-01-102606	MPT-08-SB34-09-102606	MPT-08-SB35-01-102606	MPT-08-SB35-09-102606	MPT-08-SB36-01-102706	MPT-08-SB36-09-102706
SAMPLE DATE					20061027	20061027	20061026	20061026	20061026	20061026	20061026	20061026	20061027	20061027
TOP DEPTH					0	8	0	8	0	8	0	8	0	8
BOTTOM DEPTH					1	9	1	9	1	9	1	9	1	9
METALS (mg/kg)														
POTASSIUM	NC	NC	NC	NC	114 J	71.48 UJ	57.22 UJ	85.91 UJ	89.3 J	62.71 UJ	51.82 UJ	98.7 J	62.01 UJ	66.33 UJ
SELENIUM	440	11000	NC	5.2	0.39 U	0.43 U	0.35 U	0.52 U	0.39 U	0.38 U	0.32 U	0.41 U	0.38 U	0.4 U
SODIUM	NC	NC	NC	NC	1120 J	932 J	769 J	950 J	1600 J	399 J	1260 J	1170 J	1010 J	855 J
VANADIUM	67	10000	NC	980	3.3	3.4	4.2	2	3.1	1.7	1	1.8	3.8	1.9
ZINC	26000	630000	NC	NC	3.7 J	5.7 J	18.5 J	3.3 J	7.9 J	2.8 J	5.9 J	2.7 J	12.9 J	4.4 J
MISCELLANEOUS PARAMETERS (%)														
TOTAL SOLIDS	NC	NC	NC	NC	88	78	98	72	81	78	98	85	98	84
MISCELLANEOUS PARAMETERS (mg/kg)														
SULFIDE	NC	NC	NC	NC	26 U	31 U	29 U	30 U	26 U	30 U	25 U	30 U	26 U	29 U

TABLE A1-2
SWMU 8, SOIL POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	FDEP SCTL RESIDENTIAL [R]	FDEP SCTL INDUSTRIAL [I]	NAVSTA MAYPORT BACKGROUND CRITERIA	FDEP SCTL LEACHABILITY [L]	MPT-08-SB37		MPT-08-SB38		MPT-08-SB39	MPT-08-SB40	MPT-08-SB41	MPT-08-SB42
SAMPLE IDENTIFICATION					MPT-08-SB37-01-102706	MPT-08-SB37-09-102706	MPT-08-SB38-01-102606	MPT-08-SB38-09-102606	MPT-08-SB39-01-020707	MPT-08-SB40-01-020707	MPT-08-SB41-01-020707	MPT-08-SB42-02-020707
SAMPLE DATE					20061027	20061027	20061026	20061026	20070207	20070207	20070207	20070207
TOP DEPTH					0	8	0	8	0	0	0	1
BOTTOM DEPTH					1	9	1	9	1	1	1	2
VOLATILES (µg/kg)												
2-BUTANONE	16000000	110000000	NC	17000	6 U	6 U	5 U	7 U	NA	NA	NA	9 U
ACETONE	11000000	68000000	NC	25000	5 UJ	5 U	5 U	7 U	NA	NA	NA	28 J
ACROLEIN	50	300	NC	10	4 UR	4 UR	4 UR	5 UR	NA	NA	NA	6 UR
CARBON DISULFIDE	270000	1500000	NC	5600	0.4 U	0.4 U	0.4 U	0.5 U	NA	NA	NA	2 U
CHLOROFORM	400	600	NC	400	0.4 U	0.4 U	0.4 U	0.5 U	NA	NA	NA	2 J
ETHYLBENZENE	1500000	9200000	NC	600	0.3 U	0.3 U	0.3 U	0.4 U	NA	NA	NA	0.5 U
SEMIVOLATILES (µg/kg)			NC									
BAP EQUIVALENT	100	700	NC	8000	110 U	120 U	250.9 [R]	140 U	NA	NA	NA	130 U
BAP EQUIVALENT(1)	100	700	NC	8000	0 U	0 U	151.15 [R]	0 U	NA	NA	NA	0 U
BENZO(A)PYRENE	100	700	NC	8000	110 U	120 U	120 J [R]	140 U	NA	NA	NA	130 U
BENZO(B)FLUORANTHENE	NC	NC	NC	2400	140 U	140 U	310 J	180 U	NA	NA	NA	160 U
BIS(2-ETHYLHEXYL)PHTHALAT	72000	390000	NC	3600000	340 U	340 U	330 U	420 U	NA	NA	NA	400 U
CHRYSENE	NC	NC	NC	77000	120 U	120 U	150 J	150 U	NA	NA	NA	140 U
FLUORENE	2600000	33000000	NC	160000	110 U	120 U	110 U	140 U	NA	NA	NA	240 J
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)												
BAP EQUIVALENT	100	700	NC	8000	NA	NA	NA	NA	7.504	4 U	9.555	NA
BAP EQUIVALENT(1)	100	700	NC	8000	NA	NA	NA	NA	5.104	0 U	7.305	NA
BENZO(A)ANTHRACENE	NC	NC	NC	800	NA	NA	NA	NA	11 J	4 U	10 J	NA
BENZO(A)PYRENE	100	700	NC	8000	NA	NA	NA	NA	4 J	4 U	5 J	NA
BENZO(B)FLUORANTHENE	NC	NC	NC	2400	NA	NA	NA	NA	3 U	4 U	13 J	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24000	NA	NA	NA	NA	3 U	4 U	3 J	NA
CHRYSENE	NC	NC	NC	77000	NA	NA	NA	NA	4 J	4 U	5 J	NA
PESTICIDES/PCBS (µg/kg)												
TOTAL AROCLOR HALFND	NC	NC	NC	NC	38.8	39	36.5	47.6	NA	NA	NA	44.95
METALS (mg/kg)												
ALUMINUM	80000	NC	NC	NC	1030 J	276 J	1500 J	1160 J	NA	NA	NA	659
ANTIMONY	27	370	NC	5.4	0.25 J	0.23 UJ	0.3 J	0.27 UJ	NA	NA	NA	0.11 UJ
ARSENIC	2.1	12	13.9	NC	1.2 U	0.72 U	1.4 U	1 U	NA	NA	NA	0.96
BARIUM	120	130000	NC	1600	12.3	2.8	9.6	3.8	NA	NA	NA	8
BERYLLIUM	120	1400	NC	63	0.15 U	0.09 U	0.16 U	0.15 U	NA	NA	NA	0.07
CADMIUM	82	1700	NC	7.5	0.06 J	0.04 UJ	0.08 J	0.05 UJ	NA	NA	NA	0.05 U
CALCIUM	NC	NC	NC	NC	128000	73200	63100	44500	NA	NA	NA	142000
CHROMIUM	210	470	NC	38	4	1.4 J	5.1	2.9 J	NA	NA	NA	2.2 J
COBALT	1700	42000	NC	NC	0.18	0.1 U	0.38	0.27	NA	NA	NA	0.14 J
COPPER	150	89000	NC	NC	1.5 J	0.32 J	3.7 J	0.33 J	NA	NA	NA	4.5 J
IRON	53000	NC	NC	NC	1060	418	1610	1210	NA	NA	NA	1160
LEAD	400	1400	NC	NC	1.8 J	0.48 J	10.3	0.58 J	NA	NA	NA	1.9 J
MAGNESIUM	NC	NC	NC	NC	1110	423	447	349	NA	NA	NA	674
MANGANESE	3500	43000	NC	NC	70.2	21.5	37.5	13.4	NA	NA	NA	39.7
MERCURY	3	17	NC	2.1	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	0.01 U
NICKEL	340	35000	NC	130	1.7	0.46	2.1	0.88	NA	NA	NA	0.87

TABLE A1-2
SWMU 8, SOIL POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	FDEP SCTL RESIDENTIAL [R]	FDEP SCTL INDUSTRIAL [I]	NAVSTA MAYPORT BACKGROUND CRITERIA	FDEP SCTL LEACHABILITY [L]	**MPT-08-SB37**		**MPT-08-SB38**		**MPT-08-SB39**	**MPT-08-SB40**	**MPT-08-SB41**	**MPT-08-SB42**
SAMPLE IDENTIFICATION					MPT-08-SB37-01-102706	MPT-08-SB37-09-102706	MPT-08-SB38-01-102606	MPT-08-SB38-09-102606	MPT-08-SB39-01-020707	MPT-08-SB40-01-020707	MPT-08-SB41-01-020707	MPT-08-SB42-02-020707
SAMPLE DATE					20061027	20061027	20061026	20061026	20070207	20070207	20070207	20070207
TOP DEPTH					0	8	0	8	0	0	0	1
BOTTOM DEPTH					1	9	1	9	1	1	1	2
METALS (mg/kg)												
POTASSIUM	NC	NC	NC	NC	59.6 UJ	57.18 UJ	80.7 J	118 J	NA	NA	NA	79.1 U
SELENIUM	440	11000	NC	5.2	0.36 U	0.35 U	0.4 U	0.41 U	NA	NA	NA	0.21 U
SODIUM	NC	NC	NC	NC	1260 J	719 J	499 J	436 J	NA	NA	NA	1360
VANADIUM	67	10000	NC	980	3.3	0.83	5.8	2.2	NA	NA	NA	2.2
ZINC	26000	630000	NC	NC	6.7 J	1.4 U	58.9 J	4.1 J	NA	NA	NA	5.8 J
MISCELLANEOUS PARAMETERS (%)												
TOTAL SOLIDS	NC	NC	NC	NC	95	93	98	76	94	77	84	81
MISCELLANEOUS PARAMETERS (mg/kg)												
SULFIDE	NC	NC	NC	NC	25 U	28 U	26 U	30 U	NA	NA	NA	45

Notes:
NC = No Criteria
ND = Not Determined
NA = Not Analyzed
U = Indicates compound was analyzed for but not detected at indicated detection limit.
I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J = Estimated value.
R = Data is to be rejected
FDEP Residential, Industrial and Leachability for Soil SCTLs from Table II, Chapter 62-777, FAC (FDEP, 2005)
Results in blackened cells exceed regulatory levels.

TABLE A1-3
SWMU 9, GROUNDWATER POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE IDENTIFICATION	NAVSTA Mayport Background	FL CTL 62-777 GW-Table I	**MPT-09-MW01S**			**MPT-09-MW02S**			**MPT-09-MW03S**			**MPT-09-MW04S**		
LOCATION			MPT-09-MW01S-0408	MPT-09-MW01S-20100525	MPT-09-MW01S-20100709	MPT-09-MW02S-0408	MPT-09-MW02S-20100525	MPT-09-MW02S-20100709	MPT-09-MW03S-0408	MPT-09-MW03S-20100524	MPT-09-MW03S-20100708	MPT-09-MW04S-20101206	MPT-09-MW04S-20110119	MPT-09-MW04S-20110427
SAMPLE DATE			20080423	20100525	20100709	20080424	20100525	20100709	20080424	20100524	20100708	20101206	20110119	20110427
METALS (µg/L)														
IRON	494	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MANGANESE	141	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (mg/L)														
TOTAL PETROLEUM HYDROCARBONS	NC	5	NA	**0.037 J**	0.085 U	NA	**0.78**	**0.76**	NA	**0.17**	0.085 U	NA	NA	NA
TPH (C08-C40)	NC	5	**0.056 J**	NA	NA	**0.962**	NA	NA	**0.103 J**	NA	NA	**1.1**	0.159 U	**1.6**
POLYCYCLIC AROMATIC HYDROCARBONS ((µg/L)														
1-METHYLNAPHTHALENE	NC	28	0.02 U	0.025 U	0.03 U	**0.13**	**0.1**	**0.078 J**	0.02 U	0.025 U	0.03 U	0.03 U	0.0467 U	0.0472 U
ACENAPHTHENE	NC	20	0.02 U	0.011 U	0.03 U	**0.08 J**	**0.023 J**	0.03 U	0.02 U	0.011 U	0.03 U	NA	NA	NA
FLUORENE	NC	280	0.02 U	0.014 U	0.03 U	**0.08 J**	0.014 U	0.03 U	0.02 U	0.014 U	0.03 U	NA	NA	NA
NAPHTHALENE	NC	14	0.02 U	0.023 U	0.03 U	**0.1**	**0.027 J**	**0.11**	0.02 U	0.023 U	0.03 U	**0.03 J**	0.0467 U	0.0472 U
PHENANTHRENE	NC	210	0.02 U	0.011 U	0.03 U	0.02 U	0.011 U	0.03 U	0.02 U	**0.026 J**	0.03 U	NA	NA	NA

SAMPLE IDENTIFICATION	NAVSTA Mayport Background	FL CTL 62-777 GW-Table I	**MPT-09-MW04S**	**MPT-09-MW05S**	**MPT-09-MW06S**
LOCATION			MPT-09-MW04S-20110728	MPT-09-MW05S-20121109	MPT-09-MW06S-20121109
SAMPLE DATE			20110728	20121109	20121109
METALS (µg/L)					
IRON	494	300	NA	**19.3 J**	**744**
MANGANESE	141	50	NA	NA	**98**
PETROLEUM HYDROCARBONS (mg/L)					
TOTAL PETROLEUM HYDROCARBONS	NC	5	NA	NA	NA
TPH (C08-C40)	NC	5	**1.26**	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS ((µg/L)					
1-METHYLNAPHTHALENE	NC	28	0.0463 U	NA	NA
ACENAPHTHENE	NC	20	NA	NA	NA
FLUORENE	NC	280	NA	NA	NA
NAPHTHALENE	NC	14	0.0463 U	NA	NA
PHENANTHRENE	NC	210	NA	NA	NA

Notes:
-- = The chemical was not analyzed or no value was available.
NC = no criteria
NA = not analyzed
J = The chemical was detected but the concentration reported is an estimated value.
U = The chemical was not detected.
R = The chemical was rejected.

TABLE A1-4
SWMU 9, SOIL POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA
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LOCATION	FDEP SCTL RESIDENTIAL [R]	FDEP SCTL INDUSTRIAL [I]	FDEP SCTL LEACHABILITY [L]	MPT-09-SB01		MPT-09-SB02		MPT-09-SB03		MPT-09-SB04		MPT-09-SB05
SAMPLE IDENTIFICATION				MPT-09-SB01-01-110106	MPT-09-SB01-09-110106	MPT-09-SB02-01-103006	MPT-09-SB02-09-103006	MPT-09-SB03-01-103006	MPT-09-SB03-09-103006	MPT-09-SB04-01-103006	MPT-09-SB04-09-103006	MPT-09-SB05-01-110106
SAMPLE DATE				20061101	20061101	20061030	20061030	20061030	20061030	20061030	20061030	20061101
TOP DEPTH				0	8	0	8	0	8	0	8	0
BOTTOM DEPTH				1	9	1	9	1	9	1	9	1
VOLATILES (µg/kg)												
2-BUTANONE	16000000	110000000	17000	6 U	6 U	6 U	8 U	6 U	7 U	6 U	6 U	6 U
ACETONE	11000000	68000000	25000	6 UJ	6 UJ	5 UJ	8 UJ	5 UJ	6 U	6 UJ	6 UJ	5 UJ
CARBON DISULFIDE	270000	1500000	5600	0.5 U	0.4 U	0.4 U	0.6 U	0.4 U	0.5 U	0.5 U	0.4 U	0.4 U
ETHYLBENZENE	1500000	9200000	600	0.4 U	0.3 U	0.3 U	0.5 U	0.3 U	0.4 U	0.4 U	0.3 U	0.3 U
SEMIVOLATILES (µg/kg)												
2-METHYLNAPHTHALENE	210000	2100000	8500	160 U	150 U	140 U	150 U	140 U	160 UJ	160 UJ	150 U	140 U
ACENAPHTHENE	2400000	20000000	2100	120 U	120 U	110 U	120 U	110 U	130 UJ	130 UJ	120 U	110 U
ANTHRACENE	21000000	300000000	2500000	120 U	120 U	110 U	120 U	110 U	130 UJ	130 UJ	120 U	110 U
BAP EQUIVALENT	100	700	8000	120 U	120 U	110 U	403.35 [R]	397.78 [R]	130 U	130 U	120 U	110 U
BAP EQUIVALENT(1)	100	700	8000	0 U	0 U	0 U	297.4 [R]	297.38 [R]	0 U	0 U	0 U	0 U
BENZO(A)ANTHRACENE	NC	NC	800	110 U	110 U	100 U	330 J	340 J	120 UJ	120 UJ	110 U	97 U
BENZO(A)PYRENE	100	700	8000	120 U	120 U	110 U	230 J [R]	230 J [R]	130 UJ	130 UJ	120 U	110 U
BENZO(B)FLUORANTHENE	NC	NC	2400	160 U	150 U	140 U	340 J	330 J	160 UJ	160 UJ	150 U	140 U
BENZO(K)FLUORANTHENE	NC	NC	24000	160 U	160 U	150 U	170 J	180 J	160 UJ	170 UJ	150 U	140 U
BIS(2-ETHYLHEXYL)PHTHALATE	72000	390000	3600000	370 U	370 U	340 U	3700	340 U	390 UJ	400 UJ	360 U	570
CHRYSENE	NC	NC	77000	140 U	130 U	120 U	400	380	140 UJ	140 UJ	130 U	120 U
DIBENZOFURAN	320000	63000000	15000	120 U	120 U	110 U	120 U	110 U	120 UJ	130 UJ	120 U	100 U
FLUORANTHENE	3200000	59000000	1200000	240 U	230 U	220 U	760	720	250 UJ	250 UJ	230 U	210 U
FLUORENE	2600000	33000000	160000	120 U	120 U	110 U	120 U	110 U	130 UJ	130 UJ	120 U	110 U
NAPHTHALENE	55000	300000	1200	140 U	140 U	130 U	140 U	130 U	150 UJ	150 UJ	140 U	120 U
PHENANTHRENE	2200000	36000000	250000	89 U	88 U	83 U	190 J	170 J	93 UJ	95 UJ	87 U	78 U
PYRENE	2400000	45000000	880000	170 U	170 U	160 U	620	610	170 UJ	180 UJ	160 U	150 U
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)												
2-METHYLNAPHTHALENE	210000	2100000	8500	NA	NA	NA	NA	NA	NA	NA	NA	NA
BAP EQUIVALENT	100	700	8000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BAP EQUIVALENT(1)	100	700	8000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	800	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	77000	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	55000	300000	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES/PCBS (µg/kg)												
TOTAL AROCLOR HALFND	NC	NC	NC	41.75	41.65	39	40.4	38.85	43.7	44.9	41.45	36.5
METALS (mg/kg)												
ALUMINUM	80000	NC	NC	2360 J	798 J	2740	557	1160	783	1940 J	1140 J	1250 J
ARSENIC	2.1	12	NC	0.95 U	1.8	1.2 U	0.81 U	1.7 U	1.3 U	1.4 U	0.56 U	0.62 U
BARIUM	120	130000	1600	10	6	8.7	5.4	12.2	5.5	9.2	7.7	6.2
CADMIUM	82	1700	7.5	0.05 U	0.11 J	0.18 J	0.04 U	0.07 J	0.05 U	0.1 J	0.06 U	0.07 J
CALCIUM	NC	NC	NC	56300	158000	99000	153000	125000	146000	103000	124000	111000
CHROMIUM	210	470	38	4	4.2	6.6	2.8 J	4.5	3.3	6.2	4.1	3.4
COBALT	1700	42000	NC	0.37	0.28	0.38	0.11	0.26	0.2	0.42	0.23	0.29
COPPER	150	89000	NC	2.7 U	1.2 U	5.1 J	0.67 U	1.4 J	0.8 J	5.6 U	3 U	1.8 U
IRON	53000	NC	NC	756	1400	1210	675	970	1000	1720	878	989

TABLE A1-4
SWMU 9, SOIL POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	FDEP SCTL RESIDENTIAL [R]	FDEP SCTL INDUSTRIAL [I]	FDEP SCTL LEACHABILITY [L]	MPT-09-SB01		MPT-09-SB02		MPT-09-SB03		MPT-09-SB04		MPT-09-SB05
SAMPLE IDENTIFICATION				MPT-09-SB01-01-110106	MPT-09-SB01-09-110106	MPT-09-SB02-01-103006	MPT-09-SB02-09-103006	MPT-09-SB03-01-103006	MPT-09-SB03-09-103006	MPT-09-SB04-01-103006	MPT-09-SB04-09-103006	MPT-09-SB05-01-110106
SAMPLE DATE				20061101	20061101	20061030	20061030	20061030	20061030	20061030	20061030	20061101
TOP DEPTH				0	8	0	8	0	8	0	8	0
BOTTOM DEPTH				1	9	1	9	1	9	1	9	1
METALS (mg/kg)												
LEAD	400	1400	NC	2.2 J	0.48 U	5.1	0.47 J	1.5 J	0.37 J	3.9 J	2.7 J	2 J
MAGNESIUM	NC	NC	NC	489 J	1180 J	787 J	806 J	875 J	1050 J	1040 J	828 J	527 J
MANGANESE	3500	43000	NC	24.3 J	94.2 J	30 J	35 J	55.8 J	45.8 J	73.3 J	36.8 J	30.9 J
MERCURY	3	17	2.1	0.05	0.01 U	0.48	0.01 U	0.01 U	0.01 U	0.02	0.01 U	0.01 U
NICKEL	340	35000	130	1.1 J	0.98 J	2.7	0.75 U	1 U	0.87 U	2.2 J	0.92 J	1.7 J
POTASSIUM	NC	NC	NC	75.5	123	198 J	109 J	78.2 J	104 J	67	108	64.02 U
SELENIUM	440	11000	5.2	0.38 UJ	0.41 UJ	0.44 J	0.35 UJ	0.3 UJ	0.37 UJ	0.4 UJ	0.45 UJ	0.39 UJ
SODIUM	NC	NC	NC	458 J	1310 J	563 J	1550 J	1180 J	1350 J	870 J	1110 J	997 J
THALLIUM	6.1	150	2.8	0.57 U	0.61 U	0.58 U	0.52 U	0.5	0.55 U	0.6 U	0.67 U	0.58 U
VANADIUM	67	10000	980	2.7	3 J	4	2 J	3.7	2.6 J	4.1	3	2.7
ZINC	26000	630000	NC	10.6	2.7 J	17	2.2 J	8.3	2.6 J	18.1	11.9	12.5
MISCELLANEOUS PARAMETERS (%)												
PERCENT SOLIDS	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL SOLIDS	NC	NC	NC	86	87	93	89	94	83	81	89	99
MISCELLANEOUS PARAMETERS (mg/kg)												
CYANIDE	34	11000	0.8	0.6 U	0.55 U	0.5 U	0.55 U	0.5 U	0.55 U	0.6 U	0.33	0.5 U

TABLE A1-4
SWMU 9, SOIL POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	FDEP SCTL RESIDENTIAL [R]	FDEP SCTL INDUSTRIAL [I]	FDEP SCTL LEACHABILITY [L]	MPT-09-SB05	MPT-09-SB06		MPT-09-SB07		MPT-09-SB08		MPT-09-SB09	
SAMPLE IDENTIFICATION				MPT-09-SB05-09-110106	MPT-09-SB06-01-110106	MPT-09-SB06-09-110106	MPT-09-SB07-01-103006	MPT-09-SB07-09-103006	MPT-09-SB08-01-103006	MPT-09-SB08-09-103006	MPT-09-SB09-01-110106	MPT-09-SB09-09-110106
SAMPLE DATE				20061101	20061101	20061101	20061030	20061030	20061030	20061030	20061101	20061101
TOP DEPTH				8	0	8	0	8	0	8	0	8
BOTTOM DEPTH				9	1	9	1	9	1	9	1	9
VOLATILES (µg/kg)												
2-BUTANONE	16000000	110000000	17000	23 J	7 U	5 U	8 U	6 U	5 U	7 U	7 U	17 J
ACETONE	11000000	68000000	25000	48 J	6 UJ	4 UJ	8 U	6 U	5 U	6 UJ	6 UJ	57 J
CARBON DISULFIDE	270000	1500000	5600	4 J	0.5 U	0.4 U	0.6 U	0.4 U	0.4 U	0.5 U	0.5 U	2 J
ETHYLBENZENE	1500000	9200000	600	0.4 UJ	0.4 U	0.3 U	0.5 U	0.3 U	0.3 U	0.4 U	0.4 U	1 J
SEMIVOLATILES (µg/kg)												
2-METHYLNAPHTHALENE	210000	2100000	8500	9000 [L]	140 U	170 U	150 U	150 U	140 U	160 U	140 U	11000 [L]
ACENAPHTHENE	2400000	20000000	2100	1400 J	110 U	130 U	120 U	120 U	110 U	130 U	110 U	1200 J
ANTHRACENE	21000000	300000000	2500000	610 J	110 U	130 U	120 U	110 U	110 U	130 U	110 U	550 U
BAP EQUIVALENT	100	700	8000	520 U	110 U	130 U	120 U	120 U	110 U	130 U	110 U	560 U
BAP EQUIVALENT(1)	100	700	8000	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U
BENZO(A)ANTHRACENE	NC	NC	800	470 U	100 U	120 U	110 U	100 U	98 U	120 U	100 U	500 U
BENZO(A)PYRENE	100	700	8000	520 U	110 U	130 U	120 U	120 U	110 U	130 U	110 U	560 U
BENZO(B)FLUORANTHENE	NC	NC	2400	650 U	140 U	170 U	150 U	150 U	140 U	160 U	140 U	700 U
BENZO(K)FLUORANTHENE	NC	NC	24000	660 U	140 U	170 U	150 U	150 U	140 U	160 U	140 U	710 U
BIS(2-ETHYLHEXYL)PHTHALATE	72000	390000	3600000	1600 U	340 U	400 U	350 U	350 U	330 U	390 U	340 U	1700 U
CHRYSENE	NC	NC	77000	570 U	120 U	150 U	130 U	130 U	120 U	140 U	120 U	610 U
DIBENZOFURAN	320000	63000000	15000	500 U	110 U	130 U	110 U	110 U	100 U	120 U	110 U	580 J
FLUORANTHENE	3200000	59000000	1200000	1000 U	220 U	260 U	230 U	220 U	210 U	250 U	220 U	1100 U
FLUORENE	2600000	33000000	160000	3300	110 U	130 U	120 U	120 U	110 U	130 U	110 U	1800
NAPHTHALENE	55000	300000	1200	1400 J [R]	130 U	160 U	140 U	130 U	120 U	150 U	130 U	3700 [L]
PHENANTHRENE	2200000	36000000	250000	5700	82 U	97 U	85 U	84 U	78 U	93 U	82 U	3200
PYRENE	2400000	45000000	880000	710 U	150 U	180 U	160 U	160 U	150 U	180 U	150 U	760 U
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)												
2-METHYLNAPHTHALENE	210000	2100000	8500	NA	NA	NA	NA	NA	NA	NA	NA	NA
BAP EQUIVALENT	100	700	8000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BAP EQUIVALENT(1)	100	700	8000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	800	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	77000	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	55000	300000	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES/PCBS (µg/kg)												
TOTAL AROCLOR HALFND	NC	NC	NC	44.85	38.85	45.65	39.75	39.15	36.5	43.7	38.9	47.55
METALS (mg/kg)												
ALUMINUM	80000	NC	NC	601 J	1300 J	648 J	1100	815	1100	800	1430 J	1290 J
ARSENIC	2.1	12	NC	1.8 U	0.68 U	0.61 U	0.94 U	0.55 U	1.1 U	1.5 U	0.71 U	1.1 U
BARIUM	120	130000	1600	5.9	8.3	6.8	7.5	4.6	9.4	5	6.4	5.9
CADMIUM	82	1700	7.5	0.06 U	0.05 U	0.06 U	0.04 U	0.04 J	0.06 J	0.05 J	0.04 U	0.06 J
CALCIUM	NC	NC	NC	173000	104000	222000	116000	94200	141000	105000	95500	139000
CHROMIUM	210	470	38	4.6	4.3	3.4	5.1	2.8	5	3.1	3.5	6.9
COBALT	1700	42000	NC	0.2	0.4	0.25	0.22	0.24	0.24	0.29	0.26	0.26
COPPER	150	89000	NC	1.4 U	1.3 U	1.6 U	1.2 J	0.42 U	3 J	0.86 J	3.1 U	1.6 U
IRON	53000	NC	NC	1120	1230	872	1050	873	1200	1080	1030	2000

TABLE A1-4
SWMU 9, SOIL POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	FDEP SCTL RESIDENTIAL [R]	FDEP SCTL INDUSTRIAL [I]	FDEP SCTL LEACHABILITY [L]	**MPT-09-SB05**	**MPT-09-SB06**		**MPT-09-SB07**		**MPT-09-SB08**		**MPT-09-SB09**	
SAMPLE IDENTIFICATION				MPT-09-SB05-09-110106	MPT-09-SB06-01-110106	MPT-09-SB06-09-110106	MPT-09-SB07-01-103006	MPT-09-SB07-09-103006	MPT-09-SB08-01-103006	MPT-09-SB08-09-103006	MPT-09-SB09-01-110106	MPT-09-SB09-09-110106
SAMPLE DATE				20061101	20061101	20061101	20061030	20061030	20061030	20061030	20061101	20061101
TOP DEPTH				8	0	8	0	8	0	8	0	8
BOTTOM DEPTH				9	1	9	1	9	1	9	1	9
METALS (mg/kg)												
LEAD	400	1400	NC	0.72 U	1.6 J	0.68 U	1.7 J	0.37 J	2.9 J	0.67 J	2.3 J	0.93 J
MAGNESIUM	NC	NC	NC	1580 J	698 J	1630 J	629 J	716 J	1160 J	766 J	459 J	1900 J
MANGANESE	3500	43000	NC	57.2 J	45.5 J	64.7 J	39.4 J	33 J	52.7 J	30.2 J	27.1 J	186 J
MERCURY	3	17	2.1	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
NICKEL	340	35000	130	0.63 J	1.4 J	0.44 J	1.3	0.77 U	2.3	1.5	1.2 J	0.85 J
POTASSIUM	NC	NC	NC	86.7	103	141	143 J	62.1 J	158 J	52 J	93.1	202
SELENIUM	440	11000	5.2	0.48 UJ	0.39 UJ	0.48 UJ	0.36 UJ	0.28 UJ	0.39 UJ	0.3 J	0.31 UJ	0.37 UJ
SODIUM	NC	NC	NC	1370 J	1000 J	1960 J	1150 J	892 J	1070 J	980 J	884 J	666 J
THALLIUM	6.1	150	2.8	0.72 U	0.58 U	0.71 U	0.54 U	0.42 U	0.58 U	0.45 U	0.47 U	0.56 U
VANADIUM	67	10000	980	2.2 J	2.9	2.1 J	2.4 J	1.7 J	3.8	3.9	3	5.3
ZINC	26000	630000	NC	2.5 U	8.5	2.5 U	13.6 J	2.1 J	29	3.3 J	34.9	5.4 J
MISCELLANEOUS PARAMETERS (%)												
PERCENT SOLIDS	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL SOLIDS	NC	NC	NC	82	94	79	90	92	98	82	94	76
MISCELLANEOUS PARAMETERS (mg/kg)												
CYANIDE	34	11000	0.8	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.65 U

TABLE A1-4
SWMU 9, SOIL POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	FDEP SCTL RESIDENTIAL [R]	FDEP SCTL INDUSTRIAL [I]	FDEP SCTL LEACHABILITY [L]	MPT-09-SB10		MPT-09-SB11		MPT-09-SB12		MPT-09-SB13		MPT-09-SB14
SAMPLE IDENTIFICATION				MPT-09-SB10-01-103006	MPT-09-SB10-09-103006	MPT-09-SB11-01-103006	MPT-09-SB11-09-103006	MPT-09-SB12-01-103006	MPT-09-SB12-09-103006	MPT-09-SB13-01-110106	MPT-09-SB13-09-110106	MPT-09-SB14-09-020707
SAMPLE DATE				20061030	20061030	20061030	20061030	20061030	20061030	20061101	20061101	20070207
TOP DEPTH				0	8	0	8	0	8	0	8	8
BOTTOM DEPTH				1	9	1	9	1	9	1	9	9
VOLATILES (µg/kg)												
2-BUTANONE	16000000	110000000	17000	7 U	6 U	7 U	6 U	7 U	7 U	20 U	19 U	NA
ACETONE	11000000	68000000	25000	6 U	6 U	7 U	5 U	6 U	6 U	19 UJ	32 J	NA
CARBON DISULFIDE	270000	1500000	5600	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U	0.5 U	1 U	1 U	NA
ETHYLBENZENE	1500000	9200000	600	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	1 U	1 U	NA
SEMIVOLATILES (µg/kg)												
2-METHYLNAPHTHALENE	210000	2100000	8500	140 U	150 U	160 U	160 U	140 U	160 U	140 U	160 U	NA
ACENAPHTHENE	2400000	20000000	2100	110 U	120 U	130 U	120 U	110 U	130 U	110 U	170 J	NA
ANTHRACENE	21000000	300000000	2500000	110 U	120 U	120 U	120 U	110 U	130 U	110 U	120 U	NA
BAP EQUIVALENT	100	700	8000	120 U	120 U	130 U	130 U	110 U	130 U	110 U	120 U	NA
BAP EQUIVALENT(1)	100	700	8000	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	NA
BENZO(A)ANTHRACENE	NC	NC	800	100 U	110 U	110 U	110 U	100 U	120 U	100 U	110 U	NA
BENZO(A)PYRENE	100	700	8000	120 U	120 U	130 U	130 U	110 U	130 U	110 U	120 U	NA
BENZO(B)FLUORANTHENE	NC	NC	2400	140 U	150 U	160 U	160 U	140 U	160 U	140 U	160 U	NA
BENZO(K)FLUORANTHENE	NC	NC	24000	150 U	160 U	160 U	160 U	140 U	170 U	140 U	160 U	NA
BIS(2-ETHYLHEXYL)PHTHALATE	72000	390000	3600000	350 U	370 U	380 U	380 U	340 U	400 U	340 U	380 U	NA
CHRYSENE	NC	NC	77000	130 U	130 U	140 U	140 U	120 U	140 U	120 U	140 U	NA
DIBENZOFURAN	320000	63000000	15000	110 U	120 U	120 U	120 U	110 U	130 U	110 U	140 J	NA
FLUORANTHENE	3200000	59000000	1200000	220 U	230 U	240 U	240 U	220 U	250 U	220 U	240 U	NA
FLUORENE	2600000	33000000	160000	120 U	120 U	130 U	130 U	110 U	130 U	110 U	350 J	NA
NAPHTHALENE	55000	300000	1200	130 U	140 U	150 U	140 U	130 U	150 U	130 U	140 U	NA
PHENANTHRENE	2200000	36000000	250000	83 U	88 U	92 U	91 U	81 U	95 U	81 U	90 U	NA
PYRENE	2400000	45000000	880000	160 U	160 U	170 U	170 U	150 U	180 U	150 U	170 U	NA
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)												
2-METHYLNAPHTHALENE	210000	2100000	8500	NA	NA	NA	NA	NA	NA	NA	NA	720000 [R][L]
BAP EQUIVALENT	100	700	8000	NA	NA	NA	NA	NA	NA	NA	NA	40.2
BAP EQUIVALENT(1)	100	700	8000	NA	NA	NA	NA	NA	NA	NA	NA	16.3
BENZO(A)ANTHRACENE	NC	NC	800	NA	NA	NA	NA	NA	NA	NA	NA	160 J
CHRYSENE	NC	NC	77000	NA	NA	NA	NA	NA	NA	NA	NA	300 J
NAPHTHALENE	55000	300000	1200	NA	NA	NA	NA	NA	NA	NA	NA	6500 [L]
PESTICIDES/PCBS (µg/kg)												
TOTAL AROCLOR HALFND	NC	NC	NC	39.1	41.55	43.55	42.45	38.85	44.95	38.85	42.35	NA
METALS (mg/kg)												
ALUMINUM	80000	NC	NC	1540	543	2140	599	1140	415	1020 J	832 J	NA
ARSENIC	2.1	12	NC	1.4 U	0.74 U	0.77 U	0.75 U	0.94 U	0.53 U	0.87 U	0.98 U	NA
BARIUM	120	130000	1600	8.1	3.3	7.1	3.7	5.6	2.3	5.6	5.3	NA
CADMIUM	82	1700	7.5	0.05 U	0.04 U	0.04 J	0.04 U	0.05 J	0.06	0.05 U	0.05 U	NA
CALCIUM	NC	NC	NC	117000	32200	76600	69500	109000	18300	124000	114000	NA
CHROMIUM	210	470	38	4.3	2.2	4.3	2.1	4.1	1.9	2.5 J	4.1	NA
COBALT	1700	42000	NC	0.3	0.14	0.35	0.17	0.26	0.16	0.27	0.28	NA
COPPER	150	89000	NC	0.91 J	0.16 U	1.6 J	0.34 U	1.5 J	0.4 U	1.3 U	0.48 U	NA
IRON	53000	NC	NC	1270	633	1180	658	783	420	878	1360	NA

TABLE A1-4
SWMU 9, SOIL POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	FDEP SCTL RESIDENTIAL [R]	FDEP SCTL INDUSTRIAL [I]	FDEP SCTL LEACHABILITY [L]	**MPT-09-SB10**		**MPT-09-SB11**		**MPT-09-SB12**		**MPT-09-SB13**		**MPT-09-SB14**
SAMPLE IDENTIFICATION				MPT-09-SB10-01-103006	MPT-09-SB10-09-103006	MPT-09-SB11-01-103006	MPT-09-SB11-09-103006	MPT-09-SB12-01-103006	MPT-09-SB12-09-103006	MPT-09-SB13-01-110106	MPT-09-SB13-09-110106	MPT-09-SB14-09-020707
SAMPLE DATE				20061030	20061030	20061030	20061030	20061030	20061030	20061101	20061101	20070207
TOP DEPTH				0	8	0	8	0	8	0	8	8
BOTTOM DEPTH				1	9	1	9	1	9	1	9	9
METALS (mg/kg)												
LEAD	400	1400	NC	1.7 J	0.39 J	3.5	0.57 J	1.2 J	0.24	3 J	0.72 U	NA
MAGNESIUM	NC	NC	NC	733 J	281 J	571 J	310 J	622 J	246 J	492 J	799 J	NA
MANGANESE	3500	43000	NC	51 J	14.7 J	37.3 J	23.5 J	40 J	12.4 J	26.3 J	83.5 J	NA
MERCURY	3	17	2.1	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA
NICKEL	340	35000	130	1.3 U	0.47 U	1.7	0.57 U	1.4	0.56 U	0.89 J	1.1 J	NA
POTASSIUM	NC	NC	NC	72.6 J	65.6 J	102 J	72.3 J	113 J	54.4	111	72 U	NA
SELENIUM	440	11000	5.2	0.37 UJ	0.34 J	0.31 UJ	0.31 UJ	0.31 UJ	0.3 U	0.37 UJ	0.44 UJ	NA
SODIUM	NC	NC	NC	1040 J	357 J	596 J	671 J	834 J	172 J	1020 J	1010 J	NA
THALLIUM	6.1	150	2.8	0.68	0.44 U	0.47 U	0.46 U	0.47 U	0.45 U	0.56 U	0.65 U	NA
VANADIUM	67	10000	980	5	1.3	3.8	1.4	3.1	1.2	2.4 J	2.8	NA
ZINC	26000	630000	NC	6.7	1.8	24.5	1.8 J	8.3	1.8	5 J	5.6 J	NA
MISCELLANEOUS PARAMETERS (%)												
PERCENT SOLIDS	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL SOLIDS	NC	NC	NC	92	88	84	85	95	81	95	85	79
MISCELLANEOUS PARAMETERS (mg/kg)												
CYANIDE	34	11000	0.8	0.55 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	NA

TABLE A1-4
SWMU 9, SOIL POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	FDEP SCTL RESIDENTIAL [R]	FDEP SCTL INDUSTRIAL [I]	FDEP SCTL LEACHABILITY [L]	MPT-09-SB15	MPT-09-SB16	MPT-09-SB17	MPT-09-SB18	MPT-09-SB19
SAMPLE IDENTIFICATION				MPT-09-SB15-09-020707	MPT-09-SB16-09-020707	MPT-09-SB17-09-020707	MPT09-SB18-05-022409	MPT09-SB19-01-022409
SAMPLE DATE				20070207	20070207	20070207	20090224	20090224
TOP DEPTH				8	8	8	4	0
BOTTOM DEPTH				9	9	9	5	1
VOLATILES (µg/kg)								
2-BUTANONE	16000000	110000000	17000	NA	NA	NA	NA	NA
ACETONE	11000000	68000000	25000	NA	NA	NA	NA	NA
CARBON DISULFIDE	270000	1500000	5600	NA	NA	NA	NA	NA
ETHYLBENZENE	1500000	9200000	600	NA	NA	NA	NA	NA
SEMIVOLATILES (µg/kg)								
2-METHYLNAPHTHALENE	210000	2100000	8500	NA	NA	NA	35 U	35 U
ACENAPHTHENE	2400000	20000000	2100	NA	NA	NA	35 U	35 U
ANTHRACENE	21000000	300000000	2500000	NA	NA	NA	35 U	35 U
BAP EQUIVALENT	100	700	8000	NA	NA	NA	NA	NA
BAP EQUIVALENT(1)	100	700	8000	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	800	NA	NA	NA	35 U	35 U
BENZO(A)PYRENE	100	700	8000	NA	NA	NA	35 U	35 U
BENZO(B)FLUORANTHENE	NC	NC	2400	NA	NA	NA	35 U	35 U
BENZO(K)FLUORANTHENE	NC	NC	24000	NA	NA	NA	35 U	35 U
BIS(2-ETHYLHEXYL)PHTHALATE	72000	390000	3600000	NA	NA	NA	180 U	180 U
CHRYSENE	NC	NC	77000	NA	NA	NA	35 U	35 U
DIBENZOFURAN	320000	63000000	15000	NA	NA	NA	35 U	35 U
FLUORANTHENE	3200000	59000000	1200000	NA	NA	NA	35 U	35 U
FLUORENE	2600000	33000000	160000	NA	NA	NA	35 U	35 U
NAPHTHALENE	55000	300000	1200	NA	NA	NA	35 U	35 U
PHENANTHRENE	2200000	36000000	250000	NA	NA	NA	35 U	35 U
PYRENE	2400000	45000000	880000	NA	NA	NA	35 U	35 U
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)								
2-METHYLNAPHTHALENE	210000	2100000	8500	9 U	440 J	47 U	NA	NA
BAP EQUIVALENT	100	700	8000	4 U	NA	NA	NA	NA
BAP EQUIVALENT(1)	100	700	8000	0 U	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	800	4 U	NA	NA	NA	NA
CHRYSENE	NC	NC	77000	3 U	NA	NA	NA	NA
NAPHTHALENE	55000	300000	1200	3 U	620 J	120 J	NA	NA
PESTICIDES/PCBS (µg/kg)								
TOTAL AROCLOR HALFND	NC	NC	NC	NA	NA	NA	NA	NA
METALS (mg/kg)								
ALUMINUM	80000	NC	NC	NA	NA	NA	NA	NA
ARSENIC	2.1	12	NC	NA	NA	NA	NA	NA
BARIUM	120	130000	1600	NA	NA	NA	NA	NA
CADMIUM	82	1700	7.5	NA	NA	NA	NA	NA
CALCIUM	NC	NC	NC	NA	NA	NA	NA	NA
CHROMIUM	210	470	38	NA	NA	NA	NA	NA
COBALT	1700	42000	NC	NA	NA	NA	NA	NA
COPPER	150	89000	NC	NA	NA	NA	NA	NA
IRON	53000	NC	NC	NA	NA	NA	NA	NA

TABLE A1-4
SWMU 9, SOIL POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION SAMPLE IDENTIFICATION SAMPLE DATE TOP DEPTH BOTTOM DEPTH	FDEP SCTL RESIDENTIAL [R]	FDEP SCTL INDUSTRIAL [I]	FDEP SCTL LEACHABILITY [L]	**MPT-09-SB15** MPT-09-SB15-09-020707 20070207 8 9	**MPT-09-SB16** MPT-09-SB16-09-020707 20070207 8 9	**MPT-09-SB17** MPT-09-SB17-09-020707 20070207 8 9	**MPT-09-SB18** MPT09-SB18-05-022409 20090224 4 5	**MPT-09-SB19** MPT09-SB19-01-022409 20090224 0 1
METALS (mg/kg)								
LEAD	400	1400	NC	NA	NA	NA	NA	NA
MAGNESIUM	NC	NC	NC	NA	NA	NA	NA	NA
MANGANESE	3500	43000	NC	NA	NA	NA	NA	NA
MERCURY	3	17	2.1	NA	NA	NA	NA	NA
NICKEL	340	35000	130	NA	NA	NA	NA	NA
POTASSIUM	NC	NC	NC	NA	NA	NA	NA	NA
SELENIUM	440	11000	5.2	NA	NA	NA	NA	NA
SODIUM	NC	NC	NC	NA	NA	NA	NA	NA
THALLIUM	6.1	150	2.8	NA	NA	NA	NA	NA
VANADIUM	67	10000	980	NA	NA	NA	NA	NA
ZINC	26000	630000	NC	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (%)								
PERCENT SOLIDS	NC	NC	NC	NA	NA	NA	95	95
TOTAL SOLIDS	NC	NC	NC	84	90	78	NA	NA
MISCELLANEOUS PARAMETERS (mg/kg)								
CYANIDE	34	11000	0.8	NA	NA	NA	NA	NA

Notes:
NC = No Criteria
ND = Not Determined
NA = Not Analyzed
U = Indicates compound was analyzed for but not detected at indicated detection limit.
I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J = Estimated value.
FDEP Residential, Industrial and Leachability for Soil SCTLs from Table II, Chapter 62-777, F.A.C. (FDEP, 2005)
Results in blackened cells exceed regulatory levels.

TABLE A1-5
SWMU 11, GROUNDWATER POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	FDEP GCTL	FDEP MARINE SW	**MPT-08-MW12S**				
SAMPLE IDENTIFICATION			MPT-08-GW-MW12S-110806	MPT-08-MW12S-0408	MPT-08-MW12S-20080828	MPT-08-MW12S-20100525	MPT-08-MW12S-20100709
SAMPLE DATE			20061108	20080423	20080828	20100525	20100709
METALS (µg/L)							
ARSENIC	10	50	NA	NA	0.98 U	NA	NA
PETROLEUM HYDROCARBONS (mg/L)							
TOTAL PETROLEUM HYDROCARBONS	5	5	NA	NA	NA	**0.041 J**	0.085 U
TPH (C08-C40)	5	5	0.23 U	**0.057 J**	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (µg/L)							
2-METHYLNAPHTHALENE	28	30	0.07 U	0.03 U	NA	0.031 U	**0.034 J**
FLUORENE	280	30	0.07 U	0.02 U	NA	**0.029 J**	0.03 U
NAPHTHALENE	14	26	0.1 U	0.02 U	NA	0.023 U	**0.043 J**
PHENANTHRENE	210	.031/yr	0.05 U	0.02 U	NA	**0.033 J**	0.03 U

LOCATION	FDEP GCTL	FDEP MARINE SW	**MPT-11-MW05S**	
SAMPLE IDENTIFICATION			MPT-11-GW-MW05S-110706	MPT-11-GW-MW05S-20080828
SAMPLE DATE			20061107	20080828
METALS (µg/L)				
ARSENIC	10	50	NA	**4.4**
PETROLEUM HYDROCARBONS (mg/L)				
TOTAL PETROLEUM HYDROCARBONS	5	5	NA	NA
TPH (C08-C40)	5	5	**0.57 J**	NA
POLYCYCLIC AROMATIC HYDROCARBONS (µg/L)				
2-METHYLNAPHTHALENE	28	30	0.07 U	NA
FLUORENE	280	30	0.07 U	NA
NAPHTHALENE	14	26	0.1 U	NA
PHENANTHRENE	210	.031/yr	0.05 U	NA

Notes:
NA = not analyzed
J = The chemical was detected, but the concentration reported is an estimated value.
U = The chemical was not detected.
Bold indicates exceedance of criteria.

TABLE A1-6
SWMU 11, SOIL POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	FDEP SCTL RESIDENTIAL [R]	FDEP SCTL INDUSTRIAL [I]	FDEP SCTL LEACHABILITY [L]	FDEP SCTL MARINE SURFACE WATER LEACHABILITY [L]	**MPT-11-SB01**		**MPT-11-SB02**		**MPT-11-SB03**		**MPT-11-SB04**		**MPT-11-SB05**	
SAMPLE IDENTIFICATION					MPT-11-SB01-01-102506	MPT-11-SB01-13-102506	MPT-11-SB02-01-102606	MPT-11-SB02-11-102606	MPT-11-SB03-01-102506	MPT-11-SB03-13-102506	MPT-11-SB04-01-102606	MPT-11-SB04-11-102606	MPT-11-SB05-01-102606	MPT-11-SB05-11-102606
SAMPLE DATE					20061025	20061025	20061026	20061026	20061025	20061025	20061026	20061026	20061026	20061026
TOP DEPTH					0	12	0	10	0	12	0	10	0	10
BOTTOM DEPTH					1	13	1	11	1	13	1	11	1	11
METALS (mg/kg)														
ARSENIC	2.1	12	NC	NC	1.9 U	1.2 U	1.6 U	1.4 U	1.6 U	1 U	**2.6 [R]**	1.1 U	1.7 U	0.76 U
CADMIUM	82	1700	7.5	14	**0.04**	0.05 U	**0.11**	**0.1**	0.05 U	0.05 U	**0.1**	0.05 U	**0.08**	0.04 U
CHROMIUM	210	470	38	19	**4.3**	**1.7**	**6.9**	**11.7**	**5.1**	**3.9**	**7.9**	**9.6**	**5.8**	**2.4**
LEAD	400	1400	NC	NC	**1.5**	**6.4**	**3.6**	**3.2**	**1.6**	**3.2**	**4.7**	**1.7**	**4.9**	**1**
MISCELLANEOUS PARAMETERS (%)														
PERCENT SOLIDS	NC	NC	NC	340	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL SOLIDS	NC	NC	NC	NC	**97**	**82**	**88**	**81**	**96**	**86**	**91**	**89**	**98**	**91**
PETROLEUM HYDROCARBONS (mg/kg)														
TPH (C08-C40)	460	2700	240	240	**24 J**	**6400**	**57 J**	**36**	**34**	**67**	**37**	**45**	**100 J**	**85 J**
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)														
ACENAPHTHENE	2400000	20000000	2100	300	6 U	7 UR	7 U	7 U	6 U	7 U	6 U	6 U	6 U	6 U
ACENAPHTHYLENE	1800000	20000000	27000	NC	2 U	3 UR	2 U	3 U	2 U	**6 J**	2 U	2 U	2 U	2 U
ANTHRACENE	21000000	300000000	2500000	400	4 U	4 UR	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
BAP EQUIVALENT	100	700	8000	NC	**4.5165**	**10.644**	**27.731**	4 U	3 U	**4.4665**	**4.3165**	**4.4165**	**4.3665**	3 U
BENZO(A)ANTHRACENE	NC	NC	800	NC	**6 J**	**7 J**	**27**	4 U	3 U	**5 J**	**4 J**	**5 J**	**5 J**	3 U
BENZO(A)PYRENE	100	700	8000	NC	3 U	4 UR	**19 J**	4 U	3 U	3 U	3 U	3 U	3 U	3 U
BENZO(B)FLUORANTHENE	NC	NC	2400	NC	3 U	4 UR	**28**	4 U	3 U	4 U	3 U	3 U	3 U	3 U
BENZO(G,H,I)PERYLENE	2500000	52000000	32000000	NC	3 U	4 UR	**13 J**	4 U	3 U	4 U	3 U	3 U	**4 J**	3 U
BENZO(K)FLUORANTHENE	NC	NC	24000	NC	3 U	4 UR	**11 J**	4 U	3 U	3 U	3 U	3 U	3 U	3 U
CHRYSENE	NC	NC	77000	NC	3 U	4 UR	**21 J**	4 U	3 U	3 U	3 U	3 U	3 U	3 U
FLUORANTHENE	3200000	59000000	1200000	1300	4 U	**8 J**	**41**	4 U	4 U	4 U	4 U	4 U	4 U	4 U
FLUORENE	2600000	33000000	160000	17000	3 U	4 UR	4 U	4 U	3 U	4 U	3 U	3 U	3 U	3 U
INDENO(1,2,3-CD)PYRENE	NC	NC	6600	NC	5 U	5 UR	**11 J**	6 U	5 U	5 U	5 U	5 U	4 U	5 U
PHENANTHRENE	2200000	36000000	250000	NC	3 U	**12 J**	**12 J**	3 U	3 U	3 U	3 U	3 U	3 U	3 U
PYRENE	2400000	45000000	880000	1300	3 U	**8 J**	**38**	4 U	3 U	4 U	4 U	4 U	3 U	4 U
VOLATILES (µg/kg)														
CHLOROMETHANE	4000	5700	10	2300	0.6 U	0.6 U	0.6 U	0.7 U	**1 J**	0.7 U	0.7 U	0.5 U	0.5 U	0.6 U
ETHYLBENZENE	1500000	9200000	600	1200	0.3 U	0.3 UJ	0.4 U	0.4 U	**0.4 J**	0.4 U	0.4 U	0.3 U	0.3 U	0.3 U

U = Indicates compound was analyzed for but not detected at indicated detection limit.
R = Reject value.
J = Estimated value.
Bold results indicate a detection.
Results in blackened cells exceed regulatory levels.

TABLE A1-6
SWMU 11, SOIL POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	FDEP SCTL RESIDENTIAL [R]	FDEP SCTL INDUSTRIAL [I]	FDEP SCTL LEACHABILITY [L]	FDEP SCTL MARINE SURFACE WATER LEACHABILITY [L]	MPT-11-SB06		MPT-11-SB07		MPT-11-SB08		MPT-11-SB09		MPT-11-SB10	
SAMPLE IDENTIFICATION					MPT-11-SB06-01-102506	MPT-11-SB06-13-102506	MPT-11-SB07-01-102506	MPT-11-SB07-11-102506	MPT-11-SB08-01-102606	MPT-11-SB08-11-102606	MPT-11-SB09-001	MPT-11-SB09-013	MPT-11-SB10-001	MPT-11-SB10-013
SAMPLE DATE					20061025	20061025	20061025	20061025	20061026	20061026	20070409	20070409	20070409	20070409
TOP DEPTH					0	12	0	10	0	10	0	12	0	12
BOTTOM DEPTH					1	13	1	11	1	11	1	13	1	13
METALS (mg/kg)														
ARSENIC	2.1	12	NC	NC	1.2 U	1.1 U	1.6 U	2 U	1.3 U	1.4 U	**1.2**	NA	**1.4**	NA
CADMIUM	82	1700	7.5	14	**0.06**	0.05 U	**0.04**	**0.06**	**0.1**	**0.06**	NA	NA	NA	NA
CHROMIUM	210	470	38	19	**17.1**	**1.3**	**4.4**	**15.7**	**5.8**	**17**	NA	NA	NA	NA
LEAD	400	1400	NC	NC	**3.6**	**7.5**	**0.63**	**2.5**	**2.5**	**3.2**	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (%)														
PERCENT SOLIDS	NC	NC	NC	340	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL SOLIDS	NC	NC	NC	NC	**95**	**86**	**97**	**74**	**98**	**86**	**80**	**79**	**84**	**74**
PETROLEUM HYDROCARBONS (mg/kg)														
TPH (C08-C40)	460	2700	240	240	**30**	**4500**	**45 J**	**28 J**	**43**	**32**	NA	**13000**	NA	**190**
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)														
ACENAPHTHENE	2400000	20000000	2100	300	6 U	**44 J**	6 U	8 U	6 U	7 U	NA	NA	NA	NA
ACENAPHTHYLENE	1800000	20000000	27000	NC	2 U	2 UR	2 U	3 U	2 U	2 U	NA	NA	NA	NA
ANTHRACENE	21000000	300000000	2500000	400	4 U	**10 J**	4 U	5 U	4 U	4 U	NA	NA	NA	NA
BAP EQUIVALENT	100	700	8000	NC	**4.5165**	**12.348**	**4.3165**	**19.906**	**4.4665**	**5.1715**	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	800	NC	**6 J**	**11 J**	**4 J**	**20 J**	**6 J**	**7 J**	NA	NA	NA	NA
BENZO(A)PYRENE	100	700	8000	NC	3 U	**6 J**	3 U	**13 J**	3 U	4 U	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NC	NC	2400	NC	3 U	**7 J**	3 U	**16 J**	3 U	4 U	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	2500000	52000000	32000000	NC	**7 J**	**4 J**	3 U	**7 J**	**3 J**	4 U	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	24000	NC	3 U	4 UR	3 U	**9 J**	3 U	4 U	NA	NA	NA	NA
CHRYSENE	NC	NC	77000	NC	3 U	**8 J**	3 U	**16 J**	3 U	3 U	NA	NA	NA	NA
FLUORANTHENE	3200000	59000000	1200000	1300	4 U	**21 J**	4 U	**34**	**7 J**	**4 J**	NA	NA	NA	NA
FLUORENE	2600000	33000000	160000	17000	3 U	**61 J**	3 U	4 U	3 U	4 U	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	6600	NC	5 U	5 UR	5 U	**7 J**	4 U	5 U	NA	NA	NA	NA
PHENANTHRENE	2200000	36000000	250000	NC	3 U	3 UR	3 U	**14 J**	3 U	3 U	NA	NA	NA	NA
PYRENE	2400000	45000000	880000	1300	3 U	**17 J**	3 U	**23 J**	**6 J**	**4 J**	NA	NA	NA	NA
VOLATILES (µg/kg)														
CHLOROMETHANE	4000	5700	10	2300	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	NA	NA	NA	NA
ETHYLBENZENE	1500000	9200000	600	1200	0.4 U	0.3 U	0.3 U	0.4 U	0.3 U	0.3 U	NA	NA	NA	NA

U = Indicates compound was analyzed for but not detected at indicated detection limit.
R = Reject value.
J = Estimated value.
Bold results indicate a detection.
Results in blackened cells exceed regulatory levels.

TABLE A1-6
SWMU 11, SOIL POSITIVE HITS ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	FDEP SCTL RESIDENTIAL [R]	FDEP SCTL INDUSTRIAL [I]	FDEP SCTL LEACHABILITY [L]	FDEP SCTL MARINE SURFACE WATER LEACHABILITY [L]	**MPT-11-SB11**		**MPT-11-SB12**		**MPT-11-SB14**	**MPT-11-SB15**	**MPT-11-SB16**	**MPT-11-SB17**
SAMPLE IDENTIFICATION					MPT-11-SB11-001	MPT-11-SB11-013	MPT-11-SB12-001	MPT-11-SB12-013	MPT11-SB14-10-022409	MPT11-SB15-02-022409	MPT11-SB16-05-022409	MPT11-SB17-10-022409
SAMPLE DATE					20070409	20070409	20070409	20070409	20090224	20090224	20090224	20090224
TOP DEPTH					0	12	0	12	9	1	4	9
BOTTOM DEPTH					1	13	1	13	10	2	5	10
METALS (mg/kg)												
ARSENIC	2.1	12	NC	NC	**1.8**	NA	**1**	NA	NA	NA	NA	NA
CADMIUM	82	1700	7.5	14	NA	NA	NA	NA	NA	NA	NA	NA
CHROMIUM	210	470	38	19	NA	NA	NA	NA	NA	NA	NA	NA
LEAD	400	1400	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (%)												
PERCENT SOLIDS	NC	NC	NC	340	NA	NA	NA	NA	**86**	**92**	**94**	**93**
TOTAL SOLIDS	NC	NC	NC	NC	**79**	**85**	**83**	**79**	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (mg/kg)												
TPH (C08-C40)	460	2700	240	240	NA	**11000**	NA	10 U	6.6 U	6.2 U	6 U	6.1 U
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)												
ACENAPHTHENE	2400000	20000000	2100	300	NA	NA	NA	NA	NA	72 U	NA	NA
ACENAPHTHYLENE	1800000	20000000	27000	NC	NA	NA	NA	NA	NA	72 U	NA	NA
ANTHRACENE	21000000	300000000	2500000	400	NA	NA	NA	NA	NA	36 U	NA	NA
BAP EQUIVALENT	100	700	8000	NC	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	800	NC	NA	NA	NA	NA	NA	14 U	NA	NA
BENZO(A)PYRENE	100	700	8000	NC	NA	NA	NA	NA	NA	14 U	NA	NA
BENZO(B)FLUORANTHENE	NC	NC	2400	NC	NA	NA	NA	NA	NA	14 U	NA	NA
BENZO(G,H,I)PERYLENE	2500000	52000000	32000000	NC	NA	NA	NA	NA	NA	14 U	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	24000	NC	NA	NA	NA	NA	NA	14 U	NA	NA
CHRYSENE	NC	NC	77000	NC	NA	NA	NA	NA	NA	14 U	NA	NA
FLUORANTHENE	3200000	59000000	1200000	1300	NA	NA	NA	NA	NA	36 U	NA	NA
FLUORENE	2600000	33000000	160000	17000	NA	NA	NA	NA	NA	72 U	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	6600	NC	NA	NA	NA	NA	NA	14 U	NA	NA
PHENANTHRENE	2200000	36000000	250000	NC	NA	NA	NA	NA	NA	36 U	NA	NA
PYRENE	2400000	45000000	880000	1300	NA	NA	NA	NA	NA	36 U	NA	NA
VOLATILES (µg/kg)												
CHLOROMETHANE	4000	5700	10	2300	NA	NA	NA	NA	NA	NA	NA	NA
ETHYLBENZENE	1500000	9200000	600	1200	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
NC = No Criteria
ND = Not Determined
NA = Not Analyzed
U = Indicates compound was analyzed for but not detected at indicated detection limit.
I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J = Estimated value.
FDEP Residential, Industrial and Leachability for Soil SCTLs from Table II, Chapter 62-777, F.A.C. (FDEP, 2005)
Results in blackened cells exceed regulatory levels.

U = Indicates compound was analyzed for but not detected at indicated detection limit.
R = Reject value.
J = Estimated value.
Bold results indicate a detection.
Results in blackened cells exceed regulatory levels.

TABLE A1-7a

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA EXCEEDANCES IN GROUNDWATER
SWMU 51
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-51-GW-MW01S-110806 MPT-51-MW01S 20061108 GW	MPT-51-GW-MW01S-20080827 MPT-51-MW01S 20080827 GW	MPT-51-GW-MW02S-110806 MPT-51-MW02S 20061108 GW	MPT-51-GW-MW02S-20080827 MPT-51-MW02S 20080827 GW	MPT-51-GW-MW03S-110806 MPT-51-MW03S 20061108 GW
METALS (UG/L)								
ARSENIC	10	10	50	NA	0.98 U	NA	**2.9**	NA
LEAD	15	15	8.5	NA	**1.8**	NA	**1.1**	NA
PETROLEUM HYDROCARBONS (MG/L)								
TPH (C08-C40)	--	5	5	**4.7 J**	NA	**12 J**	NA	**2.4 J**
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	**8**	NA	**110**	NA	**8**
2-METHYLNAPHTHALENE	--	28	30	0.07 U	NA	**110**	NA	**1**
ACENAPHTHENE	--	20	3	**1**	**2 J**	**2**	3 J	**0.8**
ACENAPHTHYLENE	--	210	0.031	**0.2 J**	2 U	0.06 U	2 U	0.06 U
FLUORENE	--	280	30	**2**	**2 J**	**5 J**	**4 J**	**2**
NAPHTHALENE	--	14	26	**0.4**	2 U	**92**	**2 J**	**1**
PHENANTHRENE	--	210	0.031	0.05 U	0.9 U	**3**	**1 J**	**1**
VOLATILES (UG/L)								
BENZENE	5	1	71.28	0.5 U	0.3 U	0.5 U	0.3 U	0.5 U
CHLOROBENZENE	100	100	17	NA	0.2 U	NA	**0.2 J**	NA
O-XYLENE	10000	--	NC	0.4 U	0.3 U	0.4 U	**0.3 J**	0.4 U

Footnotes:

-- = The chemical was not analyzed or no value was available.
Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.
J = The chemical was detected but the concentration reported is an estimated value.
U = The chemical was not detected.

R = The chemical was rejected.

TABLE A1-7a

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA EXCEEDANCES IN GROUNDWATER
SWMU 51
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-51-GW-MW03S-20080827 MPT-51-MW03S 20080827 GW	MPT-51-MW04S-015 MPT-51-MW04S 20070419 GW	MPT-51-MW04S-03172011 MPT-51-MW04S 20110317 GW	MPT-51-MW04S-20110427 MPT-51-MW04S 20110427 GW	MPT-51-MW04S-20110728 MPT-51-MW04S 20110728 GW	MPT-51-MW05S-015 MPT-51-MW05S 20070419 GW
METALS (UG/L)									
ARSENIC	10	10	50	0.98 U	NA	NA	NA	NA	NA
LEAD	15	15	8.5	**1.4**	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)									
TPH (C08-C40)	--	5	5	NA	**7.3**	**0.285 J**	**0.61 J**	0.315 U	**1.7**
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)									
1-METHYLNAPHTHALENE	--	28	95	NA	**25**	**0.855**	**0.0821 J**	**0.0575 J**	**0.5**
2-METHYLNAPHTHALENE	--	28	30	NA	**12**	0.0463 U	0.0467 U	**0.0478 J**	**0.3**
ACENAPHTHENE	--	20	3	2 U	**0.8 J**	NA	NA	NA	**0.2 J**
ACENAPHTHYLENE	--	210	0.031	2 U	0.06 U	NA	NA	NA	0.06 U
FLUORENE	--	280	30	1 U	**1 J**	NA	NA	NA	0.07 U
NAPHTHALENE	--	14	26	2 U	**0.7**	0.0463 U	**0.0656 J**	0.0926 U	0.1 U
PHENANTHRENE	--	210	0.031	0.9 U	0.05 U	NA	NA	NA	0.05 U
VOLATILES (UG/L)									
BENZENE	5	1	71.28	0.3 U	NA	NA	NA	NA	NA
CHLOROBENZENE	100	100	17	0.2 U	NA	NA	NA	NA	NA
O-XYLENE	10000	--	NC	0.3 U	NA	NA	NA	NA	NA

Footnotes:

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Data Qualifiers:

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TABLE A1-7a

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
SWMU 51
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-51-MW05S-20110427 MPT-51-MW05S 20110427 GW	MPT-51-MW05S-20110728 MPT-51-MW05S 20110728 GW	MPT-51-MW06S-015 MPT-51-MW06S 20070419 GW	MPT-07-TW04S-112806 MPT-51-MW07S 20061128 GW	MPT-51-GW-MW07S-20080828 MPT-51-MW07S 20080828 GW	MPT-51-MW07S-20110119 MPT-51-MW07S 20110119 GW
METALS (UG/L)									
ARSENIC	10	10	50	NA	NA	NA	NA	**2.7**	NA
LEAD	15	15	8.5	NA	NA	NA	NA	**3**	NA
PETROLEUM HYDROCARBONS (MG/L)									
TPH (C08-C40)	--	5	5	**2.84**	**0.663**	**4.4**	**11**	NA	**4.74**
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)									
1-METHYLNAPHTHALENE	--	28	95	**6.43**	**0.284 J**	**2**	**57**	NA	**67.6**
2-METHYLNAPHTHALENE	--	28	30	0.0467 U	0.0935 U	0.07 U	28	NA	**52**
ACENAPHTHENE	--	20	3	NA	NA	**0.5**	**2**	3 J	NA
ACENAPHTHYLENE	--	210	0.031	NA	NA	0.06 U	0.06 U	2 UJ	NA
FLUORENE	--	280	30	NA	NA	**0.4**	**3**	**2 J**	NA
NAPHTHALENE	--	14	26	**0.149 J**	0.0935 U	**0.1 J**	**1**	2 UJ	**1.02**
PHENANTHRENE	--	210	0.031	NA	NA	0.05 U	**0.6**	0.9 UJ	NA
VOLATILES (UG/L)									
BENZENE	5	1	71.28	NA	NA	NA	0.5 UJ	**0.4 J**	NA
CHLOROBENZENE	100	100	17	NA	NA	NA	NA	0.2 U	NA
O-XYLENE	10000	--	NC	NA	NA	NA	0.4 U	**0.4 J**	NA

Footnotes:

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Data Qualifiers:

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TABLE A1-7a

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
SWMU 51
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-51-GW-TW01S-021207 MPT-51-TW01S 20070212 GW	MPT-51-GW-TW02S-021207 MPT-51-TW02S 20070212 GW	MPT-51-TW03S-20080219 MPT-51-TW03S 20080219 GW	MPT-51-TW04S-20080219 MPT-51-TW04S 20080219 GW
METALS (UG/L)							
ARSENIC	10	10	50	NA	NA	NA	NA
LEAD	15	15	8.5	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)							
TPH (C08-C40)	--	5	5	**0.5 J**	0.22 U	0.3 U	0.3 U
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)							
1-METHYLNAPHTHALENE	--	28	95	0.1 U	0.1 U	NA	NA
2-METHYLNAPHTHALENE	--	28	30	0.07 U	0.07 U	NA	NA
ACENAPHTHENE	--	20	3	NA	NA	NA	NA
ACENAPHTHYLENE	--	210	0.031	NA	NA	NA	NA
FLUORENE	--	280	30	NA	NA	NA	NA
NAPHTHALENE	--	14	26	0.1 U	0.1 U	NA	NA
PHENANTHRENE	--	210	0.031	NA	NA	NA	NA
VOLATILES (UG/L)							
BENZENE	5	1	71.28	NA	NA	NA	NA
CHLOROBENZENE	100	100	17	NA	NA	NA	NA
O-XYLENE	10000	--	NC	NA	NA	NA	NA

Footnotes:

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TABLE A1-7b

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMU 7
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-07-MW08S-20101206 MPT-07-MW08S 20101206 GW	MPT-07-MW08S-20110119 MPT-07-MW08S 20110119 GW	MPT-07-MW08S-20110427 MPT-07-MW08S 20110427 GW	MPT-07-MW08S-20110728 MPT-07-MW08S 20110728 GW	MPT-07-MW09S-20101206 MPT-07-MW09S 20101206 GW
PETROLEUM HYDROCARBONS (MG/L)								
TPH (C08-C40)	--	5	5	**11**	**5.51**	**8.79**	**11.2**	**8.2**
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	**62**	**54.3**	**93.8**	**54.5 J**	**1.1**
2-METHYLNAPHTHALENE	--	28	30	**24**	**26.1**	**29**	**17.1**	**0.04 J**
ACENAPHTHENE	--	20	3	NA	NA	NA	NA	NA
FLUORENE	--	280	30	NA	NA	NA	NA	NA
NAPHTHALENE	--	14	26	**3**	**2.68**	**1.86 J**	**1.54**	**0.22**

Footnotes:

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Data Qualifiers:

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J = The chemical was detected but the concentration reported is an estimated value.

U = The chemical was not detected.

R = The chemical was rejected.

TABLE A1-7b

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMU 7
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-07-MW09S-20110119 MPT-07-MW09S 20110119 GW	MPT-07-MW09S-20110427 MPT-07-MW09S 20110427 GW	MPT-07-MW09S-20110728 MPT-07-MW09S 20110728 GW	MPT-07-MW10S-20101206 MPT-07-MW10S 20101206 GW	MPT-07-MW10S-20110119 MPT-07-MW10S 20110119 GW
PETROLEUM HYDROCARBONS (MG/L)								
TPH (C08-C40)	--	5	5	**5.66**	**8.34**	**14.2**	**9.9**	**6.69**
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	**0.599**	0.481 U	**0.0515 J**	**0.1**	**0.147 J**
2-METHYLNAPHTHALENE	--	28	30	0.0463 U	0.481 U	0.0463 U	0.031 U	0.0463 U
ACENAPHTHENE	--	20	3	NA	NA	NA	NA	NA
FLUORENE	--	280	30	NA	NA	NA	NA	NA
NAPHTHALENE	--	14	26	0.0463 U	0.481 U	**0.122 J**	0.03 U	**0.185**

Footnotes:

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Data Qualifiers:

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U = The chemical was not detected.

R = The chemical was rejected.

TABLE A1-7b

**SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMU 7
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA**

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-07-MW10S-20110427 MPT-07-MW10S 20110427 GW	MPT-07-MW10S-20110728 MPT-07-MW10S 20110728 GW	MPT-07-MW11S-20101206 MPT-07-MW11S 20101206 GW	MPT-07-MW11S-20110119 MPT-07-MW11S 20110119 GW	MPT-07-MW11S-20110427 MPT-07-MW11S 20110427 GW
PETROLEUM HYDROCARBONS (MG/L)								
TPH (C08-C40)	--	5	5	**14.4**	**14.6**	0.085 U	0.157 U	0.157 U
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	0.481 U	**0.144 J**	0.03 U	0.0463 U	**0.0728 J**
2-METHYLNAPHTHALENE	--	28	30	0.481 U	0.0463 U	0.031 U	0.0463 U	**0.0483 J**
ACENAPHTHENE	--	20	3	NA	NA	NA	NA	NA
FLUORENE	--	280	30	NA	NA	NA	NA	NA
NAPHTHALENE	--	14	26	0.481 U	**0.163 J**	0.03 U	**0.0513 J**	0.0472 U

Footnotes:

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Data Qualifiers:

Blank (i.e., no qualifier) = the chemical was detected.

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U = The chemical was not detected.

R = The chemical was rejected.

TABLE A1-7b

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMU 7
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-07-MW11S-20110728 MPT-07-MW11S 20110728 GW	MPT-07-TW01S-110806 MPT-07-TW01S 20061108 GW	MPT-07-TW01S-20110119 MPT-07-TW01S 20110119 GW	MPT-07-TW01S-20110427 MPT-07-TW01S 20110427 GW	MPT-07-TW01S-20110728 MPT-07-TW01S 20110728 GW
PETROLEUM HYDROCARBONS (MG/L)								
TPH (C08-C40)	--	5	5	**0.17 J**	**8.7 J**	0.157 U	0.157 U	0.318 U
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	0.0463 U	**36**	**3.47**	0.0463 U	**0.264**
2-METHYLNAPHTHALENE	--	28	30	0.0463 U	**10**	**0.329**	0.0463 U	**0.279**
ACENAPHTHENE	--	20	3	NA	**2**	NA	NA	NA
FLUORENE	--	280	30	NA	**2**	NA	NA	NA
NAPHTHALENE	--	14	26	0.0463 U	**0.6**	0.0463 U	0.0463 U	0.0926 U

Footnotes:

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Data Qualifiers:

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R = The chemical was rejected.

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	08G00401 MPT-08-MW04S 19990305 GW	08G00401_99 MPT-08-MW04S 19990927 GW	08MW004S MPT-08-MW04S 19940826 GW	8MW4 MPT-08-MW04S 19930201 GW	MPT-08-GW-04S-02 MPT-08-MW04S 20000607 GW	MPT-08-GW-4S-01 MPT-08-MW04S 20000320 GW	MPT-08-GW-MW04S-03 MPT-08-MW04S 20000905 GW
METALS (UG/L)										
ARSENIC	10	10	50	NA	NA	1.7 J	11.7	NA	NA	NA
BARIUM	2000	2000	--	NA	NA	4.9 J	12.1 J	NA	NA	NA
CADMIUM	5	5	9.3	NA	NA	1 U	2.8 U	NA	NA	NA
CALCIUM	--	--	--	NA	NA	146000	NA	NA	NA	NA
CHROMIUM	100	100	--	NA	NA	2.6 U	5.7 J	NA	NA	NA
IRON	--	300	300	NA	NA	15000	NA	NA	NA	NA
LEAD	15	15	8.5	NA	NA	0.8 J	5.8 U	NA	NA	NA
MAGNESIUM	--	--	--	NA	NA	15400	NA	NA	NA	NA
MANGANESE	--	50	--	NA	NA	280	NA	NA	NA	NA
POTASSIUM	--	--	--	NA	NA	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	35600	NA	NA	NA	NA
VANADIUM	--	49	--	NA	NA	2 J	8 J	NA	NA	NA
ZINC	--	5000	86	NA	NA	2.5 J	34.5	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)										
CYANIDE	200	200	1	NA	NA	2.7 U	5.5	NA	NA	NA
PESTICIDES/PCBS (UG/L)										
ENDRIN ALDEHYDE	--	--	--	NA	NA	0.052	0.08 U	NA	NA	NA
ENDRIN KETONE	--	--	--	NA	NA	0.048	0.04 U	NA	NA	NA
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)										
TOTAL PETROLEUM HYDROCARBONS	--	5	5	1.3	1.4	132	NA	5.2	NA	NA
TPH (C08-C40)	--	5	5	NA	NA	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)										
1-METHYLNAPHTHALENE	--	28	95	140	61	NA	NA	100	NA	NA
2-METHYLNAPHTHALENE	--	28	30	120	43	140	56	69	NA	NA
ACENAPHTHENE	--	20	3	5 U	6	9 J	10 U	2.4 J	NA	NA
ANTHRACENE	--	2100	0.3	0.5 U	0.6	20 U	10 U	5 U	NA	NA
FLUORENE	--	280	30	17	6.4	14 J	3 J	10 U	NA	NA
NAPHTHALENE	--	14	26	5 U	2 U	94	85	10 U	NA	NA
PHENANTHRENE	--	210	0.031	6.3	5 U	12 J	10 U	5 U	NA	NA
SEMIVOLATILES (UG/L)										
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	20 U	10 U	NA	NA	NA
2-METHYLPHENOL	--	35	250	NA	NA	20 U	10 U	NA	NA	NA
3&4-METHYLPHENOL	--	--	--	NA	NA	20 U	NA	NA	NA	NA
DIBENZOFURAN	--	28	67	NA	NA	5 J	10 U	NA	NA	NA
DIETHYL PHTHALATE	--	5600	380	NA	NA	4 J	10 U	NA	NA	NA
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	20 U	10 U	NA	NA	NA
DIPHENYLAMINE	--	180	--	NA	NA	NA	0	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	08G00401 MPT-08-MW04S 19990305 GW	08G00401_99 MPT-08-MW04S 19990927 GW	08MW004S MPT-08-MW04S 19940826 GW	8MW4 MPT-08-MW04S 19930201 GW	MPT-08-GW-04S-02 MPT-08-MW04S 20000607 GW	MPT-08-GW-4S-01 MPT-08-MW04S 20000320 GW	MPT-08-GW-MW04S-03 MPT-08-MW04S 20000905 GW
VOLATILES (UG/L)										
2-BUTANONE	--	4200	120000	NA	NA	20 U	10 U	10 U	NA	NA
ACETONE	--	6300	1700	NA	NA	10 U	10 U	**4.8 J**	NA	NA
BENZENE	5	1	71.28	1 U	1 U	10 U	5 U	**0.21 J**	NA	NA
CARBON DISULFIDE	--	700	110	NA	NA	10 U	5 U	1 U	NA	NA
CHLOROMETHANE	--	2.7	470.8	NA	NA	20 U	10 U	**0.16 J**	NA	NA
ETHANE	--	--	--	1 U	20 U	NA	NA	NA	NA	NA
ETHENE	--	--	--	1 U	20 U	NA	NA	NA	NA	NA
ETHYLBENZENE	700	30	610	1 U	1 U	10 U	5 U	**0.075 J**	NA	NA
METHANE	--	--	--	**5100**	**4000**	NA	NA	**2400**	**7000**	**4900**
METHYLENE CHLORIDE	5	5	1580	NA	NA	10 U	5 U	1 U	NA	NA
O-XYLENE	10000	--	--	1 U	1 U	NA	NA	NA	NA	NA
TOLUENE	1000	40	480	1 U	1 U	10 U	5 U	**0.15 J**	NA	NA

Footnotes:

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TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW04S-01 MPT-08-MW04S 20021217 GW	MPT-08-MW04S-02 MPT-08-MW04S 20030115 GW	MPT-08-MW04S-03 MPT-08-MW04S 20030214 GW	MPT-08-MW04S-03-GW MPT-08-MW04S 20030213 GW	MPT-08-MW04S-112906 MPT-08-MW04S 20061129 GW	MPT-08-MW04S-20080828 MPT-08-MW04S 20080828 GW
METALS (UG/L)									
ARSENIC	10	10	50	NA	NA	NA	NA	NA	**2.5**
BARIUM	2000	2000	--	NA	NA	NA	NA	NA	NA
CADMIUM	5	5	9.3	NA	NA	NA	NA	NA	0.1 U
CALCIUM	--	--	--	NA	NA	NA	NA	NA	NA
CHROMIUM	100	100	--	NA	NA	NA	NA	NA	1.5 U
IRON	--	300	300	**12900**	**13600**	NA	**14100**	NA	NA
LEAD	15	15	8.5	NA	NA	NA	NA	NA	**2**
MAGNESIUM	--	--	--	NA	NA	NA	NA	NA	NA
MANGANESE	--	50	--	**212**	**233**	NA	**226**	NA	NA
POTASSIUM	--	--	--	NA	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	NA	NA	NA	NA
VANADIUM	--	49	--	NA	NA	NA	NA	NA	NA
ZINC	--	5000	86	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)									
CYANIDE	200	200	1	NA	NA	NA	NA	NA	NA
PESTICIDES/PCBS (UG/L)									
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	NA	NA
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	NA	NA
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)									
TOTAL PETROLEUM HYDROCARBONS	--	5	5	NA	NA	NA	NA	NA	NA
TPH (C08-C40)	--	5	5	NA	NA	NA	NA	**9.1 J**	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)									
1-METHYLNAPHTHALENE	--	28	95	NA	NA	NA	NA	**97**	NA
2-METHYLNAPHTHALENE	--	28	30	NA	NA	NA	NA	**52**	NA
ACENAPHTHENE	--	20	3	NA	NA	NA	NA	3	2 U
ANTHRACENE	--	2100	0.3	NA	NA	NA	NA	**0.4**	1 U
FLUORENE	--	280	30	NA	NA	NA	NA	**6**	**1 J**
NAPHTHALENE	--	14	26	NA	NA	NA	NA	**1**	2 U
PHENANTHRENE	--	210	0.031	NA	NA	NA	NA	**2**	0.9 U
SEMIVOLATILES (UG/L)									
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	NA	NA	4 U
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	NA	NA
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	NA	NA	1 U
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	NA	NA	0.7 U
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW04S-01 MPT-08-MW04S 20021217 GW	MPT-08-MW04S-02 MPT-08-MW04S 20030115 GW	MPT-08-MW04S-03 MPT-08-MW04S 20030214 GW	MPT-08-MW04S-03-GW MPT-08-MW04S 20030213 GW	MPT-08-MW04S-112906 MPT-08-MW04S 20061129 GW	MPT-08-MW04S-20080828 MPT-08-MW04S 20080828 GW
VOLATILES (UG/L)									
2-BUTANONE	--	4200	120000	NA	NA	NA	NA	NA	NA
ACETONE	--	6300	1700	NA	NA	NA	NA	NA	NA
BENZENE	5	1	71.28	NA	NA	NA	NA	0.5 U	0.3 U
CARBON DISULFIDE	--	700	110	NA	NA	NA	NA	NA	NA
CHLOROMETHANE	--	2.7	470.8	NA	NA	NA	NA	NA	0.3 U
ETHANE	--	--	--	**0.13 J**	**0.022**	**0.01**	NA	NA	NA
ETHENE	--	--	--	**0.01 J**	0.005 U	0.005 U	NA	NA	NA
ETHYLBENZENE	700	30	610	NA	NA	NA	NA	0.3 U	0.3 U
METHANE	--	--	--	**7500 J**	**6700**	**9400**	NA	NA	NA
METHYLENE CHLORIDE	5	5	1580	NA	NA	NA	NA	NA	0.3 U
O-XYLENE	10000	--	--	NA	NA	NA	NA	0.4 U	0.3 U
TOLUENE	1000	40	480	NA	NA	NA	NA	0.4 U	0.4 U

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TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW04S-20101207 MPT-08-MW04S 20101207 GW	MPT-08-MW04S-20110120 MPT-08-MW04S 20110120 GW	MPT-08-MW04S-20110427 MPT-08-MW04S 20110427 GW	MPT-08-MW04S-20110728 MPT-08-MW04S 20110728 GW	MPT-8-MW04S-04 MPT-08-MW04S 20030521 GW
METALS (UG/L)								
ARSENIC	10	10	50	NA	NA	NA	NA	NA
BARIUM	2000	2000	--	NA	NA	NA	NA	NA
CADMIUM	5	5	9.3	NA	NA	NA	NA	NA
CALCIUM	--	--	--	NA	NA	NA	NA	NA
CHROMIUM	100	100	--	NA	NA	NA	NA	NA
IRON	--	300	300	NA	NA	NA	NA	**14000**
LEAD	15	15	8.5	NA	NA	NA	NA	NA
MAGNESIUM	--	--	--	NA	NA	NA	NA	NA
MANGANESE	--	50	--	NA	NA	NA	NA	**250**
POTASSIUM	--	--	--	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	NA	NA	NA
VANADIUM	--	49	--	NA	NA	NA	NA	NA
ZINC	--	5000	86	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)								
CYANIDE	200	200	1	NA	NA	NA	NA	NA
PESTICIDES/PCBS (UG/L)								
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	NA
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	NA
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)								
TOTAL PETROLEUM HYDROCARBONS	--	5	5	NA	NA	NA	NA	NA
TPH (C08-C40)	--	5	5	**11**	**10.3**	**11.8**	**6.44**	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	**74**	**37.9**	**46.5**	**47.9 J**	NA
2-METHYLNAPHTHALENE	--	28	30	**24**	**15.4**	**11.4**	**12.6**	NA
ACENAPHTHENE	--	20	3	NA	NA	NA	NA	NA
ANTHRACENE	--	2100	0.3	NA	NA	NA	NA	NA
FLUORENE	--	280	30	NA	NA	NA	NA	NA
NAPHTHALENE	--	14	26	**0.98**	0.0463 U	0.467 U	0.0463 U	NA
PHENANTHRENE	--	210	0.031	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)								
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	NA	NA
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	NA
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	NA	NA
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW04S-20101207 MPT-08-MW04S 20101207 GW	MPT-08-MW04S-20110120 MPT-08-MW04S 20110120 GW	MPT-08-MW04S-20110427 MPT-08-MW04S 20110427 GW	MPT-08-MW04S-20110728 MPT-08-MW04S 20110728 GW	MPT-8-MW04S-04 MPT-08-MW04S 20030521 GW
VOLATILES (UG/L)								
2-BUTANONE	--	4200	120000	NA	NA	NA	NA	NA
ACETONE	--	6300	1700	NA	NA	NA	NA	NA
BENZENE	5	1	71.28	NA	NA	NA	NA	NA
CARBON DISULFIDE	--	700	110	NA	NA	NA	NA	NA
CHLOROMETHANE	--	2.7	470.8	NA	NA	NA	NA	NA
ETHANE	--	--	--	NA	NA	NA	NA	0.005 U
ETHENE	--	--	--	NA	NA	NA	NA	0.005 U
ETHYLBENZENE	700	30	610	NA	NA	NA	NA	NA
METHANE	--	--	--	NA	NA	NA	NA	**10000**
METHYLENE CHLORIDE	5	5	1580	NA	NA	NA	NA	NA
O-XYLENE	10000	--	--	NA	NA	NA	NA	NA
TOLUENE	1000	40	480	NA	NA	NA	NA	NA

Footnotes:

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TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-8-MW04S-05 MPT-08-MW04S 20030904 GW	MPT-8-MW04S-05-0911 MPT-08-MW04S 20030911 GW	08G00901 MPT-08-MW09S 19990305 GW	08G00901B MPT-08-MW09S 19990929 GW	08G00901-D MPT-08-MW09S 19990305 GW	08MW009S MPT-08-MW09S 19940826 GW	8GW9 MPT-08-MW09S 19921213 GW
METALS (UG/L)										
ARSENIC	10	10	50	NA	NA	NA	NA	NA	**0.6 J**	NA
BARIUM	2000	2000	--	NA	NA	NA	NA	NA	**112 J**	NA
CADMIUM	5	5	9.3	NA	NA	NA	NA	NA	1 U	NA
CALCIUM	--	--	--	NA	NA	NA	NA	NA	**1830000**	NA
CHROMIUM	100	100	--	NA	NA	NA	NA	NA	2.6 U	NA
IRON	--	300	300	NA	**8060**	NA	NA	NA	**4820**	NA
LEAD	15	15	8.5	NA	NA	NA	NA	NA	6 UJ	NA
MAGNESIUM	--	--	--	NA	NA	NA	NA	NA	**401000**	NA
MANGANESE	--	50	--	NA	**202**	NA	NA	NA	**2260**	NA
POTASSIUM	--	--	--	NA	NA	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	NA	NA	NA	**1810000**	NA
VANADIUM	--	49	--	NA	NA	NA	NA	NA	**8.3 J**	NA
ZINC	--	5000	86	NA	NA	NA	NA	NA	**16.5 J**	NA
MISCELLANEOUS PARAMETERS (UG/L)										
CYANIDE	200	200	1	NA	NA	NA	NA	NA	2.7 U	NA
PESTICIDES/PCBS (UG/L)										
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	NA	0.04 U	NA
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	NA	0.04 U	NA
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)										
TOTAL PETROLEUM HYDROCARBONS	--	5	5	NA	NA	0.2 U	0.2 U	0.2 U	**0.93**	**0.26**
TPH (C08-C40)	--	5	5	NA	NA	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)										
1-METHYLNAPHTHALENE	--	28	95	NA	NA	**0.85**	1 U	**0.81**	NA	NA
2-METHYLNAPHTHALENE	--	28	30	NA	NA	**0.81**	1 U	**1.3**	80 U	NA
ACENAPHTHENE	--	20	3	NA	NA	0.5 U	0.5 U	0.5 U	80 U	NA
ANTHRACENE	--	2100	0.3	NA	NA	0.05 U	0.05 U	0.05 U	80 U	NA
FLUORENE	--	280	30	NA	NA	0.1 U	0.1 U	0.1 U	80 U	NA
NAPHTHALENE	--	14	26	NA	NA	0.5 U	0.5 U	0.5 U	80 U	NA
PHENANTHRENE	--	210	0.031	NA	NA	0.05 U	1 U	0.05 U	80 U	NA
SEMIVOLATILES (UG/L)										
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	NA	NA	**180**	NA
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	NA	**180**	NA
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	NA	**480**	NA
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	NA	80 U	NA
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	NA	NA	**20 J**	NA
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	NA	NA	80 U	NA
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA EXCEEDANCES IN GROUNDWATER DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9 NAVSTA MAYPORT JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-8-MW04S-05 MPT-08-MW04S 20030904 GW	MPT-8-MW04S-05-0911 MPT-08-MW04S 20030911 GW	08G00901 MPT-08-MW09S 19990305 GW	08G00901B MPT-08-MW09S 19990929 GW	08G00901-D MPT-08-MW09S 19990305 GW	08MW009S MPT-08-MW09S 19940826 GW	8GW9 MPT-08-MW09S 19921213 GW
VOLATILES (UG/L)										
2-BUTANONE	--	4200	120000	NA	NA	NA	NA	NA	**230 J**	NA
ACETONE	--	6300	1700	NA	NA	NA	NA	NA	**330 J**	NA
BENZENE	5	1	71.28	NA	NA	1 U	1 U	1 U	10 U	NA
CARBON DISULFIDE	--	700	110	NA	NA	NA	NA	NA	**4 J**	NA
CHLOROMETHANE	--	2.7	470.8	NA	NA	NA	NA	NA	1 U	NA
ETHANE	--	--	--	0.005 U	NA	1 U	1 U	1 U	NA	NA
ETHENE	--	--	--	0.005 U	NA	1 U	1 U	1 U	NA	NA
ETHYLBENZENE	700	30	610	NA	NA	1 U	1 U	1 U	10 U	NA
METHANE	--	--	--	**10000**	NA	**1500**	**5**	**1900**	NA	NA
METHYLENE CHLORIDE	5	5	1580	NA	NA	NA	NA	NA	5 U	NA
O-XYLENE	10000	--	--	NA	NA	1 U	1 U	1 U	NA	NA
TOLUENE	1000	40	480	NA	NA	1 U	1 U	1 U	**3 J**	NA

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TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA EXCEEDANCES IN GROUNDWATER DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-GW-09S-02 MPT-08-MW09S 20000630 GW	MPT-08-GW-9S-01 MPT-08-MW09S 20000316 GW	MPT-08-GW-MW09-04 MPT-08-MW09S 20001228 GW	MPT-08-GW-MW09S- MPT-08-MW09S 20000906 GW	MPT-08-MW09S MPT-08-MW09S 20021119 GW	MPT-08-MW09S-01 MPT-08-MW09S 20021218 GW
METALS (UG/L)									
ARSENIC	10	10	50	NA	NA	NA	NA	NA	NA
BARIUM	2000	2000	--	NA	NA	NA	NA	NA	NA
CADMIUM	5	5	9.3	NA	NA	NA	NA	NA	NA
CALCIUM	--	--	--	NA	NA	NA	NA	NA	NA
CHROMIUM	100	100	--	NA	NA	NA	NA	NA	NA
IRON	--	300	300	NA	NA	NA	NA	NA	**1200**
LEAD	15	15	8.5	NA	NA	NA	NA	NA	NA
MAGNESIUM	--	--	--	NA	NA	NA	NA	NA	NA
MANGANESE	--	50	--	NA	NA	NA	NA	NA	**211**
POTASSIUM	--	--	--	NA	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	NA	NA	NA	NA
VANADIUM	--	49	--	NA	NA	NA	NA	NA	NA
ZINC	--	5000	86	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)									
CYANIDE	200	200	1	NA	NA	NA	NA	NA	NA
PESTICIDES/PCBS (UG/L)									
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	NA	NA
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	NA	NA
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)									
TOTAL PETROLEUM HYDROCARBONS	--	5	5	0.5 U	NA	**9.3**	NA	NA	NA
TPH (C08-C40)	--	5	5	NA	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)									
1-METHYLNAPHTHALENE	--	28	95	2 U	NA	2 U	NA	NA	NA
2-METHYLNAPHTHALENE	--	28	30	2 U	NA	2 U	NA	NA	NA
ACENAPHTHENE	--	20	3	1 U	NA	1 U	NA	NA	NA
ANTHRACENE	--	2100	0.3	**0.53 J**	NA	1 U	NA	NA	NA
FLUORENE	--	280	30	2 U	NA	2 U	NA	NA	NA
NAPHTHALENE	--	14	26	2 U	NA	2 U	NA	NA	NA
PHENANTHRENE	--	210	0.031	1 U	NA	1 U	NA	NA	NA
SEMIVOLATILES (UG/L)									
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	NA	NA
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	NA	NA	NA
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-GW-09S-02 MPT-08-MW09S 20000630 GW	MPT-08-GW-9S-01 MPT-08-MW09S 20000316 GW	MPT-08-GW-MW09-04 MPT-08-MW09S 20001228 GW	MPT-08-GW-MW09S- MPT-08-MW09S 20000906 GW	MPT-08-MW09S MPT-08-MW09S 20021119 GW	MPT-08-MW09S-01 MPT-08-MW09S 20021218 GW
VOLATILES (UG/L)									
2-BUTANONE	--	4200	120000	10 U	NA	10 U	NA	NA	NA
ACETONE	--	6300	1700	**1.1 J**	NA	10 U	NA	NA	NA
BENZENE	5	1	71.28	1 U	NA	1 U	NA	NA	NA
CARBON DISULFIDE	--	700	110	1 U	NA	1 U	NA	NA	NA
CHLOROMETHANE	--	2.7	470.8	1 U	NA	1 U	NA	NA	NA
ETHANE	--	--	--	NA	NA	NA	NA	**0.002 J**	NA
ETHENE	--	--	--	NA	NA	NA	NA	**0.01**	NA
ETHYLBENZENE	700	30	610	1 U	NA	1 U	NA	NA	NA
METHANE	--	--	--	**16**	**2.5**	**140**	0.5 U	**5**	NA
METHYLENE CHLORIDE	5	5	1580	**4.5**	NA	**0.34 J**	NA	NA	NA
O-XYLENE	10000	--	--	NA	NA	NA	NA	NA	NA
TOLUENE	1000	40	480	1 U	NA	1 U	NA	NA	NA

Footnotes:

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Data Qualifiers:
Blank (i.e., no qualifier) = the chemical was detected.

J = The chemical was detected but the concentration reported is an estimated value.
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TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW09S-01_12-19-02 MPT-08-MW09S 20021219 GW	MPT-08-MW09S-02 MPT-08-MW09S 20030114 GW	MPT-08-MW09S-03 MPT-08-MW09S 20030210 GW	MPT-08-MW09S-03-GW MPT-08-MW09S 20030210 GW	MPT-08-MW09S-20080827 MPT-08-MW09S 20080827 GW
METALS (UG/L)								
ARSENIC	10	10	50	NA	NA	NA	NA	0.98 U
BARIUM	2000	2000	--	NA	NA	NA	NA	**4.6**
CADMIUM	5	5	9.3	NA	NA	NA	NA	0.1 U
CALCIUM	--	--	--	NA	NA	NA	NA	**72600**
CHROMIUM	100	100	--	NA	NA	NA	NA	1.3 U
IRON	--	300	300	NA	**1580**	NA	**1650**	6.8 U
LEAD	15	15	8.5	NA	NA	NA	NA	1 U
MAGNESIUM	--	--	--	NA	NA	NA	NA	**3720**
MANGANESE	--	50	--	NA	**214**	NA	**231**	0.93 U
POTASSIUM	--	--	--	NA	NA	NA	NA	**1300**
SODIUM	--	160000	--	NA	NA	NA	NA	**15900**
VANADIUM	--	49	--	NA	NA	NA	NA	**2.4**
ZINC	--	5000	86	NA	NA	NA	NA	3.5 U
MISCELLANEOUS PARAMETERS (UG/L)								
CYANIDE	200	200	1	NA	NA	NA	NA	10 U
PESTICIDES/PCBS (UG/L)								
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	NA
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	NA
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)								
TOTAL PETROLEUM HYDROCARBONS	--	5	5	NA	NA	NA	NA	NA
TPH (C08-C40)	--	5	5	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	--	28	30	NA	NA	NA	NA	9 U
ACENAPHTHENE	--	20	3	NA	NA	NA	NA	9 U
ANTHRACENE	--	2100	0.3	NA	NA	NA	NA	9 U
FLUORENE	--	280	30	NA	NA	NA	NA	9 U
NAPHTHALENE	--	14	26	NA	NA	NA	NA	9 U
PHENANTHRENE	--	210	0.031	NA	NA	NA	NA	9 U
SEMIVOLATILES (UG/L)								
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	NA	9 U
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	9 U
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	9 U
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	9 U
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	NA	9 U
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	NA	9 U
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW09S-01_12-19-02 MPT-08-MW09S 20021219 GW	MPT-08-MW09S-02 MPT-08-MW09S 20030114 GW	MPT-08-MW09S-03 MPT-08-MW09S 20030210 GW	MPT-08-MW09S-03-GW MPT-08-MW09S 20030210 GW	MPT-08-MW09S-20080827 MPT-08-MW09S 20080827 GW
VOLATILES (UG/L)								
2-BUTANONE	--	4200	120000	NA	NA	NA	NA	1 U
ACETONE	--	6300	1700	NA	NA	NA	NA	2 U
BENZENE	5	1	71.28	NA	NA	NA	NA	0.3 U
CARBON DISULFIDE	--	700	110	NA	NA	NA	NA	0.2 U
CHLOROMETHANE	--	2.7	470.8	NA	NA	NA	NA	0.3 U
ETHANE	--	--	--	**0.011 J**	0.005 U	0.005 UJ	NA	NA
ETHENE	--	--	--	0.005 UJ	0.005 U	0.005 UJ	NA	NA
ETHYLBENZENE	700	30	610	NA	NA	NA	NA	0.3 U
METHANE	--	--	--	**340 J**	**1100**	**870 J**	NA	NA
METHYLENE CHLORIDE	5	5	1580	NA	NA	NA	NA	0.3 U
O-XYLENE	10000	--	--	NA	NA	NA	NA	0.3 U
TOLUENE	1000	40	480	NA	NA	NA	NA	0.4 U

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SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW09S-20101207 MPT-08-MW09S 20101207 GW	MPT-08-MW09S-20110119 MPT-08-MW09S 20110119 GW	MPT-08-MW09S-20110427 MPT-08-MW09S 20110427 GW	MPT-08-MW09S-20110728 MPT-08-MW09S 20110728 GW	MPT-08-MW09SA MPT-08-MW09S 20021119 GW
METALS (UG/L)								
ARSENIC	10	10	50	NA	NA	NA	NA	NA
BARIUM	2000	2000	--	NA	NA	NA	NA	NA
CADMIUM	5	5	9.3	NA	NA	NA	NA	NA
CALCIUM	--	--	--	NA	NA	NA	NA	NA
CHROMIUM	100	100	--	NA	NA	NA	NA	NA
IRON	--	300	300	NA	NA	NA	NA	51.7 U
LEAD	15	15	8.5	NA	NA	NA	NA	NA
MAGNESIUM	--	--	--	NA	NA	NA	NA	NA
MANGANESE	--	50	--	NA	NA	NA	NA	**44**
POTASSIUM	--	--	--	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	NA	NA	NA
VANADIUM	--	49	--	NA	NA	NA	NA	NA
ZINC	--	5000	86	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)								
CYANIDE	200	200	1	NA	NA	NA	NA	NA
PESTICIDES/PCBS (UG/L)								
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	NA
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	NA
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)								
TOTAL PETROLEUM HYDROCARBONS	--	5	5	NA	NA	NA	NA	NA
TPH (C08-C40)	--	5	5	**0.69**	0.159 U	**8.2**	**2.93**	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	0.03 U	0.0463 U	**0.0817 J**	0.0463 U	NA
2-METHYLNAPHTHALENE	--	28	30	0.031 U	0.0463 U	0.049 U	0.0463 U	NA
ACENAPHTHENE	--	20	3	NA	NA	NA	NA	NA
ANTHRACENE	--	2100	0.3	NA	NA	NA	NA	NA
FLUORENE	--	280	30	NA	NA	NA	NA	NA
NAPHTHALENE	--	14	26	0.03 U	0.0463 U	0.049 U	0.0463 U	NA
PHENANTHRENE	--	210	0.031	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)								
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	NA	NA
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	NA
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	NA	NA
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW09S-20101207 MPT-08-MW09S 20101207 GW	MPT-08-MW09S-20110119 MPT-08-MW09S 20110119 GW	MPT-08-MW09S-20110427 MPT-08-MW09S 20110427 GW	MPT-08-MW09S-20110728 MPT-08-MW09S 20110728 GW	MPT-08-MW09SA MPT-08-MW09S 20021119 GW
VOLATILES (UG/L)								
2-BUTANONE	--	4200	120000	NA	NA	NA	NA	NA
ACETONE	--	6300	1700	NA	NA	NA	NA	NA
BENZENE	5	1	71.28	NA	NA	NA	NA	NA
CARBON DISULFIDE	--	700	110	NA	NA	NA	NA	NA
CHLOROMETHANE	--	2.7	470.8	NA	NA	NA	NA	NA
ETHANE	--	--	--	NA	NA	NA	NA	NA
ETHENE	--	--	--	NA	NA	NA	NA	NA
ETHYLBENZENE	700	30	610	NA	NA	NA	NA	NA
METHANE	--	--	--	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5	5	1580	NA	NA	NA	NA	NA
O-XYLENE	10000	--	--	NA	NA	NA	NA	NA
TOLUENE	1000	40	480	NA	NA	NA	NA	NA

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TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW09SB MPT-08-MW09S 20021120 GW	MPT-8-MW09S-04 MPT-08-MW09S 20030521 GW	MPT-8-MW09S-05 MPT-08-MW09S 20030905 GW	MPT-8-MW09S-05-0911 MPT-08-MW09S 20030911 GW	08G01601 MPT-08-MW16S 19990302 GW	08MW016S MPT-08-MW16S 19940826 GW
METALS (UG/L)									
ARSENIC	10	10	50	NA	NA	NA	NA	NA	**24.1**
BARIUM	2000	2000	--	NA	NA	NA	NA	NA	**11 J**
CADMIUM	5	5	9.3	NA	NA	NA	NA	NA	1 U
CALCIUM	--	--	--	NA	NA	NA	NA	NA	**145000**
CHROMIUM	100	100	--	NA	NA	NA	NA	NA	2.6 U
IRON	--	300	300	NA	**900**	NA	19.6 U	NA	**14300**
LEAD	15	15	8.5	NA	NA	NA	NA	NA	0.6 U
MAGNESIUM	--	--	--	NA	NA	NA	NA	NA	**10100**
MANGANESE	--	50	--	NA	**280**	NA	0.3 U	NA	**343**
POTASSIUM	--	--	--	NA	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	NA	NA	NA	**12700**
VANADIUM	--	49	--	NA	NA	NA	NA	NA	**2.3 J**
ZINC	--	5000	86	NA	NA	NA	NA	NA	**6.3 J**
MISCELLANEOUS PARAMETERS (UG/L)									
CYANIDE	200	200	1	NA	NA	NA	NA	NA	2.7 U
PESTICIDES/PCBS (UG/L)									
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	NA	0.04 U
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	NA	0.04 U
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)									
TOTAL PETROLEUM HYDROCARBONS	--	5	5	0.17 UJ	NA	NA	NA	**0.7**	**0.4**
TPH (C08-C40)	--	5	5	NA	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)									
1-METHYLNAPHTHALENE	--	28	95	100 UJ	NA	NA	NA	**47**	NA
2-METHYLNAPHTHALENE	--	28	30	11 U	NA	NA	NA	**25**	**44**
ACENAPHTHENE	--	20	3	11 U	NA	NA	NA	1 U	**2 J**
ANTHRACENE	--	2100	0.3	11 U	NA	NA	NA	0.1 U	10 U
FLUORENE	--	280	30	11 U	NA	NA	NA	**5.5**	**4 J**
NAPHTHALENE	--	14	26	11 U	NA	NA	NA	14	**81**
PHENANTHRENE	--	210	0.031	11 U	NA	NA	NA	**1.7**	10 U
SEMIVOLATILES (UG/L)									
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	NA	NA	10 U
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	NA	10 U
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	NA	10 U
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	NA	10 U
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	NA	NA	10 U
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	NA	NA	**4 J**
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW09SB MPT-08-MW09S 20021120 GW	MPT-8-MW09S-04 MPT-08-MW09S 20030521 GW	MPT-8-MW09S-05 MPT-08-MW09S 20030905 GW	MPT-8-MW09S-05-0911 MPT-08-MW09S 20030911 GW	08G01601 MPT-08-MW16S 19990302 GW	08MW016S MPT-08-MW16S 19940826 GW
VOLATILES (UG/L)									
2-BUTANONE	--	4200	120000	10 UR	NA	NA	NA	NA	10 U
ACETONE	--	6300	1700	**6.5 R**	NA	NA	NA	NA	10 U
BENZENE	5	1	71.28	5 U	NA	NA	NA	1 U	5 U
CARBON DISULFIDE	--	700	110	**1.9 J**	NA	NA	NA	NA	5 U
CHLOROMETHANE	--	2.7	470.8	10 U	NA	NA	NA	NA	1 U
ETHANE	--	--	--	NA	0.005 U	**0.008**	NA	1 U	NA
ETHENE	--	--	--	NA	0.005 U	0.005 U	NA	1 U	NA
ETHYLBENZENE	700	30	610	5 U	NA	NA	NA	1 U	5 U
METHANE	--	--	--	NA	**650**	**0.07**	NA	**3900**	NA
METHYLENE CHLORIDE	5	5	1580	10 U	NA	NA	NA	NA	5 U
O-XYLENE	10000	--	--	5 U	NA	NA	NA	1 U	NA
TOLUENE	1000	40	480	5 U	NA	NA	NA	1 U	5 U

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Data Qualifiers:
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SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	08MW016S-D MPT-08-MW16S 19940826 GW	MPT-08-MW16S-01 MPT-08-MW16S 20021218 GW	MPT-08-MW16S-02 MPT-08-MW16S 20030115 GW	MPT-08-MW16S-03 MPT-08-MW16S 20030211 GW	MPT-08-MW16S-03-D MPT-08-MW16S 20030211 GW
METALS (UG/L)								
ARSENIC	10	10	50	**23.5**	NA	NA	NA	NA
BARIUM	2000	2000	--	**11 J**	NA	NA	NA	NA
CADMIUM	5	5	9.3	**2.9 J**	NA	NA	NA	NA
CALCIUM	--	--	--	**143000**	NA	NA	NA	NA
CHROMIUM	100	100	--	2.6 U	NA	NA	NA	NA
IRON	--	300	300	**13900**	**5120**	**10500**	NA	NA
LEAD	15	15	8.5	0.6 U	NA	NA	NA	NA
MAGNESIUM	--	--	--	**9790**	NA	NA	NA	NA
MANGANESE	--	50	--	**338**	**141**	**206**	NA	NA
POTASSIUM	--	--	--	NA	NA	NA	NA	NA
SODIUM	--	160000	--	**12500**	NA	NA	NA	NA
VANADIUM	--	49	--	**2.6 J**	NA	NA	NA	NA
ZINC	--	5000	86	**11.7 J**	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)								
CYANIDE	200	200	1	2.7 U	NA	NA	NA	NA
PESTICIDES/PCBS (UG/L)								
ENDRIN ALDEHYDE	--	--	--	0.04 U	NA	NA	NA	NA
ENDRIN KETONE	--	--	--	0.04 U	NA	NA	NA	NA
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)								
TOTAL PETROLEUM HYDROCARBONS	--	5	5	**0.4**	NA	NA	NA	NA
TPH (C08-C40)	--	5	5	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	--	28	30	**41**	NA	NA	NA	NA
ACENAPHTHENE	--	20	3	**2 J**	NA	NA	NA	NA
ANTHRACENE	--	2100	0.3	10 U	NA	NA	NA	NA
FLUORENE	--	280	30	**4 J**	NA	NA	NA	NA
NAPHTHALENE	--	14	26	**76**	NA	NA	NA	NA
PHENANTHRENE	--	210	0.031	**3 J**	NA	NA	NA	NA
SEMIVOLATILES (UG/L)								
2,4-DIMETHYLPHENOL	--	140	160	10 U	NA	NA	NA	NA
2-METHYLPHENOL	--	35	250	10 U	NA	NA	NA	NA
3&4-METHYLPHENOL	--	--	--	10 U	NA	NA	NA	NA
DIBENZOFURAN	--	28	67	10 U	NA	NA	NA	NA
DIETHYL PHTHALATE	--	5600	380	10 U	NA	NA	NA	NA
DIMETHYL PHTHALATE	--	70000	1450	**4 J**	NA	NA	NA	NA
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	08MW016S-D MPT-08-MW16S 19940826 GW	MPT-08-MW16S-01 MPT-08-MW16S 20021218 GW	MPT-08-MW16S-02 MPT-08-MW16S 20030115 GW	MPT-08-MW16S-03 MPT-08-MW16S 20030211 GW	MPT-08-MW16S-03-D MPT-08-MW16S 20030211 GW
VOLATILES (UG/L)								
2-BUTANONE	--	4200	120000	10 U	NA	NA	NA	NA
ACETONE	--	6300	1700	10 U	NA	NA	NA	NA
BENZENE	5	1	71.28	5 U	NA	NA	NA	NA
CARBON DISULFIDE	--	700	110	5 U	NA	NA	NA	NA
CHLOROMETHANE	--	2.7	470.8	1 U	NA	NA	NA	NA
ETHANE	--	--	--	NA	**0.13 J**	**0.027**	**0.056 J**	**0.031 J**
ETHENE	--	--	--	NA	0.005 UJ	0.005 U	0.005 UJ	0.005 UJ
ETHYLBENZENE	700	30	610	5 U	NA	NA	NA	NA
METHANE	--	--	--	NA	**7400 J**	**5800**	**8000 J**	**5000 J**
METHYLENE CHLORIDE	5	5	1580	5 U	NA	NA	NA	NA
O-XYLENE	10000	--	--	NA	NA	NA	NA	NA
TOLUENE	1000	40	480	5 U	NA	NA	NA	NA

Footnotes:

-- = The chemical was not analyzed or no value was available.
Data Qualifiers:
Blank (i.e., no qualifier) = the chemical was detected.

J = The chemical was detected but the concentration reported is an estimated value.
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TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA EXCEEDANCES IN GROUNDWATER DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9 NAVSTA MAYPORT JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW16S-03-GW MPT-08-MW16S 20030211 GW	MPT-08-MW16S-03-GW-D MPT-08-MW16S 20030211 GW	MPT-08-MW16S-112806 MPT-08-MW16S 20061128 GW	MPT-08-MW16S-20080828 MPT-08-MW16S 20080828 GW	MPT-08-MW16S-20101207 MPT-08-MW16S 20101207 GW
METALS (UG/L)								
ARSENIC	10	10	50	NA	NA	NA	**5.3**	NA
BARIUM	2000	2000	--	NA	NA	NA	NA	NA
CADMIUM	5	5	9.3	NA	NA	NA	0.1 U	NA
CALCIUM	--	--	--	NA	NA	NA	NA	NA
CHROMIUM	100	100	--	NA	NA	NA	1.2 U	NA
IRON	--	300	300	**14800**	**14600**	NA	NA	NA
LEAD	15	15	8.5	NA	NA	NA	**2.3**	NA
MAGNESIUM	--	--	--	NA	NA	NA	NA	NA
MANGANESE	--	50	--	**270**	**270**	NA	NA	NA
POTASSIUM	--	--	--	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	NA	NA	NA
VANADIUM	--	49	--	NA	NA	NA	NA	NA
ZINC	--	5000	86	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)								
CYANIDE	200	200	1	NA	NA	NA	NA	NA
PESTICIDES/PCBS (UG/L)								
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	NA
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	NA
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)								
TOTAL PETROLEUM HYDROCARBONS	--	5	5	NA	NA	NA	NA	NA
TPH (C08-C40)	--	5	5	NA	NA	**7.5**	NA	**7.5**
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	NA	NA	**4**	NA	**2.1**
2-METHYLNAPHTHALENE	--	28	30	NA	NA	**4**	NA	**0.47**
ACENAPHTHENE	--	20	3	NA	NA	**2**	**2 J**	NA
ANTHRACENE	--	2100	0.3	NA	NA	0.3	1 U	NA
FLUORENE	--	280	30	NA	NA	**3**	**3 J**	NA
NAPHTHALENE	--	14	26	NA	NA	**0.2**	2 U	**0.65**
PHENANTHRENE	--	210	0.031	NA	NA	**0.2**	0.9 U	NA
SEMIVOLATILES (UG/L)								
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	4 U	NA
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	NA
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	1 U	NA
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	0.7 U	NA
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW16S-03-GW MPT-08-MW16S 20030211 GW	MPT-08-MW16S-03-GW-D MPT-08-MW16S 20030211 GW	MPT-08-MW16S-112806 MPT-08-MW16S 20061128 GW	MPT-08-MW16S-20080828 MPT-08-MW16S 20080828 GW	MPT-08-MW16S-20101207 MPT-08-MW16S 20101207 GW
VOLATILES (UG/L)								
2-BUTANONE	--	4200	120000	NA	NA	NA	NA	NA
ACETONE	--	6300	1700	NA	NA	NA	NA	NA
BENZENE	5	1	71.28	NA	NA	0.5 U	0.3 U	NA
CARBON DISULFIDE	--	700	110	NA	NA	NA	NA	NA
CHLOROMETHANE	--	2.7	470.8	NA	NA	NA	0.3 U	NA
ETHANE	--	--	--	NA	NA	NA	NA	NA
ETHENE	--	--	--	NA	NA	NA	NA	NA
ETHYLBENZENE	700	30	610	NA	NA	0.3 U	0.3 U	NA
METHANE	--	--	--	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5	5	1580	NA	NA	NA	0.3 U	NA
O-XYLENE	10000	--	--	NA	NA	0.4 U	**0.3 J**	NA
TOLUENE	1000	40	480	NA	NA	0.4 U	0.4 U	NA

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TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW16S-20110119 MPT-08-MW16S 20110119 GW	MPT-08-MW16S-20110427 MPT-08-MW16S 20110427 GW	MPT-08-MW16S-20110728 MPT-08-MW16S 20110728 GW	MPT-8-MW16S-04 MPT-08-MW16S 20030520 GW	MPT-8-MW16S-04-D MPT-08-MW16S 20030520 GW
METALS (UG/L)								
ARSENIC	10	10	50	NA	NA	NA	NA	NA
BARIUM	2000	2000	--	NA	NA	NA	NA	NA
CADMIUM	5	5	9.3	NA	NA	NA	NA	NA
CALCIUM	--	--	--	NA	NA	NA	NA	NA
CHROMIUM	100	100	--	NA	NA	NA	NA	NA
IRON	--	300	300	NA	NA	NA	**13000**	**14000**
LEAD	15	15	8.5	NA	NA	NA	NA	NA
MAGNESIUM	--	--	--	NA	NA	NA	NA	NA
MANGANESE	--	50	--	NA	NA	NA	**270**	**280**
POTASSIUM	--	--	--	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	NA	NA	NA
VANADIUM	--	49	--	NA	NA	NA	NA	NA
ZINC	--	5000	86	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)								
CYANIDE	200	200	1	NA	NA	NA	NA	NA
PESTICIDES/PCBS (UG/L)								
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	NA
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	NA
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)								
TOTAL PETROLEUM HYDROCARBONS	--	5	5	NA	NA	NA	NA	NA
TPH (C08-C40)	--	5	5	**5.53**	**8.06**	**10.2**	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	**6.12**	**8.21**	**15.4**	NA	NA
2-METHYLNAPHTHALENE	--	28	30	**1.59**	**1.78 J**	**4.03**	NA	NA
ACENAPHTHENE	--	20	3	NA	NA	NA	NA	NA
ANTHRACENE	--	2100	0.3	NA	NA	NA	NA	NA
FLUORENE	--	280	30	NA	NA	NA	NA	NA
NAPHTHALENE	--	14	26	**0.387**	0.467 U	**0.574**	NA	NA
PHENANTHRENE	--	210	0.031	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)								
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	NA	NA
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	NA
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	NA	NA
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW16S-20110119 MPT-08-MW16S 20110119 GW	MPT-08-MW16S-20110427 MPT-08-MW16S 20110427 GW	MPT-08-MW16S-20110728 MPT-08-MW16S 20110728 GW	MPT-8-MW16S-04 MPT-08-MW16S 20030520 GW	MPT-8-MW16S-04-D MPT-08-MW16S 20030520 GW
VOLATILES (UG/L)								
2-BUTANONE	--	4200	120000	NA	NA	NA	NA	NA
ACETONE	--	6300	1700	NA	NA	NA	NA	NA
BENZENE	5	1	71.28	NA	NA	NA	NA	NA
CARBON DISULFIDE	--	700	110	NA	NA	NA	NA	NA
CHLOROMETHANE	--	2.7	470.8	NA	NA	NA	NA	NA
ETHANE	--	--	--	NA	NA	NA	0.005 U	0.005 U
ETHENE	--	--	--	NA	NA	NA	0.005 U	0.005 U
ETHYLBENZENE	700	30	610	NA	NA	NA	NA	NA
METHANE	--	--	--	NA	NA	NA	**11000**	**11000**
METHYLENE CHLORIDE	5	5	1580	NA	NA	NA	NA	NA
O-XYLENE	10000	--	--	NA	NA	NA	NA	NA
TOLUENE	1000	40	480	NA	NA	NA	NA	NA

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SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-8-MW16S-05 MPT-08-MW16S 20030903 GW	MPT-8-MW16S-05-0911 MPT-08-MW16S 20030911 GW	MPT-8-MW16S-05-0911-D MPT-08-MW16S 20030911 GW	08G01701 MPT-08-MW17S 19990927 GW	08MW017S MPT-08-MW17S 19940826 GW
METALS (UG/L)								
ARSENIC	10	10	50	NA	NA	NA	NA	**1.6 J**
BARIUM	2000	2000	--	NA	NA	NA	NA	**5.3 J**
CADMIUM	5	5	9.3	NA	NA	NA	NA	1 U
CALCIUM	--	--	--	NA	NA	NA	NA	**130000**
CHROMIUM	100	100	--	NA	NA	NA	NA	2.6 U
IRON	--	300	300	NA	**8760**	**7010**	NA	**2810**
LEAD	15	15	8.5	NA	NA	NA	NA	0.6 U
MAGNESIUM	--	--	--	NA	NA	NA	NA	**7010**
MANGANESE	--	50	--	NA	**241**	**246**	NA	**95.1**
POTASSIUM	--	--	--	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	NA	NA	**14800**
VANADIUM	--	49	--	NA	NA	NA	NA	**2.3 J**
ZINC	--	5000	86	NA	NA	NA	NA	**3.1 J**
MISCELLANEOUS PARAMETERS (UG/L)								
CYANIDE	200	200	1	NA	NA	NA	NA	2.7 U
PESTICIDES/PCBS (UG/L)								
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	0.04 U
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	0.04 U
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)								
TOTAL PETROLEUM HYDROCARBONS	--	5	5	NA	NA	NA	0.2 U	0.05 U
TPH (C08-C40)	--	5	5	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	NA	NA	NA	1 U	NA
2-METHYLNAPHTHALENE	--	28	30	NA	NA	NA	1 U	10 U
ACENAPHTHENE	--	20	3	NA	NA	NA	0.5 U	10 U
ANTHRACENE	--	2100	0.3	NA	NA	NA	0.05 U	10 U
FLUORENE	--	280	30	NA	NA	NA	0.1 U	10 U
NAPHTHALENE	--	14	26	NA	NA	NA	0.5 U	10 U
PHENANTHRENE	--	210	0.031	NA	NA	NA	1 U	10 U
SEMIVOLATILES (UG/L)								
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	NA	10 U
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	10 U
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	10 U
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	10 U
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	NA	10 U
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	NA	10 U
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-8-MW16S-05 MPT-08-MW16S 20030903 GW	MPT-8-MW16S-05-0911 MPT-08-MW16S 20030911 GW	MPT-8-MW16S-05-0911-D MPT-08-MW16S 20030911 GW	08G01701 MPT-08-MW17S 19990927 GW	08MW017S MPT-08-MW17S 19940826 GW
VOLATILES (UG/L)								
2-BUTANONE	--	4200	120000	NA	NA	NA	NA	10 U
ACETONE	--	6300	1700	NA	NA	NA	NA	10 U
BENZENE	5	1	71.28	NA	NA	NA	1 U	5 U
CARBON DISULFIDE	--	700	110	NA	NA	NA	NA	**3 J**
CHLOROMETHANE	--	2.7	470.8	NA	NA	NA	NA	1 U
ETHANE	--	--	--	0.005 U	NA	NA	10 U	NA
ETHENE	--	--	--	0.005 U	NA	NA	10 U	NA
ETHYLBENZENE	700	30	610	NA	NA	NA	1 U	5 U
METHANE	--	--	--	**10000**	NA	NA	**530**	NA
METHYLENE CHLORIDE	5	5	1580	NA	NA	NA	NA	5 U
O-XYLENE	10000	--	--	NA	NA	NA	1 U	NA
TOLUENE	1000	40	480	NA	NA	NA	1 U	5 U

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SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-GW-17S-01 MPT-08-MW17S 20000314 GW	MPT-08-GW-MW17S-01 MPT-08-MW17S 20010112 GW	MPT-08-GW-MW17S-03 MPT-08-MW17S 20000905 GW	MPT-08-MW17S MPT-08-MW17S 20021121 GW	MPT-08-MW17S-01 MPT-08-MW17S 20021217 GW	MPT-08-MW17S-02 MPT-08-MW17S 20030113 GW
METALS (UG/L)									
ARSENIC	10	10	50	NA	NA	NA	NA	NA	NA
BARIUM	2000	2000	--	NA	NA	NA	NA	NA	NA
CADMIUM	5	5	9.3	NA	NA	NA	NA	NA	NA
CALCIUM	--	--	--	NA	NA	NA	NA	NA	NA
CHROMIUM	100	100	--	NA	NA	NA	NA	NA	NA
IRON	--	300	300	NA	NA	NA	NA	**3340**	**3100**
LEAD	15	15	8.5	NA	NA	NA	NA	NA	NA
MAGNESIUM	--	--	--	NA	NA	NA	NA	NA	NA
MANGANESE	--	50	--	NA	NA	NA	NA	**83.1**	**99.1**
POTASSIUM	--	--	--	NA	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	NA	NA	NA	NA
VANADIUM	--	49	--	NA	NA	NA	NA	NA	NA
ZINC	--	5000	86	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)									
CYANIDE	200	200	1	NA	NA	NA	NA	NA	NA
PESTICIDES/PCBS (UG/L)									
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	NA	NA
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	NA	NA
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)									
TOTAL PETROLEUM HYDROCARBONS	--	5	5	NA	0.5 U	NA	NA	NA	NA
TPH (C08-C40)	--	5	5	NA	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)									
1-METHYLNAPHTHALENE	--	28	95	NA	**20**	NA	NA	NA	NA
2-METHYLNAPHTHALENE	--	28	30	NA	**14**	NA	NA	NA	NA
ACENAPHTHENE	--	20	3	NA	**1.1**	NA	NA	NA	NA
ANTHRACENE	--	2100	0.3	NA	1 U	NA	NA	NA	NA
FLUORENE	--	280	30	NA	**6.2**	NA	NA	NA	NA
NAPHTHALENE	--	14	26	NA	2 U	NA	NA	NA	NA
PHENANTHRENE	--	210	0.031	NA	1 U	NA	NA	NA	NA
SEMIVOLATILES (UG/L)									
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	NA	NA
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	NA	NA	NA
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-GW-17S-01 MPT-08-MW17S 20000314 GW	MPT-08-GW-MW17S-01 MPT-08-MW17S 20010112 GW	MPT-08-GW-MW17S-03 MPT-08-MW17S 20000905 GW	MPT-08-MW17S MPT-08-MW17S 20021121 GW	MPT-08-MW17S-01 MPT-08-MW17S 20021217 GW	MPT-08-MW17S-02 MPT-08-MW17S 20030113 GW
VOLATILES (UG/L)									
2-BUTANONE	--	4200	120000	NA	10 U	NA	NA	NA	NA
ACETONE	--	6300	1700	NA	10 U	NA	NA	NA	NA
BENZENE	5	1	71.28	NA	1 U	NA	NA	NA	NA
CARBON DISULFIDE	--	700	110	NA	1 U	NA	NA	NA	NA
CHLOROMETHANE	--	2.7	470.8	NA	1 U	NA	NA	NA	NA
ETHANE	--	--	--	NA	NA	NA	**0.009**	0.005 UJ	0.005 U
ETHENE	--	--	--	NA	NA	NA	**0.006 J**	0.005 UJ	**0.004 J**
ETHYLBENZENE	700	30	610	NA	1 U	NA	NA	NA	NA
METHANE	--	--	--	**2100**	**4300**	**1200**	**2000**	**610 J**	**310**
METHYLENE CHLORIDE	5	5	1580	NA	1 U	NA	NA	NA	NA
O-XYLENE	10000	--	--	NA	NA	NA	NA	NA	NA
TOLUENE	1000	40	480	NA	1 U	NA	NA	NA	NA

Footnotes:

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Data Qualifiers:
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R = The chemical was rejected.

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA EXCEEDANCES IN GROUNDWATER DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9 NAVSTA MAYPORT JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW17S-03 MPT-08-MW17S 20030214 GW	MPT-08-MW17S-03-GW MPT-08-MW17S 20030213 GW	MPT-08-MW17S-112906 MPT-08-MW17S 20061129 GW	MPT-08-MW17S-20080828 MPT-08-MW17S 20080828 GW	MPT-08-MW17S-20110124 MPT-08-MW17S 20110124 GW
METALS (UG/L)								
ARSENIC	10	10	50	NA	NA	NA	0.98 U	NA
BARIUM	2000	2000	--	NA	NA	NA	NA	NA
CADMIUM	5	5	9.3	NA	NA	NA	0.1 U	NA
CALCIUM	--	--	--	NA	NA	NA	NA	NA
CHROMIUM	100	100	--	NA	NA	NA	1.1 U	NA
IRON	--	300	300	NA	**2390**	NA	NA	NA
LEAD	15	15	8.5	NA	NA	NA	**1.2**	NA
MAGNESIUM	--	--	--	NA	NA	NA	NA	NA
MANGANESE	--	50	--	NA	**78.8**	NA	NA	NA
POTASSIUM	--	--	--	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	NA	NA	NA
VANADIUM	--	49	--	NA	NA	NA	NA	NA
ZINC	--	5000	86	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)								
CYANIDE	200	200	1	NA	NA	NA	NA	NA
PESTICIDES/PCBS (UG/L)								
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	NA
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	NA
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)								
TOTAL PETROLEUM HYDROCARBONS	--	5	5	NA	NA	NA	NA	NA
TPH (C08-C40)	--	5	5	NA	NA	1.6 U	NA	**0.694**
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	NA	NA	**0.5**	NA	0.0463 U
2-METHYLNAPHTHALENE	--	28	30	NA	NA	**0.09 J**	NA	0.0463 U
ACENAPHTHENE	--	20	3	NA	NA	**0.8**	2 U	NA
ANTHRACENE	--	2100	0.3	NA	NA	0.06 U	1 U	NA
FLUORENE	--	280	30	NA	NA	**1**	1 U	NA
NAPHTHALENE	--	14	26	NA	NA	0.1 U	2 U	0.0463 U
PHENANTHRENE	--	210	0.031	NA	NA	0.05 U	0.9 U	NA
SEMIVOLATILES (UG/L)								
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	4 U	NA
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	NA
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	1 U	NA
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	0.7 U	NA
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW17S-03 MPT-08-MW17S 20030214 GW	MPT-08-MW17S-03-GW MPT-08-MW17S 20030213 GW	MPT-08-MW17S-112906 MPT-08-MW17S 20061129 GW	MPT-08-MW17S-20080828 MPT-08-MW17S 20080828 GW	MPT-08-MW17S-20110124 MPT-08-MW17S 20110124 GW
VOLATILES (UG/L)								
2-BUTANONE	--	4200	120000	NA	NA	NA	NA	NA
ACETONE	--	6300	1700	NA	NA	NA	NA	NA
BENZENE	5	1	71.28	NA	NA	0.5 U	0.3 U	NA
CARBON DISULFIDE	--	700	110	NA	NA	NA	NA	NA
CHLOROMETHANE	--	2.7	470.8	NA	NA	NA	0.3 U	NA
ETHANE	--	--	--	0.005 U	NA	NA	NA	NA
ETHENE	--	--	--	0.005 U	NA	NA	NA	NA
ETHYLBENZENE	700	30	610	NA	NA	0.3 U	0.3 U	NA
METHANE	--	--	--	**510**	NA	NA	NA	NA
METHYLENE CHLORIDE	5	5	1580	NA	NA	NA	0.3 U	NA
O-XYLENE	10000	--	--	NA	NA	0.4 U	0.3 U	NA
TOLUENE	1000	40	480	NA	NA	0.4 U	0.4 U	NA

Footnotes:

-- = The chemical was not analyzed or no value was available.
Data Qualifiers:
Blank (i.e., no qualifier) = the chemical was detected.

J = The chemical was detected but the concentration reported is an estimated value.
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TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW17S-20110728 MPT-08-MW17S 20110728 GW	MPT-08-MW17SA MPT-08-MW17S 20021121 GW	MPT-08-MW17SA-D MPT-08-MW17S 20021121 GW	MPT-08-MW17S-D MPT-08-MW17S 20021121 GW	MPT-8-MW17S-04 MPT-08-MW17S 20030519 GW
METALS (UG/L)								
ARSENIC	10	10	50	NA	NA	NA	NA	NA
BARIUM	2000	2000	--	NA	NA	NA	NA	NA
CADMIUM	5	5	9.3	NA	NA	NA	NA	NA
CALCIUM	--	--	--	NA	NA	NA	NA	NA
CHROMIUM	100	100	--	NA	NA	NA	NA	NA
IRON	--	300	300	NA	**6690**	**6580**	NA	**4800**
LEAD	15	15	8.5	NA	NA	NA	NA	NA
MAGNESIUM	--	--	--	NA	NA	NA	NA	NA
MANGANESE	--	50	--	NA	**133**	**130**	NA	**110**
POTASSIUM	--	--	--	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	NA	NA	NA
VANADIUM	--	49	--	NA	NA	NA	NA	NA
ZINC	--	5000	86	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)								
CYANIDE	200	200	1	NA	NA	NA	NA	NA
PESTICIDES/PCBS (UG/L)								
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	NA
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	NA
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)								
TOTAL PETROLEUM HYDROCARBONS	--	5	5	NA	**0.12 J**	**0.77 J**	NA	NA
TPH (C08-C40)	--	5	5	0.318 U	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	0.0935 U	**5 NJ**	100 UJ	NA	NA
2-METHYLNAPHTHALENE	--	28	30	0.0935 U	**1.3 J**	11 U	NA	NA
ACENAPHTHENE	--	20	3	NA	11 U	11 U	NA	NA
ANTHRACENE	--	2100	0.3	NA	11 U	11 U	NA	NA
FLUORENE	--	280	30	NA	11 U	11 U	NA	NA
NAPHTHALENE	--	14	26	0.0935 U	11 U	11 U	NA	NA
PHENANTHRENE	--	210	0.031	NA	11 U	11 U	NA	NA
SEMIVOLATILES (UG/L)								
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	NA	NA
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	NA
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	NA	NA
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW17S-20110728 MPT-08-MW17S 20110728 GW	MPT-08-MW17SA MPT-08-MW17S 20021121 GW	MPT-08-MW17SA-D MPT-08-MW17S 20021121 GW	MPT-08-MW17S-D MPT-08-MW17S 20021121 GW	MPT-8-MW17S-04 MPT-08-MW17S 20030519 GW
VOLATILES (UG/L)								
2-BUTANONE	--	4200	120000	NA	10 UR	10 UR	NA	NA
ACETONE	--	6300	1700	NA	10 UJ	10 UJ	NA	NA
BENZENE	5	1	71.28	NA	5 U	5 U	NA	NA
CARBON DISULFIDE	--	700	110	NA	5 U	5 U	NA	NA
CHLOROMETHANE	--	2.7	470.8	NA	10 UJ	10 UJ	NA	NA
ETHANE	--	--	--	NA	NA	NA	**0.007**	0.005 UJ
ETHENE	--	--	--	NA	NA	NA	**0.002 J**	0.005 UJ
ETHYLBENZENE	700	30	610	NA	5 U	5 U	NA	NA
METHANE	--	--	--	NA	NA	NA	**2000**	**690 J**
METHYLENE CHLORIDE	5	5	1580	NA	10 U	10 U	NA	NA
O-XYLENE	10000	--	--	NA	5 U	5 U	NA	NA
TOLUENE	1000	40	480	NA	5 U	5 U	NA	NA

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TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-8-MW17S-05 MPT-08-MW17S 20030904 GW	MPT-8-MW17S-05-0911 MPT-08-MW17S 20030911 GW	08G01801 MPT-08-MW18S 19990305 GW	08G01801_99 MPT-08-MW18S 19990928 GW	08MW018S MPT-08-MW18S 19940826 GW
METALS (UG/L)								
ARSENIC	10	10	50	NA	NA	NA	NA	**2.3 J**
BARIUM	2000	2000	--	NA	NA	NA	NA	**3.7 J**
CADMIUM	5	5	9.3	NA	NA	NA	NA	1 U
CALCIUM	--	--	--	NA	NA	NA	NA	**41500**
CHROMIUM	100	100	--	NA	NA	NA	NA	2.6 U
IRON	--	300	300	NA	**3290**	NA	NA	**221**
LEAD	15	15	8.5	NA	NA	NA	NA	0.6 U
MAGNESIUM	--	--	--	NA	NA	NA	NA	**17800**
MANGANESE	--	50	--	NA	**117**	NA	NA	**35.5**
POTASSIUM	--	--	--	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	NA	NA	**176000**
VANADIUM	--	49	--	NA	NA	NA	NA	**3.2 J**
ZINC	--	5000	86	NA	NA	NA	NA	**2 J**
MISCELLANEOUS PARAMETERS (UG/L)								
CYANIDE	200	200	1	NA	NA	NA	NA	2.7 U
PESTICIDES/PCBS (UG/L)								
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	0.04 U
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	0.04 U
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)								
TOTAL PETROLEUM HYDROCARBONS	--	5	5	NA	NA	NA	NA	0.05 U
TPH (C08-C40)	--	5	5	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	--	28	30	NA	NA	NA	NA	10 U
ACENAPHTHENE	--	20	3	NA	NA	NA	NA	10 U
ANTHRACENE	--	2100	0.3	NA	NA	NA	NA	10 U
FLUORENE	--	280	30	NA	NA	NA	NA	10 U
NAPHTHALENE	--	14	26	NA	NA	NA	NA	10 U
PHENANTHRENE	--	210	0.031	NA	NA	NA	NA	10 U
SEMIVOLATILES (UG/L)								
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	NA	10 U
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	10 U
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	10 U
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	10 U
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	NA	10 U
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	NA	10 U
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-8-MW17S-05 MPT-08-MW17S 20030904 GW	MPT-8-MW17S-05-0911 MPT-08-MW17S 20030911 GW	08G01801 MPT-08-MW18S 19990305 GW	08G01801_99 MPT-08-MW18S 19990928 GW	08MW018S MPT-08-MW18S 19940826 GW
VOLATILES (UG/L)								
2-BUTANONE	--	4200	120000	NA	NA	NA	NA	10 U
ACETONE	--	6300	1700	NA	NA	NA	NA	11 U
BENZENE	5	1	71.28	NA	NA	NA	NA	5 U
CARBON DISULFIDE	--	700	110	NA	NA	NA	NA	5 U
CHLOROMETHANE	--	2.7	470.8	NA	NA	NA	NA	1 U
ETHANE	--	--	--	0.005 U	NA	1 U	1 U	NA
ETHENE	--	--	--	0.005 U	NA	1 U	1 U	NA
ETHYLBENZENE	700	30	610	NA	NA	NA	NA	5 U
METHANE	--	--	--	**680**	NA	1 U	**13**	NA
METHYLENE CHLORIDE	5	5	1580	NA	NA	NA	NA	5 U
O-XYLENE	10000	--	--	NA	NA	NA	NA	NA
TOLUENE	1000	40	480	NA	NA	1 U	NA	5 U

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SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-GW-18S-01 MPT-08-MW18S 20000314 GW	MPT-08-GW-MW18S-03 MPT-08-MW18S 20000906 GW	MPT-08-GW-MW18S-04 MPT-08-MW18S 20010104 GW	MPT-08-MW18S MPT-08-MW18S 20021120 GW	MPT-08-MW18S-01 MPT-08-MW18S 20021219 GW
METALS (UG/L)								
ARSENIC	10	10	50	NA	NA	NA	NA	NA
BARIUM	2000	2000	--	NA	NA	NA	NA	NA
CADMIUM	5	5	9.3	NA	NA	NA	NA	NA
CALCIUM	--	--	--	NA	NA	NA	NA	NA
CHROMIUM	100	100	--	NA	NA	NA	NA	NA
IRON	--	300	300	NA	NA	NA	NA	NA
LEAD	15	15	8.5	NA	NA	NA	NA	NA
MAGNESIUM	--	--	--	NA	NA	NA	NA	NA
MANGANESE	--	50	--	NA	NA	NA	NA	NA
POTASSIUM	--	--	--	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	NA	NA	NA
VANADIUM	--	49	--	NA	NA	NA	NA	NA
ZINC	--	5000	86	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)								
CYANIDE	200	200	1	NA	NA	NA	NA	NA
PESTICIDES/PCBS (UG/L)								
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	NA
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	NA
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)								
TOTAL PETROLEUM HYDROCARBONS	--	5	5	NA	NA	NA	NA	NA
TPH (C08-C40)	--	5	5	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	--	28	30	NA	NA	NA	NA	NA
ACENAPHTHENE	--	20	3	NA	NA	NA	NA	NA
ANTHRACENE	--	2100	0.3	NA	NA	NA	NA	NA
FLUORENE	--	280	30	NA	NA	NA	NA	NA
NAPHTHALENE	--	14	26	NA	NA	NA	NA	NA
PHENANTHRENE	--	210	0.031	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)								
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	NA	NA
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	NA
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	NA	NA
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-GW-18S-01 MPT-08-MW18S 20000314 GW	MPT-08-GW-MW18S-03 MPT-08-MW18S 20000906 GW	MPT-08-GW-MW18S-04 MPT-08-MW18S 20010104 GW	MPT-08-MW18S MPT-08-MW18S 20021120 GW	MPT-08-MW18S-01 MPT-08-MW18S 20021219 GW
VOLATILES (UG/L)								
2-BUTANONE	--	4200	120000	NA	NA	NA	NA	NA
ACETONE	--	6300	1700	NA	NA	NA	NA	NA
BENZENE	5	1	71.28	NA	NA	NA	NA	NA
CARBON DISULFIDE	--	700	110	NA	NA	NA	NA	NA
CHLOROMETHANE	--	2.7	470.8	NA	NA	NA	NA	NA
ETHANE	--	--	--	NA	NA	NA	**0.007**	0.005 UJ
ETHENE	--	--	--	NA	NA	NA	**0.011**	0.005 UJ
ETHYLBENZENE	700	30	610	NA	NA	NA	NA	NA
METHANE	--	--	--	**80**	**3.2**	**57**	**97**	**68 J**
METHYLENE CHLORIDE	5	5	1580	NA	NA	NA	NA	NA
O-XYLENE	10000	--	--	NA	NA	NA	NA	NA
TOLUENE	1000	40	480	NA	NA	NA	NA	NA

Footnotes:

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Data Qualifiers:
Blank (i.e., no qualifier) = the chemical was detected.

J = The chemical was detected but the concentration reported is an estimated value.
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TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW18S-01A MPT-08-MW18S 20021219 GW	MPT-08-MW18S-01B MPT-08-MW18S 20030108 GW	MPT-08-MW18S-01C MPT-08-MW18S 20030115 GW	MPT-08-MW18S-02 MPT-08-MW18S 20030114 GW	MPT-08-MW18S-02-D MPT-08-MW18S 20030114 GW
METALS (UG/L)								
ARSENIC	10	10	50	NA	NA	NA	NA	NA
BARIUM	2000	2000	--	NA	NA	NA	NA	NA
CADMIUM	5	5	9.3	NA	NA	NA	NA	NA
CALCIUM	--	--	--	NA	NA	NA	NA	NA
CHROMIUM	100	100	--	NA	NA	NA	NA	NA
IRON	--	300	300	**1280**	NA	NA	**1410**	**1210**
LEAD	15	15	8.5	NA	NA	NA	NA	NA
MAGNESIUM	--	--	--	NA	NA	NA	NA	NA
MANGANESE	--	50	--	**77.4**	NA	NA	**67.5**	**60.1**
POTASSIUM	--	--	--	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	NA	NA	NA
VANADIUM	--	49	--	NA	NA	NA	NA	NA
ZINC	--	5000	86	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)								
CYANIDE	200	200	1	NA	NA	NA	NA	NA
PESTICIDES/PCBS (UG/L)								
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	NA
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	NA
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)								
TOTAL PETROLEUM HYDROCARBONS	--	5	5	NA	NA	NA	NA	NA
TPH (C08-C40)	--	5	5	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	--	28	30	NA	NA	NA	NA	NA
ACENAPHTHENE	--	20	3	NA	NA	NA	NA	NA
ANTHRACENE	--	2100	0.3	NA	NA	NA	NA	NA
FLUORENE	--	280	30	NA	NA	NA	NA	NA
NAPHTHALENE	--	14	26	NA	NA	NA	NA	NA
PHENANTHRENE	--	210	0.031	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/L)								
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	NA	NA
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	NA
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	NA	NA
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW18S-01A MPT-08-MW18S 20021219 GW	MPT-08-MW18S-01B MPT-08-MW18S 20030108 GW	MPT-08-MW18S-01C MPT-08-MW18S 20030115 GW	MPT-08-MW18S-02 MPT-08-MW18S 20030114 GW	MPT-08-MW18S-02-D MPT-08-MW18S 20030114 GW
VOLATILES (UG/L)								
2-BUTANONE	--	4200	120000	NA	NA	NA	NA	NA
ACETONE	--	6300	1700	NA	NA	NA	NA	NA
BENZENE	5	1	71.28	NA	NA	NA	NA	NA
CARBON DISULFIDE	--	700	110	NA	NA	NA	NA	NA
CHLOROMETHANE	--	2.7	470.8	NA	NA	NA	NA	NA
ETHANE	--	--	--	NA	NA	NA	**0.002 J**	**0.003 J**
ETHENE	--	--	--	NA	NA	NA	0.005 U	0.005 U
ETHYLBENZENE	700	30	610	NA	NA	NA	NA	NA
METHANE	--	--	--	NA	NA	NA	**100**	**120**
METHYLENE CHLORIDE	5	5	1580	NA	NA	NA	NA	NA
O-XYLENE	10000	--	--	NA	NA	NA	NA	NA
TOLUENE	1000	40	480	NA	NA	NA	NA	NA

Footnotes:

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Data Qualifiers:
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TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA EXCEEDANCES IN GROUNDWATER DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9 NAVSTA MAYPORT JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW18S-03 MPT-08-MW18S 20030213 GW	MPT-08-MW18S-03-GW MPT-08-MW18S 20030213 GW	MPT-08-MW18S-112906 MPT-08-MW18S 20061129 GW	MPT-08-MW18S-20080828 MPT-08-MW18S 20080828 GW	MPT-08-MW18S-20110427 MPT-08-MW18S 20110427 GW
METALS (UG/L)								
ARSENIC	10	10	50	NA	NA	NA	**1.1**	NA
BARIUM	2000	2000	--	NA	NA	NA	NA	NA
CADMIUM	5	5	9.3	NA	NA	NA	0.1 U	NA
CALCIUM	--	--	--	NA	NA	NA	NA	NA
CHROMIUM	100	100	--	NA	NA	NA	1 U	NA
IRON	--	300	300	NA	**1300**	NA	NA	NA
LEAD	15	15	8.5	NA	NA	NA	**1.2**	NA
MAGNESIUM	--	--	--	NA	NA	NA	NA	NA
MANGANESE	--	50	--	NA	**58.8**	NA	NA	NA
POTASSIUM	--	--	--	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	NA	NA	NA
VANADIUM	--	49	--	NA	NA	NA	NA	NA
ZINC	--	5000	86	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)								
CYANIDE	200	200	1	NA	NA	NA	NA	NA
PESTICIDES/PCBS (UG/L)								
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	NA
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	NA
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)								
TOTAL PETROLEUM HYDROCARBONS	--	5	5	NA	NA	NA	NA	NA
TPH (C08-C40)	--	5	5	NA	NA	0.95 U	NA	**0.232 J**
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	NA	NA	0.1 U	NA	0.0463 U
2-METHYLNAPHTHALENE	--	28	30	NA	NA	0.07 U	NA	0.0463 U
ACENAPHTHENE	--	20	3	NA	NA	0.07 U	2 U	NA
ANTHRACENE	--	2100	0.3	NA	NA	0.06 U	1 U	NA
FLUORENE	--	280	30	NA	NA	0.07 U	1 U	NA
NAPHTHALENE	--	14	26	NA	NA	0.1 U	2 U	0.0463 U
PHENANTHRENE	--	210	0.031	NA	NA	0.05 U	0.9 U	NA
SEMIVOLATILES (UG/L)								
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	4 U	NA
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	NA
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	1 U	NA
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	0.7 U	NA
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW18S-03 MPT-08-MW18S 20030213 GW	MPT-08-MW18S-03-GW MPT-08-MW18S 20030213 GW	MPT-08-MW18S-112906 MPT-08-MW18S 20061129 GW	MPT-08-MW18S-20080828 MPT-08-MW18S 20080828 GW	MPT-08-MW18S-20110427 MPT-08-MW18S 20110427 GW
VOLATILES (UG/L)								
2-BUTANONE	--	4200	120000	NA	NA	NA	NA	NA
ACETONE	--	6300	1700	NA	NA	NA	NA	NA
BENZENE	5	1	71.28	NA	NA	0.5 U	0.3 U	NA
CARBON DISULFIDE	--	700	110	NA	NA	NA	NA	NA
CHLOROMETHANE	--	2.7	470.8	NA	NA	NA	0.3 U	NA
ETHANE	--	--	--	0.005 U	NA	NA	NA	NA
ETHENE	--	--	--	0.005 U	NA	NA	NA	NA
ETHYLBENZENE	700	30	610	NA	NA	0.3 U	0.3 U	NA
METHANE	--	--	--	**180**	NA	NA	NA	NA
METHYLENE CHLORIDE	5	5	1580	NA	NA	NA	0.3 U	NA
O-XYLENE	10000	--	--	NA	NA	0.4 U	0.3 U	NA
TOLUENE	1000	40	480	NA	NA	0.4 U	0.4 U	NA

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TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW18S-20110801 MPT-08-MW18S 20110801 GW	MPT-08-MW18SA MPT-08-MW18S 20021120 GW	MPT-8-MW18S-04 MPT-08-MW18S 20030519 GW	MPT-8-MW18S-05 MPT-08-MW18S 20030904 GW	MPT-8-MW18S-05-0911 MPT-08-MW18S 20030911 GW
METALS (UG/L)								
ARSENIC	10	10	50	NA	NA	NA	NA	NA
BARIUM	2000	2000	--	NA	NA	NA	NA	NA
CADMIUM	5	5	9.3	NA	NA	NA	NA	NA
CALCIUM	--	--	--	NA	NA	NA	NA	NA
CHROMIUM	100	100	--	NA	NA	NA	NA	NA
IRON	--	300	300	NA	**1230**	**2100**	NA	**2000**
LEAD	15	15	8.5	NA	NA	NA	NA	NA
MAGNESIUM	--	--	--	NA	NA	NA	NA	NA
MANGANESE	--	50	--	NA	**59**	**95**	NA	**126**
POTASSIUM	--	--	--	NA	NA	NA	NA	NA
SODIUM	--	160000	--	NA	NA	NA	NA	NA
VANADIUM	--	49	--	NA	NA	NA	NA	NA
ZINC	--	5000	86	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)								
CYANIDE	200	200	1	NA	NA	NA	NA	NA
PESTICIDES/PCBS (UG/L)								
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	NA
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	NA
TOTAL AROCLOR HALFND	--	--	--	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)								
TOTAL PETROLEUM HYDROCARBONS	--	5	5	NA	0.19 UJ	NA	NA	NA
TPH (C08-C40)	--	5	5	0.157 U	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	0.0463 U	100 UJ	NA	NA	NA
2-METHYLNAPHTHALENE	--	28	30	0.0463 U	11 U	NA	NA	NA
ACENAPHTHENE	--	20	3	NA	11 U	NA	NA	NA
ANTHRACENE	--	2100	0.3	NA	11 U	NA	NA	NA
FLUORENE	--	280	30	NA	11 U	NA	NA	NA
NAPHTHALENE	--	14	26	0.0463 U	11 U	NA	NA	NA
PHENANTHRENE	--	210	0.031	NA	11 U	NA	NA	NA
SEMIVOLATILES (UG/L)								
2,4-DIMETHYLPHENOL	--	140	160	NA	NA	NA	NA	NA
2-METHYLPHENOL	--	35	250	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	--	--	--	NA	NA	NA	NA	NA
DIBENZOFURAN	--	28	67	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	--	5600	380	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	--	70000	1450	NA	NA	NA	NA	NA
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-08-MW18S-20110801 MPT-08-MW18S 20110801 GW	MPT-08-MW18SA MPT-08-MW18S 20021120 GW	MPT-8-MW18S-04 MPT-08-MW18S 20030519 GW	MPT-8-MW18S-05 MPT-08-MW18S 20030904 GW	MPT-8-MW18S-05-0911 MPT-08-MW18S 20030911 GW
VOLATILES (UG/L)								
2-BUTANONE	--	4200	120000	NA	10 UR	NA	NA	NA
ACETONE	--	6300	1700	NA	10 U	NA	NA	NA
BENZENE	5	1	71.28	NA	5 U	NA	NA	NA
CARBON DISULFIDE	--	700	110	NA	5 U	NA	NA	NA
CHLOROMETHANE	--	2.7	470.8	NA	10 U	NA	NA	NA
ETHANE	--	--	--	NA	NA	**0.005 J**	**0.007**	NA
ETHENE	--	--	--	NA	NA	**0.008 J**	0.005 U	NA
ETHYLBENZENE	700	30	610	NA	5 U	NA	NA	NA
METHANE	--	--	--	NA	NA	**120 J**	**84**	NA
METHYLENE CHLORIDE	5	5	1580	NA	12 U	NA	NA	NA
O-XYLENE	10000	--	--	NA	5 U	NA	NA	NA
TOLUENE	1000	40	480	NA	5 U	NA	NA	NA

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TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-09-GW-MW04S-110706 MPT-09-MW04S 20061107 GW	MPT-09-MW04S-20101206 MPT-09-MW04S 20101206 GW	MPT-09-MW04S-20110119 MPT-09-MW04S 20110119 GW	MPT-09-MW04S-20110427 MPT-09-MW04S 20110427 GW	MPT-09-MW04S-20110728 MPT-09-MW04S 20110728 GW
METALS (UG/L)								
ARSENIC	10	10	50	3.09 U	NA	NA	NA	NA
BARIUM	2000	2000	--	**9.9**	NA	NA	NA	NA
CADMIUM	5	5	9.3	2.48 U	NA	NA	NA	NA
CALCIUM	--	--	--	**96600**	NA	NA	NA	NA
CHROMIUM	100	100	--	1.1 U	NA	NA	NA	NA
IRON	--	300	300	114 U	NA	NA	NA	NA
LEAD	15	15	8.5	1.8 U	NA	NA	NA	NA
MAGNESIUM	--	--	--	**13600**	NA	NA	NA	NA
MANGANESE	--	50	--	**86**	NA	NA	NA	NA
POTASSIUM	--	--	--	**5690**	NA	NA	NA	NA
SODIUM	--	160000	--	**20800**	NA	NA	NA	NA
VANADIUM	--	49	--	5.89 U	NA	NA	NA	NA
ZINC	--	5000	86	3.22 U	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)								
CYANIDE	200	200	1	**3.4**	NA	NA	NA	NA
PESTICIDES/PCBS (UG/L)								
ENDRIN ALDEHYDE	--	--	--	NA	NA	NA	NA	NA
ENDRIN KETONE	--	--	--	NA	NA	NA	NA	NA
TOTAL AROCLOR HALFND	--	--	--	**0.835**	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/L)								
TOTAL PETROLEUM HYDROCARBONS	--	5	5	NA	NA	NA	NA	NA
TPH (C08-C40)	--	5	5	NA	**1.1**	0.159 U	**1.6**	**1.26**
POLYCYCLIC AROMATIC HYDROCARBONS (UG/L)								
1-METHYLNAPHTHALENE	--	28	95	NA	0.03 U	0.0467 U	0.0472 U	0.0463 U
2-METHYLNAPHTHALENE	--	28	30	4 U	0.031 U	0.0467 U	0.0472 U	0.0463 U
ACENAPHTHENE	--	20	3	3 U	NA	NA	NA	NA
ANTHRACENE	--	2100	0.3	3 U	NA	NA	NA	NA
FLUORENE	--	280	30	3 U	NA	NA	NA	NA
NAPHTHALENE	--	14	26	2 U	**0.03 J**	0.0467 U	0.0472 U	0.0463 U
PHENANTHRENE	--	210	0.031	3 U	NA	NA	NA	NA
SEMIVOLATILES (UG/L)								
2,4-DIMETHYLPHENOL	--	140	160	7 U	NA	NA	NA	NA
2-METHYLPHENOL	--	35	250	8 U	NA	NA	NA	NA
3&4-METHYLPHENOL	--	--	--	8 U	NA	NA	NA	NA
DIBENZOFURAN	--	28	67	3 U	NA	NA	NA	NA
DIETHYL PHTHALATE	--	5600	380	3 U	NA	NA	NA	NA
DIMETHYL PHTHALATE	--	70000	1450	4 UR	NA	NA	NA	NA
DIPHENYLAMINE	--	180	--	NA	NA	NA	NA	NA

TABLE A1-7c

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN GROUNDWATER
DOWNGRADIENT OF SWMU 51 at SWMUs 8 and 9
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Federal MCL	Florida GCTL	Florida Marine Surface Water CTL	MPT-09-GW-MW04S-110706 MPT-09-MW04S 20061107 GW	MPT-09-MW04S-20101206 MPT-09-MW04S 20101206 GW	MPT-09-MW04S-20110119 MPT-09-MW04S 20110119 GW	MPT-09-MW04S-20110427 MPT-09-MW04S 20110427 GW	MPT-09-MW04S-20110728 MPT-09-MW04S 20110728 GW
VOLATILES (UG/L)								
2-BUTANONE	--	4200	120000	3 U	NA	NA	NA	NA
ACETONE	--	6300	1700	3 U	NA	NA	NA	NA
BENZENE	5	1	71.28	0.5 UJ	NA	NA	NA	NA
CARBON DISULFIDE	--	700	110	0.6 U	NA	NA	NA	NA
CHLOROMETHANE	--	2.7	470.8	0.6 U	NA	NA	NA	NA
ETHANE	--	--	--	NA	NA	NA	NA	NA
ETHENE	--	--	--	NA	NA	NA	NA	NA
ETHYLBENZENE	700	30	610	0.3 U	NA	NA	NA	NA
METHANE	--	--	--	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	5	5	1580	2 U	NA	NA	NA	NA
O-XYLENE	10000	--	--	0.4 U	NA	NA	NA	NA
TOLUENE	1000	40	480	0.4 U	NA	NA	NA	NA

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TABLE A1-8

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN SOIL
SWMU 51
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Residential SCTL	Industiral SCTL	Leachability SCTL based on GW	Leachability SCTL based on Marine SW	MPT-51-SB01-01-102406 MPT-51-SB01 20061024 SO	MPT-51-SB01-13-102406 MPT-51-SB01 20061024 SO	MPT-51-SB02-01-102406 MPT-51-SB02 20061024 SO	MPT-51-SB02-11-102406 MPT-51-SB02 20061024 SO	MPT-51-SB03-01-102406 MPT-51-SB03 20061024 SO
METALS (MG/KG)									
CHROMIUM	210	470	38	--	**4.8 J**	**1.2 J**	**7.9 J**	**5.9 J**	**4 J**
LEAD	400	1400	--	--	**4**	**0.39**	**2.2**	**0.78**	**1.2**
PESTICIDES/PCBS (UG/KG)									
TOTAL AROCLOR HALFND	--	--	--	--	**41.7**	**41.75**	**39.75**	**44.25**	**41.7**
PETROLEUM HYDROCARBONS (MG/KG)									
TPH (C08-C40)	460	2700	340	340	**97**	**3700**	**1600**	**81 J**	**180 J**
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)									
1-METHYLNAPHTHALENE	200000	1800000	3100	10000	10 U	**3500**	10 U	**130**	11 U
2-METHYLNAPHTHALENE	210000	2100000	8500	9100	8 U	**3600**	8 U	**180**	8 U
ACENAPHTHENE	2400000	20000000	2100	300	7 U	**210 J**	6 U	7 U	7 U
ACENAPHTHYLENE	1800000	20000000	27000	700	2 U	2 U	2 U	3 U	2 U
ANTHRACENE	21000000	300000000	2500000	400	4 U	**120 J**	**4 J**	4 U	4 U
BAP EQUIVALENT	100	700	8000	--	**4**	**3**	**3**	4 U	**8**
BAP EQUIVALENT(1)	100	700	8000	--	**4**	**3**	**3**	0 U	**8**
BENZO(A)ANTHRACENE	--	--	800	700	**7 J**	**10 J**	**18 J**	4 U	**11 J**
BENZO(A)PYRENE	100	700	8000	1200	**4 J**	3 U	3 U	4 U	**8 J**
BENZO(B)FLUORANTHENE	--	--	2400	1600	**4 J**	4 U	**21 J**	4 U	**10 J**
BENZO(G,H,I)PERYLENE	2500000	52000000	32000000	4800	4 U	4 U	3 U	4 U	4 U
BENZO(K)FLUORANTHENE	--	--	24000	1600	3 U	3 U	**7 J**	4 U	**3 J**
CHRYSENE	--	--	77000	--	**5 J**	**19 J**	**33**	4 U	**12 J**
FLUORANTHENE	3200000	59000000	1200000	1300	**5 J**	**24 J**	**17 J**	4 U	**9 J**
FLUORENE	2600000	33000000	160000	17000	4 U	**600**	3 U	**25**	4 U
INDENO(1,2,3-CD)PYRENE	--	--	6600	--	5 U	5 U	5 U	5 U	5 U
NAPHTHALENE	55000	300000	1200	2200	3 U	**89 J**	3 U	**9 J**	3 U
PHENANTHRENE	2200000	36000000	250000	--	**4 J**	**940**	**26**	**42**	**6 J**
PYRENE	2400000	45000000	880000	1300	**6 J**	**67 J**	**37**	4 U	**9 J**
SEMIVOLATILES (UG/KG)									
ACENAPHTHENE	2400000	20000000	2100	300	120 U	**280 J**	120 U	130 U	120 U
ANTHRACENE	21000000	300000000	2500000	400	120 U	120 U	120 U	130 U	120 U
FLUORENE	2600000	33000000	160000	17000	120 U	**560**	120 U	130 U	120 U
NAPHTHALENE	55000	300000	1200	2200	140 U	**200 J**	140 U	150 U	140 U
PHENANTHRENE	2200000	36000000	250000	0	89 U	**960**	85 U	94 U	89 U
PYRENE	2400000	45000000	880000	1300	170 U	170 U	160 U	180 U	170 U
VOLATILES (UG/KG)									
ETHYLBENZENE	1500000	9200000	600	12000	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U

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TABLE A1-8

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN SOIL
SWMU 51
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA
PAGE 2 OF 6

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Residential SCTL	Industrial SCTL	Leachability SCTL based on GW	Leachability SCTL based on Marine SW	MPT-51-SB03-09-102406 MPT-51-SB03 20061024 SO	MPT-51-SB04-01-102506 MPT-51-SB04 20061025 SO	MPT-51-SB04-13-102506 MPT-51-SB04 20061025 SO	MPT-51-SB05-13-020807 MPT-51-SB05 20070208 SO	MPT-51-SB06-13-020807 MPT-51-SB06 20070208 SO
METALS (MG/KG)									
CHROMIUM	210	470	38	--	**23.7 J**	**8 J**	**1.2 J**	NA	NA
LEAD	400	1400	--	--	**5.8**	**2**	0.21 U	NA	NA
PESTICIDES/PCBS (UG/KG)									
TOTAL AROCLOR HALFND	--	--	--	--	**54.2**	**45.15**	**44.85**	NA	NA
PETROLEUM HYDROCARBONS (MG/KG)									
TPH (C08-C40)	460	2700	340	340	3.3 U	**17 J**	**34 J**	**86**	**640**
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)									
1-METHYLNAPHTHALENE	200000	1800000	3100	10000	14 U	10 U	**33**	**20 J**	**79000**
2-METHYLNAPHTHALENE	210000	2100000	8500	9100	11 U	8 U	**39**	NA	**110000**
ACENAPHTHENE	2400000	20000000	2100	300	9 U	6 U	7 U	NA	**4700**
ACENAPHTHYLENE	1800000	20000000	27000	700	3 U	2 U	3 U	NA	NA
ANTHRACENE	21000000	300000000	2500000	400	5 U	4 U	4 U	NA	NA
BAP EQUIVALENT	100	700	8000	--	4 U	**4**	4 U	NA	NA
BAP EQUIVALENT(1)	100	700	8000	--	0 U	**4**	0 U	NA	NA
BENZO(A)ANTHRACENE	--	--	800	700	4 UJ	**7 J**	4 U	NA	NA
BENZO(A)PYRENE	100	700	8000	1200	4 U	**4 J**	4 U	NA	NA
BENZO(B)FLUORANTHENE	--	--	2400	1600	5 U	**4 J**	4 U	NA	NA
BENZO(G,H,I)PERYLENE	2500000	52000000	32000000	4800	5 U	3 U	4 U	NA	NA
BENZO(K)FLUORANTHENE	--	--	24000	1600	4 U	3 U	4 U	NA	NA
CHRYSENE	--	--	77000	--	4 U	**4 J**	4 U	NA	NA
FLUORANTHENE	3200000	59000000	1200000	1300	5 U	**9 J**	4 U	NA	NA
FLUORENE	2600000	33000000	160000	17000	5 U	3 U	**11 J**	NA	NA
INDENO(1,2,3-CD)PYRENE	--	--	6600	--	7 U	5 U	6 U	NA	NA
NAPHTHALENE	55000	300000	1200	2200	4 U	3 U	3 U	NA	**2200 J**
PHENANTHRENE	2200000	36000000	250000	--	4 U	**4 J**	**18 J**	NA	NA
PYRENE	2400000	45000000	880000	1300	5 U	**6 J**	4 U	NA	NA
SEMIVOLATILES (UG/KG)									
ACENAPHTHENE	2400000	20000000	2100	300	160 U	110 U	130 U	NA	NA
ANTHRACENE	21000000	300000000	2500000	400	160 U	110 U	130 U	NA	NA
FLUORENE	2600000	33000000	160000	17000	160 U	110 U	130 U	NA	NA
NAPHTHALENE	55000	300000	1200	2200	180 U	130 U	150 U	NA	NA
PHENANTHRENE	2200000	36000000	250000	0	120 U	82 U	95 U	NA	NA
PYRENE	2400000	45000000	880000	1300	220 U	160 U	180 U	NA	NA
VOLATILES (UG/KG)									
ETHYLBENZENE	1500000	9200000	600	12000	0.6 U	0.4 U	0.3 U	NA	NA

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TABLE A1-8

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN SOIL
SWMU 51
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Residential SCTL	Industiral SCTL	Leachability SCTL based on GW	Leachability SCTL based on Marine SW	MPT-51-SB07-11-020707 MPT-51-SB07 20070207 SO	MPT-51-SB08-01-102506 MPT-51-SB08 20061025 SO	MPT-51-SB08-11-102506 MPT-51-SB08 20061025 SO	MPT-51-SB09-01-102406 MPT-51-SB09 20061024 SO	MPT-51-SB09-13-102406 MPT-51-SB09 20061024 SO
METALS (MG/KG)									
CHROMIUM	210	470	38	--	NA	7.9 J	3.5 J	8.3 J	3.8 J
LEAD	400	1400	--	--	NA	3.9	7.3	7.1	1.5
PESTICIDES/PCBS (UG/KG)									
TOTAL AROCLOR HALFND	--	--	--	--	NA	37.7	44.9	41.7	48.3
PETROLEUM HYDROCARBONS (MG/KG)									
TPH (C08-C40)	460	2700	340	340	11 U	70	1200	170	48000
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)									
1-METHYLNAPHTHALENE	200000	1800000	3100	10000	12 U	10 U	8100	11 U	91000
2-METHYLNAPHTHALENE	210000	2100000	8500	9100	9 U	8 U	8900	8 U	110000
ACENAPHTHENE	2400000	20000000	2100	300	NA	6 U	180 U	7 U	6600
ACENAPHTHYLENE	1800000	20000000	27000	700	NA	2 U	130 J	2 U	150 U
ANTHRACENE	21000000	300000000	2500000	400	NA	4 U	110 U	4 J	2400
BAP EQUIVALENT	100	700	8000	--	NA	16	92	16	200
BAP EQUIVALENT(1)	100	700	8000	--	NA	16	92	16	200
BENZO(A)ANTHRACENE	--	--	800	700	NA	18 J	130 J	19 J	380 J
BENZO(A)PYRENE	100	700	8000	1200	NA	16 J	92 U	16 J	200 U
BENZO(B)FLUORANTHENE	--	--	2400	1600	NA	19 J	96 U	20 J	210 U
BENZO(G,H,I)PERYLENE	2500000	52000000	32000000	4800	NA	12 J	96 U	13 J	210 U
BENZO(K)FLUORANTHENE	--	--	24000	1600	NA	8 J	92 U	8 J	200 U
CHRYSENE	--	--	77000	--	NA	15 J	89 U	18 J	470 J
FLUORANTHENE	3200000	59000000	1200000	1300	NA	24	110 U	33	480 J
FLUORENE	2600000	33000000	160000	17000	NA	3 U	120 J	4 U	14000 J
INDENO(1,2,3-CD)PYRENE	--	--	6600	--	NA	9 J	140 U	5 U	300 U
NAPHTHALENE	55000	300000	1200	2200	3 U	3 U	1700	3 U	9200
PHENANTHRENE	2200000	36000000	250000	--	NA	7 J	88 J	21 J	24000
PYRENE	2400000	45000000	880000	1300	NA	18 J	99 U	21 J	1700
SEMIVOLATILES (UG/KG)									
ACENAPHTHENE	2400000	20000000	2100	300	NA	110 U	140 J	120 U	9100
ANTHRACENE	21000000	300000000	2500000	400	NA	110 U	130 U	120 U	1400 U
FLUORENE	2600000	33000000	160000	17000	NA	110 U	130 J	120 U	15000
NAPHTHALENE	55000	300000	1200	2200	NA	130 U	1600	140 U	14000
PHENANTHRENE	2200000	36000000	250000	0	NA	80 U	95 U	89 U	26000
PYRENE	2400000	45000000	880000	1300	NA	150 U	180 U	170 U	2000 J
VOLATILES (UG/KG)									
ETHYLBENZENE	1500000	9200000	600	12000	NA	0.3 J	18 U	0.4 U	2900 U

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TABLE A1-8

SUMMARY OF POSITIVE DETECTIONS AND
CRITERIA EXCEEDANCES IN SOIL
SWMU 51
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Residential SCTL	Industrial SCTL	Leachability SCTL based on GW	Leachability SCTL based on Marine SW	MPT-51-SB10-01-102406 MPT-51-SB10 20061024 SO	MPT-51-SB10-11-102406 MPT-51-SB10 20061024 SO	MPT-51-SB11-01-102406 MPT-51-SB11 20061024 SO	MPT-51-SB11-11-102406 MPT-51-SB11 20061024 SO	MPT-51-SB12-11-020807 MPT-51-SB12 20070208 SO
METALS (MG/KG)									
CHROMIUM	210	470	38	--	**8.4 J**	**1.8 J**	**2.3 J**	**6.8 J**	NA
LEAD	400	1400	--	--	**3.2**	**0.69**	**0.37**	**0.9**	NA
PESTICIDES/PCBS (UG/KG)									
TOTAL AROCLOR HALFND	--	--	--	--	**39.75**	**44.95**	**39.1**	**41.65**	NA
PETROLEUM HYDROCARBONS (MG/KG)									
TPH (C08-C40)	460	2700	340	340	**260**	**43000**	**33 J**	**70 J**	**34000**
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)									
1-METHYLNAPHTHALENE	200000	1800000	3100	10000	10 U	**140000**	10 U	10 U	**110000**
2-METHYLNAPHTHALENE	210000	2100000	8500	9100	8 U	**200000**	8 U	8 U	**150000**
ACENAPHTHENE	2400000	20000000	2100	300	6 U	**12000**	6 U	7 U	**4400**
ACENAPHTHYLENE	1800000	20000000	27000	700	**7 J**	270 U	2 U	2 U	NA
ANTHRACENE	21000000	300000000	2500000	400	**12 J**	**4500**	4 U	4 U	NA
BAP EQUIVALENT	100	700	8000	--	**14**	370 U	3 U	3 U	NA
BAP EQUIVALENT(1)	100	700	8000	--	**14**	0 U	0 U	0 U	NA
BENZO(A)ANTHRACENE	--	--	800	700	**17 J**	370 U	3 UJ	3 UJ	NA
BENZO(A)PYRENE	100	700	8000	1200	**14 J**	370 U	3 U	3 U	NA
BENZO(B)FLUORANTHENE	--	--	2400	1600	**38**	380 U	3 U	4 U	NA
BENZO(G,H,I)PERYLENE	2500000	52000000	32000000	4800	**20 J**	380 U	3 U	4 U	NA
BENZO(K)FLUORANTHENE	--	--	24000	1600	**13 J**	370 U	3 U	3 U	NA
CHRYSENE	--	--	77000	--	**24**	360 U	3 U	3 U	NA
FLUORANTHENE	3200000	59000000	1200000	1300	**53**	**940 J**	4 U	4 U	NA
FLUORENE	2600000	33000000	160000	17000	3 U	**23000 J**	3 U	4 U	NA
INDENO(1,2,3-CD)PYRENE	--	--	6600	--	**8 J**	560 U	5 U	5 U	NA
NAPHTHALENE	55000	300000	1200	2200	3 U	**17000**	3 U	3 U	**2600 J**
PHENANTHRENE	2200000	36000000	250000	--	**9 J**	**41000**	3 U	**3 J**	NA
PYRENE	2400000	45000000	880000	1300	**28**	**3000**	3 U	4 U	NA
SEMIVOLATILES (UG/KG)									
ACENAPHTHENE	2400000	20000000	2100	300	120 U	**14000**	110 U	120 U	NA
ANTHRACENE	21000000	300000000	2500000	400	120 U	**4300 J**	110 U	120 U	NA
FLUORENE	2600000	33000000	160000	17000	120 U	**24000**	120 U	120 U	NA
NAPHTHALENE	55000	300000	1200	2200	140 U	**21000**	130 U	140 U	NA
PHENANTHRENE	2200000	36000000	250000	0	85 U	**44000**	83 U	88 U	NA
PYRENE	2400000	45000000	880000	1300	160 U	**3600 J**	160 U	170 U	NA
VOLATILES (UG/KG)									
ETHYLBENZENE	1500000	9200000	600	12000	0.5 U	18 U	0.4 U	0.4 U	NA

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SWMU 51
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Residential SCTL	Industrial SCTL	Leachability SCTL based on GW	Leachability SCTL based on Marine SW	MPT-51-SB13-11-020707 MPT-51-SB13 20070207 SO	MPT-51-SB14-001 MPT-51-SB14 20070410 SO	MPT-51-SB14-013 MPT-51-SB14 20070410 SO	MPT-51-SB15-001 MPT-51-SB15 20070410 SO	MPT-51-SB15-013 MPT-51-SB15 20070410 SO	MPT-51-SB16-011 MPT-51-SB16 20070410 SO
METALS (MG/KG)										
CHROMIUM	210	470	38	--	NA	NA	NA	NA	NA	NA
LEAD	400	1400	--	--	NA	NA	NA	NA	NA	NA
PESTICIDES/PCBS (UG/KG)										
TOTAL AROCLOR HALFND	--	--	--	--	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/KG)										
TPH (C08-C40)	460	2700	340	340	38 U	**56**	18 U	**42**	**13000**	**15000**
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)										
1-METHYLNAPHTHALENE	200000	1800000	3100	10000	12 U	NA	NA	NA	NA	NA
2-METHYLNAPHTHALENE	210000	2100000	8500	9100	10 U	NA	NA	NA	NA	NA
ACENAPHTHENE	2400000	20000000	2100	300	8 U	NA	NA	NA	NA	NA
ACENAPHTHYLENE	1800000	20000000	27000	700	NA	NA	NA	NA	NA	NA
ANTHRACENE	21000000	300000000	2500000	400	NA	NA	NA	NA	NA	NA
BAP EQUIVALENT	100	700	8000	--	NA	NA	**5.0515**	NA	**51.27**	**2105.5**
BAP EQUIVALENT(1)	100	700	8000	--	NA	NA	**0.6**	NA	**8.47**	**2082**
BENZO(A)ANTHRACENE	--	--	800	700	NA	NA	**6 J**	NA	**83 J**	**3000**
BENZO(A)PYRENE	100	700	8000	1200	NA	NA	4 U	NA	34 U	**1500**
BENZO(B)FLUORANTHENE	--	--	2400	1600	NA	NA	4 UJ	NA	35 UJ	**1800 J**
BENZO(G,H,I)PERYLENE	2500000	52000000	32000000	4800	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	--	--	24000	1600	NA	NA	4 U	NA	34 U	**930**
CHRYSENE	--	--	77000	--	NA	NA	3 U	NA	**170 J**	**2000**
FLUORANTHENE	3200000	59000000	1200000	1300	NA	NA	NA	NA	NA	NA
FLUORENE	2600000	33000000	160000	17000	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	--	--	6600	--	NA	NA	5 U	NA	51 U	**1000**
NAPHTHALENE	55000	300000	1200	2200	3 U	NA	NA	NA	NA	NA
PHENANTHRENE	2200000	36000000	250000	--	NA	NA	NA	NA	NA	NA
PYRENE	2400000	45000000	880000	1300	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (UG/KG)										
ACENAPHTHENE	2400000	20000000	2100	300	NA	NA	NA	NA	NA	NA
ANTHRACENE	21000000	300000000	2500000	400	NA	NA	NA	NA	NA	NA
FLUORENE	2600000	33000000	160000	17000	NA	NA	NA	NA	NA	NA
NAPHTHALENE	55000	300000	1200	2200	NA	NA	NA	NA	NA	NA
PHENANTHRENE	2200000	36000000	250000	0	NA	NA	NA	NA	NA	NA
PYRENE	2400000	45000000	880000	1300	NA	NA	NA	NA	NA	NA
VOLATILES (UG/KG)										
ETHYLBENZENE	1500000	9200000	600	12000	NA	NA	NA	NA	NA	NA

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CRITERIA EXCEEDANCES IN SOIL
SWMU 51
NAVSTA MAYPORT
JACKSONVILLE, FLORIDA

SAMPLE ID LOCATION_ID SAMPLE DATE SAMPLE MATRIX	Residential SCTL	Industiral SCTL	Leachability SCTL based on GW	Leachability SCTL based on Marine SW	MPT51-SB17-01-022409 MPT-51-SB17 20090224 SO	MPT51-SB18-01-022409 MPT-51-SB18 20090224 SO	MPT51-SB19-01-022409 MPT-51-SB19 20090224 SO	MPT51-SB20-01-022409 MPT-51-SB20 20090224 SO	MPT51-SB21-09-022409 MPT-51-SB21 20090224 SO
METALS (MG/KG)									
CHROMIUM	210	470	38	--	NA	NA	NA	NA	NA
LEAD	400	1400	--	--	NA	NA	NA	NA	NA
PESTICIDES/PCBS (UG/KG)									
TOTAL AROCLOR HALFND	--	--	--	--	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (MG/KG)									
TPH (C08-C40)	460	2700	340	340	**22**	**27.3**	**7.5 J**	6 U	5.9 U
POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)									
1-METHYLNAPHTHALENE	200000	1800000	3100	10000	36 U	35 U	35 U	35 U	34 U
2-METHYLNAPHTHALENE	210000	2100000	8500	9100	36 U	35 U	35 U	35 U	34 U
ACENAPHTHENE	2400000	20000000	2100	300	72 U	71 U	70 U	71 U	69 U
ACENAPHTHYLENE	1800000	20000000	27000	700	72 U	71 U	70 U	71 U	69 U
ANTHRACENE	21000000	300000000	2500000	400	36 U	35 U	35 U	35 U	34 U
BAP EQUIVALENT	100	700	8000	--	NA	NA	NA	NA	NA
BAP EQUIVALENT(1)	100	700	8000	--	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	--	--	800	700	**41.5**	**22.5 J**	14 U	14 U	14 U
BENZO(A)PYRENE	100	700	8000	1200	**38**	**25.4 J**	14 U	14 U	14 U
BENZO(B)FLUORANTHENE	--	--	2400	1600	**31.8**	**25.9 J**	14 U	14 U	14 U
BENZO(G,H,I)PERYLENE	2500000	52000000	32000000	4800	**21.8 J**	14 U	14 U	14 U	14 U
BENZO(K)FLUORANTHENE	--	--	24000	1600	**33.1**	**17.7 J**	14 U	14 U	14 U
CHRYSENE	--	--	77000	--	**38.2**	**23.7 J**	14 U	14 U	14 U
FLUORANTHENE	3200000	59000000	1200000	1300	**67.6 J**	35 U	35 U	35 U	34 U
FLUORENE	2600000	33000000	160000	17000	72 U	71 U	70 U	71 U	69 U
INDENO(1,2,3-CD)PYRENE	--	--	6600	--	**22.9 J**	**14.9 J**	14 U	14 U	14 U
NAPHTHALENE	55000	300000	1200	2200	36 U	35 U	35 U	35 U	34 U
PHENANTHRENE	2200000	36000000	250000	--	36 U	35 U	35 U	35 U	34 U
PYRENE	2400000	45000000	880000	1300	**61.9 J**	35 U	35 U	35 U	34 U
SEMIVOLATILES (UG/KG)									
ACENAPHTHENE	2400000	20000000	2100	300	NA	NA	NA	NA	NA
ANTHRACENE	21000000	300000000	2500000	400	NA	NA	NA	NA	NA
FLUORENE	2600000	33000000	160000	17000	NA	NA	NA	NA	NA
NAPHTHALENE	55000	300000	1200	2200	NA	NA	NA	NA	NA
PHENANTHRENE	2200000	36000000	250000	0	NA	NA	NA	NA	NA
PYRENE	2400000	45000000	880000	1300	NA	NA	NA	NA	NA
VOLATILES (UG/KG)									
ETHYLBENZENE	1500000	9200000	600	12000	NA	NA	NA	NA	NA

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LOCATION	MPT-08-MW01S	MPT-08-MW02S	MPT-08-MW03S		MPT-08-MW04S		MPT-08-MW06S	MPT-08-MW07S	MPT-08-MW09S	MPT-08-MW12S			MPT-08-MW15SR	
SAMPLE IDENTIFICATION	MPT-08-MW01S-111306	MPT-08-MW02S-111306	MPT-08-MW03S-111306	MPT-08-MW03S-112706	MPT-08-MW04S-112906	MPT-08-MW04S-20080828	MPT-08-MW06S-111306	MPT-08-MW07S-112706	MPT-08-MW09S-20080827	MPT-08-GW-MW12S-110806	MPT-08-MW12S-0408	MPT-08-MW12S-20080828	MPT-08-MW15SR-112806	MPT-08-MW15SR-20080827
SAMPLE DATE	20061113	20061113	20061113	20061127	20061129	20080828	20061113	20061127	20080827	20061108	20080423	20080828	20061128	20080827
VOLATILES (µg/L)														
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	NA	0.3 U	NA	NA	0.3 U	NA	NA	0.3 U	NA	0.3 U
1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	0.3 U	NA	NA	0.3 U	NA	NA	0.3 U	NA	0.3 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	NA	0.3 U	NA	NA	0.3 U	NA	NA	0.3 U	NA	0.3 U
1,1-DICHLOROETHANE	NA	NA	NA	NA	NA	0.2 U	NA	NA	0.2 U	NA	NA	0.2 U	NA	0.2 U
1,1-DICHLOROETHENE	NA	NA	NA	NA	NA	0.3 U	NA	NA	0.3 U	NA	NA	0.3 U	NA	0.3 U
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	0.4 U	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA	NA	NA	NA	NA	NA	NA	NA	0.6 U	NA	NA	NA	NA	NA
1,2-DIBROMOETHANE	0.0066 U	0.0065 U	0.0065 U	0.0064 U	0.0066 U	NA	0.0065 U	0.0065 UJ	0.3 U	0.0065 U	NA	NA	0.0065 UJ	NA
1,2-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA	NA
1,2-DICHLOROETHANE	NA	NA	NA	NA	NA	0.3 U	NA	NA	0.3 U	NA	NA	0.3 U	NA	0.3 U
1,2-DICHLOROPROPANE	NA	NA	NA	NA	NA	0.3 U	NA	NA	0.3 U	NA	NA	0.3 U	NA	0.3 U
1,3-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA	NA
1,4-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA	NA
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA	5 UR	NA	NA	NA	NA	NA
2-BUTANONE	NA	NA	NA	NA	NA	NA	NA	NA	1 U	NA	NA	NA	NA	NA
2-CHLOROETHYL VINYL ETHER	NA	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA	NA	0.3 U	NA	0.3 U
2-HEXANONE	NA	NA	NA	NA	NA	NA	NA	NA	2 U	NA	NA	NA	NA	NA
3-CHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	NA	NA	NA	NA	NA	NA	NA	NA	2 U	NA	NA	NA	NA	NA
ACETONE	NA	NA	NA	NA	NA	NA	NA	NA	2 U	NA	NA	NA	NA	NA
ACETONITRILE	NA	NA	NA	NA	NA	NA	NA	NA	8 U	NA	NA	NA	NA	NA
ACROLEIN	NA	NA	NA	NA	NA	1 U	NA	NA	1 U	NA	NA	1 U	NA	1 U
ACRYLONITRILE	NA	NA	NA	NA	NA	1 U	NA	NA	1 U	NA	NA	1 U	NA	1 U
BENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.5 U	0.5 U	0.3 U	0.5 U	0.23 U	0.3 U	0.5 UJ	0.3 U
BROMODICHLOROMETHANE	NA	NA	NA	NA	NA	0.3 U	NA	NA	0.3 U	NA	NA	0.3 U	NA	0.3 U
BROMOFORM	NA	NA	NA	NA	NA	0.4 U	NA	NA	0.4 U	NA	NA	0.4 U	NA	0.4 U
BROMOMETHANE	NA	NA	NA	NA	NA	0.3 U	NA	NA	0.3 U	NA	NA	0.3 U	NA	0.3 U
CARBON DISULFIDE	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA
CARBON TETRACHLORIDE	NA	NA	NA	NA	NA	0.4 U	NA	NA	0.4 U	NA	NA	0.4 U	NA	0.4 U
CHLOROBENZENE	NA	NA	NA	NA	NA	0.2 U	NA	NA	0.2 U	NA	NA	0.2 U	NA	0.2 U
CHLORODIBROMOMETHANE	NA	NA	NA	NA	NA	0.3 U	NA	NA	0.3 U	NA	NA	0.3 U	NA	0.3 U
CHLOROETHANE	NA	NA	NA	NA	NA	0.3 U	NA	NA	0.3 U	NA	NA	0.3 U	NA	0.3 U
CHLOROFORM	NA	NA	NA	NA	NA	0.2 U	NA	NA	0.2 U	NA	NA	0.2 U	NA	0.2 U
CHLOROMETHANE	NA	NA	NA	NA	NA	0.3 U	NA	NA	0.3 U	NA	NA	0.3 U	NA	0.3 U
CHLOROPRENE	NA	NA	NA	NA	NA	NA	NA	NA	0.4 U	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	0.2 U	NA	NA	0.2 U	NA	NA	0.2 U	NA	0.2 U
CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	NA	0.3 U	NA	NA	0.3 U	NA	NA	0.3 U	NA	0.3 U
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA
DICHLORODIFLUOROMETHANE	NA	NA	NA	NA	NA	NA	NA	NA	0.4 U	NA	NA	NA	NA	NA
ETHYL METHACRYLATE	NA	NA	NA	NA	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA	NA

LOCATION	MPT-08-MW01S	MPT-08-MW02S	MPT-08-MW03S		MPT-08-MW04S		MPT-08-MW06S	MPT-08-MW07S	MPT-08-MW09S	MPT-08-MW12S			MPT-08-MW15SR	
SAMPLE IDENTIFICATION	MPT-08-MW01S-111306	MPT-08-MW02S-111306	MPT-08-MW03S-111306	MPT-08-MW03S-112706	MPT-08-MW04S-112906	MPT-08-MW04S-20080828	MPT-08-MW06S-111306	MPT-08-MW07S-112706	MPT-08-MW09S-20080827	MPT-08-GW-MW12S-110806	MPT-08-MW12S-0408	MPT-08-MW12S-20080828	MPT-08-MW15SR-112806	MPT-08-MW15SR-20080827
SAMPLE DATE	20061113	20061113	20061113	20061127	20061129	20080828	20061113	20061127	20080827	20061108	20080423	20080828	20061128	20080827
VOLATILES (µg/L)														
ETHYLBENZENE	0.3 U	0.3 U	0.3 U	0.3 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.34 U	0.3 U	0.3 U	0.3 U
ISOBUTANOL	NA	NA	NA	NA	NA	NA	NA	NA	8 UR	NA	NA	NA	NA	NA
M+P-XYLENES	1 U	1 U	1 U	1 U	1 U	0.7 U	1 U	1 U	0.7 U	1 U	NA	0.7 U	1 U	0.7 U
METHACRYLONITRILE	NA	NA	NA	NA	NA	NA	NA	NA	3 U	NA	NA	NA	NA	NA
METHYL IODIDE	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA
METHYL METHACRYLATE	NA	NA	NA	NA	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	NA	0.5 U	0.21 U	NA	0.5 U	NA
METHYLENE CHLORIDE	NA	NA	NA	NA	NA	0.3 U	NA	NA	0.3 U	NA	NA	0.3 U	NA	0.3 U
O-XYLENE	0.4 U	0.4 U	0.7 J	0.8 J	0.4 U	0.3 U	0.4 U	0.6 J	0.3 U	0.4 U	NA	0.3 U	0.4 U	0.3 U
PENTACHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA	0.7 U	NA	NA	NA	NA	NA
PROPIONITRILE	NA	NA	NA	NA	NA	NA	NA	NA	4 U	NA	NA	NA	NA	NA
STYRENE	NA	NA	NA	NA	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA	NA
TETRACHLOROETHENE	NA	NA	NA	NA	NA	0.4 U	NA	NA	0.4 U	NA	NA	0.4 U	NA	0.4 U
TOLUENE	0.4 U	0.7 J	1	1	0.4 U	0.4 U	0.4 U	0.6 J	0.4 U	0.4 U	0.28 U	0.4 U	0.4 U	0.4 U
TOTAL XYLENES	1 U	1 U	0.7 J	0.8 J	1 U	0.9 U	1 U	0.6 J	NA	1 U	0.38 U	0.9 U	1 U	0.9 U
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	NA	0.4 U	NA	NA	0.4 U	NA	NA	0.4 U	NA	0.4 U
TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	NA	0.2 U	NA	NA	0.2 U	NA	NA	0.2 U	NA	0.2 U
TRANS-1,4-DICHLORO-2-BUTENE	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA
TRICHLOROETHENE	NA	NA	NA	NA	NA	0.4 U	NA	NA	0.4 U	NA	NA	0.4 U	NA	0.4 U
TRICHLOROFLUOROMETHANE	NA	NA	NA	NA	NA	0.5 U	NA	NA	0.5 U	NA	NA	0.5 U	NA	0.5 U
VINYL ACETATE	NA	NA	NA	NA	NA	NA	NA	NA	0.4 U	NA	NA	NA	NA	NA
VINYL CHLORIDE	NA	NA	NA	NA	NA	0.3 U	NA	NA	0.3 U	NA	NA	0.3 U	NA	0.3 U
SEMIVOLATILES (µg/L)														
1,2,4,5-TETRACHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
1,2-DIPHENYLHYDRAZINE	NA	NA	NA	NA	NA	3 U	NA	NA	NA	NA	NA	3 U	NA	3 U
1,3,5-TRINITROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
1,3-DINITROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
1,4-NAPHTHOQUINONE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
1,4-PHENYLENEDIAMINE	NA	NA	NA	NA	NA	NA	NA	NA	9 UR	NA	NA	NA	NA	NA
1-NAPHTHYLAMINE	NA	NA	NA	NA	NA	NA	NA	NA	9 UJ	NA	NA	NA	NA	NA
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
2,3,4,6-TETRACHLOROPHENOL	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA	NA	NA	24 U	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	3 U	NA	NA	9 U	NA	NA	3 U	NA	3 U
2,4-DICHLOROPHENOL	NA	NA	NA	NA	NA	4 U	NA	NA	9 U	NA	NA	4 U	NA	4 U
2,4-DIMETHYLPHENOL	NA	NA	NA	NA	NA	4 U	NA	NA	9 U	NA	NA	4 U	NA	4 U
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA	NA	NA	24 U	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	1 U	NA	NA	9 U	NA	NA	1 U	NA	1 U
2,6-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA	NA	1 U	NA	NA	9 U	NA	NA	1 U	NA	1 U
2-ACETYLAMINOFLUORENE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA

TABLE A2-1
SWMU 8, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-08-MW01S**	**MPT-08-MW02S**	**MPT-08-MW03S**		**MPT-08-MW04S**		**MPT-08-MW06S**	**MPT-08-MW07S**	**MPT-08-MW09S**	**MPT-08-MW12S**			**MPT-08-MW15SR**	
SAMPLE IDENTIFICATION	MPT-08-MW01S-111306	MPT-08-MW02S-111306	MPT-08-MW03S-111306	MPT-08-MW03S-112706	MPT-08-MW04S-112906	MPT-08-MW04S-20080828	MPT-08-MW06S-111306	MPT-08-MW07S-112706	MPT-08-MW09S-20080827	MPT-08-GW-MW12S-110806	MPT-08-MW12S-0408	MPT-08-MW12S-20080828	MPT-08-MW15SR-112806	MPT-08-MW15SR-20080827
SAMPLE DATE	20061113	20061113	20061113	20061127	20061129	20080828	20061113	20061127	20080827	20061108	20080423	20080828	20061128	20080827
SEMIVOLATILES (µg/L)														
2-CHLORONAPHTHALENE	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
2-CHLOROPHENOL	NA	NA	NA	NA	NA	3 U	NA	NA	9 U	NA	NA	3 U	NA	3 U
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
2-NAPHTHYLAMINE	NA	NA	NA	NA	NA	NA	NA	NA	9 UJ	NA	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA	NA	NA	24 U	NA	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA	NA	3 U	NA	NA	9 U	NA	NA	3 U	NA	3 U
2-PICOLINE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA	NA	3 U	NA	NA	9 U	NA	NA	3 U	NA	3 U
3,3'-DIMETHYLBENZIDINE	NA	NA	NA	NA	NA	NA	NA	NA	24 UJ	NA	NA	NA	NA	NA
3-METHYLCHOLANTHRENE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA	NA	NA	24 UJ	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA	NA	6 U	NA	NA	24 U	NA	NA	6 U	NA	6 U
4-AMINOBIPHENYL	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	1 U	NA	NA	9 U	NA	NA	1 U	NA	1 U
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA	NA	1 U	NA	NA	9 U	NA	NA	1 U	NA	1 U
4-NITROANILINE	NA	NA	NA	NA	NA	NA	NA	NA	24 U	NA	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA	NA	5 U	NA	NA	24 U	NA	NA	5 U	NA	5 U
4-NITROQUINOLINE-1-OXIDE	NA	NA	NA	NA	NA	NA	NA	NA	24 U	NA	NA	NA	NA	NA
5-NITRO-O-TOLUIDINE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
7,12-DIMETHYLBENZ(A)ANTHRACENE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
A,A-DIMETHYLPHENETHYLAMINE	NA	NA	NA	NA	NA	NA	NA	NA	24 UJ	NA	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
ACENAPHTHYLENE	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
ACETOPHENONE	NA	NA	NA	NA	NA	NA	NA	NA	9 UJ	NA	NA	NA	NA	NA
ANILINE	NA	NA	NA	NA	NA	NA	NA	NA	24 U	NA	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA	NA	1 U	NA	NA	9 U	NA	NA	1 U	NA	1 U
ARAMITE	NA	NA	NA	NA	NA	NA	NA	NA	19 UJ	NA	NA	NA	NA	NA
BAP EQUIVALENT	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BAP EQUIVALENT(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZIDINE	NA	NA	NA	NA	NA	15 UR	NA	NA	NA	NA	NA	15 UR	NA	15 UR
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	1 U	NA	NA	9 U	NA	NA	1 U	NA	1 U
BENZO(A)PYRENE	NA	NA	NA	NA	NA	1 U	NA	NA	9 U	NA	NA	1 U	NA	1 U
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	1 U	NA	NA	9 U	NA	NA	1 U	NA	1 U
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	1 U	NA	NA	9 U	NA	NA	1 U	NA	1 U
BENZYL ALCOHOL	NA	NA	NA	NA	NA	NA	NA	NA	19 U	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U

TABLE A2-1
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NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-08-MW01S**	**MPT-08-MW02S**	**MPT-08-MW03S**		**MPT-08-MW04S**		**MPT-08-MW06S**	**MPT-08-MW07S**	**MPT-08-MW09S**	**MPT-08-MW12S**			**MPT-08-MW15SR**	
SAMPLE IDENTIFICATION	MPT-08-MW01S-111306	MPT-08-MW02S-111306	MPT-08-MW03S-111306	MPT-08-MW03S-112706	MPT-08-MW04S-112906	MPT-08-MW04S-20080828	MPT-08-MW06S-111306	MPT-08-MW07S-112706	MPT-08-MW09S-20080827	MPT-08-GW-MW12S-110806	MPT-08-MW12S-0408	MPT-08-MW12S-20080828	MPT-08-MW15SR-112806	MPT-08-MW15SR-20080827
SAMPLE DATE	20061113	20061113	20061113	20061127	20061129	20080828	20061113	20061127	20080827	20061108	20080423	20080828	20061128	20080827
SEMIVOLATILES (µg/L)														
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	4 J
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA	NA	1 U	NA	NA	9 U	NA	NA	1 U	NA	1 U
CHLOROBENZILATE	NA	NA	NA	NA	NA	NA	NA	NA	9 UJ	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	1 U	NA	NA	9 U	NA	NA	1 U	NA	1 U
DIALLATE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
DIBENZOFURAN	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA	NA	1 U	NA	NA	9 U	NA	NA	1 U	NA	1 U
DIMETHOATE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA	NA	0.7 U	NA	NA	9 U	NA	NA	0.7 U	NA	0.7 U
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA	NA	1 U	NA	NA	9 U	NA	NA	1 U	NA	1 U
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
DINOSEB	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
ETHYL METHANE SULFONATE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
ETHYL PARATHION	NA	NA	NA	NA	NA	NA	NA	NA	24 U	NA	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA	NA	1 U	NA	NA	9 U	NA	NA	1 U	NA	1 U
FLUORENE	NA	NA	NA	NA	NA	1 J	NA	NA	9 U	NA	NA	1 U	NA	1 U
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	0.9 U	NA	NA	9 U	NA	NA	0.9 U	NA	0.9 U
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA	NA	1 U	NA	NA	9 U	NA	NA	1 U	NA	1 U
HEXACHLOROETHANE	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
HEXACHLOROPHENE	NA	NA	NA	NA	NA	NA	NA	NA	24 UR	NA	NA	NA	NA	NA
HEXACHLOROPROPENE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
ISODRIN	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
ISOSAFROLE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
KEPONE	NA	NA	NA	NA	NA	NA	NA	NA	24 UR	NA	NA	NA	NA	NA
METHAPYRILENE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
METHYL METHANE SULFONATE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
NITROBENZENE	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
N-NITROSODIETHYLAMINE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
N-NITROSODIMETHYLAMINE	NA	NA	NA	NA	NA	1 U	NA	NA	9 U	NA	NA	1 U	NA	1 U
N-NITROSO-DI-N-BUTYLAMINE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
N-NITROSOMETHYLETHYLAMINE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
N-NITROSOMORPHOLINE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
N-NITROSOPIPERIDINE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
N-NITROSOPYRROLIDINE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
O,O,O-TRIETHYL PHOSPHOROTHIOATE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA

LOCATION	MPT-08-MW01S	MPT-08-MW02S	MPT-08-MW03S		MPT-08-MW04S		MPT-08-MW06S	MPT-08-MW07S	MPT-08-MW09S	MPT-08-MW12S			MPT-08-MW15SR	
SAMPLE IDENTIFICATION	MPT-08-MW01S-111306	MPT-08-MW02S-111306	MPT-08-MW03S-111306	MPT-08-MW03S-112706	MPT-08-MW04S-112906	MPT-08-MW04S-20080828	MPT-08-MW06S-111306	MPT-08-MW07S-112706	MPT-08-MW09S-20080827	MPT-08-GW-MW12S-110806	MPT-08-MW12S-0408	MPT-08-MW12S-20080828	MPT-08-MW15SR-112806	MPT-08-MW15SR-20080827
SAMPLE DATE	20061113	20061113	20061113	20061127	20061129	20080828	20061113	20061127	20080827	20061108	20080423	20080828	20061128	20080827
SEMIVOLATILES (µg/L)														
O-TOLUIDINE	NA	NA	NA	NA	NA	NA	NA	NA	24 UJ	NA	NA	NA	NA	NA
PENTACHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
PENTACHLORONITROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	9 UR	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	7 UJ	NA	NA	24 U	NA	NA	7 UJ	NA	7 UJ
PHENACETIN	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA	NA	0.9 U	NA	NA	9 U	NA	NA	0.9 U	NA	0.9 U
PHENOL	NA	NA	NA	NA	NA	2 U	NA	NA	9 U	NA	NA	2 U	NA	2 U
PRONAMIDE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA	NA	1 U	NA	NA	9 U	NA	NA	1 U	NA	1 U
PYRIDINE	NA	NA	NA	NA	NA	NA	NA	NA	47 U	NA	NA	NA	NA	NA
SAFROLE	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
SOLVENT YELLOW 2	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
SULFOTEPP	NA	NA	NA	NA	NA	NA	NA	NA	9 U	NA	NA	NA	NA	NA
THIONAZIN	NA	NA	NA	NA	NA	NA	NA	NA	19 U	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (µg/L)														
1-METHYLNAPHTHALENE	0.4	130	160	140	97	NA	0.1 U	22	NA	0.1 U	0.02 U	NA	0.1 U	NA
2-METHYLNAPHTHALENE	0.3	100	100	65	52	NA	0.07 U	5	NA	0.07 U	0.03 U	NA	0.07 U	NA
ACENAPHTHENE	0.07 U	3	7 J	4	3	NA	0.07 U	2	NA	0.07 U	0.02 U	NA	0.4	NA
ACENAPHTHYLENE	0.06 U	0.06 U	0.6 U	0.06 U	0.06 U	NA	0.06 U	0.06 U	NA	0.06 U	0.01 U	NA	0.06 U	NA
ANTHRACENE	0.06 U	0.06 U	2 U	0.6	0.4	NA	0.06 U	0.5	NA	0.06 U	0.02 U	NA	0.06 U	NA
BAP EQUIVALENT	0.05 U	0.05 U	0.5 U	0.05 U	0.05 U	NA	0.05 U	0.05 U	NA	0.05 U	NA	NA	0.05 U	NA
BAP EQUIVALENT(1)	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	NA	0.0 U	0.0 U	NA	0.0 U	NA	NA	0.0 U	NA
BENZO(A)ANTHRACENE	0.07 U	0.07 U	0.7 U	0.07 U	0.07 U	NA	0.07 U	0.07 U	NA	0.07 U	0.02 U	NA	0.07 U	NA
BENZO(A)PYRENE	0.05 U	0.05 U	0.5 U	0.05 U	0.05 U	NA	0.05 U	0.05 U	NA	0.05 U	0.01 U	NA	0.05 U	NA
BENZO(B)FLUORANTHENE	0.08 U	0.08 U	0.8 U	0.1 U	0.08 U	NA	0.08 U	0.08 U	NA	0.08 U	0.02 U	NA	0.08 U	NA
BENZO(G,H,I)PERYLENE	0.08 U	0.08 U	0.9 U	0.08 U	0.09 U	NA	0.08 U	0.08 U	NA	0.08 U	0.02 U	NA	0.08 U	NA
BENZO(K)FLUORANTHENE	0.1 U	0.1 U	1 U	0.1 U	0.1 U	NA	0.1 U	0.1 U	NA	0.1 U	0.02 U	NA	0.1 U	NA
CHRYSENE	0.07 U	0.07 U	0.7 U	0.07 U	0.07 U	NA	0.07 U	0.07 U	NA	0.07 U	0.01 U	NA	0.07 U	NA
DIBENZO(A,H)ANTHRACENE	0.1 U	0.1 U	1 U	0.1 U	0.1 U	NA	0.1 U	0.1 U	NA	0.1 U	0.01 U	NA	0.1 U	NA
FLUORANTHENE	0.2 U	0.2 U	0.6 U	0.06 U	0.06 U	NA	0.2 U	0.06 U	NA	0.06 U	0.01 U	NA	0.06 U	NA
FLUORENE	0.1 J	7 J	11	7 J	6	NA	0.07 U	3	NA	0.07 U	0.02 U	NA	0.07 U	NA
INDENO(1,2,3-CD)PYRENE	0.09 U	0.09 U	1 U	0.09 U	0.1 U	NA	0.1 U	0.09 U	NA	0.1 U	0.02 U	NA	0.09 U	NA
NAPHTHALENE	0.1 U	40	2 J	1	1	NA	0.1 U	0.6	NA	0.1 U	0.02 U	NA	0.1 U	NA
PHENANTHRENE	0.1 J	4	6	4	2	NA	0.05 U	0.5	NA	0.05 U	0.02 U	NA	0.05 U	NA
PYRENE	0.06 U	0.2	0.6 U	0.06 U	0.06 U	NA	0.06 U	0.06 U	NA	0.06 U	0.01 U	NA	0.06 U	NA
PESTICIDES/PCBS (µg/L)														
AROCLOR-1016	NA	NA	NA	NA	NA	0.15 UJ	NA	NA	0.15 UJ	NA	NA	0.15 UJ	NA	0.15 UJ
AROCLOR-1221	NA	NA	NA	NA	NA	0.38 UJ	NA	NA	0.38 UJ	NA	NA	0.38 U	NA	0.38 UJ
AROCLOR-1232	NA	NA	NA	NA	NA	0.11 UJ	NA	NA	0.11 UJ	NA	NA	0.11 U	NA	0.11 UJ
AROCLOR-1242	NA	NA	NA	NA	NA	0.11 UJ	NA	NA	0.11 UJ	NA	NA	0.11 U	NA	0.11 UJ
AROCLOR-1248	NA	NA	NA	NA	NA	0.075 UJ	NA	NA	0.075 UJ	NA	NA	0.075 U	NA	0.075 UJ
AROCLOR-1254	NA	NA	NA	NA	NA	0.087 UJ	NA	NA	0.087 UJ	NA	NA	0.087 U	NA	0.087 UJ

TABLE A2-1
SWMU 8, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-08-MW01S**	**MPT-08-MW02S**	**MPT-08-MW03S**		**MPT-08-MW04S**		**MPT-08-MW06S**	**MPT-08-MW07S**	**MPT-08-MW09S**	**MPT-08-MW12S**			**MPT-08-MW15SR**	
SAMPLE IDENTIFICATION	MPT-08-MW01S-111306	MPT-08-MW02S-111306	MPT-08-MW03S-111306	MPT-08-MW03S-112706	MPT-08-MW04S-112906	MPT-08-MW04S-20080828	MPT-08-MW06S-111306	MPT-08-MW07S-112706	MPT-08-MW09S-20080827	MPT-08-GW-MW12S-110806	MPT-08-MW12S-0408	MPT-08-MW12S-20080828	MPT-08-MW15SR-112806	MPT-08-MW15SR-20080827
SAMPLE DATE	20061113	20061113	20061113	20061127	20061129	20080828	20061113	20061127	20080827	20061108	20080423	20080828	20061128	20080827
PESTICIDES/PCBS (µg/L)														
AROCLOR-1260	NA	NA	NA	NA	NA	0.12 UJ	NA	NA	0.12 UJ	NA	NA	0.12 UJ	NA	0.12 UJ
TOTAL AROCLOR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL AROCLOR HALFND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METALS (µg/L)														
ALUMINUM	NA	NA	NA	NA	NA	NA	NA	NA	19 U	NA	NA	NA	NA	NA
ANTIMONY	NA	NA	NA	NA	NA	NA	NA	NA	1.6 U	NA	NA	NA	NA	NA
ARSENIC	NA	NA	NA	NA	NA	2.5	NA	NA	0.98 U	NA	NA	0.98 U	NA	1.7
BARIUM	NA	NA	NA	NA	NA	NA	NA	NA	4.6	NA	NA	NA	NA	NA
BERYLLIUM	NA	NA	NA	NA	NA	NA	NA	NA	0.15 U	NA	NA	NA	NA	NA
CADMIUM	NA	NA	NA	NA	NA	0.1 U	NA	NA	0.1 U	NA	NA	0.1 U	NA	0.38
CALCIUM	NA	NA	NA	NA	NA	NA	NA	NA	72600	NA	NA	NA	NA	NA
CHROMIUM	NA	NA	NA	NA	NA	1.5 U	NA	NA	1.3 U	NA	NA	1.8 U	NA	12.7
COBALT	NA	NA	NA	NA	NA	NA	NA	NA	0.25 U	NA	NA	NA	NA	NA
COPPER	NA	NA	NA	NA	NA	NA	NA	NA	1.2 U	NA	NA	NA	NA	NA
IRON	NA	NA	NA	NA	NA	NA	NA	NA	6.8 U	NA	NA	NA	NA	NA
LEAD	NA	NA	NA	NA	NA	2	NA	NA	1 U	NA	NA	1 U	NA	9.3
MAGNESIUM	NA	NA	NA	NA	NA	NA	NA	NA	3720	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	NA	NA	NA	NA	0.93 U	NA	NA	NA	NA	NA
MERCURY	NA	NA	NA	NA	NA	NA	NA	NA	0.02 U	NA	NA	NA	NA	NA
NICKEL	NA	NA	NA	NA	NA	NA	NA	NA	0.46 U	NA	NA	NA	NA	NA
POTASSIUM	NA	NA	NA	NA	NA	NA	NA	NA	1300	NA	NA	NA	NA	NA
SELENIUM	NA	NA	NA	NA	NA	NA	NA	NA	2.1 U	NA	NA	NA	NA	NA
SILVER	NA	NA	NA	NA	NA	NA	NA	NA	0.52 U	NA	NA	NA	NA	NA
SODIUM	NA	NA	NA	NA	NA	NA	NA	NA	15900	NA	NA	NA	NA	NA
THALLIUM	NA	NA	NA	NA	NA	NA	NA	NA	1.8 U	NA	NA	NA	NA	NA
TIN	NA	NA	NA	NA	NA	NA	NA	NA	0.76 U	NA	NA	NA	NA	NA
VANADIUM	NA	NA	NA	NA	NA	NA	NA	NA	2.4	NA	NA	NA	NA	NA
ZINC	NA	NA	NA	NA	NA	NA	NA	NA	3.5 U	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (mg/L)														
SULFIDE	NA	NA	NA	NA	NA	NA	NA	NA	1 U	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (µg/L)														
CYANIDE	NA	NA	NA	NA	NA	NA	NA	NA	10 U	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (mg/L)														
TPH (C08-C40)	0.23 U	12	47	24	9.1 J	NA	0.23 U	23	NA	0.23 U	0.057 J	NA	3.6	NA

TABLE A2-1
SWMU 8, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-08-MW16S**		**MPT-08-MW17S**		**MPT-08-MW18S**		**MPT-08-MW21S**	**MPT-08-MW22S**	**MPT-08-RW01**
SAMPLE IDENTIFICATION	MPT-08-MW16S-112806	MPT-08-MW16S-20080828	MPT-08-MW17S-112906	MPT-08-MW17S-20080828	MPT-08-MW18S-112906	MPT-08-MW18S-20080828	MPT-08-GW-MW21S-110606	MPT-08-GW-MW22S-110606	MPT-08-RW01-112706
SAMPLE DATE	20061128	20080828	20061129	20080828	20061129	20080828	20061106	20061106	20061127
VOLATILES (µg/L)									
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA	NA	NA	0.4 U	0.4 U	NA
1,1,1-TRICHLOROETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	0.5 U	0.5 U	NA
1,1,2,2-TETRACHLOROETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	0.6 U	0.6 U	NA
1,1,2-TRICHLOROETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	0.5 U	0.5 U	NA
1,1-DICHLOROETHANE	NA	0.2 U	NA	0.2 U	NA	0.2 U	0.4 U	0.4 U	NA
1,1-DICHLOROETHENE	NA	0.3 U	NA	0.3 U	NA	0.3 U	0.6 U	0.6 U	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA	NA	NA	0.5 U	0.5 U	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA	NA	NA	0.4 U	0.4 U	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA	NA	NA	NA	NA	NA	0.6 U	0.6 U	NA
1,2-DIBROMOETHANE	0.0065 U	NA	0.0065 U	NA	0.0064 U	NA	0.3 U	0.3 U	0.0065 U
1,2-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	0.3 U	0.3 U	NA
1,2-DICHLOROETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	0.4 U	0.4 U	NA
1,2-DICHLOROPROPANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	0.5 UJ	0.5 UJ	NA
1,3-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	0.4 U	0.4 U	NA
1,4-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	0.4 U	0.4 U	NA
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	20 UR	20 UR	NA
2-BUTANONE	NA	NA	NA	NA	NA	NA	3 U	3 U	NA
2-CHLOROETHYL VINYL ETHER	NA	0.3 U	NA	0.3 U	NA	0.3 U	NA	NA	NA
2-HEXANONE	NA	NA	NA	NA	NA	NA	2 U	2 U	NA
3-CHLOROPROPENE	NA	NA	NA	NA	NA	NA	0.6 UJ	0.6 UJ	NA
4-METHYL-2-PENTANONE	NA	NA	NA	NA	NA	NA	2 U	2 U	NA
ACETONE	NA	NA	NA	NA	NA	NA	3 U	3 U	NA
ACETONITRILE	NA	NA	NA	NA	NA	NA	14 UR	14 UR	NA
ACROLEIN	NA	1 U	NA	1 U	NA	1 U	3 UR	3 UR	NA
ACRYLONITRILE	NA	1 U	NA	1 U	NA	1 U	4 UJ	4 UJ	NA
BENZENE	0.5 U	0.3 U	0.5 U	0.3 U	0.5 U	0.3 U	0.5 UJ	0.5 UJ	0.5 U
BROMODICHLOROMETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	0.4 U	0.4 U	NA
BROMOFORM	NA	0.4 U	NA	0.4 U	NA	0.4 U	0.4 U	0.4 U	NA
BROMOMETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	0.6 U	0.6 U	NA
CARBON DISULFIDE	NA	NA	NA	NA	NA	NA	0.6 U	0.6 U	NA
CARBON TETRACHLORIDE	NA	0.4 U	NA	0.4 U	NA	0.4 U	0.5 U	0.5 U	NA
CHLOROBENZENE	NA	0.2 U	NA	0.2 U	NA	0.2 U	0.3 U	0.3 U	NA
CHLORODIBROMOMETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	0.3 U	0.3 U	NA
CHLOROETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	0.5 U	0.5 U	NA
CHLOROFORM	NA	0.2 U	NA	0.2 U	NA	0.2 U	0.4 U	0.4 U	NA
CHLOROMETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	0.6 U	0.6 U	NA
CHLOROPRENE	NA	NA	NA	NA	NA	NA	0.5 UJ	0.5 UJ	NA
CIS-1,2-DICHLOROETHENE	NA	0.2 U	NA	0.2 U	NA	0.2 U	0.5 U	0.5 U	NA
CIS-1,3-DICHLOROPROPENE	NA	0.3 U	NA	0.3 U	NA	0.3 U	0.4 U	0.4 U	NA
DIBROMOMETHANE	NA	NA	NA	NA	NA	NA	0.4 U	0.4 U	NA
DICHLORODIFLUOROMETHANE	NA	NA	NA	NA	NA	NA	0.3 UJ	0.3 UJ	NA
ETHYL METHACRYLATE	NA	NA	NA	NA	NA	NA	0.4 UJ	0.4 UJ	NA

LOCATION	MPT-08-MW16S		MPT-08-MW17S		MPT-08-MW18S		MPT-08-MW21S	MPT-08-MW22S	MPT-08-RW01
SAMPLE IDENTIFICATION	MPT-08-MW16S-112806	MPT-08-MW16S-20080828	MPT-08-MW17S-112906	MPT-08-MW17S-20080828	MPT-08-MW18S-112906	MPT-08-MW18S-20080828	MPT-08-GW-MW21S-110606	MPT-08-GW-MW22S-110606	MPT-08-RW01-112706
SAMPLE DATE	20061128	20080828	20061129	20080828	20061129	20080828	20061106	20061106	20061127
VOLATILES (µg/L)									
ETHYLBENZENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
ISOBUTANOL	NA	NA	NA	NA	NA	NA	13 UR	13 UR	NA
M+P-XYLENES	1 U	0.7 U	1 U	0.7 U	1 U	0.7 U	1 U	1 U	1 U
METHACRYLONITRILE	NA	NA	NA	NA	NA	NA	3 UJ	3 UJ	NA
METHYL IODIDE	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	NA
METHYL METHACRYLATE	NA	NA	NA	NA	NA	NA	0.6 UJ	0.6 UJ	NA
METHYL TERT-BUTYL ETHER	0.5 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	0.5 U
METHYLENE CHLORIDE	NA	0.3 U	NA	0.3 U	NA	0.3 U	2 U	2 U	NA
O-XYLENE	0.4 U	0.3 J	0.4 U	0.3 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U
PENTACHLOROETHANE	NA	NA	NA	NA	NA	NA	0.6 UJ	0.6 UJ	NA
PROPIONITRILE	NA	NA	NA	NA	NA	NA	4 UR	4 UR	NA
STYRENE	NA	NA	NA	NA	NA	NA	0.3 U	0.3 U	NA
TETRACHLOROETHENE	NA	0.4 U	NA	0.4 U	NA	0.4 U	0.6 U	0.6 U	NA
TOLUENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TOTAL XYLENES	1 U	0.9 U	1 U	0.9 U	1 U	0.9 U	NA	NA	1 U
TRANS-1,2-DICHLOROETHENE	NA	0.4 U	NA	0.4 U	NA	0.4 U	0.6 U	0.6 U	NA
TRANS-1,3-DICHLOROPROPENE	NA	0.2 U	NA	0.2 U	NA	0.2 U	0.4 U	0.4 U	NA
TRANS-1,4-DICHLORO-2-BUTENE	NA	NA	NA	NA	NA	NA	0.7 UJ	0.7 UJ	NA
TRICHLOROETHENE	NA	0.4 U	NA	0.4 U	NA	0.4 U	0.4 U	0.4 U	NA
TRICHLOROFLUOROMETHANE	NA	0.5 U	NA	0.5 U	NA	0.5 U	0.4 U	0.4 U	NA
VINYL ACETATE	NA	NA	NA	NA	NA	NA	0.5 U	0.5 U	NA
VINYL CHLORIDE	NA	0.3 U	NA	0.3 U	NA	0.3 U	0.6 U	0.6 U	NA
SEMIVOLATILES (µg/L)									
1,2,4,5-TETRACHLOROBENZENE	NA	NA	NA	NA	NA	NA	4 U	4 U	NA
1,2,4-TRICHLOROBENZENE	NA	2 U	NA	2 U	NA	2 U	2 U	2 U	NA
1,2-DIPHENYLHYDRAZINE	NA	3 U	NA	3 U	NA	3 U	NA	NA	NA
1,3,5-TRINITROBENZENE	NA	NA	NA	NA	NA	NA	5 UJ	5 UJ	NA
1,3-DINITROBENZENE	NA	NA	NA	NA	NA	NA	5 U	5 U	NA
1,4-NAPHTHOQUINONE	NA	NA	NA	NA	NA	NA	4 UR	4 UR	NA
1,4-PHENYLENEDIAMINE	NA	NA	NA	NA	NA	NA	5 UR	5 UR	NA
1-NAPHTHYLAMINE	NA	NA	NA	NA	NA	NA	3 U	3 U	NA
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA	NA	NA	3 UJ	3 UJ	NA
2,3,4,6-TETRACHLOROPHENOL	NA	NA	NA	NA	NA	NA	6 U	6 U	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA	6 U	6 U	NA
2,4,6-TRICHLOROPHENOL	NA	3 U	NA	3 U	NA	3 U	6 U	6 U	NA
2,4-DICHLOROPHENOL	NA	4 U	NA	4 U	NA	4 U	7 U	7 U	NA
2,4-DIMETHYLPHENOL	NA	4 U	NA	4 U	NA	4 U	7 U	7 U	NA
2,4-DINITROPHENOL	NA	NA	NA	NA	NA	NA	22 U	22 U	NA
2,4-DINITROTOLUENE	NA	1 U	NA	1 U	NA	1 U	4 U	4 U	NA
2,6-DICHLOROPHENOL	NA	NA	NA	NA	NA	NA	8 U	8 U	NA
2,6-DINITROTOLUENE	NA	1 U	NA	1 U	NA	1 U	4 U	4 U	NA
2-ACETYLAMINOFLUORENE	NA	NA	NA	NA	NA	NA	4 U	4 U	NA

TABLE A2-1
SWMU 8, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-08-MW16S		MPT-08-MW17S		MPT-08-MW18S		MPT-08-MW21S	MPT-08-MW22S	MPT-08-RW01
SAMPLE IDENTIFICATION	MPT-08-MW16S-112806	MPT-08-MW16S-20080828	MPT-08-MW17S-112906	MPT-08-MW17S-20080828	MPT-08-MW18S-112906	MPT-08-MW18S-20080828	MPT-08-GW-MW21S-110606	MPT-08-GW-MW22S-110606	MPT-08-RW01-112706
SAMPLE DATE	20061128	20080828	20061129	20080828	20061129	20080828	20061106	20061106	20061127
SEMIVOLATILES (µg/L)									
2-CHLORONAPHTHALENE	NA	2 U	NA	2 U	NA	2 U	2 U	2 U	NA
2-CHLOROPHENOL	NA	3 U	NA	3 U	NA	3 U	8 U	8 U	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA	4 U	4 U	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA	8 U	8 U	NA
2-NAPHTHYLAMINE	NA	NA	NA	NA	NA	NA	4 UJ	4 UJ	NA
2-NITROANILINE	NA	NA	NA	NA	NA	NA	3 U	3 U	NA
2-NITROPHENOL	NA	3 U	NA	3 U	NA	3 U	7 U	7 U	NA
2-PICOLINE	NA	NA	NA	NA	NA	NA	3 U	3 U	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA	8 U	8 U	NA
3,3'-DICHLOROBENZIDINE	NA	3 U	NA	3 U	NA	3 U	3 UJ	3 UJ	NA
3,3'-DIMETHYLBENZIDINE	NA	NA	NA	NA	NA	NA	6 U	6 U	NA
3-METHYLCHOLANTHRENE	NA	NA	NA	NA	NA	NA	6 U	6 U	NA
3-NITROANILINE	NA	NA	NA	NA	NA	NA	4 UR	4 UR	NA
4,6-DINITRO-2-METHYLPHENOL	NA	6 U	NA	6 U	NA	6 U	10 U	10 U	NA
4-AMINOBIPHENYL	NA	NA	NA	NA	NA	NA	4 UJ	4 UJ	NA
4-BROMOPHENYL PHENYL ETHER	NA	1 U	NA	1 U	NA	1 U	3 U	3 U	NA
4-CHLORO-3-METHYLPHENOL	NA	2 U	NA	2 U	NA	2 U	9 U	9 U	NA
4-CHLOROANILINE	NA	NA	NA	NA	NA	NA	4 UJ	4 UJ	NA
4-CHLOROPHENYL PHENYL ETHER	NA	1 U	NA	1 U	NA	1 U	3 U	3 U	NA
4-NITROANILINE	NA	NA	NA	NA	NA	NA	5 UR	5 UR	NA
4-NITROPHENOL	NA	5 U	NA	5 U	NA	5 U	15 UJ	15 UJ	NA
4-NITROQUINOLINE-1-OXIDE	NA	NA	NA	NA	NA	NA	9 UR	9 UR	NA
5-NITRO-O-TOLUIDINE	NA	NA	NA	NA	NA	NA	5 U	5 U	NA
7,12-DIMETHYLBENZ(A)ANTHRACENE	NA	NA	NA	NA	NA	NA	4 U	4 U	NA
A,A-DIMETHYLPHENETHYLAMINE	NA	NA	NA	NA	NA	NA	15 UR	15 UR	NA
ACENAPHTHENE	NA	2 J	NA	2 U	NA	2 U	3 U	3 U	NA
ACENAPHTHYLENE	NA	2 U	NA	2 U	NA	2 U	3 U	3 U	NA
ACETOPHENONE	NA	NA	NA	NA	NA	NA	5 U	5 U	NA
ANILINE	NA	NA	NA	NA	NA	NA	6 UJ	6 UJ	NA
ANTHRACENE	NA	1 U	NA	1 U	NA	1 U	3 U	3 U	NA
ARAMITE	NA	NA	NA	NA	NA	NA	8 UR	8 UR	NA
BAP EQUIVALENT	NA	NA	NA	NA	NA	NA	3 U	3 U	NA
BAP EQUIVALENT(1)	NA	NA	NA	NA	NA	NA	0.0 U	0.0 U	NA
BENZIDINE	NA	15 UR	NA	15 UR	NA	15 UR	NA	NA	NA
BENZO(A)ANTHRACENE	NA	1 U	NA	1 U	NA	1 U	2 U	2 U	NA
BENZO(A)PYRENE	NA	1 U	NA	1 U	NA	1 U	3 U	3 U	NA
BENZO(B)FLUORANTHENE	NA	1 U	NA	1 U	NA	1 U	3 U	3 U	NA
BENZO(G,H,I)PERYLENE	NA	2 U	NA	2 U	NA	2 U	8 U	8 U	NA
BENZO(K)FLUORANTHENE	NA	1 U	NA	1 U	NA	1 U	4 U	4 U	NA
BENZYL ALCOHOL	NA	NA	NA	NA	NA	NA	8 U	8 U	NA
BIS(2-CHLOROETHOXY)METHANE	NA	2 U	NA	2 U	NA	2 U	3 U	3 U	NA
BIS(2-CHLOROETHYL)ETHER	NA	2 U	NA	2 U	NA	2 U	4 UJ	4 UJ	NA

TABLE A2-1
SWMU 8, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-08-MW16S		MPT-08-MW17S		MPT-08-MW18S		MPT-08-MW21S	MPT-08-MW22S	MPT-08-RW01
SAMPLE IDENTIFICATION	MPT-08-MW16S-112806	MPT-08-MW16S-20080828	MPT-08-MW17S-112906	MPT-08-MW17S-20080828	MPT-08-MW18S-112906	MPT-08-MW18S-20080828	MPT-08-GW-MW21S-110606	MPT-08-GW-MW22S-110606	MPT-08-RW01-112706
SAMPLE DATE	20061128	20080828	20061129	20080828	20061129	20080828	20061106	20061106	20061127
SEMIVOLATILES (µg/L)									
BIS(2-ETHYLHEXYL)PHTHALATE	NA	2 U	NA	2 U	NA	2 U	7 UJ	7 UJ	NA
BUTYL BENZYL PHTHALATE	NA	1 U	NA	1 U	NA	1 U	6 UJ	6 UJ	NA
CHLOROBENZILATE	NA	NA	NA	NA	NA	NA	7 UR	7 UR	NA
CHRYSENE	NA	1 U	NA	1 U	NA	1 U	3 U	3 U	NA
DIALLATE	NA	NA	NA	NA	NA	NA	4 U	4 U	NA
DIBENZO(A,H)ANTHRACENE	NA	2 U	NA	2 U	NA	2 U	7 U	7 U	NA
DIBENZOFURAN	NA	NA	NA	NA	NA	NA	3 U	3 U	NA
DIETHYL PHTHALATE	NA	1 U	NA	1 U	NA	1 U	3 U	3 U	NA
DIMETHOATE	NA	NA	NA	NA	NA	NA	7 UR	7 UR	NA
DIMETHYL PHTHALATE	NA	0.7 U	NA	0.7 U	NA	0.7 U	4 UR	4 UR	NA
DI-N-BUTYL PHTHALATE	NA	1 U	NA	1 U	NA	1 U	7 U	7 U	NA
DI-N-OCTYL PHTHALATE	NA	2 U	NA	2 U	NA	2 U	5 UJ	5 UJ	NA
DINOSEB	NA	NA	NA	NA	NA	NA	5 U	5 U	NA
ETHYL METHANE SULFONATE	NA	NA	NA	NA	NA	NA	7 U	7 U	NA
ETHYL PARATHION	NA	NA	NA	NA	NA	NA	14 U	14 U	NA
FLUORANTHENE	NA	1 U	NA	1 U	NA	1 U	8 U	8 U	NA
FLUORENE	NA	3 J	NA	1 U	NA	1 U	3 U	3 U	NA
HEXACHLOROBENZENE	NA	0.9 U	NA	0.9 U	NA	0.9 U	3 U	3 U	NA
HEXACHLOROBUTADIENE	NA	2 U	NA	2 U	NA	2 U	2 U	2 U	NA
HEXACHLOROCYCLOPENTADIENE	NA	1 U	NA	1 U	NA	1 U	2 U	2 U	NA
HEXACHLOROETHANE	NA	2 U	NA	2 U	NA	2 U	3 U	3 U	NA
HEXACHLOROPHENE	NA	NA	NA	NA	NA	NA	5 UR	5 UR	NA
HEXACHLOROPROPENE	NA	NA	NA	NA	NA	NA	3 UJ	3 UJ	NA
INDENO(1,2,3-CD)PYRENE	NA	2 U	NA	2 U	NA	2 U	7 UJ	7 UJ	NA
ISODRIN	NA	NA	NA	NA	NA	NA	4 U	4 U	NA
ISOPHORONE	NA	2 U	NA	2 U	NA	2 U	3 U	3 U	NA
ISOSAFROLE	NA	NA	NA	NA	NA	NA	5 U	5 U	NA
KEPONE	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHAPYRILENE	NA	NA	NA	NA	NA	NA	8 UJ	8 UJ	NA
METHYL METHANE SULFONATE	NA	NA	NA	NA	NA	NA	7 U	7 U	NA
NAPHTHALENE	NA	2 U	NA	2 U	NA	2 U	2 U	2 U	NA
NITROBENZENE	NA	2 U	NA	2 U	NA	2 U	2 U	2 U	NA
N-NITROSODIETHYLAMINE	NA	NA	NA	NA	NA	NA	3 U	3 U	NA
N-NITROSODIMETHYLAMINE	NA	1 U	NA	1 U	NA	1 U	4 U	4 U	NA
N-NITROSO-DI-N-BUTYLAMINE	NA	NA	NA	NA	NA	NA	8 U	8 U	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	2 U	NA	2 U	NA	2 U	4 U	4 U	NA
N-NITROSODIPHENYLAMINE	NA	2 U	NA	2 U	NA	2 U	5 U	5 U	NA
N-NITROSOMETHYLETHYLAMINE	NA	NA	NA	NA	NA	NA	5 U	5 U	NA
N-NITROSOMORPHOLINE	NA	NA	NA	NA	NA	NA	4 U	4 U	NA
N-NITROSOPIPERIDINE	NA	NA	NA	NA	NA	NA	3 U	3 U	NA
N-NITROSOPYRROLIDINE	NA	NA	NA	NA	NA	NA	5 U	5 U	NA
O,O,O-TRIETHYL PHOSPHOROTHIOATE	NA	NA	NA	NA	NA	NA	3 U	3 U	NA

TABLE A2-1
SWMU 8, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-08-MW16S		MPT-08-MW17S		MPT-08-MW18S		MPT-08-MW21S	MPT-08-MW22S	MPT-08-RW01
SAMPLE IDENTIFICATION	MPT-08-MW16S-112806	MPT-08-MW16S-20080828	MPT-08-MW17S-112906	MPT-08-MW17S-20080828	MPT-08-MW18S-112906	MPT-08-MW18S-20080828	MPT-08-GW-MW21S-110606	MPT-08-GW-MW22S-110606	MPT-08-RW01-112706
SAMPLE DATE	20061128	20080828	20061129	20080828	20061129	20080828	20061106	20061106	20061127
SEMIVOLATILES (µg/L)									
O-TOLUIDINE	NA	NA	NA	NA	NA	NA	10 U	10 U	NA
PENTACHLOROBENZENE	NA	NA	NA	NA	NA	NA	3 U	3 U	NA
PENTACHLORONITROBENZENE	NA	NA	NA	NA	NA	NA	4 U	4 U	NA
PENTACHLOROPHENOL	NA	7 UJ	NA	7 UJ	NA	7 UJ	16 U	16 U	NA
PHENACETIN	NA	NA	NA	NA	NA	NA	6 U	6 U	NA
PHENANTHRENE	NA	0.9 U	NA	0.9 U	NA	0.9 U	3 U	3 U	NA
PHENOL	NA	2 U	NA	2 U	NA	2 U	8 U	8 U	NA
PRONAMIDE	NA	NA	NA	NA	NA	NA	5 U	5 U	NA
PYRENE	NA	1 U	NA	1 U	NA	1 U	6 U	6 U	NA
PYRIDINE	NA	NA	NA	NA	NA	NA	2 U	2 U	NA
SAFROLE	NA	NA	NA	NA	NA	NA	3 U	3 U	NA
SOLVENT YELLOW 2	NA	NA	NA	NA	NA	NA	6 U	6 U	NA
SULFOTEPP	NA	NA	NA	NA	NA	NA	3 U	3 U	NA
THIONAZIN	NA	NA	NA	NA	NA	NA	4 U	4 U	NA
POLYCYCLIC AROMATIC HYDROCARBONS (µg/L)									
1-METHYLNAPHTHALENE	4	NA	0.5	NA	0.1 U	NA	NA	NA	0.4
2-METHYLNAPHTHALENE	4	NA	0.09 J	NA	0.07 U	NA	NA	NA	0.2
ACENAPHTHENE	2	NA	0.8	NA	0.07 U	NA	NA	NA	0.2
ACENAPHTHYLENE	0.06 U	NA	0.06 U	NA	0.1 U	NA	NA	NA	0.06 U
ANTHRACENE	0.3	NA	0.06 U	NA	0.06 U	NA	NA	NA	0.06 U
BAP EQUIVALENT	0.05 U	NA	0.05 U	NA	0.05 U	NA	NA	NA	0.05 U
BAP EQUIVALENT(1)	0.0 U	NA	0.0 U	NA	0.0 U	NA	NA	NA	0.0 U
BENZO(A)ANTHRACENE	0.07 U	NA	0.07 U	NA	0.07 U	NA	NA	NA	0.07 U
BENZO(A)PYRENE	0.05 U	NA	0.05 U	NA	0.05 U	NA	NA	NA	0.05 U
BENZO(B)FLUORANTHENE	0.08 U	NA	0.08 U	NA	0.08 U	NA	NA	NA	0.08 U
BENZO(G,H,I)PERYLENE	0.08 U	NA	0.08 U	NA	0.08 U	NA	NA	NA	0.08 U
BENZO(K)FLUORANTHENE	0.1 U	NA	0.1 U	NA	0.1 U	NA	NA	NA	0.1 U
CHRYSENE	0.07 U	NA	0.07 U	NA	0.07 U	NA	NA	NA	0.07 U
DIBENZO(A,H)ANTHRACENE	0.1 U	NA	0.1 U	NA	0.1 U	NA	NA	NA	0.1 U
FLUORANTHENE	0.06 U	NA	0.06 U	NA	0.06 U	NA	NA	NA	0.06 U
FLUORENE	3	NA	1	NA	0.07 U	NA	NA	NA	0.1 J
INDENO(1,2,3-CD)PYRENE	0.09 U	NA	0.09 U	NA	0.09 U	NA	NA	NA	0.09 U
NAPHTHALENE	0.2	NA	0.1 U	NA	0.1 U	NA	NA	NA	0.1 J
PHENANTHRENE	0.2	NA	0.05 U	NA	0.05 U	NA	NA	NA	0.05 U
PYRENE	0.06 U	NA	0.06 U	NA	0.06 U	NA	NA	NA	0.06 U
PESTICIDES/PCBS (µg/L)									
AROCLOR-1016	NA	0.15 UJ	NA	0.15 UJ	NA	0.15 UJ	0.38 UJ	0.38 UJ	NA
AROCLOR-1221	NA	0.38 U	NA	0.38 U	NA	0.38 U	0.16 U	0.16 U	NA
AROCLOR-1232	NA	0.11 U	NA	0.11 U	NA	0.11 U	0.26 U	0.26 U	NA
AROCLOR-1242	NA	0.11 U	NA	0.11 U	NA	0.11 U	0.2 U	0.2 U	NA
AROCLOR-1248	NA	0.075 U	NA	0.075 U	NA	0.075 U	0.18 U	0.18 U	NA
AROCLOR-1254	NA	0.087 U	NA	0.087 U	NA	0.087 U	0.24 U	0.24 U	NA

TABLE A2-1
SWMU 8, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-08-MW16S**		**MPT-08-MW17S**		**MPT-08-MW18S**		**MPT-08-MW21S**	**MPT-08-MW22S**	**MPT-08-RW01**
SAMPLE IDENTIFICATION	MPT-08-MW16S-112806	MPT-08-MW16S-20080828	MPT-08-MW17S-112906	MPT-08-MW17S-20080828	MPT-08-MW18S-112906	MPT-08-MW18S-20080828	MPT-08-GW-MW21S-110606	MPT-08-GW-MW22S-110606	MPT-08-RW01-112706
SAMPLE DATE	20061128	20080828	20061129	20080828	20061129	20080828	20061106	20061106	20061127
PESTICIDES/PCBS (µg/L)									
AROCLOR-1260	NA	0.12 UJ	NA	0.12 UJ	NA	0.12 UJ	0.25 UJ	0.25 UJ	NA
TOTAL AROCLOR	NA	NA	NA	NA	NA	NA	0 U	0 U	NA
TOTAL AROCLOR HALFND	NA	NA	NA	NA	NA	NA	0.835	0.835	NA
METALS (µg/L)									
ALUMINUM	NA	NA	NA	NA	NA	NA	86.6 U	194 U	NA
ANTIMONY	NA	NA	NA	NA	NA	NA	2.68 U	2.68 U	NA
ARSENIC	NA	5.3	NA	0.98 U	NA	1.1	3.09 U	3.09 U	NA
BARIUM	NA	NA	NA	NA	NA	NA	12	8.6	NA
BERYLLIUM	NA	NA	NA	NA	NA	NA	0.3 U	0.3 U	NA
CADMIUM	NA	0.1 U	NA	0.1 U	NA	0.1 U	2.48 U	2.48 U	NA
CALCIUM	NA	NA	NA	NA	NA	NA	83300	81100	NA
CHROMIUM	NA	1.2 U	NA	1.1 U	NA	1 U	1.6 U	2.3 U	NA
COBALT	NA	NA	NA	NA	NA	NA	2.99 U	2.99 U	NA
COPPER	NA	NA	NA	NA	NA	NA	5.8 U	5 U	NA
IRON	NA	NA	NA	NA	NA	NA	517	194	NA
LEAD	NA	2.3	NA	1.2	NA	1.2	1.8 U	1.8 U	NA
MAGNESIUM	NA	NA	NA	NA	NA	NA	6750	16300	NA
MANGANESE	NA	NA	NA	NA	NA	NA	72.4	88.1	NA
MERCURY	NA	NA	NA	NA	NA	NA	0.01 U	0.01 U	NA
NICKEL	NA	NA	NA	NA	NA	NA	9.98 U	9.98 U	NA
POTASSIUM	NA	NA	NA	NA	NA	NA	5310	10300	NA
SELENIUM	NA	NA	NA	NA	NA	NA	4.04 UR	4.04 UR	NA
SILVER	NA	NA	NA	NA	NA	NA	1.21 U	1.21 U	NA
SODIUM	NA	NA	NA	NA	NA	NA	22900	34800	NA
THALLIUM	NA	NA	NA	NA	NA	NA	6.04 U	6.04 U	NA
TIN	NA	NA	NA	NA	NA	NA	3.4 U	3.6 U	NA
VANADIUM	NA	NA	NA	NA	NA	NA	5.89 U	6.5 U	NA
ZINC	NA	NA	NA	NA	NA	NA	4	3.22 U	NA
MISCELLANEOUS PARAMETERS (mg/L)									
SULFIDE	NA	NA	NA	NA	NA	NA	0.05 U	0.05 U	NA
MISCELLANEOUS PARAMETERS (µg/L)									
CYANIDE	NA	NA	NA	NA	NA	NA	3.9	10 U	NA
PETROLEUM HYDROCARBONS (mg/L)									
TPH (C08-C40)	7.5	NA	1.6 U	NA	0.95 U	NA	NA	NA	12

Notes:
NA = Not analyzed
U = Indicates compound was analyzed for but not detected at indicated detection limit.
I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J = Estimated value, value not accurate.
R = Data to be rejected

TABLE A2-2
SWMU 8, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-08-SB25**		**MPT-08-SB27**		**MPT-08-SB29**		**MPT-08-SB30**		**MPT-08-SB31**		**MPT-08-SB32**		**MPT-08-SB33**	
SAMPLE IDENTIFICATION	MPT-08-SB25-01-102706	MPT-08-SB25-09-102706	MPT-08-SB27-01-102706	MPT-08-SB27-09-102706	MPT-08-SB29-01-102706	MPT-08-SB29-09-102706	MPT-08-SB30-01-110206	MPT-08-SB30-09-102706	MPT-08-SB31-01-102706	MPT-08-SB31-09-102706	MPT-08-SB32-01-102706	MPT-08-SB32-09-102706	MPT-08-SB33-01-102606	MPT-08-SB33-09-102606
SAMPLE DATE	20061027	20061027	20061027	20061027	20061027	20061027	20061102	20061027	20061027	20061027	20061027	20061027	20061026	20061026
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	0	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	1	9
VOLATILES (μg/kg)														
1,1,1,2-TETRACHLOROETHANE	0.7 U	0.8 U	0.6 U	0.8 U	0.8 U	0.9 U	2 U	0.9 U	0.6 U	0.8 U	0.7 U	0.7 U	0.5 U	0.7 U
1,1,1-TRICHLOROETHANE	0.4 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.3 U	0.4 U
1,1,2,2-TETRACHLOROETHANE	0.4 U	0.5 U	0.3 U	0.4 U	0.4 U	0.5 U	0.9 U	0.5 U	0.3 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U
1,1,2-TRICHLOROETHANE	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.5 U	0.8 U	0.5 U	0.3 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U
1,1-DICHLOROETHANE	0.5 U	0.6 U	0.4 U	0.6 U	0.6 U	0.6 U	1 U	0.6 U	0.4 U	0.6 U	0.5 U	0.5 U	0.4 U	0.6 U
1,1-DICHLOROETHENE	0.8 U	1 U	0.7 U	1 U	1 U	1 U	2 U	1 U	0.8 U	1 U	0.9 U	0.9 U	0.7 U	0.9 U
1,2,3-TRICHLOROPROPANE	0.8 U	0.9 U	0.6 U	0.9 U	0.9 U	1 U	2 U	1 U	0.7 U	0.9 U	0.8 U	0.8 U	0.6 U	0.8 U
1,2,4-TRICHLOROBENZENE	0.9 U	1 U	0.8 U	1 U	1 U	1 U	2 U	1 U	0.8 U	1 U	1 U	1 U	0.8 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	0.7 U	0.8 U	0.6 U	0.8 U	0.8 U	0.9 U	2 U	0.9 U	0.6 U	0.8 U	0.8 U	0.8 U	0.6 U	0.8 U
1,2-DIBROMOETHANE	0.6 U	0.7 U	0.5 U	0.6 U	0.7 U	0.7 U	1 U	0.7 U	0.5 U	0.6 U	0.6 U	0.6 U	0.4 U	0.6 U
1,2-DICHLOROBENZENE	0.6 U	0.8 U	0.5 U	0.7 U	0.8 U	0.8 U	1 UJ	0.8 U	0.6 U	0.7 U	0.7 U	0.7 U	0.5 U	0.7 U
1,2-DICHLOROETHANE	0.4 U	0.5 U	0.3 U	0.4 U	0.4 U	0.5 U	0.9 U	0.5 U	0.3 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U
1,2-DICHLOROPROPANE	0.5 U	0.7 U	0.4 U	0.6 U	0.6 U	0.7 U	1 U	0.7 U	0.5 U	0.6 U	0.6 U	0.6 U	0.4 U	0.6 U
1,3-DICHLOROBENZENE	0.6 U	0.8 U	0.5 U	0.7 U	0.7 U	0.8 U	1 U	0.8 U	0.6 U	0.7 U	0.6 U	0.7 U	0.5 U	0.7 U
1,4-DICHLOROBENZENE	0.4 U	0.5 U	0.3 U	0.5 U	0.5 U	0.6 U	1 U	0.6 U	0.4 U	0.5 U	0.4 U	0.5 U	0.3 U	0.5 U
1,4-DIOXANE	36 UR	45 UR	30 UR	42 UR	43 UR	48 UR	84 UR	47 UR	33 UR	42 UR	39 UR	40 UR	29 UR	40 UR
2-BUTANONE	6 U	8 U	5 U	8 J	7 U	8 U	14 U	8 U	6 U	7 U	7 U	7 U	5 U	7 U
2-HEXANONE	4 U	4 U	3 U	4 U	4 U	5 U	8 U	4 U	3 U	4 U	4 U	4 U	3 U	4 U
3-CHLOROPROPENE	0.5 U	0.7 U	0.4 U	0.6 U	0.6 UJ	0.7 UJ	1 U	0.7 U	0.5 UJ	0.6 UJ	0.6 UJ	0.6 UJ	0.4 U	0.6 U
4-METHYL-2-PENTANONE	2 U	3 U	2 U	3 U	3 U	3 U	5 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U
ACETONE	6 U	7 U	68 J	46 J	7 U	8 U	13 U	8 U	5 U	6 U	6 U	6 U	5 U	6 U
ACETONITRILE	10 UR	12 UR	8 UR	12 UR	12 UR	13 UR	23 UR	13 UR	9 UR	11 UR	11 UR	11 UR	8 UR	11 UR
ACROLEIN	4 UR	5 UR	3 UR	6 J	5 UR	6 UR	10 UR	6 UR	4 UR	5 UR	4 UR	5 UR	3 UR	5 UR
ACRYLONITRILE	11 U	13 U	9 U	12 UR	13 U	14 U	25 U	14 U	10 U	12 U	12 U	12 U	9 U	12 U
BENZENE	0.4 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	0.9 U	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.3 U	0.4 U
BROMODICHLOROMETHANE	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.4 U	0.6 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U
BROMOFORM	0.7 U	0.9 U	0.6 U	0.8 U	0.8 U	0.9 U	2 U	0.9 U	0.6 U	0.8 U	0.8 U	0.8 U	0.6 U	0.8 U
BROMOMETHANE	0.8 U	1 U	0.7 U	1 U	1 U	1 U	2 U	1 U	0.8 U	1 U	0.9 U	0.9 U	0.7 U	0.9 U
CARBON DISULFIDE	0.4 U	0.6 U	0.4 U	4	0.5 U	0.6 U	1 U	0.6 U	0.4 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U
CARBON TETRACHLORIDE	0.5 U	0.6 U	0.4 U	0.5 U	0.5 U	0.6 U	1 U	0.6 U	0.4 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U
CHLOROBENZENE	0.3 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U	0.7 U	0.4 U	0.3 U	0.4 U	0.3 U	0.4 U	0.2 U	0.4 U
CHLORODIBROMOMETHANE	0.7 U	0.9 U	0.6 U	0.9 U	0.9 U	1 U	2 U	1 U	0.7 U	0.8 U	0.8 U	0.8 U	0.6 U	0.8 U
CHLOROETHANE	0.8 U	1 U	0.7 U	1 U	1 U	1 U	2 U	1 U	0.8 U	0.9 U	0.9 U	0.9 U	0.7 U	0.9 U
CHLOROFORM	0.4 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	0.9 U	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.3 U	0.4 U
CHLOROMETHANE	0.6 U	0.7 U	0.5 U	0.7 U	0.7 U	0.8 U	1 U	0.8 U	0.5 U	0.7 U	0.6 U	0.6 U	0.5 U	0.6 U
CHLOROPRENE	0.6 U	0.8 U	0.5 U	0.7 U	0.8 U	0.8 U	1 U	0.8 U	0.6 U	0.7 U	0.7 U	0.7 U	0.5 U	0.7 U
CIS-1,2-DICHLOROETHENE	0.5 U	0.6 U	0.4 U	0.6 U	0.6 U	0.7 U	1 U	0.7 U	0.5 U	0.6 U	0.6 U	0.6 U	0.4 U	0.6 U
CIS-1,3-DICHLOROPROPENE	0.5 U	0.6 U	0.4 U	0.5 U	0.6 U	0.6 U	1 UJ	0.6 U	0.4 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U
DIBROMOMETHANE	0.3 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U
DICHLORODIFLUOROMETHANE	0.4 U	0.5 U	0.4 U	0.5 U	0.5 U	0.6 U	1 U	0.6 U	0.4 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U

TABLE A2-2
SWMU 8, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-08-SB25**		**MPT-08-SB27**		**MPT-08-SB29**		**MPT-08-SB30**		**MPT-08-SB31**		**MPT-08-SB32**		**MPT-08-SB33**	
SAMPLE IDENTIFICATION	MPT-08-SB25-01-102706	MPT-08-SB25-09-102706	MPT-08-SB27-01-102706	MPT-08-SB27-09-102706	MPT-08-SB29-01-102706	MPT-08-SB29-09-102706	MPT-08-SB30-01-110206	MPT-08-SB30-09-102706	MPT-08-SB31-01-102706	MPT-08-SB31-09-102706	MPT-08-SB32-01-102706	MPT-08-SB32-09-102706	MPT-08-SB33-01-102606	MPT-08-SB33-09-102606
SAMPLE DATE	20061027	20061027	20061027	20061027	20061027	20061027	20061102	20061027	20061027	20061027	20061027	20061027	20061026	20061026
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	0	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	1	9
VOLATILES (µg/kg)														
ETHYL METHACRYLATE	0.5 U	0.6 U	0.4 U	0.6 U	0.6 U	0.6 U	1 U	0.6 U	0.4 U	0.6 U	0.5 U	0.5 U	0.4 U	0.5 U
ETHYLBENZENE	0.4 U	0.4 U	0.3 J	0.4 U	0.4 U	0.4 U	0.8 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U
ISOBUTANOL	16 UR	19 UR	13 UR	18 UR	18 UR	20 UR	35 UR	20 UR	14 UR	18 UR	17 UR	17 UR	12 UR	17 UR
M+P-XYLENES	2 U	2 U	1 U	2 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	1 U	2 U
METHACRYLONITRILE	5 U	7 U	4 U	6 U	6 U	7 U	12 U	7 U	5 U	6 U	6 U	6 U	4 U	6 U
METHYL IODIDE	0.9 UJ	1 UJ	0.8 UJ	1 UJ	1 U	1 U	2 U	1 UJ	0.8 U	1 U	1 U	1 U	0.8 UJ	1 UJ
METHYL METHACRYLATE	0.6 U	0.7 U	0.5 U	0.7 U	0.7 U	0.8 U	1 U	0.8 U	0.6 U	0.7 U	0.6 U	0.6 U	0.5 U	0.7 U
METHYLENE CHLORIDE	1 U	6 U	2 U	3 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U
O-XYLENE	0.7 U	0.8 U	0.6 U	0.8 U	0.8 U	0.9 U	2 U	0.9 U	0.6 U	0.8 U	0.7 U	0.7 U	0.5 U	0.7 U
PENTACHLOROETHANE	0.7 U	0.9 U	0.6 U	0.8 U	0.9 U	1 U	2 U	1 U	0.7 U	0.8 U	0.8 U	0.8 U	0.6 U	0.8 U
PROPIONITRILE	7 UR	8 UR	6 UR	8 UR	8 UR	9 UR	16 UR	9 UR	6 UR	8 UR	7 UR	8 UR	6 UR	8 UR
STYRENE	0.5 U	0.6 U	0.4 U	0.5 U	0.6 U	0.6 U	1 U	0.6 U	0.4 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U
TETRACHLOROETHENE	0.8 U	0.9 U	0.6 U	0.9 U	0.9 U	1 U	2 U	1 U	0.7 U	0.9 U	0.8 U	0.8 U	0.6 U	0.8 U
TOLUENE	0.8 U	1 U	0.7 U	0.9 U	1 U	1 U	2 U	1 U	0.7 U	0.9 U	0.9 U	0.9 U	0.6 U	0.9 U
TRANS-1,2-DICHLOROETHENE	0.4 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	0.9 U	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.3 U	0.4 U
TRANS-1,3-DICHLOROPROPENE	0.4 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.3 U	0.4 U
TRANS-1,4-DICHLORO-2-BUTENE	1 U	1 U	0.8 U	1 U	1 U	1 U	2 U	1 U	0.9 U	1 U	1 U	1 U	0.8 U	1 U
TRICHLOROETHENE	0.7 U	0.9 U	0.6 U	0.8 U	0.8 U	0.9 U	2 U	0.9 U	0.6 U	0.8 U	0.8 U	0.8 U	0.6 U	0.8 U
TRICHLOROFLUOROMETHANE	0.5 U	0.6 U	0.4 U	0.5 U	0.5 U	0.6 U	1 U	0.6 U	0.4 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U
VINYL ACETATE	0.7 U	0.8 U	0.6 U	0.8 U	0.8 U	0.9 U	2 U	0.9 U	0.6 U	0.8 U	0.7 U	0.7 U	0.5 U	0.7 U
VINYL CHLORIDE	0.7 U	0.8 U	0.5 U	0.8 U	0.8 U	0.9 U	2 U	0.9 U	0.6 U	0.8 U	0.7 U	0.7 U	0.5 U	0.7 U
SEMIVOLATILES (µg/kg)														
1,2,4,5-TETRACHLOROBENZENE	160 U	180 U	150 U	190 U	150 U	200 U	150 U	190 U	160 U	190 U	160 U	180 U	140 U	200 U
1,2,4-TRICHLOROBENZENE	150 U	160 U	140 U	180 U	140 U	180 U	140 U	170 U	140 U	170 U	150 U	170 U	130 U	180 U
1,3,5-TRINITROBENZENE	260 U	280 U	240 U	300 U	240 U	310 U	230 U	300 U	250 U	300 U	260 U	290 U	230 U	320 U
1,3-DINITROBENZENE	180 U	190 U	170 U	210 U	170 U	220 U	160 U	210 U	170 U	210 U	180 U	200 U	160 U	220 U
1,4-NAPHTHOQUINONE	300 U	330 U	290 U	360 U	290 U	370 U	280 U	360 U	290 U	360 U	300 U	340 U	270 U	370 U
1,4-PHENYLENEDIAMINE	190 UR	200 UR	180 UR	220 UR	180 UR	230 UR	170 U	220 UR	180 UR	220 UR	190 UR	210 UR	170 UR	230 UR
1-NAPHTHYLAMINE	210 UJ	230 UJ	200 UJ	250 UJ	200 UJ	250 UJ	190 UJ	240 UJ	200 UJ	240 UJ	210 UJ	240 UJ	190 UJ	260 UJ
2,2'-OXYBIS(1-CHLOROPROPANE)	150 U	160 U	140 UJ	180 U	140 U	180 U	140 U	180 U	140 U	180 U	150 U	170 U	140 U	180 U
2,3,4,6-TETRACHLOROPHENOL	280 U	310 U	270 U	330 U	270 U	340 U	260 U	330 U	270 U	330 U	280 U	320 U	250 U	350 U
2,4,5-TRICHLOROPHENOL	280 U	300 U	260 U	320 U	260 U	330 U	250 U	320 U	260 U	320 U	270 U	310 U	250 U	340 U
2,4,6-TRICHLOROPHENOL	240 U	260 U	220 U	280 U	220 U	290 U	220 U	280 U	230 U	280 U	240 U	270 U	210 U	290 U
2,4-DICHLOROPHENOL	290 U	320 U	280 U	340 U	280 U	350 U	270 U	340 U	280 U	340 U	290 U	330 U	260 U	360 U
2,4-DIMETHYLPHENOL	250 U	270 U	240 U	300 U	240 U	300 U	230 U	290 U	240 U	300 U	250 U	280 U	220 U	310 U
2,4-DINITROPHENOL	920 U	1000 U	870 U	1100 U	870 U	1100 U	840 U	1100 U	880 U	1100 U	920 U	1000 U	820 U	1100 U
2,4-DINITROTOLUENE	250 U	270 U	230 U	290 U	240 U	300 U	230 U	290 U	240 U	290 U	250 U	280 U	220 U	300 U
2,6-DICHLOROPHENOL	340 U	360 U	320 U	390 U	320 U	400 U	310 U	390 U	320 U	390 U	330 U	380 U	300 U	410 U
2,6-DINITROTOLUENE	200 U	220 U	190 U	240 U	190 U	240 U	180 U	240 U	190 U	240 U	200 U	230 U	180 U	250 U
2-ACETYLAMINOFLUORENE	330 U	360 U	320 U	390 U	320 U	400 U	300 U	390 U	320 U	390 U	330 U	380 U	300 U	410 U

TABLE A2-2
SWMU 8, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-08-SB25**		**MPT-08-SB27**		**MPT-08-SB29**		**MPT-08-SB30**		**MPT-08-SB31**		**MPT-08-SB32**		**MPT-08-SB33**	
SAMPLE IDENTIFICATION	MPT-08-SB25-01-102706	MPT-08-SB25-09-102706	MPT-08-SB27-01-102706	MPT-08-SB27-09-102706	MPT-08-SB29-01-102706	MPT-08-SB29-09-102706	MPT-08-SB30-01-110206	MPT-08-SB30-09-102706	MPT-08-SB31-01-102706	MPT-08-SB31-09-102706	MPT-08-SB32-01-102706	MPT-08-SB32-09-102706	MPT-08-SB33-01-102606	MPT-08-SB33-09-102606
SAMPLE DATE	20061027	20061027	20061027	20061027	20061027	20061027	20061102	20061027	20061027	20061027	20061027	20061027	20061026	20061026
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	0	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	1	9
SEMIVOLATILES (µg/kg)														
2-CHLORONAPHTHALENE	280 U	300 U	260 U	320 U	260 U	330 U	250 U	320 U	260 U	320 U	270 U	310 U	250 U	340 U
2-CHLOROPHENOL	270 U	290 U	250 U	310 U	250 U	320 U	240 U	310 U	260 U	310 U	270 U	300 U	240 U	330 U
2-METHYLNAPHTHALENE	150 U	160 U	140 U	180 U	140 U	180 U	140 U	180 U	140 U	180 U	150 U	170 U	140 U	190 U
2-METHYLPHENOL	280 U	310 U	270 U	340 U	270 U	340 U	260 U	330 U	270 U	340 U	280 U	320 U	260 U	350 U
2-NAPHTHYLAMINE	200 UJ	220 UJ	190 UJ	240 UJ	190 UJ	240 UJ	180 UJ	240 UJ	190 UJ	240 UJ	200 UJ	230 UJ	180 UJ	250 UJ
2-NITROANILINE	170 U	180 U	160 U	200 U	160 U	200 U	150 UJ	200 U	160 U	200 U	170 U	190 U	150 U	210 U
2-NITROPHENOL	260 U	280 U	240 U	300 U	240 U	310 U	230 U	300 U	240 U	300 U	260 U	290 U	230 U	310 U
2-PICOLINE	180 U	190 U	160 U	210 U	170 U	210 U	160 U	200 U	170 U	200 U	170 U	200 U	160 U	220 U
3&4-METHYLPHENOL	280 U	310 U	270 U	330 U	270 U	340 U	260 U	330 U	270 U	330 U	280 U	320 U	250 U	350 U
3,3'-DICHLOROBENZIDINE	320 UJ	350 UJ	310 UJ	380 UJ	310 UJ	390 UJ	300 UJ	380 UJ	310 UJ	380 UJ	320 UJ	360 UJ	290 UJ	400 UJ
3,3'-DIMETHYLBENZIDINE	100 UJ	110 UJ	94 UJ	120 UJ	95 UJ	120 UJ	91 UJ	120 UJ	96 UJ	120 UJ	100 UJ	110 UJ	89 UJ	120 UJ
3-METHYLCHOLANTHRENE	330 U	360 U	310 U	390 U	310 U	400 U	300 U	390 U	320 U	390 U	330 U	370 U	300 U	410 U
3-NITROANILINE	360 UJ	390 UJ	340 UJ	420 UJ	340 UJ	430 UJ	330 UJ	420 UJ	340 UJ	420 UJ	360 UJ	400 UJ	320 UJ	440 UJ
4,6-DINITRO-2-METHYLPHENOL	870 U	940 U	820 U	1000 U	820 U	1000 U	800 U	1000 U	830 U	1000 U	870 U	980 U	780 U	1100 U
4-AMINOBIPHENYL	250 UJ	270 UJ	230 UJ	290 UJ	230 UJ	300 UJ	220 UJ	290 UJ	240 UJ	290 UJ	250 UJ	280 UJ	220 UJ	300 UJ
4-BROMOPHENYL PHENYL ETHER	190 U	200 U	180 U	220 U	180 U	220 U	170 U	220 U	180 U	220 U	190 U	210 U	170 U	230 U
4-CHLORO-3-METHYLPHENOL	370 U	410 U	350 U	440 U	350 U	450 U	340 U	440 U	360 U	440 U	370 U	420 U	330 U	460 U
4-CHLOROANILINE	180 UJ	200 UJ	170 UJ	210 UJ	170 U	220 U	160 U	210 UJ	170 U	210 U	180 U	200 U	160 U	220 UJ
4-CHLOROPHENYL PHENYL ETHER	140 U	150 U	130 U	160 U	130 U	170 U	130 U	160 U	130 U	160 U	140 U	160 U	120 U	170 U
4-NITROANILINE	380 UJ	410 UJ	360 UJ	440 UJ	360 UJ	460 UJ	340 UJ	440 UJ	360 UJ	440 UJ	380 UJ	420 UJ	340 UJ	460 UJ
4-NITROPHENOL	920 U	1000 U	870 U	1100 U	880 U	1100 U	840 UJ	1100 U	880 U	1100 U	920 U	1000 U	820 U	1100 U
4-NITROQUINOLINE-1-OXIDE	440 UR	480 UR	420 UR	520 UR	420 UR	530 UR	400 UR	520 UR	420 UR	520 UR	440 UR	500 UR	400 UR	540 UR
5-NITRO-O-TOLUIDINE	340 U	370 U	320 U	400 U	330 U	420 U	320 U	400 U	330 U	400 U	340 U	390 U	310 U	420 U
7,12-DIMETHYLBENZ(A)ANTHRACENE	380 U	410 U	360 U	440 U	360 U	460 U	340 U	440 U	360 U	440 U	380 U	420 U	340 U	460 U
A,A-DIMETHYLPHENETHYLAMINE	170 UR	190 UR	160 UR	200 UR	160 UR	210 UR	160 U	200 UR	160 UR	200 UR	170 UR	190 UR	150 UR	210 UR
ACENAPHTHENE	120 U	130 U	110 U	140 U	110 U	140 U	110 U	140 U	120 U	140 U	120 U	140 U	110 U	150 U
ACENAPHTHYLENE	120 U	130 U	110 U	140 U	110 U	140 U	110 U	140 U	120 U	140 U	120 U	140 U	110 U	150 U
ACETOPHENONE	270 U	300 U	260 U	320 U	260 U	330 U	250 U	320 U	260 U	320 U	270 U	310 U	240 U	340 U
ANILINE	420 UJ	450 UJ	390 U	490 UJ	390 U	500 U	380 U	480 UJ	400 U	490 U	410 U	470 U	370 U	510 UJ
ANTHRACENE	120 U	130 U	110 U	140 U	110 U	140 U	110 U	140 U	110 U	140 U	120 U	130 U	110 U	150 U
ARAMITE	340 UJ	370 UJ	320 UJ	400 UJ	320 U	410 U	310 U	400 UJ	330 U	400 U	340 U	390 U	310 U	420 U
BAP EQUIVALENT	120 U	130 U	110 U	140 U	120 U	150 U	110 U	140 U	120 U	140 U	120 U	140 U	110 U	150 U
BAP EQUIVALENT(1)	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U
BENZO(A)ANTHRACENE	110 U	120 U	100 U	130 U	100 U	130 U	100 U	130 U	100 U	130 U	110 U	120 U	98 U	130 U
BENZO(A)PYRENE	120 U	130 U	110 U	140 U	120 U	150 U	110 U	140 U	120 U	140 U	120 U	140 U	110 U	150 U
BENZO(B)FLUORANTHENE	150 U	160 U	140 U	180 U	140 U	180 U	140 U	180 U	140 U	180 U	150 U	170 U	140 U	190 U
BENZO(G,H,I)PERYLENE	190 U	210 U	180 U	230 U	180 U	230 U	180 U	230 U	190 U	230 U	190 U	220 U	170 U	240 U
BENZO(K)FLUORANTHENE	150 U	170 U	150 U	180 U	150 U	190 U	140 U	180 U	150 U	180 U	150 U	170 U	140 U	190 U
BENZYL ALCOHOL	470 U	510 U	450 U	560 U	450 U	570 U	430 U	550 U	450 U	560 U	470 U	530 U	420 U	580 U
BIS(2-CHLOROETHOXY)METHANE	150 U	160 U	140 U	180 U	140 U	180 U	140 U	180 U	140 U	180 U	150 U	170 U	140 U	190 U

TABLE A2-2
SWMU 8, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-08-SB25**		**MPT-08-SB27**		**MPT-08-SB29**		**MPT-08-SB30**		**MPT-08-SB31**		**MPT-08-SB32**		**MPT-08-SB33**	
SAMPLE IDENTIFICATION	MPT-08-SB25-01-102706	MPT-08-SB25-09-102706	MPT-08-SB27-01-102706	MPT-08-SB27-09-102706	MPT-08-SB29-01-102706	MPT-08-SB29-09-102706	MPT-08-SB30-01-110206	MPT-08-SB30-09-102706	MPT-08-SB31-01-102706	MPT-08-SB31-09-102706	MPT-08-SB32-01-102706	MPT-08-SB32-09-102706	MPT-08-SB33-01-102606	MPT-08-SB33-09-102606
SAMPLE DATE	20061027	20061027	20061027	20061027	20061027	20061027	20061102	20061027	20061027	20061027	20061027	20061027	20061026	20061026
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	0	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	1	9
SEMIVOLATILES (µg/kg)														
BIS(2-CHLOROETHYL)ETHER	160 UJ	180 UJ	150 U	190 UJ	150 U	190 U	150 U	190 UJ	150 U	190 U	160 U	180 U	140 U	200 UJ
BIS(2-ETHYLHEXYL)PHTHALATE	360 U	400 U	340 U	430 U	350 U	440 U	330 U	430 U	350 U	430 U	360 U	410 U	330 U	450 U
BUTYL BENZYL PHTHALATE	170 U	180 U	160 U	200 U	160 U	200 U	150 U	200 U	160 U	200 U	170 U	190 U	150 U	210 U
CHLOROBENZILATE	180 U	200 U	170 U	220 U	170 U	220 U	170 U	210 U	180 U	210 U	180 U	210 U	160 U	220 U
CHRYSENE	130 U	140 U	120 U	160 U	130 U	160 U	120 U	160 U	130 U	160 U	130 U	150 U	120 U	160 U
DIALLATE	210 U	220 U	200 U	240 U	200 U	250 U	190 U	240 U	200 U	240 U	210 U	230 U	190 U	260 U
DIBENZO(A,H)ANTHRACENE	180 U	200 U	170 U	210 U	170 U	220 U	160 U	210 U	170 U	210 U	180 U	200 U	160 U	220 U
DIBENZOFURAN	120 U	130 U	110 U	140 U	110 U	140 U	110 U	140 U	110 U	140 U	120 U	130 U	100 U	140 U
DIETHYL PHTHALATE	240 U	260 U	220 U	280 U	230 U	290 U	220 U	280 U	230 U	280 U	240 U	270 U	210 U	290 U
DIMETHOATE	260 U	280 U	250 U	310 U	250 U	320 U	240 U	300 U	250 U	310 U	260 U	290 U	230 U	320 U
DIMETHYL PHTHALATE	150 U	170 U	140 U	180 U	140 U	180 U	140 U	180 U	150 U	180 U	150 U	170 U	140 U	190 U
DI-N-BUTYL PHTHALATE	250 U	270 U	240 U	300 U	240 U	300 U	230 U	290 U	240 U	300 U	250 U	280 U	220 U	310 U
DI-N-OCTYL PHTHALATE	290 U	310 U	270 U	340 U	270 U	340 U	260 U	330 U	270 U	340 U	290 U	320 U	260 U	350 U
DINOSEB	290 U	310 U	270 U	340 U	270 U	350 U	260 U	340 U	280 U	340 U	290 U	330 U	260 U	360 U
ETHYL METHANE SULFONATE	320 U	350 U	310 U	380 U	310 U	390 U	300 U	380 U	310 U	380 U	320 U	370 U	290 U	400 U
ETHYL PARATHION	430 U	470 U	410 U	510 U	410 U	520 U	400 U	510 U	410 U	510 U	430 U	490 U	390 U	530 U
FLUORANTHENE	230 U	250 U	220 U	270 U	220 U	280 U	210 U	270 U	220 U	270 U	230 U	260 U	210 U	290 U
FLUORENE	120 U	130 U	110 U	140 U	120 U	150 U	110 U	140 U	120 U	140 U	120 U	140 U	110 U	150 U
HEXACHLOROBENZENE	150 U	170 U	140 U	180 U	140 U	180 U	140 U	180 U	150 U	180 U	150 U	170 U	140 U	190 U
HEXACHLOROBUTADIENE	130 U	140 U	120 U	160 U	120 U	160 U	120 U	150 U	130 U	150 U	130 U	150 U	120 U	160 U
HEXACHLOROCYCLOPENTADIENE	180 U	200 U	170 U	210 U	170 U	220 U	170 U	210 U	170 U	210 U	180 U	200 U	160 U	220 UJ
HEXACHLOROETHANE	160 U	180 U	150 U	190 U	150 U	200 U	150 U	190 U	160 U	190 U	160 U	180 U	140 U	200 U
HEXACHLOROPHENE	190 UR	200 UR	180 UR	220 UR	180 UR	230 UR	170 U	220 UR	180 UR	220 UR	190 UR	210 UR	170 UR	230 UR
HEXACHLOROPROPENE	170 U	190 U	160 U	200 U	160 U	210 U	160 U	200 U	160 U	200 U	170 U	190 U	150 U	210 UJ
INDENO(1,2,3-CD)PYRENE	310 U	340 U	290 UJ	360 U	290 U	370 U	280 UJ	360 U	300 U	360 U	310 U	350 U	280 U	380 U
ISODRIN	200 U	220 U	190 U	240 U	190 U	250 U	190 U	240 U	200 U	240 U	200 U	230 U	180 U	250 U
ISOPHORONE	140 U	150 U	130 U	160 U	130 U	160 U	120 U	160 U	130 U	160 U	140 U	150 U	120 U	170 U
ISOSAFROLE	150 U	160 U	140 U	180 U	140 U	180 U	140 U	180 U	140 U	180 U	150 U	170 U	140 U	190 U
METHAPYRILENE	140 UR	150 UR	130 UR	160 UR	130 UR	170 UR	130 UR	160 UR	130 UR	160 UR	140 UR	160 UR	120 UR	170 UR
METHYL METHANE SULFONATE	300 U	320 U	280 U	350 U	280 U	360 U	270 U	350 U	280 U	350 U	300 U	340 U	270 U	370 U
NAPHTHALENE	140 U	150 U	130 U	160 U	130 U	170 U	130 U	160 U	130 U	160 U	140 U	160 U	120 U	170 U
NITROBENZENE	130 U	140 U	120 U	150 U	120 U	160 U	120 U	150 U	120 U	150 U	130 U	140 U	110 U	160 U
N-NITROSODIETHYLAMINE	140 U	150 U	130 U	160 U	130 U	170 U	130 U	160 U	140 U	160 U	140 U	160 U	130 U	170 U
N-NITROSODIMETHYLAMINE	170 U	180 U	160 U	200 U	160 U	200 U	150 UJ	190 U	160 U	200 U	160 U	190 U	150 U	200 U
N-NITROSO-DI-N-BUTYLAMINE	270 U	290 U	250 U	320 U	250 U	320 U	240 U	310 U	260 U	320 U	270 U	300 U	240 U	330 U
N-NITROSO-DI-N-PROPYLAMINE	210 U	230 U	200 U	250 U	200 U	250 U	190 U	240 U	200 U	240 U	210 U	240 U	190 U	260 U
N-NITROSODIPHENYLAMINE	280 U	300 U	260 U	320 U	260 U	330 U	250 U	320 U	260 U	320 U	270 U	310 U	250 U	340 U
N-NITROSOMETHYLETHYLAMINE	160 U	180 U	150 U	190 U	160 U	200 U	150 U	190 U	160 U	190 U	160 U	180 U	150 U	200 U
N-NITROSOMORPHOLINE	130 U	140 U	130 U	160 U	130 U	160 U	120 U	160 U	130 U	160 U	130 U	150 U	120 U	160 U
N-NITROSOPIPERIDINE	140 U	150 U	130 U	160 U	130 U	160 U	120 U	160 U	130 U	160 U	140 U	150 U	120 U	170 U

TABLE A2-2
SWMU 8, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-08-SB25**		**MPT-08-SB27**		**MPT-08-SB29**		**MPT-08-SB30**		**MPT-08-SB31**		**MPT-08-SB32**		**MPT-08-SB33**	
SAMPLE IDENTIFICATION	MPT-08-SB25-01-102706	MPT-08-SB25-09-102706	MPT-08-SB27-01-102706	MPT-08-SB27-09-102706	MPT-08-SB29-01-102706	MPT-08-SB29-09-102706	MPT-08-SB30-01-110206	MPT-08-SB30-09-102706	MPT-08-SB31-01-102706	MPT-08-SB31-09-102706	MPT-08-SB32-01-102706	MPT-08-SB32-09-102706	MPT-08-SB33-01-102606	MPT-08-SB33-09-102606
SAMPLE DATE	20061027	20061027	20061027	20061027	20061027	20061027	20061102	20061027	20061027	20061027	20061027	20061027	20061026	20061026
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	0	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	1	9
SEMIVOLATILES (µg/kg)														
N-NITROSOPYRROLIDINE	230 U	250 U	220 U	270 U	220 U	280 U	210 U	270 U	220 U	270 U	230 U	260 U	210 U	290 U
O,O,O-TRIETHYL PHOSPHOROTHIOATE	150 U	160 U	140 U	180 U	140 U	180 U	140 U	180 U	140 U	180 U	150 U	170 U	130 U	180 U
O-TOLUIDINE	700 U	760 U	660 U	830 U	670 U	850 U	640 U	820 U	670 U	830 U	700 U	790 U	630 U	860 U
PENTACHLOROBENZENE	110 U	120 U	100 U	130 U	100 U	130 U	99 U	130 U	100 U	130 U	110 U	120 U	97 U	130 U
PENTACHLORONITROBENZENE	160 U	180 U	150 U	190 U	150 U	190 U	150 U	190 U	150 U	190 U	160 U	180 U	140 U	200 U
PENTACHLOROPHENOL	750 U	810 U	710 U	880 U	710 U	900 U	680 U	870 U	720 U	880 U	750 U	840 U	670 U	920 U
PHENACETIN	240 U	260 U	220 U	280 U	220 U	280 U	220 U	280 U	230 U	280 U	240 U	270 U	210 U	290 U
PHENANTHRENE	88 U	95 U	83 U	100 U	83 U	100 U	80 U	100 U	84 U	100 U	87 U	99 U	78 U	110 U
PHENOL	260 U	290 U	250 U	310 U	250 U	320 U	240 U	310 U	250 U	310 U	260 U	300 U	240 U	320 U
PRONAMIDE	190 U	200 U	180 U	220 U	180 U	220 U	170 U	220 U	180 U	220 U	190 U	210 U	170 U	230 U
PYRENE	160 U	180 U	160 U	190 U	160 U	200 U	150 U	190 U	160 U	190 U	160 U	180 U	150 U	200 U
PYRIDINE	260 U	280 U	240 U	300 U	240 U	310 U	240 U	300 U	250 U	300 U	260 U	290 U	230 U	320 U
SAFROLE	180 U	190 U	170 U	210 U	170 U	210 U	160 U	200 U	170 U	210 U	180 U	200 U	160 U	220 U
SOLVENT YELLOW 2	240 U	260 U	220 U	280 U	220 U	290 U	220 U	280 U	230 U	280 U	240 U	270 U	210 U	290 U
SULFOTEPP	170 U	190 U	160 U	200 U	160 U	210 U	160 U	200 U	160 U	200 U	170 U	190 U	150 U	210 U
THIONAZIN	270 U	290 U	260 U	320 U	260 U	330 U	250 U	320 U	260 U	320 U	270 U	300 U	240 U	330 U
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)														
BAP EQUIVALENT	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BAP EQUIVALENT(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES/PCBS (UG/KG)														
AROCLOR-1016	18 U	20 U	17 U	21 U	17 U	22 U	17 U	21 U	17 U	21 U	18 U	20 U	16 U	22 U
AROCLOR-1221	14 U	15 U	13 U	16 U	13 U	16 U	12 U	16 U	13 U	16 U	14 U	15 U	12 U	17 U
AROCLOR-1232	6 U	6.5 U	5.7 U	7.1 U	5.7 U	7.3 U	5.5 U	7 U	5.8 U	7.1 U	6 U	6.8 U	5.4 U	7.4 U
AROCLOR-1242	7.6 U	8.3 U	7.2 U	9 U	7.2 U	9.2 U	7 U	8.9 U	7.3 U	8.9 U	7.6 U	8.6 U	6.8 U	9.4 U
AROCLOR-1248	6.5 U	7 U	6.1 U	7.6 U	18 U	7.8 U	5.9 U	7.6 U	6.2 U	7.6 U	6.5 U	7.3 U	5.8 U	8 U
AROCLOR-1254	15 U	16 U	14 U	17 U	14 U	18 U	14 U	17 U	14 U	17 U	15 U	17 U	13 U	18 U
AROCLOR-1260	16 U	17 U	15 U	19 U	15 U	19 U	14 U	18 U	15 U	19 U	16 U	18 U	14 U	20 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U
TOTAL AROCLOR HALFND	41.55	44.9	39	48.35	44.95	49.65	37.7	47.75	39.15	48.3	41.55	46.35	36.5	50.9
METALS (mg/kg)														
ALUMINUM	1450	411	1660	3370	5650 J	755 J	1360 J	611	2640 J	693 J	613 J	1010 J	1140 J	684 J
ANTIMONY	0.27 U	0.26 U	0.28 U	0.25 U	0.26 U	0.36 UJ	0.25 U	0.35 U	0.21 UJ	0.34 UJ	0.26 UJ	0.29 UJ	0.3 J	0.35 UJ
ARSENIC	1.3 U	0.5 U	1.5 U	0.56 U	1.2 U	1.2 U	1.2 U	0.61 U	1.3 U	1.4 U	1.4 U	1.7 U	3.1 J	1.1 U

TABLE A2-2
SWMU 8, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-08-SB25		MPT-08-SB27		MPT-08-SB29		MPT-08-SB30		MPT-08-SB31		MPT-08-SB32		MPT-08-SB33	
SAMPLE IDENTIFICATION	MPT-08-SB25-01-102706	MPT-08-SB25-09-102706	MPT-08-SB27-01-102706	MPT-08-SB27-09-102706	MPT-08-SB29-01-102706	MPT-08-SB29-09-102706	MPT-08-SB30-01-110206	MPT-08-SB30-09-102706	MPT-08-SB31-01-102706	MPT-08-SB31-09-102706	MPT-08-SB32-01-102706	MPT-08-SB32-09-102706	MPT-08-SB33-01-102606	MPT-08-SB33-09-102606
SAMPLE DATE	20061027	20061027	20061027	20061027	20061027	20061027	20061102	20061027	20061027	20061027	20061027	20061027	20061026	20061026
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	0	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	1	9
METALS (mg/kg)														
BARIUM	8.2	4.9	8.9	9.3	13.4	7.4	6.3	6.4	6.5	4	8.1	6.7	10.2	4.8
BERYLLIUM	0.12 U	0.09 U	0.2 U	0.18 U	0.14 U	0.17 U	0.12 U	0.15 U	0.14 U	0.17 U	0.12 U	0.14 U	0.13 U	0.17 U
CADMIUM	0.07 J	0.05 U	0.05 U	0.1 J	0.05 U	0.07 UJ	0.05 U	0.06 U	0.04 UJ	0.06 UJ	0.05 UJ	0.05 UJ	0.08 J	0.06 UJ
CALCIUM	86400	81500	83200	97000	7460	147000	75900	164000	31400	72300	120000	142000	86300	102000
CHROMIUM	4.4	2.5	4.7	8.5	7.4	3.5 J	3.4	4.5	5.5	3.4 J	2.6 J	5.2	3.9	3.2 J
COBALT	0.3	0.12 U	0.2	0.7	0.36	0.16 U	0.35	0.33	0.36	0.15 U	0.18	0.25	0.33	0.16 U
COPPER	2.5 J	0.59 U	2.4 J	1.2 J	2.6	0.68 J	1.7 U	0.45 U	3.9 J	0.34 J	0.8 J	1.1 J	1.5 J	1.2 J
IRON	1180	445	1230	2820	2360	715	1130	677	1930	740	722	1000	1080	909
LEAD	4.8	0.29 J	5.9	1.2 J	9.7	0.8 J	3.6 J	0.24 J	8.3	0.86 J	0.53 J	0.8 J	2.6 J	0.62 J
MAGNESIUM	544 J	443 J	594 J	1370 J	220	740	461 J	1510 J	448	406	677	1370	373	468
MANGANESE	42.6 J	18.3 J	42.2 J	45.7 J	9.5	28.2	31.9 J	46.3 J	24.2	18	32.9	72.7	50.1	66.1
MERCURY	0.01 U	0.01 U	0.02	0.01 U	0.02	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
NICKEL	2.1	1 U	2	2.2	3.5	1	1.5 J	1.1 U	2.4	1	1.1	2.2	1.7	0.95
POTASSIUM	105 J	65.05 U	147 J	258 J	118	89.36 UJ	115	204 J	107 J	106 J	114 J	71.48 UJ	57.22 UJ	85.91 UJ
SELENIUM	0.53 J	0.4 UJ	0.43 UJ	0.46 J	0.39 U	0.54 U	0.38 UJ	0.52 UJ	0.31 U	0.51 U	0.39 U	0.43 U	0.35 U	0.52 U
SILVER	0.12 U	0.12 U	0.13 U	0.11 U	0.12 U	0.16 UJ	0.39 U	0.16 U	0.09 UJ	0.15 UJ	0.12 UJ	0.13 UJ	0.1 UJ	0.16 UJ
SODIUM	778 J	739 J	670 J	591 J	4.27 U	1350 J	720 J	889 J	264 J	716 J	1120 J	932 J	769 J	950 J
THALLIUM	0.62 U	0.59 U	0.64 U	0.57 U	0.58 U	0.81 U	0.56 U	0.78 U	0.47 U	0.76 U	0.58 U	0.65 U	0.52 U	0.78 U
TIN	3.6 U	3.3 U	3.9 U	3.1 U	2.9 U	3.3 U	3.3 U	4.4 U	2.8 U	2.8 U	2.1 U	2.7 U	2.2 U	3.4 U
VANADIUM	3.1	1.5 J	3.6	7.1	6.4	2.1	3	2.3 J	4.6	1.9	3.3	3.4	4.2	2
ZINC	7.9	2.5 J	11	8.5	16.1 J	2.9 U	8.9	2.4 J	12.5 J	4.9 J	3.7 J	5.7 J	18.5 J	3.3 J
MISCELLANEOUS PARAMETERS (%)														
TOTAL SOLIDS	88	81	93	75	93	73	96	75	92	75	88	78	98	72
MISCELLANEOUS PARAMETERS (mg/kg)														
CYANIDE	0.55 U	0.6 U	0.5 U	0.65 U	0.5 U	0.5 U	0.5 U	0.65 U	0.55 U	0.65 U	0.5 U	0.5 U	0.5 U	0.5 U
SULFIDE	31 U	30 U	27 U	32 U	27 U	30 U	29 U	31 U	26 U	31 U	26 U	31 U	29 U	30 U

TABLE A2-2
SWMU 8, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-08-SB34		MPT-08-SB35		MPT-08-SB36		MPT-08-SB37		MPT-08-SB38		MPT-08-SB39	MPT-08-SB40	MPT-08-SB41	MPT-08-SB42
SAMPLE IDENTIFICATION	MPT-08-SB34-01-102606	MPT-08-SB34-09-102606	MPT-08-SB35-01-102606	MPT-08-SB35-09-102606	MPT-08-SB36-01-102706	MPT-08-SB36-09-102706	MPT-08-SB37-01-102706	MPT-08-SB37-09-102706	MPT-08-SB38-01-102606	MPT-08-SB38-09-102606	MPT-08-SB39-01-020707	MPT-08-SB40-01-020707	MPT-08-SB41-01-020707	MPT-08-SB42-02-020707
SAMPLE DATE	20061026	20061026	20061026	20061026	20061027	20061027	20061027	20061027	20061026	20061026	20070207	20070207	20070207	20070207
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	0	0	1
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	1	1	2
VOLATILES (μg/kg)														
1,1,1,2-TETRACHLOROETHANE	0.7 U	0.6 U	0.6 U	0.6 U	0.6 U	0.7 U	0.6 U	0.6 U	0.6 U	0.8 U	NA	NA	NA	1 U
1,1,1-TRICHLOROETHANE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	NA	NA	NA	0.6 U
1,1,2,2-TETRACHLOROETHANE	0.4 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.3 U	0.4 U	0.3 U	0.4 U	NA	NA	NA	0.6 UJ
1,1,2-TRICHLOROETHANE	0.4 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.3 U	0.3 U	0.3 U	0.4 U	NA	NA	NA	0.6 U
1,1-DICHLOROETHANE	0.5 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.6 U	NA	NA	NA	0.7 U
1,1-DICHLOROETHENE	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1 U	NA	NA	NA	1 U
1,2,3-TRICHLOROPROPANE	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.7 U	0.9 U	NA	NA	NA	1 UJ
1,2,4-TRICHLOROBENZENE	0.9 U	0.8 U	0.8 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.8 U	1 U	NA	NA	NA	1 UJ
1,2-DIBROMO-3-CHLOROPROPANE	0.7 U	0.6 U	0.6 U	0.6 U	0.6 U	0.7 U	0.6 U	0.6 U	0.6 U	0.8 U	NA	NA	NA	1 UJ
1,2-DIBROMOETHANE	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.7 U	NA	NA	NA	0.8 U
1,2-DICHLOROBENZENE	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.7 U	NA	NA	NA	1 UJ
1,2-DICHLOROETHANE	0.4 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	NA	NA	NA	0.6 U
1,2-DICHLOROPROPANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	NA	NA	NA	0.8 U
1,3-DICHLOROBENZENE	0.6 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.7 U	NA	NA	NA	0.9 UJ
1,4-DICHLOROBENZENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	NA	NA	NA	0.6 UJ
1,4-DIOXANE	37 UR	33 UR	32 UR	34 UR	34 UR	36 UR	33 UR	34 UR	32 UR	42 UR	NA	NA	NA	54 UR
2-BUTANONE	6 U	6 U	5 U	6 U	6 U	6 U	6 U	6 U	5 U	7 U	NA	NA	NA	9 U
2-HEXANONE	4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	4 U	NA	NA	NA	5 U
3-CHLOROPROPENE	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	NA	NA	NA	0.8 U
4-METHYL-2-PENTANONE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	NA	NA	NA	3 U
ACETONE	6 U	5 U	5 U	5 U	5 U	6 U	5 UJ	5 U	5 U	7 U	NA	NA	NA	28 J
ACETONITRILE	10 UR	9 UR	9 UR	9 UR	9 UR	10 UR	9 UR	9 UR	9 UR	12 UR	NA	NA	NA	15 UR
ACROLEIN	4 UR	4 UR	4 UR	4 UR	4 UR	4 UR	4 UR	4 UR	4 UR	5 UR	NA	NA	NA	6 UR
ACRYLONITRILE	11 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	12 U	NA	NA	NA	16 U
BENZENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	NA	NA	NA	0.6 U
BROMODICHLOROMETHANE	0.3 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U	NA	NA	NA	0.4 U
BROMOFORM	0.7 U	0.6 U	0.6 U	0.6 U	0.6 U	0.7 U	0.6 U	0.6 U	0.6 U	0.8 U	NA	NA	NA	1 U
BROMOMETHANE	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.7 U	1 U	NA	NA	NA	1 U
CARBON DISULFIDE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	NA	NA	NA	2 U
CARBON TETRACHLORIDE	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	NA	NA	NA	0.7 U
CHLOROBENZENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	NA	NA	NA	0.5 U
CHLORODIBROMOMETHANE	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.6 U	0.9 U	NA	NA	NA	1 U
CHLOROETHANE	0.8 U	0.7 U	0.7 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.7 U	1 U	NA	NA	NA	1 U
CHLOROFORM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	NA	NA	NA	2 J
CHLOROMETHANE	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.7 U	NA	NA	NA	0.9 U
CHLOROPRENE	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.7 U	NA	NA	NA	1 U
CIS-1,2-DICHLOROETHENE	0.5 U	0.5 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.6 U	NA	NA	NA	0.8 U
CIS-1,3-DICHLOROPROPENE	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.5 U	NA	NA	NA	0.7 U
DIBROMOMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	NA	NA	NA	0.5 U
DICHLORODIFLUOROMETHANE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.5 U	NA	NA	NA	0.7 U

TABLE A2-2
SWMU 8, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-08-SB34**		**MPT-08-SB35**		**MPT-08-SB36**		**MPT-08-SB37**		**MPT-08-SB38**		**MPT-08-SB39**	**MPT-08-SB40**	**MPT-08-SB41**	**MPT-08-SB42**
SAMPLE IDENTIFICATION	MPT-08-SB34-01-102606	MPT-08-SB34-09-102606	MPT-08-SB35-01-102606	MPT-08-SB35-09-102606	MPT-08-SB36-01-102706	MPT-08-SB36-09-102706	MPT-08-SB37-01-102706	MPT-08-SB37-09-102706	MPT-08-SB38-01-102606	MPT-08-SB38-09-102606	MPT-08-SB39-01-020707	MPT-08-SB40-01-020707	MPT-08-SB41-01-020707	MPT-08-SB42-02-020707
SAMPLE DATE	20061026	20061026	20061026	20061026	20061027	20061027	20061027	20061027	20061026	20061026	20070207	20070207	20070207	20070207
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	0	0	1
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	1	1	2
VOLATILES (µg/kg)														
ETHYL METHACRYLATE	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.6 U	NA	NA	NA	0.7 U
ETHYLBENZENE	0.4 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	NA	NA	NA	0.5 U
ISOBUTANOL	16 UR	14 UR	14 UR	14 UR	14 UR	15 UR	14 UR	14 UR	14 UR	18 UR	NA	NA	NA	23 UR
M+P-XYLENES	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA	NA	2 U
METHACRYLONITRILE	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	NA	NA	NA	8 U
METHYL IODIDE	0.9 U	0.8 U	0.8 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.8 UJ	1 UJ	NA	NA	NA	1 U
METHYL METHACRYLATE	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.7 U	NA	NA	NA	0.9 U
METHYLENE CHLORIDE	3 U	3 U	1 U	3 U	0.9 U	1 U	1 U	2 U	1 U	3 U	NA	NA	NA	1 U
O-XYLENE	0.7 U	0.6 U	0.6 U	0.6 U	0.6 U	0.7 U	0.6 U	0.6 U	0.6 U	0.8 U	NA	NA	NA	1 U
PENTACHLOROETHANE	0.7 U	0.7 U	0.6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.6 U	0.8 U	NA	NA	NA	1 U
PROPIONITRILE	7 UR	6 UR	6 UR	6 UR	6 UR	7 UR	6 UR	6 UR	6 UR	8 UR	NA	NA	NA	10 UR
STYRENE	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.5 U	NA	NA	NA	0.7 U
TETRACHLOROETHENE	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.7 U	0.9 U	NA	NA	NA	1 U
TOLUENE	0.8 U	0.7 U	0.7 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.7 U	0.9 U	NA	NA	NA	1 U
TRANS-1,2-DICHLOROETHENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	NA	NA	NA	0.6 U
TRANS-1,3-DICHLOROPROPENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	NA	NA	NA	0.6 U
TRANS-1,4-DICHLORO-2-BUTENE	1 U	0.9 U	0.8 U	0.9 U	0.9 U	1 U	0.9 U	0.9 U	0.8 U	1 U	NA	NA	NA	1 U
TRICHLOROETHENE	0.7 U	0.6 U	0.6 U	0.6 U	0.7 U	0.7 U	0.6 U	0.7 U	0.6 U	0.8 U	NA	NA	NA	1 U
TRICHLOROFLUOROMETHANE	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	NA	NA	NA	0.7 U
VINYL ACETATE	0.7 U	0.6 U	0.6 U	0.6 U	0.6 U	0.7 U	0.6 U	0.6 U	0.6 U	0.8 U	NA	NA	NA	1 U
VINYL CHLORIDE	0.7 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.8 U	NA	NA	NA	1 U
SEMIVOLATILES (µg/kg)														
1,2,4,5-TETRACHLOROBENZENE	180 U	180 U	140 U	170 U	140 U	170 U	150 U	150 U	140 U	190 U	NA	NA	NA	180 U
1,2,4-TRICHLOROBENZENE	160 U	170 U	130 U	150 U	130 U	160 U	140 U	140 U	130 U	170 U	NA	NA	NA	160 U
1,3,5-TRINITROBENZENE	280 U	290 U	230 U	270 U	230 U	270 U	240 U	240 U	230 U	300 U	NA	NA	NA	280 UR
1,3-DINITROBENZENE	190 U	200 U	160 U	180 U	160 U	190 U	160 U	170 U	160 U	200 U	NA	NA	NA	190 U
1,4-NAPHTHOQUINONE	330 U	340 U	270 U	320 U	270 U	320 U	280 U	290 U	270 U	350 U	NA	NA	NA	330 UR
1,4-PHENYLENEDIAMINE	200 UR	210 UR	170 UR	190 UR	170 UR	200 UR	170 UR	180 UR	170 UR	220 UR	NA	NA	NA	200 UJ
1-NAPHTHYLAMINE	220 UJ	240 UJ	190 UJ	220 UJ	190 UJ	220 UJ	190 UJ	200 UJ	190 UJ	240 UJ	NA	NA	NA	230 U
2,2'-OXYBIS(1-CHLOROPROPANE)	160 U	170 U	130 U	160 U	140 U	160 U	140 U	140 U	140 U	170 U	NA	NA	NA	160 U
2,3,4,6-TETRACHLOROPHENOL	300 U	320 U	250 U	290 U	250 U	290 U	260 U	270 U	250 U	320 U	NA	NA	NA	310 U
2,4,5-TRICHLOROPHENOL	300 U	310 U	240 U	280 U	250 U	290 U	250 U	260 U	250 U	320 U	NA	NA	NA	300 U
2,4,6-TRICHLOROPHENOL	260 U	270 U	210 U	250 U	210 U	250 U	220 U	220 U	210 U	270 U	NA	NA	NA	260 U
2,4-DICHLOROPHENOL	320 U	330 U	260 U	300 U	260 U	300 U	270 U	280 U	260 U	340 U	NA	NA	NA	320 U
2,4-DIMETHYLPHENOL	270 U	280 U	220 U	260 U	220 U	260 U	230 U	240 U	220 U	290 U	NA	NA	NA	270 U
2,4-DINITROPHENOL	990 U	1000 U	820 U	950 U	820 U	960 U	850 U	870 U	820 U	1000 U	NA	NA	NA	1000 U
2,4-DINITROTOLUENE	270 U	280 U	220 U	260 U	220 U	260 U	230 U	230 U	220 U	280 U	NA	NA	NA	270 U
2,6-DICHLOROPHENOL	360 U	380 U	300 U	350 U	300 U	350 U	310 U	320 U	300 U	390 U	NA	NA	NA	360 U
2,6-DINITROTOLUENE	220 U	230 U	180 U	210 U	180 U	210 U	190 U	190 U	180 U	230 U	NA	NA	NA	220 U
2-ACETYLAMINOFLUORENE	360 U	380 U	300 U	350 U	300 U	350 U	310 U	320 U	300 U	380 U	NA	NA	NA	360 UJ

TABLE A2-2
SWMU 8, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-08-SB34**		**MPT-08-SB35**		**MPT-08-SB36**		**MPT-08-SB37**		**MPT-08-SB38**		**MPT-08-SB39**	**MPT-08-SB40**	**MPT-08-SB41**	**MPT-08-SB42**
SAMPLE IDENTIFICATION	MPT-08-SB34-01-102606	MPT-08-SB34-09-102606	MPT-08-SB35-01-102606	MPT-08-SB35-09-102606	MPT-08-SB36-01-102706	MPT-08-SB36-09-102706	MPT-08-SB37-01-102706	MPT-08-SB37-09-102706	MPT-08-SB38-01-102606	MPT-08-SB38-09-102606	MPT-08-SB39-01-020707	MPT-08-SB40-01-020707	MPT-08-SB41-01-020707	MPT-08-SB42-02-020707
SAMPLE DATE	20061026	20061026	20061026	20061026	20061027	20061027	20061027	20061027	20061026	20061026	20070207	20070207	20070207	20070207
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	0	0	1
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	1	1	2
SEMIVOLATILES (µg/kg)														
2-CHLORONAPHTHALENE	300 U	310 U	240 U	280 U	250 U	290 U	250 U	260 U	250 U	320 U	NA	NA	NA	300 U
2-CHLOROPHENOL	290 U	300 U	240 U	280 U	240 U	280 U	250 U	250 U	240 U	310 U	NA	NA	NA	290 U
2-METHYLNAPHTHALENE	160 U	170 U	140 U	160 U	140 U	160 U	140 U	140 U	140 U	180 U	NA	NA	NA	160 U
2-METHYLPHENOL	310 U	320 U	250 U	300 U	260 U	300 U	260 U	270 U	260 U	330 U	NA	NA	NA	310 U
2-NAPHTHYLAMINE	220 UJ	230 UJ	180 UJ	210 UJ	180 UJ	210 UJ	190 UJ	190 UJ	180 UJ	230 UJ	NA	NA	NA	220 U
2-NITROANILINE	180 U	190 U	150 U	170 U	150 U	180 U	160 U	160 U	150 U	190 U	NA	NA	NA	180 U
2-NITROPHENOL	280 U	290 U	230 U	260 U	230 U	270 U	240 U	240 U	230 U	290 U	NA	NA	NA	280 U
2-PICOLINE	190 U	200 U	160 U	180 U	160 U	180 U	160 U	160 U	160 U	200 U	NA	NA	NA	190 U
3&4-METHYLPHENOL	300 U	320 U	250 U	290 U	250 U	300 U	260 U	270 U	250 U	330 U	NA	NA	NA	310 U
3,3'-DICHLOROBENZIDINE	350 UJ	370 UJ	290 UJ	340 UJ	290 UJ	340 UJ	300 UJ	310 UJ	290 UJ	370 UJ	NA	NA	NA	350 UJ
3,3'-DIMETHYLBENZIDINE	110 UJ	110 UJ	89 UJ	100 UJ	90 UJ	100 UJ	92 UJ	95 UJ	90 UJ	120 UJ	NA	NA	NA	110 UR
3-METHYLCHOLANTHRENE	360 U	370 U	300 U	340 U	300 U	340 U	300 U	310 U	300 U	380 U	NA	NA	NA	360 U
3-NITROANILINE	390 UJ	400 UJ	320 UJ	370 UJ	320 UJ	380 UJ	330 UJ	340 UJ	320 UJ	410 UJ	NA	NA	NA	390 U
4,6-DINITRO-2-METHYLPHENOL	940 U	980 U	780 U	900 U	780 U	910 U	800 U	820 U	780 U	1000 U	NA	NA	NA	950 U
4-AMINOBIPHENYL	270 UJ	280 UJ	220 UJ	260 UJ	220 UJ	260 UJ	230 UJ	230 UJ	220 UJ	280 UJ	NA	NA	NA	270 UJ
4-BROMOPHENYL PHENYL ETHER	200 U	210 U	170 U	190 U	170 U	190 U	170 U	180 U	170 U	210 U	NA	NA	NA	200 U
4-CHLORO-3-METHYLPHENOL	400 U	420 U	330 U	390 U	330 U	390 U	340 U	350 U	340 U	430 U	NA	NA	NA	410 U
4-CHLOROANILINE	190 UJ	200 UJ	160 UJ	190 UJ	160 UJ	190 U	160 UJ	170 UJ	160 U	210 UJ	NA	NA	NA	200 U
4-CHLOROPHENYL PHENYL ETHER	150 U	160 U	120 U	140 U	120 U	150 U	130 U	130 U	120 U	160 U	NA	NA	NA	150 U
4-NITROANILINE	410 UJ	430 UJ	340 UJ	390 UJ	340 UJ	390 UJ	350 UJ	360 UJ	340 UJ	440 UJ	NA	NA	NA	410 U
4-NITROPHENOL	1000 U	1000 U	820 U	960 U	830 U	960 U	850 U	870 U	830 U	1100 U	NA	NA	NA	1000 UJ
4-NITROQUINOLINE-1-OXIDE	480 UR	500 UR	390 UR	460 UR	400 UR	460 UR	410 UR	420 UR	400 UR	510 UR	NA	NA	NA	480 UR
5-NITRO-O-TOLUIDINE	370 U	390 U	310 U	360 U	310 U	360 U	320 U	330 U	310 U	400 U	NA	NA	NA	370 U
7,12-DIMETHYLBENZ(A)ANTHRACENE	410 U	430 U	340 U	390 U	340 U	390 U	350 U	360 U	340 U	440 U	NA	NA	NA	410 U
A,A-DIMETHYLPHENETHYLAMINE	180 UR	190 UR	150 UR	180 UR	150 UR	180 UR	160 UR	160 UR	150 UR	200 UR	NA	NA	NA	190 UR
ACENAPHTHENE	130 U	140 U	110 U	120 U	110 U	120 U	110 U	110 U	110 U	140 U	NA	NA	NA	130 U
ACENAPHTHYLENE	130 U	140 U	110 U	120 U	110 U	120 U	110 U	110 U	110 U	140 U	NA	NA	NA	130 U
ACETOPHENONE	290 U	310 U	240 U	280 U	240 U	280 U	250 U	260 U	240 U	310 U	NA	NA	NA	300 U
ANILINE	450 UJ	470 UJ	370 UJ	430 UJ	370 UJ	430 U	380 UJ	390 U	370 U	480 UJ	NA	NA	NA	450 U
ANTHRACENE	130 U	130 U	110 U	120 U	110 U	120 U	110 U	110 U	110 U	140 U	NA	NA	NA	130 U
ARAMITE	370 U	390 U	310 U	360 U	310 UJ	360 U	320 UJ	320 U	310 U	400 U	NA	NA	NA	370 UR
BAP EQUIVALENT	130 U	140 U	110 U	130 U	110 U	130 U	110 U	120 U	**250.9**	140 U	NA	NA	NA	130 U
BAP EQUIVALENT(1)	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	**151.15**	0.0 U	NA	NA	NA	0.0 U
BENZO(A)ANTHRACENE	120 U	120 U	97 U	110 U	98 U	110 U	100 U	100 U	98 U	120 U	NA	NA	NA	120 U
BENZO(A)PYRENE	130 U	140 U	110 U	130 U	110 U	130 U	110 U	120 U	**120** J	140 U	NA	NA	NA	130 U
BENZO(B)FLUORANTHENE	160 U	170 U	140 U	160 U	140 U	160 U	140 U	140 U	310 J	180 U	NA	NA	NA	160 U
BENZO(G,H,I)PERYLENE	210 U	220 U	170 U	200 U	170 U	200 U	180 U	180 U	170 U	220 U	NA	NA	NA	210 U
BENZO(K)FLUORANTHENE	170 U	170 U	140 U	160 U	140 U	160 U	140 U	150 U	140 U	180 U	NA	NA	NA	170 U
BENZYL ALCOHOL	510 U	530 U	420 U	490 U	420 U	490 U	440 U	450 U	420 U	540 U	NA	NA	NA	510 U
BIS(2-CHLOROETHOXY)METHANE	160 U	170 U	140 U	160 U	140 U	160 U	140 U	140 U	140 U	180 U	NA	NA	NA	160 U

TABLE A2-2
SWMU 8, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-08-SB34		MPT-08-SB35		MPT-08-SB36		MPT-08-SB37		MPT-08-SB38		MPT-08-SB39	MPT-08-SB40	MPT-08-SB41	MPT-08-SB42
SAMPLE IDENTIFICATION	MPT-08-SB34-01-102606	MPT-08-SB34-09-102606	MPT-08-SB35-01-102606	MPT-08-SB35-09-102606	MPT-08-SB36-01-102706	MPT-08-SB36-09-102706	MPT-08-SB37-01-102706	MPT-08-SB37-09-102706	MPT-08-SB38-01-102606	MPT-08-SB38-09-102606	MPT-08-SB39-01-020707	MPT-08-SB40-01-020707	MPT-08-SB41-01-020707	MPT-08-SB42-02-020707
SAMPLE DATE	20061026	20061026	20061026	20061026	20061027	20061027	20061027	20061027	20061026	20061026	20070207	20070207	20070207	20070207
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	0	0	1
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	1	1	2
SEMIVOLATILES (µg/kg)														
BIS(2-CHLOROETHYL)ETHER	170 UJ	180 UJ	140 UJ	170 UJ	140 UJ	170 U	150 UJ	150 U	140 U	190 UJ	NA	NA	NA	180 U
BIS(2-ETHYLHEXYL)PHTHALATE	390 U	410 U	320 U	380 U	580	380 U	340 U	340 U	330 U	420 U	NA	NA	NA	400 U
BUTYL BENZYL PHTHALATE	180 U	190 U	150 U	170 U	150 U	180 U	160 U	160 U	150 U	190 U	NA	NA	NA	180 U
CHLOROBENZILATE	200 U	210 U	160 U	190 U	160 U	190 U	170 U	170 U	160 U	210 U	NA	NA	NA	200 U
CHRYSENE	140 U	150 U	120 U	140 U	120 U	140 U	120 U	120 U	150 J	150 U	NA	NA	NA	140 U
DIALLATE	220 U	240 U	180 U	220 U	190 U	220 U	190 U	200 U	190 U	240 U	NA	NA	NA	230 U
DIBENZO(A,H)ANTHRACENE	200 U	200 U	160 U	190 U	160 U	190 U	170 U	170 U	160 U	210 U	NA	NA	NA	200 U
DIBENZOFURAN	130 U	130 U	100 U	120 U	100 U	120 U	110 U	110 U	100 U	130 U	NA	NA	NA	130 U
DIETHYL PHTHALATE	260 U	270 U	210 U	250 U	210 U	250 U	220 U	230 U	210 U	280 U	NA	NA	NA	260 U
DIMETHOATE	280 U	300 U	230 U	270 U	230 U	270 U	240 U	250 U	230 U	300 U	NA	NA	NA	280 U
DIMETHYL PHTHALATE	160 U	170 U	140 U	160 U	140 U	160 U	140 U	140 U	140 U	180 U	NA	NA	NA	170 U
DI-N-BUTYL PHTHALATE	270 U	280 U	220 U	260 U	220 U	260 U	230 U	240 U	230 U	290 U	NA	NA	NA	270 U
DI-N-OCTYL PHTHALATE	310 U	320 U	260 U	300 U	260 U	300 U	260 U	270 U	260 U	330 U	NA	NA	NA	310 UJ
DINOSEB	310 U	330 U	260 U	300 U	260 U	300 U	270 U	270 U	260 U	330 U	NA	NA	NA	320 U
ETHYL METHANE SULFONATE	350 U	370 U	290 U	340 U	290 U	340 U	300 U	310 U	290 U	370 U	NA	NA	NA	350 U
ETHYL PARATHION	470 U	490 U	390 U	450 U	390 U	450 U	400 U	410 U	390 U	500 U	NA	NA	NA	470 U
FLUORANTHENE	250 U	260 U	210 U	240 U	210 U	240 U	220 U	220 U	210 U	270 U	NA	NA	NA	250 U
FLUORENE	130 U	140 U	110 U	130 U	110 U	130 U	110 U	120 U	110 U	140 U	NA	NA	NA	240 J
HEXACHLOROBENZENE	160 U	170 U	140 U	160 U	140 U	160 U	140 U	140 U	140 U	180 U	NA	NA	NA	170 U
HEXACHLOROBUTADIENE	140 U	150 U	120 U	140 U	120 U	140 U	120 U	120 U	120 U	150 U	NA	NA	NA	140 U
HEXACHLOROCYCLOPENTADIENE	200 UJ	200 UJ	160 UJ	190 UJ	160 U	190 U	170 U	170 U	160 U	210 UJ	NA	NA	NA	200 U
HEXACHLOROETHANE	180 U	180 U	140 U	170 U	140 U	170 U	150 U	150 U	140 U	190 U	NA	NA	NA	180 U
HEXACHLOROPHENE	200 UR	210 UR	170 UR	190 UR	170 UR	200 UR	170 UR	180 UR	170 UR	220 UR	NA	NA	NA	200 UR
HEXACHLOROPROPENE	190 UJ	200 UJ	150 UJ	180 UJ	150 UJ	180 U	160 U	160 U	150 U	200 UJ	NA	NA	NA	190 U
INDENO(1,2,3-CD)PYRENE	340 U	350 U	280 U	320 U	280 U	320 U	290 U	290 U	280 U	360 U	NA	NA	NA	340 UJ
ISODRIN	220 U	230 U	180 U	210 U	180 U	210 U	190 U	190 U	180 U	240 U	NA	NA	NA	220 U
ISOPHORONE	150 U	150 U	120 U	140 U	120 U	140 U	130 U	130 U	120 U	160 U	NA	NA	NA	150 U
ISOSAFROLE	160 U	170 U	140 U	160 U	140 U	160 U	140 U	140 U	140 U	180 U	NA	NA	NA	160 U
METHAPYRILENE	150 UR	160 UR	120 UR	140 UR	120 UR	150 UR	130 UR	130 UR	120 UR	160 UR	NA	NA	NA	150 UR
METHYL METHANE SULFONATE	320 U	340 U	260 U	310 U	270 U	310 U	280 U	280 U	270 U	340 U	NA	NA	NA	320 U
NAPHTHALENE	150 U	160 U	120 U	140 U	120 U	150 U	130 U	130 U	120 U	160 U	NA	NA	NA	150 U
NITROBENZENE	140 U	140 U	110 U	130 U	120 U	130 U	120 U	120 U	120 U	150 U	NA	NA	NA	140 U
N-NITROSODIETHYLAMINE	150 U	160 U	120 U	150 U	130 U	150 U	130 U	130 U	130 U	160 U	NA	NA	NA	150 U
N-NITROSODIMETHYLAMINE	180 U	190 U	150 U	170 U	150 U	170 U	150 U	160 U	150 U	190 U	NA	NA	NA	180 U
N-NITROSO-DI-N-BUTYLAMINE	290 U	300 U	240 U	280 U	240 U	280 U	250 U	250 U	240 U	310 U	NA	NA	NA	290 U
N-NITROSO-DI-N-PROPYLAMINE	220 U	240 U	190 U	220 U	190 U	220 U	190 U	200 U	190 U	240 U	NA	NA	NA	230 U
N-NITROSODIPHENYLAMINE	300 U	310 U	240 U	280 U	250 U	290 U	250 U	260 U	250 U	320 U	NA	NA	NA	300 U
N-NITROSOMETHYLETHYLAMINE	180 U	180 U	150 U	170 U	150 U	170 U	150 U	160 U	150 U	190 U	NA	NA	NA	180 U
N-NITROSOMORPHOLINE	140 U	150 U	120 U	140 U	120 U	140 U	120 U	130 U	120 U	150 U	NA	NA	NA	150 U
N-NITROSOPIPERIDINE	150 U	150 U	120 U	140 U	120 U	140 U	130 U	130 U	120 U	160 U	NA	NA	NA	150 U

TABLE A2-2
SWMU 8, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-08-SB34		MPT-08-SB35		MPT-08-SB36		MPT-08-SB37		MPT-08-SB38		MPT-08-SB39	MPT-08-SB40	MPT-08-SB41	MPT-08-SB42
SAMPLE IDENTIFICATION	MPT-08-SB34-01-102606	MPT-08-SB34-09-102606	MPT-08-SB35-01-102606	MPT-08-SB35-09-102606	MPT-08-SB36-01-102706	MPT-08-SB36-09-102706	MPT-08-SB37-01-102706	MPT-08-SB37-09-102706	MPT-08-SB38-01-102606	MPT-08-SB38-09-102606	MPT-08-SB39-01-020707	MPT-08-SB40-01-020707	MPT-08-SB41-01-020707	MPT-08-SB42-02-020707
SAMPLE DATE	20061026	20061026	20061026	20061026	20061027	20061027	20061027	20061027	20061026	20061026	20070207	20070207	20070207	20070207
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	0	0	1
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	1	1	2
SEMIVOLATILES (µg/kg)														
N-NITROSOPYRROLIDINE	250 U	260 U	210 U	240 U	210 U	240 U	220 U	220 U	210 U	270 U	NA	NA	NA	250 U
O,O,O-TRIETHYL PHOSPHOROTHIOATE	160 U	170 U	130 U	160 U	130 U	160 U	140 U	140 U	130 U	170 U	NA	NA	NA	160 U
O-TOLUIDINE	760 U	800 U	630 U	730 U	630 U	740 U	650 U	670 U	630 U	810 U	NA	NA	NA	760 U
PENTACHLOROBENZENE	120 U	120 U	96 U	110 U	97 U	110 U	100 U	100 U	97 U	120 U	NA	NA	NA	120 U
PENTACHLORONITROBENZENE	170 U	180 U	140 U	170 U	140 U	170 U	150 U	150 U	140 U	190 U	NA	NA	NA	180 U
PENTACHLOROPHENOL	810 U	840 U	670 U	780 U	670 U	780 U	690 U	710 U	670 U	860 U	NA	NA	NA	810 U
PHENACETIN	260 U	270 U	210 U	240 U	210 U	250 U	220 U	220 U	210 U	270 U	NA	NA	NA	260 U
PHENANTHRENE	94 U	99 U	78 U	91 U	78 U	92 U	81 U	83 U	78 U	100 U	NA	NA	NA	95 U
PHENOL	280 U	300 U	240 U	270 U	240 U	280 U	240 U	250 U	240 U	300 U	NA	NA	NA	290 U
PRONAMIDE	200 U	210 U	170 U	190 U	170 U	190 U	170 U	180 U	170 U	210 U	NA	NA	NA	200 U
PYRENE	180 U	190 U	150 U	170 U	150 U	170 U	150 U	160 U	150 U	190 U	NA	NA	NA	180 U
PYRIDINE	280 U	290 U	230 U	270 U	230 U	270 U	240 U	240 U	230 U	300 U	NA	NA	NA	280 U
SAFROLE	190 U	200 U	160 U	180 U	160 U	180 U	160 U	170 U	160 U	200 U	NA	NA	NA	190 UJ
SOLVENT YELLOW 2	260 U	270 U	210 U	250 U	210 U	250 U	220 U	220 U	210 U	270 U	NA	NA	NA	260 U
SULFOTEPP	190 U	200 U	150 U	180 U	150 U	180 U	160 U	160 U	150 U	200 U	NA	NA	NA	190 U
THIONAZIN	290 U	300 U	240 U	280 U	240 U	280 U	250 U	260 U	240 U	310 U	NA	NA	NA	290 U
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)														
BAP EQUIVALENT	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.504	4 U	9.555	NA
BAP EQUIVALENT(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.104	0.0 U	7.305	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11 J	4 U	10 J	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 J	4 U	5 J	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 U	4 U	13 J	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 U	4 U	3 J	NA
CHRYSENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 J	4 U	5 J	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 UJ	5 UJ	4 UJ	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 U	6 U	5 U	NA
PESTICIDES/PCBS (UG/KG)														
AROCLOR-1016	20 U	20 U	16 U	19 U	16 U	19 U	17 U	17 U	16 U	21 U	NA	NA	NA	20 U
AROCLOR-1221	15 U	15 U	12 U	14 U	12 U	14 U	13 U	13 U	12 U	16 U	NA	NA	NA	15 U
AROCLOR-1232	6.5 U	6.8 U	5.4 U	6.2 U	5.4 U	6.3 U	5.6 U	5.7 U	5.4 U	6.9 U	NA	NA	NA	6.6 U
AROCLOR-1242	8.2 U	8.6 U	6.8 U	7.9 U	6.8 U	8 U	7 U	7.2 U	6.8 U	8.8 U	NA	NA	NA	8.3 U
AROCLOR-1248	7 U	7.3 U	5.8 U	6.7 U	5.8 U	6.8 U	6 U	6.1 U	5.8 U	7.5 U	NA	NA	NA	7 U
AROCLOR-1254	16 U	17 U	13 U	15 U	13 U	15 U	14 U	14 U	13 U	17 U	NA	NA	NA	16 U
AROCLOR-1260	17 U	18 U	14 U	16 U	14 U	17 U	15 U	15 U	14 U	18 U	NA	NA	NA	17 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	NA	NA	NA	0 U
TOTAL AROCLOR HALFND	44.85	46.35	36.5	42.4	36.5	43.05	38.8	39	36.5	47.6	NA	NA	NA	44.95
METALS (mg/kg)														
ALUMINUM	1000 J	645 J	546 J	777 J	1400 J	489 J	1030 J	276 J	1500 J	1160 J	NA	NA	NA	659
ANTIMONY	0.26 UJ	0.25 UJ	0.22 J	0.34 J	0.25 UJ	0.32 J	0.25 J	0.23 UJ	0.3 J	0.27 UJ	NA	NA	NA	0.11 UJ
ARSENIC	4.3 J	1.3 U	0.69 U	0.92 U	1.4 U	1.2 U	1.2 U	0.72 U	1.4 U	1 U	NA	NA	NA	0.96

TABLE A2-2
SWMU 8, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-08-SB34		MPT-08-SB35		MPT-08-SB36		MPT-08-SB37		MPT-08-SB38		MPT-08-SB39	MPT-08-SB40	MPT-08-SB41	MPT-08-SB42
SAMPLE IDENTIFICATION	MPT-08-SB34-01-102606	MPT-08-SB34-09-102606	MPT-08-SB35-01-102606	MPT-08-SB35-09-102606	MPT-08-SB36-01-102706	MPT-08-SB36-09-102706	MPT-08-SB37-01-102706	MPT-08-SB37-09-102706	MPT-08-SB38-01-102606	MPT-08-SB38-09-102606	MPT-08-SB39-01-020707	MPT-08-SB40-01-020707	MPT-08-SB41-01-020707	MPT-08-SB42-02-020707
SAMPLE DATE	20061026	20061026	20061026	20061026	20061027	20061027	20061027	20061027	20061026	20061026	20070207	20070207	20070207	20070207
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	0	0	1
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	1	1	2
METALS (mg/kg)														
BARIUM	8.4	2.8	5.5	6.9	6.7	5.8	12.3	2.8	9.6	3.8	NA	NA	NA	8
BERYLLIUM	0.14 U	0.14 U	0.08 U	0.15 U	0.18 U	0.1 U	0.15 U	0.09 U	0.16 U	0.15 U	NA	NA	NA	0.07
CADMIUM	0.05 UJ	0.05 UJ	0.04 UJ	0.05 UJ	0.07 J	0.05 UJ	0.06 J	0.04 UJ	0.08 J	0.05 UJ	NA	NA	NA	0.05 U
CALCIUM	170000	40200	139000	125000	102000	94600	128000	73200	63100	44500	NA	NA	NA	142000
CHROMIUM	4.1	2.2 J	3.4	3.2 J	4.4	2.8 J	4	1.4 J	5.1	2.9 J	NA	NA	NA	2.2 J
COBALT	0.27	0.17	0.11	0.24	0.21	0.2	0.18	0.1 U	0.38	0.27	NA	NA	NA	0.14 J
COPPER	1 J	0.3 J	0.57 J	0.37 J	1.9 J	0.78 J	1.5 J	0.32 J	3.7 J	0.33 J	NA	NA	NA	4.5 J
IRON	994	761	558	947	1390	798	1060	418	1610	1210	NA	NA	NA	1160
LEAD	1.1 J	0.51 J	0.47 J	0.45 J	3.4 J	0.66 J	1.8 J	0.48 J	10.3	0.58 J	NA	NA	NA	1.9 J
MAGNESIUM	781	206	810	612	471	690	1110	423	447	349	NA	NA	NA	674
MANGANESE	56.7	17.1	42.5	36.5	36.1	39.5	70.2	21.5	37.5	13.4	NA	NA	NA	39.7
MERCURY	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	0.01 U
NICKEL	1.2	0.67	1.1	0.72	1.8	0.62	1.7	0.46	2.1	0.88	NA	NA	NA	0.87
POTASSIUM	89.3 J	62.71 UJ	51.82 UJ	98.7 J	62.01 UJ	66.33 UJ	59.6 UJ	57.18 UJ	80.7 J	118 J	NA	NA	NA	79.1 U
SELENIUM	0.39 U	0.38 U	0.32 U	0.41 U	0.38 U	0.4 U	0.36 U	0.35 U	0.4 U	0.41 U	NA	NA	NA	0.21 U
SILVER	0.12 UJ	0.11 UJ	0.09 UJ	0.12 UJ	0.11 UJ	0.12 UJ	0.11 UJ	0.1 UJ	0.12 UJ	0.12 UJ	NA	NA	NA	0.04 U
SODIUM	1600 J	399 J	1260 J	1170 J	1010 J	855 J	1260 J	719 J	499 J	436 J	NA	NA	NA	1360
THALLIUM	0.59 U	0.57 U	0.47 U	0.61 U	0.56 U	0.6 U	0.54 U	0.52 U	0.59 U	0.62 U	NA	NA	NA	0.15 U
TIN	2.4 U	2.3 U	1.6 U	2.7 U	2.1 U	2.5 U	2.3 U	2.1 U	2.8 U	2.6 U	NA	NA	NA	0.98 U
VANADIUM	3.1	1.7	1	1.8	3.8	1.9	3.3	0.83	5.8	2.2	NA	NA	NA	2.2
ZINC	7.9 J	2.8 J	5.9 J	2.7 J	12.9 J	4.4 J	6.7 J	1.4 U	58.9 J	4.1 J	NA	NA	NA	5.8 J
MISCELLANEOUS PARAMETERS (%)														
TOTAL SOLIDS	81	78	98	85	98	84	95	93	98	76	94	77	84	81
MISCELLANEOUS PARAMETERS (mg/kg)														
CYANIDE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.55 U	0.5 U	NA	NA	NA	0.55 U
SULFIDE	26 U	30 U	25 U	30 U	26 U	29 U	25 U	28 U	26 U	30 U	NA	NA	NA	45

Notes:
NA = Not analyzed
U = Indicates compound was analyzed for but not detected at indicated detection limit.
I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J = Estimated value, value not accurate.
R = Data to be rejected

TABLE A2-3
SWMU 9, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-09-MW01S	MPT-09-MW02S	MPT-09-MW03S	MPT-09-MW04S	MPT-09-MW05S	MPT-09-MW06S	
SAMPLE IDENTIFICATION	MPT-09-MW01S-0408	MPT-09-MW02S-0408	MPT-09-MW03S-0408	MPT-09-GW-MW04S-110706	MPT-09-GW-MW05S-110706	MPT-09-GW-MW06S-110606	MPT-09-GW-MW06S-110706
SAMPLE DATE	20080423	20080424	20080424	20061107	20061107	20061106	20061107
VOLATILES (µg/L)							
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	0.4 U	0.4 U	0.4 U	0.4 U
1,1,1-TRICHLOROETHANE	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	0.6 U	0.6 U	0.6 U	0.6 U
1,1,2-TRICHLOROETHANE	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHANE	NA	NA	NA	0.4 U	0.4 U	0.4 U	0.4 U
1,1-DICHLOROETHENE	NA	NA	NA	0.6 U	0.6 U	0.6 U	0.6 U
1,2,3-TRICHLOROPROPANE	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-TRICHLOROBENZENE	NA	NA	NA	0.4 U	0.4 U	0.4 U	0.4 U
1,2-DIBROMO-3-CHLOROPROPANE	NA	NA	NA	0.6 U	0.6 U	0.6 U	0.6 U
1,2-DIBROMOETHANE	NA	NA	NA	0.3 U	0.3 U	0.3 U	0.3 U
1,2-DICHLOROBENZENE	NA	NA	NA	0.3 U	0.3 U	0.3 U	0.3 U
1,2-DICHLOROETHANE	NA	NA	NA	0.4 U	0.4 U	0.4 U	0.4 U
1,2-DICHLOROPROPANE	NA	NA	NA	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
1,3-DICHLOROBENZENE	NA	NA	NA	0.4 U	0.4 U	0.4 U	0.4 U
1,4-DICHLOROBENZENE	NA	NA	NA	0.4 U	0.4 U	0.4 U	0.4 U
1,4-DIOXANE	NA	NA	NA	20 UR	20 UR	20 UR	20 UR
2-BUTANONE	NA	NA	NA	3 U	3 U	3 U	3 U
2-HEXANONE	NA	NA	NA	2 U	2 U	2 U	2 U
3-CHLOROPROPENE	NA	NA	NA	0.6 UJ	0.6 UJ	0.6 UJ	0.6 UJ
4-METHYL-2-PENTANONE	NA	NA	NA	2 U	2 U	2 U	2 U
ACETONE	NA	NA	NA	3 U	3 U	3 U	3 U
ACETONITRILE	NA	NA	NA	14 UR	14 UR	14 UR	14 UR
ACROLEIN	NA	NA	NA	3 UR	3 UR	3 UR	3 UR
ACRYLONITRILE	NA	NA	NA	4 UJ	4 UJ	4 UJ	4 UJ
BENZENE	0.23 U	0.23 U	0.23 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
BROMODICHLOROMETHANE	NA	NA	NA	0.4 U	0.4 U	0.4 U	0.4 U
BROMOFORM	NA	NA	NA	0.4 U	0.4 U	0.4 U	0.4 U

TABLE A2-3
SWMU 9, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-09-MW01S**	**MPT-09-MW02S**	**MPT-09-MW03S**	**MPT-09-MW04S**	**MPT-09-MW05S**	**MPT-09-MW06S**	
SAMPLE IDENTIFICATION	MPT-09-MW01S-0408	MPT-09-MW02S-0408	MPT-09-MW03S-0408	MPT-09-GW-MW04S-110706	MPT-09-GW-MW05S-110706	MPT-09-GW-MW06S-110606	MPT-09-GW-MW06S-110706
SAMPLE DATE	20080423	20080424	20080424	20061107	20061107	20061106	20061107
VOLATILES (µg/L)							
BROMOMETHANE	NA	NA	NA	0.6 U	0.6 U	0.6 U	0.6 U
CARBON DISULFIDE	NA	NA	NA	0.6 U	0.6 U	0.6 U	0.6 U
CARBON TETRACHLORIDE	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROBENZENE	NA	NA	NA	0.3 U	0.3 U	0.3 U	0.3 U
CHLORODIBROMOMETHANE	NA	NA	NA	0.3 U	0.3 U	0.3 U	0.3 U
CHLOROETHANE	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROFORM	NA	NA	NA	0.4 U	0.4 U	0.4 U	0.4 U
CHLOROMETHANE	NA	NA	NA	0.6 U	0.6 U	0.6 U	0.6 U
CHLOROPRENE	NA	NA	NA	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
CIS-1,2-DICHLOROETHENE	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U
CIS-1,3-DICHLOROPROPENE	NA	NA	NA	0.4 U	0.4 U	0.4 U	0.4 U
DIBROMOMETHANE	NA	NA	NA	0.4 U	0.4 U	0.4 U	0.4 U
DICHLORODIFLUOROMETHANE	NA	NA	NA	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ
ETHYL METHACRYLATE	NA	NA	NA	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ
ETHYLBENZENE	0.34 U	0.34 U	0.34 U	0.3 U	0.3 U	0.3 U	0.3 U
ISOBUTANOL	NA	NA	NA	13 UR	13 UR	13 UR	13 UR
M+P-XYLENES	NA	NA	NA	1 U	1 U	1 U	1 U
METHACRYLONITRILE	NA	NA	NA	3 UJ	3 UJ	3 UJ	3 UJ
METHYL IODIDE	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U
METHYL METHACRYLATE	NA	NA	NA	0.6 UJ	0.6 UJ	0.6 UJ	0.6 UJ
METHYL TERT-BUTYL ETHER	0.21 U	0.21 U	0.21 U	NA	NA	NA	NA
METHYLENE CHLORIDE	NA	NA	NA	2 U	2 U	2 U	2 U
O-XYLENE	NA	NA	NA	0.4 U	0.4 U	0.4 U	0.4 U
PENTACHLOROETHANE	NA	NA	NA	0.6 UJ	0.6 UJ	0.6 UJ	0.6 UJ
PROPIONITRILE	NA	NA	NA	4 UR	4 UR	4 UR	4 UR
STYRENE	NA	NA	NA	0.3 U	0.3 U	0.3 U	0.3 U
TETRACHLOROETHENE	NA	NA	NA	0.6 U	0.6 U	0.6 U	0.6 U

TABLE A2-3
SWMU 9, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-09-MW01S**	**MPT-09-MW02S**	**MPT-09-MW03S**	**MPT-09-MW04S**	**MPT-09-MW05S**	**MPT-09-MW06S**	
SAMPLE IDENTIFICATION	MPT-09-MW01S-0408	MPT-09-MW02S-0408	MPT-09-MW03S-0408	MPT-09-GW-MW04S-110706	MPT-09-GW-MW05S-110706	MPT-09-GW-MW06S-110606	MPT-09-GW-MW06S-110706
SAMPLE DATE	20080423	20080424	20080424	20061107	20061107	20061106	20061107
VOLATILES (µg/L)							
TOLUENE	0.28 U	0.28 U	0.28 U	0.4 U	0.4 U	0.4 U	0.4 U
TOTAL XYLENES	0.38 U	0.38 U	0.38 U	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	0.6 U	0.6 U	0.6 U	0.6 U
TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	0.4 U	0.4 U	0.4 U	0.4 U
TRANS-1,4-DICHLORO-2-BUTENE	NA	NA	NA	0.7 UJ	0.7 UJ	0.7 UJ	0.7 UJ
TRICHLOROETHENE	NA	NA	NA	0.4 U	0.4 U	0.4 U	0.4 U
TRICHLOROFLUOROMETHANE	NA	NA	NA	0.4 U	0.4 U	0.4 U	0.4 U
VINYL ACETATE	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U
VINYL CHLORIDE	NA	NA	NA	0.6 U	0.6 U	0.6 U	0.6 U
SEMIVOLATILES (µg/L)							
1,2,4,5-TETRACHLOROBENZENE	NA	NA	NA	4 U	4 U	4 U	4 U
1,2,4-TRICHLOROBENZENE	NA	NA	NA	2 U	2 U	2 U	2 U
1,3,5-TRINITROBENZENE	NA	NA	NA	5 UJ	5 UJ	5 UJ	5 UJ
1,3-DINITROBENZENE	NA	NA	NA	5 U	5 U	5 U	5 U
1,4-NAPHTHOQUINONE	NA	NA	NA	4 UR	4 UR	4 UR	4 UR
1,4-PHENYLENEDIAMINE	NA	NA	NA	5 UR	5 UR	5 UR	5 UR
1-NAPHTHYLAMINE	NA	NA	NA	3 U	3 U	3 U	3 U
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	3 UJ	3 UJ	3 UJ	3 UJ
2,3,4,6-TETRACHLOROPHENOL	NA	NA	NA	6 U	6 U	6 U	6 U
2,4,5-TRICHLOROPHENOL	NA	NA	NA	6 U	6 U	6 U	6 U
2,4,6-TRICHLOROPHENOL	NA	NA	NA	6 U	6 U	6 U	6 U
2,4-DICHLOROPHENOL	NA	NA	NA	7 U	7 U	7 U	7 U
2,4-DIMETHYLPHENOL	NA	NA	NA	7 U	7 U	7 U	7 U
2,4-DINITROPHENOL	NA	NA	NA	22 U	22 U	22 U	22 U
2,4-DINITROTOLUENE	NA	NA	NA	4 U	4 U	4 U	4 U
2,6-DICHLOROPHENOL	NA	NA	NA	8 U	8 U	8 U	8 U
2,6-DINITROTOLUENE	NA	NA	NA	4 U	4 U	4 U	4 U

TABLE A2-3
SWMU 9, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-09-MW01S	MPT-09-MW02S	MPT-09-MW03S	MPT-09-MW04S	MPT-09-MW05S	MPT-09-MW06S	
SAMPLE IDENTIFICATION	MPT-09-MW01S-0408	MPT-09-MW02S-0408	MPT-09-MW03S-0408	MPT-09-GW-MW04S-110706	MPT-09-GW-MW05S-110706	MPT-09-GW-MW06S-110606	MPT-09-GW-MW06S-110706
SAMPLE DATE	20080423	20080424	20080424	20061107	20061107	20061106	20061107
SEMIVOLATILES (µg/L)							
2-ACETYLAMINOFLUORENE	NA	NA	NA	4 U	4 U	4 U	4 U
2-CHLORONAPHTHALENE	NA	NA	NA	2 U	2 U	2 U	2 U
2-CHLOROPHENOL	NA	NA	NA	8 U	8 U	8 U	8 U
2-METHYLNAPHTHALENE	NA	NA	NA	4 U	4 U	4 U	4 U
2-METHYLPHENOL	NA	NA	NA	8 U	8 U	8 U	8 U
2-NAPHTHYLAMINE	NA	NA	NA	4 UJ	4 UJ	4 UJ	4 UJ
2-NITROANILINE	NA	NA	NA	3 U	3 U	3 U	3 U
2-NITROPHENOL	NA	NA	NA	7 U	7 U	7 U	7 U
2-PICOLINE	NA	NA	NA	3 U	3 U	3 U	3 U
3&4-METHYLPHENOL	NA	NA	NA	8 U	8 U	8 U	8 U
3,3'-DICHLOROBENZIDINE	NA	NA	NA	3 UJ	3 UJ	3 UJ	3 UJ
3,3'-DIMETHYLBENZIDINE	NA	NA	NA	6 U	6 U	6 U	6 U
3-METHYLCHOLANTHRENE	NA	NA	NA	6 U	6 U	6 U	6 U
3-NITROANILINE	NA	NA	NA	4 UR	4 UR	4 UR	4 UR
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	10 U	10 U	10 U	10 U
4-AMINOBIPHENYL	NA	NA	NA	4 UJ	4 UJ	4 UJ	4 UJ
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	3 U	3 U	3 U	3 U
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	9 U	9 U	9 U	9 U
4-CHLOROANILINE	NA	NA	NA	4 UJ	4 UJ	4 UJ	4 UJ
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	3 U	3 U	3 U	3 U
4-NITROANILINE	NA	NA	NA	5 UR	5 UR	5 UR	5 UR
4-NITROPHENOL	NA	NA	NA	15 UJ	15 UJ	15 UJ	15 UJ
4-NITROQUINOLINE-1-OXIDE	NA	NA	NA	9 UR	9 UR	9 UR	9 UR
5-NITRO-O-TOLUIDINE	NA	NA	NA	5 U	5 U	5 U	5 U
7,12-DIMETHYLBENZ(A)ANTHRACENE	NA	NA	NA	4 U	4 U	4 U	4 U
A,A-DIMETHYLPHENETHYLAMINE	NA	NA	NA	15 UR	15 UR	15 UR	15 UR
ACENAPHTHENE	NA	NA	NA	3 U	3 U	3 U	3 U

TABLE A2-3
SWMU 9, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-09-MW01S	MPT-09-MW02S	MPT-09-MW03S	MPT-09-MW04S	MPT-09-MW05S	MPT-09-MW06S	
SAMPLE IDENTIFICATION	MPT-09-MW01S-0408	MPT-09-MW02S-0408	MPT-09-MW03S-0408	MPT-09-GW-MW04S-110706	MPT-09-GW-MW05S-110706	MPT-09-GW-MW06S-110606	MPT-09-GW-MW06S-110706
SAMPLE DATE	20080423	20080424	20080424	20061107	20061107	20061106	20061107
SEMIVOLATILES (µg/L)							
ACENAPHTHYLENE	NA	NA	NA	3 U	3 U	3 U	3 U
ACETOPHENONE	NA	NA	NA	5 U	5 U	5 U	5 U
ANILINE	NA	NA	NA	6 UJ	6 UJ	6 UJ	6 UJ
ANTHRACENE	NA	NA	NA	3 U	3 U	3 U	3 U
ARAMITE	NA	NA	NA	8 UR	8 UR	8 UR	8 UR
BAP EQUIVALENT	NA	NA	NA	3 U	3 U	3 U	3 U
BAP EQUIVALENT(1)	NA	NA	NA	0.0 U	0.0 U	0.0 U	0.0 U
BENZO(A)ANTHRACENE	NA	NA	NA	2 U	2 U	2 U	2 U
BENZO(A)PYRENE	NA	NA	NA	3 U	3 U	3 U	3 U
BENZO(B)FLUORANTHENE	NA	NA	NA	3 U	3 U	3 U	3 U
BENZO(G,H,I)PERYLENE	NA	NA	NA	8 U	8 U	8 U	8 U
BENZO(K)FLUORANTHENE	NA	NA	NA	4 U	4 U	4 U	4 U
BENZYL ALCOHOL	NA	NA	NA	8 U	8 U	8 U	8 U
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	3 U	3 U	3 U	3 U
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	4 UJ	4 UJ	4 UJ	4 UJ
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	7 UJ	7 UJ	7 UJ	7 UJ
BUTYL BENZYL PHTHALATE	NA	NA	NA	6 UJ	6 UJ	6 UJ	6 UJ
CHLOROBENZILATE	NA	NA	NA	7 UR	7 UR	7 UR	7 UR
CHRYSENE	NA	NA	NA	3 U	3 U	3 U	3 U
DIALLATE	NA	NA	NA	4 U	4 U	4 U	4 U
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	7 U	7 U	7 U	7 U
DIBENZOFURAN	NA	NA	NA	3 U	3 U	3 U	3 U
DIETHYL PHTHALATE	NA	NA	NA	3 U	3 U	3 U	3 U
DIMETHOATE	NA	NA	NA	7 UR	7 UR	7 UR	7 UR
DIMETHYL PHTHALATE	NA	NA	NA	4 UR	4 UR	4 UR	4 UR
DI-N-BUTYL PHTHALATE	NA	NA	NA	7 U	7 U	7 U	7 U
DI-N-OCTYL PHTHALATE	NA	NA	NA	5 UJ	5 UJ	5 UJ	5 UJ

TABLE A2-3
SWMU 9, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-09-MW01S**	**MPT-09-MW02S**	**MPT-09-MW03S**	**MPT-09-MW04S**	**MPT-09-MW05S**	**MPT-09-MW06S**	
SAMPLE IDENTIFICATION	MPT-09-MW01S-0408	MPT-09-MW02S-0408	MPT-09-MW03S-0408	MPT-09-GW-MW04S-110706	MPT-09-GW-MW05S-110706	MPT-09-GW-MW06S-110606	MPT-09-GW-MW06S-110706
SAMPLE DATE	20080423	20080424	20080424	20061107	20061107	20061106	20061107
SEMIVOLATILES (µg/L)							
DINOSEB	NA	NA	NA	5 U	5 U	5 U	5 U
ETHYL METHANE SULFONATE	NA	NA	NA	7 U	7 U	7 U	7 U
ETHYL PARATHION	NA	NA	NA	14 U	14 U	14 U	14 U
FLUORANTHENE	NA	NA	NA	8 U	8 U	8 U	8 U
FLUORENE	NA	NA	NA	3 U	3 U	3 U	3 U
HEXACHLOROBENZENE	NA	NA	NA	3 U	3 U	3 U	3 U
HEXACHLOROBUTADIENE	NA	NA	NA	2 U	2 U	2 U	2 U
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	2 U	2 U	2 U	2 U
HEXACHLOROETHANE	NA	NA	NA	3 U	3 U	3 U	3 U
HEXACHLOROPHENE	NA	NA	NA	5 UR	5 UR	5 UR	5 UR
HEXACHLOROPROPENE	NA	NA	NA	3 UJ	3 UJ	3 UJ	3 UJ
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	7 UJ	7 UJ	7 UJ	7 UJ
ISODRIN	NA	NA	NA	4 U	4 U	4 U	4 U
ISOPHORONE	NA	NA	NA	3 U	3 U	3 U	3 U
ISOSAFROLE	NA	NA	NA	5 U	5 U	5 U	5 U
METHAPYRILENE	NA	NA	NA	8 UJ	8 UJ	8 UJ	8 UJ
METHYL METHANE SULFONATE	NA	NA	NA	7 U	7 U	7 U	7 U
NAPHTHALENE	NA	NA	NA	2 U	2 U	2 U	2 U
NITROBENZENE	NA	NA	NA	2 U	2 U	2 U	2 U
N-NITROSODIETHYLAMINE	NA	NA	NA	3 U	3 U	3 U	3 U
N-NITROSODIMETHYLAMINE	NA	NA	NA	4 U	4 U	4 U	4 U
N-NITROSO-DI-N-BUTYLAMINE	NA	NA	NA	8 U	8 U	8 U	8 U
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	4 U	4 U	4 U	4 U
N-NITROSODIPHENYLAMINE	NA	NA	NA	5 U	5 U	5 U	5 U
N-NITROSOMETHYLETHYLAMINE	NA	NA	NA	5 U	5 U	5 U	5 U
N-NITROSOMORPHOLINE	NA	NA	NA	4 U	4 U	4 U	4 U
N-NITROSOPIPERIDINE	NA	NA	NA	3 U	3 U	3 U	3 U

TABLE A2-3
SWMU 9, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-09-MW01S**	**MPT-09-MW02S**	**MPT-09-MW03S**	**MPT-09-MW04S**	**MPT-09-MW05S**	**MPT-09-MW06S**	
SAMPLE IDENTIFICATION	MPT-09-MW01S-0408	MPT-09-MW02S-0408	MPT-09-MW03S-0408	MPT-09-GW-MW04S-110706	MPT-09-GW-MW05S-110706	MPT-09-GW-MW06S-110606	MPT-09-GW-MW06S-110706
SAMPLE DATE	20080423	20080424	20080424	20061107	20061107	20061106	20061107
SEMIVOLATILES (µg/L)							
N-NITROSOPYRROLIDINE	NA	NA	NA	5 U	5 U	5 U	5 U
O,O,O-TRIETHYL PHOSPHOROTHIOATE	NA	NA	NA	3 U	3 U	3 U	3 U
O-TOLUIDINE	NA	NA	NA	10 U	10 U	10 U	10 U
PENTACHLOROBENZENE	NA	NA	NA	3 U	3 U	3 U	3 U
PENTACHLORONITROBENZENE	NA	NA	NA	4 U	4 U	4 U	4 U
PENTACHLOROPHENOL	NA	NA	NA	16 U	16 U	16 U	16 U
PHENACETIN	NA	NA	NA	6 U	6 U	6 U	6 U
PHENANTHRENE	NA	NA	NA	3 U	3 U	3 U	3 U
PHENOL	NA	NA	NA	8 U	8 U	8 U	8 U
PRONAMIDE	NA	NA	NA	5 U	5 U	5 U	5 U
PYRENE	NA	NA	NA	6 U	6 U	6 U	6 U
PYRIDINE	NA	NA	NA	2 U	2 U	2 U	2 U
SAFROLE	NA	NA	NA	3 U	3 U	3 U	3 U
SOLVENT YELLOW 2	NA	NA	NA	6 U	6 U	6 U	6 U
SULFOTEPP	NA	NA	NA	3 U	3 U	3 U	3 U
THIONAZIN	NA	NA	NA	4 U	4 U	4 U	4 U
POLYCYCLIC AROMATIC HYDROCARBONS (µg/L)							
1-METHYLNAPHTHALENE	0.02 U	0.13	0.02 U	NA	NA	NA	NA
2-METHYLNAPHTHALENE	0.03 U	0.03 U	0.03 U	NA	NA	NA	NA
ACENAPHTHENE	0.02 U	0.08 J	0.02 U	NA	NA	NA	NA
ACENAPHTHYLENE	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA
ANTHRACENE	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA
BENZO(A)ANTHRACENE	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA
BENZO(A)PYRENE	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA

TABLE A2-3
SWMU 9, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-09-MW01S**	**MPT-09-MW02S**	**MPT-09-MW03S**	**MPT-09-MW04S**	**MPT-09-MW05S**	**MPT-09-MW06S**	
SAMPLE IDENTIFICATION	MPT-09-MW01S-0408	MPT-09-MW02S-0408	MPT-09-MW03S-0408	MPT-09-GW-MW04S-110706	MPT-09-GW-MW05S-110706	MPT-09-GW-MW06S-110606	MPT-09-GW-MW06S-110706
SAMPLE DATE	20080423	20080424	20080424	20061107	20061107	20061106	20061107
POLYCYCLIC AROMATIC HYDROCARBONS (µg/L)							
CHRYSENE	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA
FLUORANTHENE	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA
FLUORENE	0.02 U	0.08 J	0.02 U	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA
NAPHTHALENE	0.02 U	0.1	0.02 U	NA	NA	NA	NA
PHENANTHRENE	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA
PYRENE	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA
PESTICIDES/PCBS (µg/L)							
AROCLOR-1016	NA	NA	NA	0.38 U	0.38 U	0.38 UJ	0.38 U
AROCLOR-1221	NA	NA	NA	0.16 U	0.16 U	0.16 U	0.16 U
AROCLOR-1232	NA	NA	NA	0.26 U	0.26 U	0.26 U	0.26 U
AROCLOR-1242	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U
AROCLOR-1248	NA	NA	NA	0.18 U	0.18 U	0.18 U	0.18 U
AROCLOR-1254	NA	NA	NA	0.24 U	0.24 U	0.24 U	0.24 U
AROCLOR-1260	NA	NA	NA	0.25 U	0.25 U	0.25 UJ	0.25 U
TOTAL AROCLOR	NA	NA	NA	0 U	0 U	0 U	0 U
TOTAL AROCLOR HALFND	NA	NA	NA	0.835	0.835	0.835	0.835
METALS (µg/L)							
ALUMINUM	NA	NA	NA	44.8 U	204 U	72.8 U	21 U
ANTIMONY	NA	NA	NA	2.68 U	2.68 U	2.68 U	2.68 U
ARSENIC	NA	NA	NA	3.09 U	3.09 U	3.09 U	7.3
BARIUM	NA	NA	NA	9.9	6.3 U	6.4 U	9.3
BERYLLIUM	NA	NA	NA	0.68 U	0.3 U	0.3 U	0.3 U
CADMIUM	NA	NA	NA	2.48 U	2.48 U	2.48 U	2.8
CALCIUM	NA	NA	NA	96600	103000	71800	134000
CHROMIUM	NA	NA	NA	1.1 U	1.5 U	1.8 U	1.9 U

TABLE A2-3
SWMU 9, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA
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LOCATION	**MPT-09-MW01S**	**MPT-09-MW02S**	**MPT-09-MW03S**	**MPT-09-MW04S**	**MPT-09-MW05S**	**MPT-09-MW06S**	
SAMPLE IDENTIFICATION	MPT-09-MW01S-0408	MPT-09-MW02S-0408	MPT-09-MW03S-0408	MPT-09-GW-MW04S-110706	MPT-09-GW-MW05S-110706	MPT-09-GW-MW06S-110606	MPT-09-GW-MW06S-110706
SAMPLE DATE	20080423	20080424	20080424	20061107	20061107	20061106	20061107
METALS (µg/L)							
COBALT	NA	NA	NA	2.99 U	2.99 U	2.99 U	2.99 U
COPPER	NA	NA	NA	5.1 U	5 U	5.1 U	5.3 U
IRON	NA	NA	NA	114 U	530	182	1870
LEAD	NA	NA	NA	1.8 U	1.8 U	1.8 U	1.8 U
MAGNESIUM	NA	NA	NA	13600	16700	12900	20200
MANGANESE	NA	NA	NA	86	86.9	87.6	518
MERCURY	NA	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U
NICKEL	NA	NA	NA	9.98 U	9.98 U	9.98 U	9.98 U
POTASSIUM	NA	NA	NA	5690	5970	10600	7560
SELENIUM	NA	NA	NA	4.04 UR	4.04 UR	4.04 UR	4.04 UR
SILVER	NA	NA	NA	1.21 U	1.21 U	1.21 U	1.3
SODIUM	NA	NA	NA	20800	54400	29500	16600
THALLIUM	NA	NA	NA	6.04 U	6.04 U	6.04 U	6.04 U
TIN	NA	NA	NA	4.7 U	3.4 U	3.4 U	3.7 U
VANADIUM	NA	NA	NA	5.89 U	5.89 U	10.6 U	5.89 U
ZINC	NA	NA	NA	3.22 U	4.5	6.1	3.3
MISCELLANEOUS PARAMETERS (mg/L)							
SULFIDE	NA	NA	NA	0.16	0.05 U	0.05 U	0.1 U
MISCELLANEOUS PARAMETERS (µg/L)							
CYANIDE	NA	NA	NA	3.4	2.9	10 U	10 U
PETROLEUM HYDROCARBONS (mg/L)							
TPH (C08-C40)	0.056 J	0.962	0.103 J	NA	NA	NA	NA

Notes:
NA = Not analyzed
U = Indicates compound was analyzed for but not detected at indicated detection limit.
I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J = Estimated value, value not accurate. R = Data to be rejected

TABLE A2-4
SWMU 9, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-09-SB01**		**MPT-09-SB02**		**MPT-09-SB03**		**MPT-09-SB04**		**MPT-09-SB05**		**MPT-09-SB06**		**MPT-09-SB07**	
SAMPLE IDENTIFICATION	MPT-09-SB01-01-110106	MPT-09-SB01-09-110106	MPT-09-SB02-01-103006	MPT-09-SB02-09-103006	MPT-09-SB03-01-103006	MPT-09-SB03-09-103006	MPT-09-SB04-01-103006	MPT-09-SB04-09-103006	MPT-09-SB05-01-110106	MPT-09-SB05-09-110106	MPT-09-SB06-01-110106	MPT-09-SB06-09-110106	MPT-09-SB07-01-103006	MPT-09-SB07-09-103006
SAMPLE DATE	20061101	20061101	20061030	20061030	20061030	20061030	20061030	20061030	20061101	20061101	20061101	20061101	20061030	20061030
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	0	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	1	9
VOLATILES (µg/kg)														
1,1,1,2-TETRACHLOROETHANE	0.7 U	0.7 U	0.6 U	0.9 U	0.6 U	0.7 U	0.7 U	0.6 U	0.6 U	0.8 UJ	0.8 U	0.5 U	0.9 U	0.7 U
1,1,1-TRICHLOROETHANE	0.4 U	0.4 U	0.4 U	0.6 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.3 U	0.6 U	0.4 U
1,1,2,2-TETRACHLOROETHANE	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 UJ	0.4 U	0.3 U	0.5 U	0.4 U
1,1,2-TRICHLOROETHANE	0.4 U	0.4 U	0.3 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.3 U	0.5 U	0.4 U
1,1-DICHLOROETHANE	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.4 U	0.7 U	0.5 U
1,1-DICHLOROETHENE	0.9 U	0.8 U	0.8 U	1 U	0.8 U	0.9 U	0.9 U	0.8 U	0.8 U	1 U	1 U	0.7 U	1 U	0.8 U
1,2,3-TRICHLOROPROPANE	0.8 U	0.8 U	0.7 U	1 U	0.7 U	0.8 U	0.8 U	0.8 U	0.7 U	1 UJ	0.9 U	0.6 U	1 U	0.8 U
1,2,4-TRICHLOROBENZENE	1 U	0.9 U	0.9 U	1 U	0.9 U	1 U	1 U	0.9 U	0.9 U	1 UJ	1 U	0.7 U	1 U	0.9 U
1,2-DIBROMO-3-CHLOROPROPANE	0.7 U	0.7 U	0.6 U	0.9 U	0.7 U	0.8 U	0.7 U	0.7 U	0.6 U	0.9 UJ	0.8 U	0.6 U	1 U	0.7 U
1,2-DIBROMOETHANE	0.6 U	0.6 U	0.5 U	0.8 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.7 U	0.6 UJ	0.4 UJ	0.8 U	0.6 U
1,2-DICHLOROBENZENE	0.7 U	0.6 U	0.6 U	0.8 U	0.6 U	0.7 U	0.7 U	0.6 U	0.6 UJ	0.8 UJ	0.7 UJ	0.5 UJ	0.9 U	0.6 U
1,2-DICHLOROETHANE	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.3 U	0.5 U	0.4 U
1,2-DICHLOROPROPANE	0.6 U	0.5 U	0.5 U	0.7 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.7 U	0.6 U	0.4 U	0.8 U	0.5 U
1,3-DICHLOROBENZENE	0.6 U	0.6 U	0.6 U	0.8 U	0.6 U	0.7 U	0.6 U	0.6 U	0.6 U	0.8 UJ	0.7 U	0.5 U	0.8 U	0.6 U
1,4-DICHLOROBENZENE	0.4 U	0.4 U	0.4 U	0.6 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.5 UJ	0.5 U	0.3 U	0.6 U	0.4 U
1,4-DIOXANE	38 UR	36 UR	34 UR	49 UR	34 UR	40 UR	38 UR	36 UR	34 UR	45 UR	41 UR	29 UR	51 UR	36 UR
2-BUTANONE	6 U	6 U	6 U	8 U	6 U	7 U	6 U	6 U	6 U	23 J	7 U	5 U	8 U	6 U
2-HEXANONE	4 U	4 U	3 U	5 U	3 U	4 U	4 U	3 U	3 U	4 UJ	4 U	3 U	5 U	4 U
3-CHLOROPROPENE	0.6 U	0.5 U	0.5 U	0.7 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.7 U	0.6 U	0.4 U	0.7 U	0.5 U
4-METHYL-2-PENTANONE	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	3 U	2 U
ACETONE	6 UJ	6 UJ	5 UJ	8 UJ	5 UJ	6 U	6 UJ	6 UJ	5 UJ	48 J	6 UJ	4 UJ	8 U	6 U
ACETONITRILE	10 UR	10 UR	9 UR	13 UR	10 UR	11 UR	10 UR	10 UR	9 UR	12 UR	11 UR	8 UR	14 UR	10 UR
ACROLEIN	4 UR	4 UR	4 UR	6 UR	4 UR	5 UR	4 UR	4 UR	4 UR	5 UR	5 UR	3 UR	6 UR	4 UR
ACRYLONITRILE	11 U	11 U	10 U	14 U	10 U	12 U	11 U	11 U	10 U	13 U	12 U	9 U	15 U	11 U
BENZENE	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.3 U	0.6 U	0.4 U
BROMODICHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.4 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.3 U	0.2 U	0.4 U	0.3 U
BROMOFORM	0.7 U	0.7 U	0.6 U	0.9 U	0.7 U	0.8 U	0.7 U	0.7 U	0.7 U	0.9 UJ	0.8 U	0.6 U	1 U	0.7 U
BROMOMETHANE	0.9 U	0.8 U	0.8 U	1 U	0.8 U	0.9 U	0.9 U	0.8 U	0.8 U	1 U	1 U	0.7 U	1 U	0.8 U
CARBON DISULFIDE	0.5 U	0.4 U	0.4 U	0.6 U	0.4 U	0.5 U	0.5 U	0.4 U	0.4 U	4 J	0.5 U	0.4 U	0.6 U	0.4 U
CARBON TETRACHLORIDE	0.5 U	0.5 U	0.4 U	0.6 U	0.4 U	0.5 U	0.5 U	0.4 U	0.4 U	0.6 U	0.5 U	0.4 U	0.6 U	0.5 U
CHLOROBENZENE	0.3 U	0.3 U	0.3 U	0.4 U	0.3 U	0.4 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.4 U	0.2 U	0.4 U	0.3 U
CHLORODIBROMOMETHANE	0.8 U	0.7 U	0.7 U	1 U	0.7 U	0.8 U	0.8 U	0.7 U	0.7 U	0.9 U	0.8 U	0.6 U	1 U	0.7 U
CHLOROETHANE	0.9 U	0.8 U	0.8 U	1 U	0.8 U	0.9 U	0.9 U	0.8 U	0.8 U	1 U	0.9 U	0.6 U	1 U	0.8 U
CHLOROFORM	0.4 U	0.4 U	0.4 U	0.6 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.3 U	0.6 U	0.4 U
CHLOROMETHANE	0.6 U	0.6 U	0.5 U	0.8 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.7 U	0.7 U	0.5 U	0.8 U	0.6 U
CHLOROPRENE	0.7 U	0.6 U	0.6 U	0.8 U	0.6 U	0.7 U	0.7 U	0.6 U	0.6 U	0.8 U	0.7 U	0.5 U	0.9 U	0.6 U
CIS-1,2-DICHLOROETHENE	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.4 U	0.7 U	0.5 U
CIS-1,3-DICHLOROPROPENE	0.5 U	0.5 U	0.4 U	0.6 U	0.4 U	0.5 U	0.5 U	0.5 U	0.4 UJ	0.6 U	0.5 UJ	0.4 UJ	0.6 U	0.5 U
DIBROMOMETHANE	0.4 U	0.3 U	0.3 U	0.5 U	0.3 U	0.4 U	0.4 U	0.3 U	0.3 U	0.4 U	0.4 U	0.3 U	0.5 U	0.3 U
DICHLORODIFLUOROMETHANE	0.5 U	0.4 U	0.4 UJ	0.6 UJ	0.4 UJ	0.5 U	0.5 U	0.4 U	0.4 U	0.6 U	0.5 U	0.4 U	0.6 U	0.4 U
ETHYL METHACRYLATE	0.5 U	0.5 U	0.4 U	0.6 U	0.4 U	0.5 U	0.5 U	0.5 U	0.4 U	0.6 U	0.5 U	0.4 U	0.7 U	0.5 U

TABLE A2-4
SWMU 9, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-09-SB01**		**MPT-09-SB02**		**MPT-09-SB03**		**MPT-09-SB04**		**MPT-09-SB05**		**MPT-09-SB06**		**MPT-09-SB07**	
SAMPLE IDENTIFICATION	MPT-09-SB01-01-110106	MPT-09-SB01-09-110106	MPT-09-SB02-01-103006	MPT-09-SB02-09-103006	MPT-09-SB03-01-103006	MPT-09-SB03-09-103006	MPT-09-SB04-01-103006	MPT-09-SB04-09-103006	MPT-09-SB05-01-110106	MPT-09-SB05-09-110106	MPT-09-SB06-01-110106	MPT-09-SB06-09-110106	MPT-09-SB07-01-103006	MPT-09-SB07-09-103006
SAMPLE DATE	20061101	20061101	20061030	20061030	20061030	20061030	20061030	20061030	20061101	20061101	20061101	20061101	20061030	20061030
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	0	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	1	9
VOLATILES (µg/kg)														
ETHYLBENZENE	0.4 U	0.3 U	0.3 U	0.5 U	0.3 U	0.4 U	0.4 U	0.3 U	0.3 U	0.4 UJ	0.4 U	0.3 U	0.5 U	0.3 U
ISOBUTANOL	16 UR	15 UR	14 UR	21 UR	15 UR	17 UR	16 UR	15 UR	15 UR	19 UR	17 UR	12 UR	22 UR	15 UR
M+P-XYLENES	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	1 U	2 U	2 U
METHACRYLONITRILE	6 U	5 U	5 U	7 U	5 U	6 U	6 U	5 U	5 U	7 U	6 U	4 U	8 U	5 U
METHYL IODIDE	1 U	0.9 U	0.9 U	1 U	0.9 U	1 U	1 U	0.9 U	0.9 U	1 U	1 U	0.7 U	1 UJ	0.9 UJ
METHYL METHACRYLATE	0.6 U	0.6 U	0.6 U	0.8 U	0.6 U	0.7 U	0.6 U	0.6 U	0.6 U	0.8 U	0.7 U	0.5 U	0.8 U	0.6 U
METHYLENE CHLORIDE	1 U	2 U	1 U	2 U	1 U	2 U	0.8 U	2 U	3 U	4 U	4 U	2 U	1 U	2 U
O-XYLENE	0.7 U	0.7 U	0.6 U	0.9 U	0.6 U	0.7 U	0.7 U	0.7 U	0.6 U	0.8 UJ	0.8 U	0.5 U	0.9 U	0.7 U
PENTACHLOROETHANE	0.8 U	0.7 U	0.7 U	1 U	0.7 U	0.8 U	0.8 U	0.7 U	0.7 U	0.9 UJ	0.8 U	0.6 U	1 U	0.7 U
PROPIONITRILE	7 UR	7 UR	6 UR	9 UR	6 UR	8 UR	7 UR	7 UR	6 UR	8 UR	8 UR	6 UR	10 UR	7 UR
STYRENE	0.5 U	0.5 U	0.4 U	0.6 U	0.4 U	0.5 U	0.5 U	0.4 U	0.4 U	0.6 UJ	0.5 U	0.4 U	0.6 U	0.5 U
TETRACHLOROETHENE	0.8 U	0.8 U	0.7 U	1 U	0.7 U	0.8 U	0.8 U	0.7 U	0.7 U	0.9 U	0.8 U	0.6 U	1 U	0.8 U
TOLUENE	0.9 U	0.8 U	0.8 U	1 U	0.8 U	0.9 U	0.8 U	0.8 U	0.8 U	1 U	0.9 U	0.6 U	1 U	0.8 U
TRANS-1,2-DICHLOROETHENE	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.3 U	0.6 U	0.4 U
TRANS-1,3-DICHLOROPROPENE	0.4 U	0.4 U	0.4 U	0.6 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.3 U	0.6 U	0.4 U
TRANS-1,4-DICHLORO-2-BUTENE	1 U	1 U	0.9 U	1 U	0.9 U	1 U	1 U	0.9 U	0.9 U	1 UJ	1 U	0.8 U	1 U	1 U
TRICHLOROETHENE	0.8 U	0.7 U	0.7 U	1 U	0.7 U	0.8 U	0.7 U	0.7 U	0.7 U	0.9 U	0.8 U	0.6 U	1 U	0.7 U
TRICHLOROFLUOROMETHANE	0.5 U	0.5 U	0.4 U	0.6 U	0.4 U	0.5 U	0.5 U	0.4 U	0.4 U	0.6 U	0.5 U	0.4 U	0.6 U	0.5 U
VINYL ACETATE	0.7 U	0.7 U	0.6 U	0.9 U	0.6 U	0.7 U	0.7 U	0.7 U	0.6 U	0.8 U	0.8 U	0.5 U	0.9 U	0.7 U
VINYL CHLORIDE	0.7 U	0.6 U	0.6 U	0.9 U	0.6 U	0.7 U	0.7 U	0.6 U	0.6 U	0.8 U	0.7 U	0.5 U	0.9 U	0.7 U
SEMIVOLATILES (µg/kg)														
1,2,4,5-TETRACHLOROBENZENE	160 U	160 U	150 U	160 U	150 U	170 UJ	180 UJ	160 U	140 U	700 U	150 U	180 U	160 U	160 U
1,2,4-TRICHLOROBENZENE	150 U	150 U	140 U	150 U	140 U	160 UJ	160 UJ	150 U	130 U	640 U	140 U	160 U	140 U	140 U
1,2-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-TRINITROBENZENE	260 U	260 U	240 U	250 U	240 U	270 UJ	280 UJ	250 U	230 U	1100 U	240 U	280 U	250 U	250 U
1,3-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DINITROBENZENE	180 U	180 U	170 U	180 U	170 U	190 UJ	190 UJ	180 U	160 U	770 U	170 U	200 U	170 U	170 U
1,4-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-NAPHTHOQUINONE	310 U	310 U	290 U	300 U	280 U	320 UJ	330 UJ	300 U	270 U	1300 U	280 U	340 U	300 U	290 U
1,4-PHENYLENEDIAMINE	190 U	190 U	180 UR	180 UR	170 UR	200 UR	200 UJ	180 U	170 U	810 U	170 U	210 U	180 UR	180 UR
1-NAPHTHYLAMINE	210 UJ	210 UJ	200 UJ	210 UJ	190 UJ	220 UJ	230 UJ	210 UJ	190 UJ	900 UJ	190 UJ	230 UJ	200 UJ	200 UJ
2,2'-OXYBIS(1-CHLOROPROPANE)	150 U	150 U	140 UJ	150 UJ	140 UJ	160 UJ	160 UJ	150 U	130 U	650 U	140 U	170 U	150 U	140 U
2,3,4,6-TETRACHLOROPHENOL	290 U	280 U	270 U	280 U	260 U	300 UJ	300 UJ	280 U	250 U	1200 U	260 U	310 U	270 U	270 U
2,4,5-TRICHLOROPHENOL	280 U	280 U	260 U	270 U	260 U	290 UJ	300 UJ	270 U	240 U	1200 U	260 U	300 U	270 U	260 U
2,4,6-TRICHLOROPHENOL	240 U	240 U	220 U	230 U	220 U	250 UJ	260 UJ	240 U	210 U	1000 U	220 U	260 U	230 U	230 U
2,4-DICHLOROPHENOL	300 U	290 U	280 U	290 U	270 U	310 UJ	320 UJ	290 U	260 U	1200 U	270 U	320 U	280 U	280 U
2,4-DIMETHYLPHENOL	260 U	250 U	240 U	250 U	230 U	270 UJ	270 UJ	250 U	220 U	1100 U	230 U	280 U	240 U	240 U
2,4-DINITROPHENOL	940 U	920 U	870 U	900 U	850 U	970 UJ	1000 UJ	910 U	820 U	3900 U	850 U	1000 U	890 U	880 U
2,4-DINITROTOLUENE	250 U	250 U	230 U	240 U	230 U	260 UJ	270 UJ	240 U	220 U	1100 U	230 U	270 U	240 U	240 U
2,6-DICHLOROPHENOL	340 U	340 U	320 U	330 U	310 U	360 UJ	360 UJ	330 U	300 U	1400 U	310 U	370 U	320 U	320 U
2,6-DINITROTOLUENE	210 U	200 U	190 U	200 U	190 U	210 UJ	220 UJ	200 U	180 U	870 U	190 U	220 U	200 U	190 U

TABLE A2-4
SWMU 9, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-09-SB01**		**MPT-09-SB02**		**MPT-09-SB03**		**MPT-09-SB04**		**MPT-09-SB05**		**MPT-09-SB06**		**MPT-09-SB07**	
SAMPLE IDENTIFICATION	MPT-09-SB01-01-110106	MPT-09-SB01-09-110106	MPT-09-SB02-01-103006	MPT-09-SB02-09-103006	MPT-09-SB03-01-103006	MPT-09-SB03-09-103006	MPT-09-SB04-01-103006	MPT-09-SB04-09-103006	MPT-09-SB05-01-110106	MPT-09-SB05-09-110106	MPT-09-SB06-01-110106	MPT-09-SB06-09-110106	MPT-09-SB07-01-103006	MPT-09-SB07-09-103006
SAMPLE DATE	20061101	20061101	20061030	20061030	20061030	20061030	20061030	20061030	20061101	20061101	20061101	20061101	20061030	20061030
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	0	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	1	9
SEMIVOLATILES (µg/kg)														
2-ACETYLAMINOFLUORENE	340 U	340 U	320 U	330 U	310 U	350 UJ	360 UJ	330 U	300 U	1400 U	310 U	370 U	320 U	320 U
2-CHLORONAPHTHALENE	280 U	280 U	260 U	270 U	260 U	290 UJ	300 UJ	270 U	240 U	1200 U	260 U	300 U	270 U	260 U
2-CHLOROPHENOL	270 U	270 U	250 U	260 U	250 U	280 UJ	290 UJ	260 U	240 U	1100 U	250 U	300 U	260 U	260 U
2-METHYLNAPHTHALENE	160 U	150 U	140 U	150 U	140 U	160 UJ	160 UJ	150 U	140 U	9000	140 U	170 U	150 U	150 U
2-METHYLPHENOL	290 U	290 U	270 U	280 U	260 U	300 UJ	310 UJ	280 U	250 U	1200 U	260 U	320 U	280 U	270 U
2-NAPHTHYLAMINE	210 UJ	200 UJ	190 UJ	200 UJ	190 UJ	210 UJ	220 UJ	200 U	180 UJ	870 UJ	190 UJ	220 UJ	200 UJ	190 UJ
2-NITROANILINE	170 U	170 U	160 U	160 U	160 U	180 UJ	180 UJ	170 U	150 U	720 U	160 U	190 U	160 U	160 U
2-NITROPHENOL	260 U	260 U	240 U	250 U	240 U	270 UJ	280 UJ	250 U	230 U	1100 U	240 U	280 U	250 U	240 U
2-PICOLINE	180 U	180 U	160 U	170 U	160 U	180 UJ	190 UJ	170 U	160 U	750 U	160 U	190 U	170 U	170 U
3&4-METHYLPHENOL	290 U	280 U	270 U	280 U	260 U	300 UJ	310 UJ	280 U	250 U	1200 U	260 U	310 U	270 U	270 U
3,3'-DICHLOROBENZIDINE	330 U	330 U	310 UJ	320 UJ	300 UJ	340 UJ	350 UJ	320 UJ	290 U	1400 UJ	300 U	360 U	310 UJ	310 UJ
3,3'-DIMETHYLBENZIDINE	100 UJ	100 UJ	94 UJ	98 UJ	93 UJ	110 UJ	110 UJ	99 UJ	89 UJ	430 UJ	93 UJ	110 UJ	97 UJ	96 UJ
3-METHYLCHOLANTHRENE	340 U	330 U	310 U	320 U	310 U	350 UJ	360 UJ	330 U	290 U	1400 U	310 U	370 U	320 U	320 U
3-NITROANILINE	370 UJ	360 UJ	340 UJ	350 UJ	330 UR	380 UJ	390 UJ	360 UJ	320 UJ	1500 UJ	330 UJ	400 UJ	350 UJ	340 UJ
4,6-DINITRO-2-METHYLPHENOL	890 U	880 U	820 U	860 U	810 U	920 UJ	940 UJ	860 U	780 U	3700 U	810 U	960 U	840 U	830 U
4-AMINOBIPHENYL	250 UJ	250 UJ	230 UJ	240 UJ	230 UJ	260 UJ	270 UJ	240 UJ	220 UJ	1100 UJ	230 UJ	270 UJ	240 UJ	240 UJ
4-BROMOPHENYL PHENYL ETHER	190 U	190 U	180 U	180 U	170 U	200 UJ	200 UJ	180 U	170 U	800 U	170 U	210 U	180 U	180 U
4-CHLORO-3-METHYLPHENOL	380 U	380 U	350 U	370 U	350 U	400 UJ	400 UJ	370 U	330 U	1600 U	350 U	410 U	360 U	360 U
4-CHLOROANILINE	180 U	180 U	170 UJ	180 UJ	170 UJ	190 UJ	190 UJ	180 UJ	160 U	770 U	170 U	200 U	170 UJ	170 UJ
4-CHLOROPHENYL PHENYL ETHER	140 U	140 U	130 U	140 U	130 U	150 UJ	150 UJ	140 U	120 U	600 U	130 U	160 U	140 U	130 U
4-NITROANILINE	380 U	380 U	360 UJ	370 UJ	350 UJ	400 UJ	410 UJ	370 UJ	340 U	1600 U	350 U	420 U	370 UJ	360 UJ
4-NITROPHENOL	940 U	930 U	870 U	910 U	860 U	980 UJ	1000 UJ	910 UJ	820 U	4000 UJ	860 U	1000 U	900 U	880 U
4-NITROQUINOLINE-1-OXIDE	450 UR	440 UR	420 UR	440 UR	410 UR	470 UR	480 UR	440 UR	390 UR	1900 UR	410 UR	490 UR	430 UR	420 UR
5-NITRO-O-TOLUIDINE	350 U	350 U	320 U	340 U	320 U	360 UJ	370 UJ	340 U	310 U	1500 U	320 U	380 U	330 U	330 U
7,12-DIMETHYLBENZ(A)ANTHRACENE	380 U	380 U	360 U	370 U	350 U	400 UJ	410 UJ	370 U	340 U	1600 U	350 U	420 U	370 U	360 U
A,A-DIMETHYLPHENETHYLAMINE	180 U	170 U	160 UR	170 UR	160 UR	180 UR	190 UJ	170 U	150 U	740 U	160 U	190 U	170 UR	160 UR
ACENAPHTHENE	120 U	120 U	110 U	120 U	110 U	130 UJ	130 UJ	120 U	110 U	1400 J	110 U	130 U	120 U	120 U
ACENAPHTHYLENE	120 U	120 U	110 U	120 U	110 U	130 UJ	130 UJ	120 U	110 U	520 U	110 U	130 U	120 U	120 U
ACETOPHENONE	280 U	280 U	260 U	270 U	250 U	290 UJ	300 UJ	270 U	240 U	1200 U	250 U	300 U	260 U	260 U
ANILINE	420 U	420 U	390 U	410 U	390 U	440 UJ	450 UJ	410 U	370 U	1800 U	390 U	460 U	400 UJ	400 UJ
ANTHRACENE	120 U	120 U	110 U	120 U	110 U	130 UJ	130 UJ	120 U	110 U	610 J	110 U	130 U	120 U	110 U
ARAMITE	350 U	350 U	320 UJ	340 UJ	320 UJ	360 UJ	370 UJ	340 UJ	300 U	1500 U	320 U	380 U	330 UJ	330 UJ
BAP EQUIVALENT	120 U	120 U	110 U	403.35	397.78	130 U	130 U	120 U	110 U	520 U	110 U	130 U	120 U	120 U
BAP EQUIVALENT(1)	0.0 U	0.0 U	0.0 U	297.4	297.38	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U
BENZO(A)ANTHRACENE	110 U	110 U	100 U	330 J	340 J	120 UJ	120 UJ	110 U	97 U	470 U	100 U	120 U	110 U	100 U
BENZO(A)PYRENE	120 U	120 U	110 U	230 J	230 J	130 UJ	130 UJ	120 U	110 U	520 U	110 U	130 U	120 U	120 U
BENZO(B)FLUORANTHENE	160 U	150 U	140 U	340 J	330 J	160 UJ	160 UJ	150 U	140 U	650 U	140 U	170 U	150 U	150 U
BENZO(G,H,I)PERYLENE	200 U	200 U	180 U	190 U	180 U	210 UJ	210 UJ	190 U	170 U	840 U	180 U	220 U	190 U	190 U
BENZO(K)FLUORANTHENE	160 U	160 U	150 U	170 J	180 J	160 UJ	170 UJ	150 U	140 U	660 U	140 U	170 U	150 U	150 U
BENZOIC ACID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZYL ALCOHOL	480 U	480 U	450 U	460 U	440 U	500 UJ	510 UJ	470 U	420 U	2000 U	440 U	520 U	460 U	450 U

LOCATION	MPT-09-SB01		MPT-09-SB02		MPT-09-SB03		MPT-09-SB04		MPT-09-SB05		MPT-09-SB06		MPT-09-SB07	
SAMPLE IDENTIFICATION	MPT-09-SB01-01-110106	MPT-09-SB01-09-110106	MPT-09-SB02-01-103006	MPT-09-SB02-09-103006	MPT-09-SB03-01-103006	MPT-09-SB03-09-103006	MPT-09-SB04-01-103006	MPT-09-SB04-09-103006	MPT-09-SB05-01-110106	MPT-09-SB05-09-110106	MPT-09-SB06-01-110106	MPT-09-SB06-09-110106	MPT-09-SB07-01-103006	MPT-09-SB07-09-103006
SAMPLE DATE	20061101	20061101	20061030	20061030	20061030	20061030	20061030	20061030	20061101	20061101	20061101	20061101	20061030	20061030
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	0	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	1	9
SEMIVOLATILES (µg/kg)														
BIS(2-CHLOROETHOXY)METHANE	160 U	150 U	140 U	150 U	140 U	160 UJ	160 UJ	150 U	140 U	650 U	140 U	170 U	150 U	150 U
BIS(2-CHLOROETHYL)ETHER	160 U	160 U	150 U	160 U	150 U	170 UJ	180 UJ	160 U	140 U	690 U	150 U	180 U	160 UJ	150 UJ
BIS(2-ETHYLHEXYL)PHTHALATE	370 U	370 U	340 U	3700	340 U	390 UJ	400 UJ	360 U	570	1600 U	340 U	400 U	350 U	350 U
BUTYL BENZYL PHTHALATE	170 U	170 U	160 U	160 U	160 U	180 UJ	180 UJ	170 U	150 U	720 U	160 U	190 U	160 U	160 U
CARBAZOLE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROBENZILATE	190 U	180 U	170 U	180 U	170 U	190 UJ	200 UJ	180 U	160 U	790 U	170 U	200 U	180 U	180 U
CHRYSENE	140 U	130 U	120 U	400	380	140 UJ	140 UJ	130 U	120 U	570 U	120 U	150 U	130 U	130 U
DIALLATE	210 U	210 U	200 U	200 U	190 U	220 UJ	220 UJ	210 U	180 U	890 U	190 U	230 U	200 U	200 U
DIBENZO(A,H)ANTHRACENE	180 U	180 U	170 U	180 U	170 U	190 UJ	200 UJ	180 U	160 U	780 U	170 U	200 U	180 U	170 U
DIBENZOFURAN	120 U	120 U	110 U	120 U	110 U	120 UJ	130 UJ	120 U	100 U	500 U	110 U	130 U	110 U	110 U
DIETHYL PHTHALATE	240 U	240 U	220 U	240 U	220 U	250 UJ	260 UJ	240 U	210 U	1000 U	220 U	260 U	230 U	230 U
DIMETHOATE	270 U	260 U	250 U	260 U	240 U	280 UJ	280 UJ	260 U	230 U	1100 U	240 U	290 U	250 U	250 U
DIMETHYL PHTHALATE	160 U	150 U	140 U	150 U	140 U	160 UJ	170 UJ	150 U	140 U	660 U	140 U	170 U	150 U	150 U
DI-N-BUTYL PHTHALATE	260 U	250 U	240 U	250 U	240 U	270 UJ	270 UJ	250 U	220 U	1100 U	240 U	280 U	240 U	240 U
DI-N-OCTYL PHTHALATE	290 U	290 U	270 U	280 U	270 U	300 UJ	310 UJ	280 U	260 U	1200 U	270 U	320 U	280 U	270 U
DINOSEB	300 U	290 U	270 U	280 U	270 U	310 UJ	310 UJ	290 U	260 U	1200 U	270 U	320 U	280 U	280 U
ETHYL METHANE SULFONATE	330 U	330 U	310 U	320 U	300 U	340 UJ	350 UJ	320 U	290 U	1400 U	300 U	360 U	320 U	310 U
ETHYL PARATHION	440 U	440 U	410 U	430 U	400 U	460 UJ	470 UJ	430 U	380 U	1900 U	400 U	480 U	420 U	420 U
FLUORANTHENE	240 U	230 U	220 U	760	720	250 UJ	250 UJ	230 U	210 U	1000 U	220 U	260 U	230 U	220 U
FLUORENE	120 U	120 U	110 U	120 U	110 U	130 UJ	130 UJ	120 U	110 U	3300	110 U	130 U	120 U	120 U
HEXACHLOROBENZENE	160 U	150 U	140 U	150 U	140 U	160 UJ	170 UJ	150 U	140 U	660 U	140 U	170 U	150 U	150 U
HEXACHLOROBUTADIENE	130 U	130 U	120 U	130 U	120 U	140 UJ	140 UJ	130 U	120 U	570 U	120 U	150 U	130 U	130 U
HEXACHLOROCYCLOPENTADIENE	180 U	180 U	170 U	180 U	170 U	190 UJ	200 UJ	180 U	160 U	780 U	170 U	200 U	180 U	170 U
HEXACHLOROETHANE	160 U	160 U	150 U	160 U	150 U	170 UJ	180 UJ	160 U	140 U	700 U	150 U	180 U	160 U	160 U
HEXACHLOROPHENE	190 U	190 U	180 UR	180 UR	170 UR	200 UR	200 UJ	180 U	170 U	810 U	170 U	210 U	180 UR	180 UR
HEXACHLOROPROPENE	180 U	170 U	160 U	170 U	160 U	180 UJ	190 UJ	170 U	150 U	740 U	160 U	190 U	170 U	160 U
INDENO(1,2,3-CD)PYRENE	320 U	310 U	290 UJ	300 UJ	290 UJ	330 UJ	340 UJ	310 UJ	280 U	1300 UJ	290 U	340 U	300 U	300 U
ISODRIN	210 U	210 U	190 U	200 U	190 U	220 UJ	220 UJ	200 U	180 U	880 U	190 U	230 U	200 U	200 U
ISOPHORONE	140 U	140 U	130 U	130 U	130 U	140 UJ	150 UJ	140 U	120 U	590 U	130 U	150 U	130 U	130 U
ISOSAFROLE	160 U	150 U	140 U	150 U	140 U	160 UJ	160 UJ	150 U	140 U	650 U	140 U	170 U	150 U	150 U
METHAPYRILENE	140 U	140 U	130 UR	140 UR	130 UR	150 UR	150 UR	140 UJ	120 U	600 U	130 U	160 U	140 UR	130 UR
METHYL METHANE SULFONATE	300 U	300 U	280 U	290 U	280 U	320 UJ	320 UJ	300 U	260 U	1300 U	280 U	330 U	290 U	280 U
NAPHTHALENE	140 U	140 U	130 U	140 U	130 U	150 UJ	150 UJ	140 U	120 U	1400 J	130 U	160 U	140 U	130 U
NITROBENZENE	130 U	130 U	120 U	130 U	120 U	140 UJ	140 UJ	130 U	110 U	550 U	120 U	140 U	120 U	120 U
N-NITROSODIETHYLAMINE	140 U	140 U	130 U	140 U	130 U	150 UJ	150 UJ	140 U	120 U	600 U	130 U	160 U	140 U	140 U
N-NITROSODIMETHYLAMINE	170 U	170 U	160 U	160 U	150 U	180 UJ	180 UJ	160 U	150 U	710 U	150 U	180 U	160 U	160 U
N-NITROSO-DI-N-BUTYLAMINE	270 U	270 U	250 U	260 U	250 U	280 UJ	290 UJ	260 U	240 U	1200 U	250 U	300 U	260 U	260 U
N-NITROSO-DI-N-PROPYLAMINE	210 U	210 U	200 U	210 U	190 U	220 UJ	230 UJ	210 U	190 U	900 U	190 U	230 U	200 U	200 U
N-NITROSODIPHENYLAMINE	280 U	280 U	260 U	270 U	260 U	290 UJ	300 UJ	270 U	240 U	1200 U	260 U	300 U	270 U	260 U
N-NITROSOMETHYLETHYLAMINE	170 U	160 U	150 UR	160 UR	150 UR	170 UJ	180 UJ	160 U	140 U	700 U	150 U	180 U	160 U	160 U
N-NITROSOMORPHOLINE	140 U	140 U	130 U	130 U	120 U	140 UJ	140 UJ	130 U	120 U	580 U	120 U	150 U	130 U	130 U

TABLE A2-4
SWMU 9, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-09-SB01		MPT-09-SB02		MPT-09-SB03		MPT-09-SB04		MPT-09-SB05		MPT-09-SB06		MPT-09-SB07	
SAMPLE IDENTIFICATION	MPT-09-SB01-01-110106	MPT-09-SB01-09-110106	MPT-09-SB02-01-103006	MPT-09-SB02-09-103006	MPT-09-SB03-01-103006	MPT-09-SB03-09-103006	MPT-09-SB04-01-103006	MPT-09-SB04-09-103006	MPT-09-SB05-01-110106	MPT-09-SB05-09-110106	MPT-09-SB06-01-110106	MPT-09-SB06-09-110106	MPT-09-SB07-01-103006	MPT-09-SB07-09-103006
SAMPLE DATE	20061101	20061101	20061030	20061030	20061030	20061030	20061030	20061030	20061101	20061101	20061101	20061101	20061030	20061030
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	0	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	1	9
SEMIVOLATILES (µg/kg)														
N-NITROSOPIPERIDINE	140 U	140 U	130 U	130 U	130 U	140 UJ	150 UJ	140 U	120 U	590 U	130 U	150 U	130 U	130 U
N-NITROSOPYRROLIDINE	240 U	230 U	220 U	230 U	220 U	250 UJ	250 UJ	230 U	210 U	1000 U	220 U	260 U	230 U	220 U
O,O,O-TRIETHYL PHOSPHOROTHIOATE	150 U	150 U	140 U	150 U	140 U	160 UJ	160 UJ	150 U	130 U	640 U	140 U	170 U	140 U	140 U
O-TOLUIDINE	720 U	710 U	660 U	690 U	660 U	750 UJ	760 UJ	700 U	630 U	3000 U	660 U	780 U	680 U	670 U
PENTACHLOROBENZENE	110 U	110 U	100 U	110 U	100 U	110 UJ	120 UJ	110 U	96 U	460 U	100 U	120 U	100 U	100 U
PENTACHLORONITROBENZENE	160 U	160 U	150 U	160 U	150 U	170 UJ	180 UJ	160 U	140 U	690 U	150 U	180 U	160 U	150 U
PENTACHLOROPHENOL	760 U	750 U	710 U	740 U	700 U	790 UJ	810 UJ	740 U	670 U	3200 U	700 U	830 U	730 U	720 U
PHENACETIN	240 U	240 U	220 U	230 U	220 U	250 UJ	260 UJ	230 U	210 U	1000 U	220 U	260 U	230 U	230 U
PHENANTHRENE	89 U	88 U	83 U	190 J	170 J	93 UJ	95 UJ	87 U	78 U	5700	82 U	97 U	85 U	84 U
PHENOL	270 U	260 U	250 U	260 U	240 U	280 UJ	290 UJ	260 U	230 U	1100 U	240 U	290 U	260 U	250 U
PRONAMIDE	190 U	190 U	180 U	180 U	170 U	200 UJ	200 UJ	180 U	170 U	800 U	170 U	210 U	180 U	180 U
PYRENE	170 U	170 U	160 U	620	610	170 UJ	180 UJ	160 U	150 U	710 U	150 U	180 U	160 U	160 U
PYRIDINE	260 U	260 U	240 U	260 U	240 U	270 UJ	280 UJ	260 U	230 U	1100 U	240 U	290 U	250 U	250 U
SAFROLE	180 U	180 U	170 U	170 U	160 U	190 UJ	190 UJ	170 U	160 U	760 U	160 U	200 U	170 U	170 U
SOLVENT YELLOW 2	240 U	240 U	220 U	230 U	220 U	250 UJ	260 UJ	230 U	210 U	1000 U	220 U	260 U	230 U	230 U
SULFOTEPP	180 U	170 U	160 U	170 U	160 U	180 UJ	190 UJ	170 U	150 U	740 U	160 U	190 U	170 U	160 U
THIONAZIN	280 U	270 U	260 U	270 U	250 U	290 UJ	290 UJ	270 U	240 U	1200 U	250 U	300 U	260 U	260 U
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)														
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BAP EQUIVALENT	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BAP EQUIVALENT(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES/PCBS (µg/kg)														
AROCLOR-1016	18 U	18 U	17 U	18 U	17 U	19 U	20 U	18 U	16 U	20 U	17 U	20 U	18 U	17 U
AROCLOR-1221	14 U	14 U	13 U	13 U	13 U	14 U	15 U	14 U	12 U	15 U	13 U	15 U	13 U	13 U
AROCLOR-1232	6.1 U	6.1 U	5.7 U	5.9 U	5.6 U	6.4 U	6.5 U	6 U	5.4 U	6.5 U	5.6 U	6.7 U	5.8 U	5.8 U
AROCLOR-1242	7.8 U	7.7 U	7.2 U	7.5 U	7.1 U	8.1 U	8.3 U	7.5 U	6.8 U	8.2 U	7.1 U	8.4 U	7.4 U	7.3 U
AROCLOR-1248	6.6 U	6.5 U	6.1 U	6.4 U	6 U	6.9 U	7 U	6.4 U	5.8 U	7 U	6 U	7.2 U	6.3 U	6.2 U
AROCLOR-1254	15 U	15 U	14 U	14 U	14 U	16 U	16 U	15 U	13 U	16 U	14 U	16 U	14 U	14 U
AROCLOR-1260	16 U	16 U	15 U	16 U	15 U	17 U	17 U	16 U	14 U	17 U	15 U	18 U	15 U	15 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U
TOTAL AROCLOR HALFND	41.75	41.65	39	40.4	38.85	43.7	44.9	41.45	36.5	44.85	38.85	45.65	39.75	39.15
METALS (mg/kg)														
ALUMINUM	2360 J	798 J	2740	557	1160	783	1940 J	1140 J	1250 J	601 J	1300 J	648 J	1100	815

TABLE A2-4
SWMU 9, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-09-SB01**		**MPT-09-SB02**		**MPT-09-SB03**		**MPT-09-SB04**		**MPT-09-SB05**		**MPT-09-SB06**		**MPT-09-SB07**	
SAMPLE IDENTIFICATION	MPT-09-SB01-01-110106	MPT-09-SB01-09-110106	MPT-09-SB02-01-103006	MPT-09-SB02-09-103006	MPT-09-SB03-01-103006	MPT-09-SB03-09-103006	MPT-09-SB04-01-103006	MPT-09-SB04-09-103006	MPT-09-SB05-01-110106	MPT-09-SB05-09-110106	MPT-09-SB06-01-110106	MPT-09-SB06-09-110106	MPT-09-SB07-01-103006	MPT-09-SB07-09-103006
SAMPLE DATE	20061101	20061101	20061030	20061030	20061030	20061030	20061030	20061030	20061101	20061101	20061101	20061101	20061030	20061030
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	0	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	1	9
METALS (mg/kg)														
ANTIMONY	0.31 U	0.3 U	0.26 U	0.23 U	0.2 U	0.24 U	0.3 U	0.42 U	0.29 U	0.32 U	0.26 U	0.32 U	0.24 U	0.19 U
ARSENIC	0.95 U	1.8	1.2 U	0.81 U	1.7 U	1.3 U	1.4 U	0.56 U	0.62 U	1.8 U	0.68 U	0.61 U	0.94 U	0.55 U
BARIUM	10	6	8.7	5.4	12.2	5.5	9.2	7.7	6.2	5.9	8.3	6.8	7.5	4.6
BERYLLIUM	0.1 U	0.14 U	0.14 U	0.12 U	0.15 U	0.11 U	0.12 U	0.09 U	0.07 U	0.11 U	0.1 U	0.09 U	0.11 U	0.11 U
CADMIUM	0.05 U	0.11 J	0.18 J	0.04 U	0.07 J	0.05 U	0.1 J	0.06 U	0.07 J	0.06 U	0.05 U	0.06 U	0.04 U	0.04 J
CALCIUM	56300	158000	99000	153000	125000	146000	103000	124000	111000	173000	104000	222000	116000	94200
CHROMIUM	4	4.2	6.6	2.8 J	4.5	3.3	6.2	4.1	3.4	4.6	4.3	3.4	5.1	2.8
COBALT	0.37	0.28	0.38	0.11	0.26	0.2	0.42	0.23	0.29	0.2	0.4	0.25	0.22	0.24
COPPER	2.7 U	1.2 U	5.1 J	0.67 U	1.4 J	0.8 J	5.6 U	3 U	1.8 U	1.4 U	1.3 U	1.6 U	1.2 J	0.42 U
IRON	756	1400	1210	675	970	1000	1720	878	989	1120	1230	872	1050	873
LEAD	2.2 J	0.48 U	5.1	0.47 J	1.5 J	0.37 J	3.9 J	2.7 J	2 J	0.72 U	1.6 J	0.68 U	1.7 J	0.37 J
MAGNESIUM	489 J	1180 J	787 J	806 J	875 J	1050 J	1040 J	828 J	527 J	1580 J	698 J	1630 J	629 J	716 J
MANGANESE	24.3 J	94.2 J	30 J	35 J	55.8 J	45.8 J	73.3 J	36.8 J	30.9 J	57.2 J	45.5 J	64.7 J	39.4 J	33 J
MERCURY	0.05	0.01 U	0.48	0.01 U	0.01 U	0.01 U	0.02	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
NICKEL	1.1 J	0.98 J	2.7	0.75 U	1 U	0.87 U	2.2 J	0.92 J	1.7 J	0.63 J	1.4 J	0.44 J	1.3	0.77 U
POTASSIUM	75.5	123	198 J	109 J	78.2 J	104 J	67	108	64.02 U	86.7	103	141	143 J	62.1 J
SELENIUM	0.38 UJ	0.41 UJ	0.44 J	0.35 UJ	0.3 UJ	0.37 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.48 UJ	0.39 UJ	0.48 UJ	0.36 UJ	0.28 UJ
SILVER	0.4 U	0.43 U	0.12 U	0.11 U	0.09 U	0.11 U	0.42 U	0.47 U	0.41 U	0.51 U	0.4 U	0.5 U	0.11 U	0.08 U
SODIUM	458 J	1310 J	563 J	1550 J	1180 J	1350 J	870 J	1110 J	997 J	1370 J	1000 J	1960 J	1150 J	892 J
THALLIUM	0.57 U	0.61 U	0.58 U	0.52 U	0.5	0.55 U	0.6 U	0.67 U	0.58 U	0.72 U	0.58 U	0.71 U	0.54 U	0.42 U
TIN	3.6 U	3.8 U	3 U	2.9 U	2.4 U	3 U	3.6 U	4.2 U	3.4 U	4.3 U	3.3 U	3.7 U	2.6 U	2.3 U
VANADIUM	2.7	3 J	4	2 J	3.7	2.6 J	4.1	3	2.7	2.2 J	2.9	2.1 J	2.4 J	1.7 J
ZINC	10.6	2.7 J	17	2.2 J	8.3	2.6 J	18.1	11.9	12.5	2.5 U	8.5	2.5 U	13.6 J	2.1 J
MISCELLANEOUS PARAMETERS (%)														
PERCENT SOLIDS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL SOLIDS	86	87	93	89	94	83	81	89	99	82	94	79	90	92
MISCELLANEOUS PARAMETERS (mg/kg)														
CYANIDE	0.6 U	0.55 U	0.5 U	0.55 U	0.5 U	0.55 U	0.6 U	0.33	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
SULFIDE	27 U	29 U	27 U	30 U	27 U	28 U	26 U	31 U	25 U	29 U	29 U	29 U	26 U	30 U
PETROLEUM HYDROCARBONS (mg/kg)														
TPH (C08-C40)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE A2-4
SWMU 9, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-09-SB08**		**MPT-09-SB09**		**MPT-09-SB10**		**MPT-09-SB11**		**MPT-09-SB12**		**MPT-09-SB13**		**MPT-09-SB14**	**MPT-09-SB15**
SAMPLE IDENTIFICATION	MPT-09-SB08-01-103006	MPT-09-SB08-09-103006	MPT-09-SB09-01-110106	MPT-09-SB09-09-110106	MPT-09-SB10-01-103006	MPT-09-SB10-09-103006	MPT-09-SB11-01-103006	MPT-09-SB11-09-103006	MPT-09-SB12-01-103006	MPT-09-SB12-09-103006	MPT-09-SB13-01-110106	MPT-09-SB13-09-110106	MPT-09-SB14-09-020707	MPT-09-SB15-09-020707
SAMPLE DATE	20061030	20061030	20061101	20061101	20061030	20061030	20061030	20061030	20061030	20061030	20061101	20061101	20070207	20070207
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	8	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	9	9
VOLATILES (µg/kg)														
1,1,1,2-TETRACHLOROETHANE	0.6 U	0.7 U	0.8 U	0.8 UJ	0.7 U	0.7 U	0.8 U	0.6 U	0.7 U	0.7 U	2 U	2 U	NA	NA
1,1,1-TRICHLOROETHANE	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U	1 U	1 U	NA	NA
1,1,2,2-TETRACHLOROETHANE	0.3 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	1 U	1 U	NA	NA
1,1,2-TRICHLOROETHANE	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	1 U	1 U	NA	NA
1,1-DICHLOROETHANE	0.4 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.4 U	0.5 U	0.6 U	2 U	2 U	NA	NA
1,1-DICHLOROETHENE	0.7 U	0.9 U	1 U	1 U	0.9 U	0.9 U	1 U	0.8 U	0.9 U	0.9 U	3 U	2 U	NA	NA
1,2,3-TRICHLOROPROPANE	0.7 U	0.8 U	0.8 U	0.9 UJ	0.8 U	0.8 U	0.9 U	0.7 U	0.8 U	0.8 U	2 U	2 U	NA	NA
1,2,4-TRICHLOROBENZENE	0.8 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.8 U	1 U	1 U	3 U	3 U	NA	NA
1,2-DIBROMO-3-CHLOROPROPANE	0.6 U	0.8 U	0.8 U	0.8 UJ	0.8 U	0.7 U	0.8 U	0.6 U	0.8 U	0.8 U	2 U	2 U	NA	NA
1,2-DIBROMOETHANE	0.5 U	0.6 UJ	0.6 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.6 U	2 UJ	2 UJ	NA	NA
1,2-DICHLOROBENZENE	0.6 U	0.7 UJ	0.7 U	0.8 UJ	0.7 U	0.7 U	0.7 U	0.6 U	0.7 U	0.7 U	2 UJ	2 UJ	NA	NA
1,2-DICHLOROETHANE	0.3 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	1 U	1 U	NA	NA
1,2-DICHLOROPROPANE	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.6 U	2 U	2 U	NA	NA
1,3-DICHLOROBENZENE	0.5 U	0.7 U	0.7 U	0.7 UJ	0.7 U	0.6 U	0.7 U	0.6 U	0.6 U	0.7 U	2 U	2 U	NA	NA
1,4-DICHLOROBENZENE	0.4 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U	1 U	1 U	NA	NA
1,4-DIOXANE	32 UR	40 UR	41 UR	44 UR	40 UR	38 UR	42 UR	33 UR	39 UR	40 UR	120 UR	110 UR	NA	NA
2-BUTANONE	5 U	7 U	7 U	17 J	7 U	6 U	7 U	6 U	7 U	7 U	20 U	19 U	NA	NA
2-HEXANONE	3 U	4 U	4 U	4 UJ	4 U	4 U	4 U	3 U	4 U	4 U	12 U	11 U	NA	NA
3-CHLOROPROPENE	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.6 U	2 U	2 U	NA	NA
4-METHYL-2-PENTANONE	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	7 U	7 U	NA	NA
ACETONE	5 U	6 UJ	6 UJ	57 J	6 U	6 U	7 U	5 U	6 U	6 U	19 UJ	32 J	NA	NA
ACETONITRILE	9 UR	11 UR	11 UR	12 UR	11 UR	10 UR	12 UR	9 UR	11 UR	11 UR	33 UR	31 UR	NA	NA
ACROLEIN	4 UR	5 UR	5 UR	5 UR	5 UR	4 UR	5 UR	4 UR	4 UR	5 UR	14 UR	13 UR	NA	NA
ACRYLONITRILE	9 U	12 U	12 U	13 U	12 U	11 U	12 U	10 U	12 U	12 U	36 U	33 U	NA	NA
BENZENE	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	1 U	1 U	NA	NA
BROMODICHLOROMETHANE	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.9 U	0.9 U	NA	NA
BROMOFORM	0.6 U	0.8 U	0.8 U	0.8 UJ	0.8 U	0.7 U	0.8 U	0.6 U	0.8 U	0.8 U	2 U	2 U	NA	NA
BROMOMETHANE	0.7 U	0.9 U	0.9 U	1 U	0.9 U	0.9 U	1 U	0.8 U	0.9 U	0.9 U	3 U	2 U	NA	NA
CARBON DISULFIDE	0.4 U	0.5 U	0.5 U	2 J	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U	0.5 U	1 U	1 U	NA	NA
CARBON TETRACHLORIDE	0.4 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U	0.5 U	2 U	1 U	NA	NA
CHLOROBENZENE	0.3 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.3 U	0.4 U	0.3 U	0.3 U	0.4 U	1 U	1 U	NA	NA
CHLORODIBROMOMETHANE	0.6 U	0.8 U	0.8 U	0.9 U	0.8 U	0.8 U	0.8 U	0.7 U	0.8 U	0.8 U	2 U	2 U	NA	NA
CHLOROETHANE	0.7 U	0.9 U	0.9 U	1 U	0.9 U	0.9 U	1 U	0.7 U	0.9 U	0.9 U	3 U	2 U	NA	NA
CHLOROFORM	0.4 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	1 U	1 U	NA	NA
CHLOROMETHANE	0.5 U	0.6 U	0.6 U	0.7 U	0.6 U	0.6 U	0.7 U	0.5 U	0.6 U	0.6 U	2 U	2 U	NA	NA
CHLOROPRENE	0.6 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.7 U	0.6 U	0.7 U	0.7 U	2 U	2 U	NA	NA
CIS-1,2-DICHLOROETHENE	0.4 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	2 U	2 U	NA	NA
CIS-1,3-DICHLOROPROPENE	0.4 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U	0.5 U	2 UJ	1 U	NA	NA
DIBROMOMETHANE	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	1 U	1 U	NA	NA
DICHLORODIFLUOROMETHANE	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U	0.5 U	1 U	1 U	NA	NA
ETHYL METHACRYLATE	0.4 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.4 U	0.5 U	0.5 U	2 U	1 U	NA	NA

TABLE A2-4
SWMU 9, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-09-SB08		MPT-09-SB09		MPT-09-SB10		MPT-09-SB11		MPT-09-SB12		MPT-09-SB13		MPT-09-SB14	MPT-09-SB15
SAMPLE IDENTIFICATION	MPT-09-SB08-01-103006	MPT-09-SB08-09-103006	MPT-09-SB09-01-110106	MPT-09-SB09-09-110106	MPT-09-SB10-01-103006	MPT-09-SB10-09-103006	MPT-09-SB11-01-103006	MPT-09-SB11-09-103006	MPT-09-SB12-01-103006	MPT-09-SB12-09-103006	MPT-09-SB13-01-110106	MPT-09-SB13-09-110106	MPT-09-SB14-09-020707	MPT-09-SB15-09-020707
SAMPLE DATE	20061030	20061030	20061101	20061101	20061030	20061030	20061030	20061030	20061030	20061030	20061101	20061101	20070207	20070207
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	8	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	9	9
VOLATILES (µg/kg)														
ETHYLBENZENE	0.3 U	0.4 U	0.4 U	1 J	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	1 U	1 U	NA	NA
ISOBUTANOL	14 UR	17 UR	17 UR	18 UR	17 UR	16 UR	18 UR	14 UR	17 UR	17 UR	51 UR	47 UR	NA	NA
M+P-XYLENES	1 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	6 U	5 U	NA	NA
METHACRYLONITRILE	5 U	6 U	6 U	6 U	6 U	6 U	6 U	5 U	6 U	6 U	18 U	17 U	NA	NA
METHYL IODIDE	0.8 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	0.8 UJ	1 UJ	1 UJ	3 U	3 U	NA	NA
METHYL METHACRYLATE	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.6 U	0.7 U	0.5 U	0.6 U	0.7 U	2 U	2 U	NA	NA
METHYLENE CHLORIDE	0.8 U	2 U	2 U	5 U	4 U	3 U	3 U	0.7 U	2 U	2 U	8 U	12 U	NA	NA
O-XYLENE	0.6 U	0.8 U	0.8 U	0.8 UJ	0.8 U	0.7 U	0.8 U	0.6 U	0.7 U	0.7 U	2 U	2 U	NA	NA
PENTACHLOROETHANE	0.6 U	0.8 U	0.8 U	0.9 UJ	0.8 U	0.8 U	0.8 U	0.7 U	0.8 U	0.8 U	2 U	2 U	NA	NA
PROPIONITRILE	6 UR	8 UR	8 UR	8 UR	8 UR	7 UR	8 UR	6 UR	7 UR	8 UR	23 UR	21 UR	NA	NA
STYRENE	0.4 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U	0.5 U	2 U	1 U	NA	NA
TETRACHLOROETHENE	0.7 U	0.8 U	0.8 U	0.9 U	0.8 U	0.8 U	0.9 U	0.7 U	0.8 U	0.8 U	2 U	2 U	NA	NA
TOLUENE	0.7 U	0.9 U	0.9 U	1 U	0.9 U	0.9 U	0.9 U	0.7 U	0.9 U	0.9 U	3 U	2 U	NA	NA
TRANS-1,2-DICHLOROETHENE	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	1 U	1 U	NA	NA
TRANS-1,3-DICHLOROPROPENE	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U	1 U	1 U	NA	NA
TRANS-1,4-DICHLORO-2-BUTENE	0.8 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.9 U	1 U	1 U	3 U	3 U	NA	NA
TRICHLOROETHENE	0.6 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.6 U	0.8 U	0.8 U	2 U	2 U	NA	NA
TRICHLOROFLUOROMETHANE	0.4 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U	0.5 U	2 U	1 U	NA	NA
VINYL ACETATE	0.6 U	0.8 U	0.8 U	0.8 U	0.8 U	0.7 U	0.8 U	0.6 U	0.7 U	0.7 U	2 U	2 U	NA	NA
VINYL CHLORIDE	0.6 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.8 U	0.6 U	0.7 U	0.7 U	2 U	2 U	NA	NA
SEMIVOLATILES (µg/kg)														
1,2,4,5-TETRACHLOROBENZENE	140 U	170 U	150 U	750 U	160 U	160 U	170 U	170 U	150 U	180 U	150 U	170 U	NA	NA
1,2,4-TRICHLOROBENZENE	130 U	160 U	140 U	680 U	140 U	150 U	160 U	150 U	140 U	160 U	140 U	150 U	NA	NA
1,2-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-TRINITROBENZENE	230 U	270 U	240 U	1200 U	240 U	260 U	270 U	270 U	240 U	280 U	240 U	260 U	NA	NA
1,3-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-DINITROBENZENE	160 U	190 U	170 U	820 U	170 U	180 U	190 U	180 U	160 U	190 U	160 U	180 U	NA	NA
1,4-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-NAPHTHOQUINONE	270 U	320 U	280 U	1400 U	290 U	300 U	320 U	320 U	280 U	330 U	280 U	310 U	NA	NA
1,4-PHENYLENEDIAMINE	170 UR	200 UR	180 U	860 U	180 UR	190 UR	200 UR	190 UR	170 UR	200 UR	170 U	190 U	NA	NA
1-NAPHTHYLAMINE	190 UJ	220 UJ	200 UJ	960 UJ	200 UJ	210 UJ	220 UJ	220 UJ	190 UJ	230 UJ	190 UJ	220 UJ	NA	NA
2,2'-OXYBIS(1-CHLOROPROPANE)	140 U	160 U	140 U	700 U	140 U	150 U	160 U	160 U	140 U	160 U	140 U	160 U	NA	NA
2,3,4,6-TETRACHLOROPHENOL	250 U	300 U	260 U	1300 U	270 U	280 U	300 U	290 U	260 U	310 U	260 U	290 U	NA	NA
2,4,5-TRICHLOROPHENOL	250 U	290 U	260 U	1300 U	260 U	280 U	290 U	280 U	260 U	300 U	260 U	280 U	NA	NA
2,4,6-TRICHLOROPHENOL	210 U	250 U	220 U	1100 U	230 U	240 U	250 U	250 U	220 U	260 U	220 U	240 U	NA	NA
2,4-DICHLOROPHENOL	260 U	310 U	270 U	1300 U	280 U	290 U	310 U	300 U	270 U	320 U	270 U	300 U	NA	NA
2,4-DIMETHYLPHENOL	220 U	270 U	240 U	1200 U	240 U	250 U	260 U	260 U	230 U	270 U	230 U	260 U	NA	NA
2,4-DINITROPHENOL	820 U	980 U	860 U	4200 U	870 U	920 U	960 U	950 U	850 U	1000 U	850 U	940 U	NA	NA
2,4-DINITROTOLUENE	220 U	260 U	230 U	1100 U	240 U	250 U	260 U	260 U	230 U	270 U	230 U	260 U	NA	NA
2,6-DICHLOROPHENOL	300 U	360 U	310 U	1500 U	320 U	340 U	350 U	350 U	310 U	360 U	310 U	340 U	NA	NA
2,6-DINITROTOLUENE	180 U	220 U	190 U	930 U	190 U	200 U	210 U	210 U	190 U	220 U	190 U	210 U	NA	NA

TABLE A2-4
SWMU 9, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-09-SB08		MPT-09-SB09		MPT-09-SB10		MPT-09-SB11		MPT-09-SB12		MPT-09-SB13		MPT-09-SB14	MPT-09-SB15
SAMPLE IDENTIFICATION	MPT-09-SB08-01-103006	MPT-09-SB08-09-103006	MPT-09-SB09-01-110106	MPT-09-SB09-09-110106	MPT-09-SB10-01-103006	MPT-09-SB10-09-103006	MPT-09-SB11-01-103006	MPT-09-SB11-09-103006	MPT-09-SB12-01-103006	MPT-09-SB12-09-103006	MPT-09-SB13-01-110106	MPT-09-SB13-09-110106	MPT-09-SB14-09-020707	MPT-09-SB15-09-020707
SAMPLE DATE	20061030	20061030	20061101	20061101	20061030	20061030	20061030	20061030	20061030	20061030	20061101	20061101	20070207	20070207
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	8	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	9	9
SEMIVOLATILES (µg/kg)														
2-ACETYLAMINOFLUORENE	300 U	360 U	310 U	1500 U	320 U	340 U	350 U	350 U	310 U	360 U	310 U	340 U	NA	NA
2-CHLORONAPHTHALENE	250 U	290 U	260 U	1300 U	260 U	280 U	290 U	280 U	260 U	300 U	260 U	280 U	NA	NA
2-CHLOROPHENOL	240 U	280 U	250 U	1200 U	250 U	270 U	280 U	280 U	250 U	290 U	250 U	280 U	NA	NA
2-METHYLNAPHTHALENE	140 U	160 U	140 U	11000	140 U	150 U	160 U	160 U	140 U	160 U	140 U	160 U	NA	NA
2-METHYLPHENOL	260 U	300 U	270 U	1300 U	270 U	290 U	300 U	300 U	260 U	310 U	260 U	290 U	NA	NA
2-NAPHTHYLAMINE	180 U	220 U	190 UJ	930 UJ	190 U	200 U	210 UJ	210 UJ	190 UJ	220 U	190 UJ	210 UJ	NA	NA
2-NITROANILINE	150 U	180 U	160 U	770 U	160 U	170 U	180 U	170 U	160 U	180 U	160 U	170 UJ	NA	NA
2-NITROPHENOL	230 U	270 U	240 U	1200 U	240 U	260 U	270 U	260 U	240 U	280 U	240 U	260 U	NA	NA
2-PICOLINE	160 U	190 U	160 U	810 U	170 U	180 U	180 U	180 U	160 U	190 U	160 U	180 U	NA	NA
3&4-METHYLPHENOL	250 U	300 U	260 U	1300 U	270 U	280 U	300 U	290 U	260 U	310 U	260 U	290 U	NA	NA
3,3'-DICHLOROBENZIDINE	290 U	340 U	300 U	1500 UJ	310 U	320 U	340 UJ	340 UJ	300 UJ	350 U	300 U	330 UJ	NA	NA
3,3'-DIMETHYLBENZIDINE	90 UJ	110 UJ	94 UJ	460 UJ	95 UJ	100 UJ	100 UJ	100 UJ	93 UJ	110 UJ	93 UJ	100 UJ	NA	NA
3-METHYLCHOLANTHRENE	300 U	350 U	310 U	1500 U	320 U	330 U	350 U	340 U	310 U	360 U	310 U	340 U	NA	NA
3-NITROANILINE	320 U	380 U	340 UJ	1600 UJ	340 U	360 U	380 UJ	370 UJ	330 UJ	390 U	330 UJ	370 UJ	NA	NA
4,6-DINITRO-2-METHYLPHENOL	780 U	930 U	810 U	4000 U	830 U	870 U	920 U	900 U	810 U	950 U	810 U	900 U	NA	NA
4-AMINOBIPHENYL	220 UJ	260 UJ	230 UJ	1100 UJ	240 UJ	250 UJ	260 UJ	260 UJ	230 UJ	270 UJ	230 UJ	250 UJ	NA	NA
4-BROMOPHENYL PHENYL ETHER	170 U	200 U	170 U	860 U	180 U	190 U	200 U	190 U	170 U	200 U	170 U	190 U	NA	NA
4-CHLORO-3-METHYLPHENOL	340 U	400 U	350 U	1700 U	360 U	380 U	390 U	390 U	350 U	410 U	350 U	380 U	NA	NA
4-CHLOROANILINE	160 U	190 U	170 U	830 U	170 U	180 U	190 UJ	190 UJ	170 UJ	200 U	170 U	180 U	NA	NA
4-CHLOROPHENYL PHENYL ETHER	120 U	150 U	130 U	640 U	130 U	140 U	150 U	140 U	130 U	150 U	130 U	140 U	NA	NA
4-NITROANILINE	340 U	400 U	350 U	1700 U	360 U	380 U	400 UJ	390 UJ	350 UJ	410 U	350 U	390 U	NA	NA
4-NITROPHENOL	830 U	980 U	860 U	4200 UJ	880 U	930 U	970 U	960 U	860 U	1000 U	860 U	950 UJ	NA	NA
4-NITROQUINOLINE-1-OXIDE	400 UR	470 UR	410 UR	2000 UR	420 UR	440 UR	460 UR	460 UR	410 UR	480 UR	410 UR	460 UR	NA	NA
5-NITRO-O-TOLUIDINE	310 U	370 U	320 U	1600 U	330 U	340 U	360 U	360 U	320 U	370 U	320 U	350 U	NA	NA
7,12-DIMETHYLBENZ(A)ANTHRACENE	340 U	400 U	350 U	1700 U	360 U	380 U	400 U	390 U	350 U	410 U	350 U	390 U	NA	NA
A,A-DIMETHYLPHENETHYLAMINE	150 UR	180 UR	160 U	790 U	160 UR	170 UR	180 UR	180 UR	160 UR	190 UR	160 U	180 U	NA	NA
ACENAPHTHENE	110 U	130 U	110 U	1200 J	110 U	120 U	130 U	120 U	110 U	130 U	110 U	170 J	NA	NA
ACENAPHTHYLENE	110 U	130 U	110 U	550 U	110 U	120 U	130 U	120 U	110 U	130 U	110 U	120 U	NA	NA
ACETOPHENONE	240 U	290 U	260 U	1200 U	260 U	270 U	290 U	280 U	250 U	300 U	250 U	280 U	NA	NA
ANILINE	370 U	440 U	390 U	1900 U	400 U	420 U	440 UJ	430 UJ	380 UJ	450 U	380 U	430 U	NA	NA
ANTHRACENE	110 U	130 U	110 U	550 U	110 U	120 U	120 U	120 U	110 U	130 U	110 U	120 U	NA	NA
ARAMITE	310 U	370 U	320 U	1600 U	330 U	340 U	360 UJ	360 UJ	320 UJ	370 U	320 U	350 U	NA	NA
BAP EQUIVALENT	110 U	130 U	110 U	560 U	120 U	120 U	130 U	130 U	110 U	130 U	110 U	120 U	NA	NA
BAP EQUIVALENT(1)	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	NA	NA
BENZO(A)ANTHRACENE	98 U	120 U	100 U	500 U	100 U	110 U	110 U	110 U	100 U	120 U	100 U	110 U	NA	NA
BENZO(A)PYRENE	110 U	130 U	110 U	560 U	120 U	120 U	130 U	130 U	110 U	130 U	110 U	120 U	NA	NA
BENZO(B)FLUORANTHENE	140 U	160 U	140 U	700 U	140 U	150 U	160 U	160 U	140 U	160 U	140 U	160 U	NA	NA
BENZO(G,H,I)PERYLENE	170 U	210 U	180 U	900 U	180 U	200 U	200 U	200 U	180 U	210 U	180 U	200 U	NA	NA
BENZO(K)FLUORANTHENE	140 U	160 U	140 U	710 U	150 U	160 U	160 U	160 U	140 U	170 U	140 U	160 U	NA	NA
BENZOIC ACID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZYL ALCOHOL	420 U	500 U	440 U	2200 U	450 U	470 U	500 U	490 U	440 U	510 U	440 U	490 U	NA	NA

TABLE A2-4
SWMU 9, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-09-SB08**		**MPT-09-SB09**		**MPT-09-SB10**		**MPT-09-SB11**		**MPT-09-SB12**		**MPT-09-SB13**		**MPT-09-SB14**	**MPT-09-SB15**
SAMPLE IDENTIFICATION	MPT-09-SB08-01-103006	MPT-09-SB08-09-103006	MPT-09-SB09-01-110106	MPT-09-SB09-09-110106	MPT-09-SB10-01-103006	MPT-09-SB10-09-103006	MPT-09-SB11-01-103006	MPT-09-SB11-09-103006	MPT-09-SB12-01-103006	MPT-09-SB12-09-103006	MPT-09-SB13-01-110106	MPT-09-SB13-09-110106	MPT-09-SB14-09-020707	MPT-09-SB15-09-020707
SAMPLE DATE	20061030	20061030	20061101	20061101	20061030	20061030	20061030	20061030	20061030	20061030	20061101	20061101	20070207	20070207
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	8	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	9	9
SEMIVOLATILES (µg/kg)														
BIS(2-CHLOROETHOXY)METHANE	140 U	160 U	140 U	700 U	140 U	150 U	160 U	160 U	140 U	160 U	140 U	160 U	NA	NA
BIS(2-CHLOROETHYL)ETHER	140 U	170 U	150 U	740 U	150 U	160 U	170 UJ	170 UJ	150 UJ	180 U	150 U	170 U	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	330 U	390 U	340 U	1700 U	350 U	370 U	380 U	380 U	340 U	400 U	340 U	380 U	NA	NA
BUTYL BENZYL PHTHALATE	150 U	180 U	160 U	770 U	160 U	170 U	180 U	170 U	160 U	180 U	160 U	170 U	NA	NA
CARBAZOLE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROBENZILATE	160 U	200 U	170 U	840 U	170 U	180 U	190 U	190 U	170 U	200 U	170 U	190 U	NA	NA
CHRYSENE	120 U	140 U	120 U	610 U	130 U	130 U	140 U	140 U	120 U	140 U	120 U	140 U	NA	NA
DIALLATE	190 U	220 U	190 U	960 U	200 U	210 U	220 U	220 U	190 U	230 U	190 U	210 U	NA	NA
DIBENZO(A,H)ANTHRACENE	160 U	190 U	170 U	830 U	170 U	180 U	190 U	190 U	170 U	200 U	170 U	190 U	NA	NA
DIBENZOFURAN	100 U	120 U	110 U	580 J	110 U	120 U	120 U	120 U	110 U	130 U	110 U	140 J	NA	NA
DIETHYL PHTHALATE	210 U	250 U	220 U	1100 U	230 U	240 U	250 U	250 U	220 U	260 U	220 U	240 U	NA	NA
DIMETHOATE	230 U	280 U	240 U	1200 U	250 U	260 U	280 U	270 U	240 U	280 U	240 U	270 U	NA	NA
DIMETHYL PHTHALATE	140 U	160 U	140 U	710 U	150 U	150 U	160 U	160 U	140 U	170 U	140 U	160 U	NA	NA
DI-N-BUTYL PHTHALATE	230 U	270 U	240 U	1200 U	240 U	250 U	260 U	260 U	230 U	270 U	230 U	260 U	NA	NA
DI-N-OCTYL PHTHALATE	260 U	300 U	270 U	1300 U	270 U	290 U	300 U	300 U	260 U	310 U	260 U	300 U	NA	NA
DINOSEB	260 U	310 U	270 U	1300 U	280 U	290 U	300 U	300 U	270 U	320 U	270 U	300 U	NA	NA
ETHYL METHANE SULFONATE	290 U	350 U	300 U	1500 U	310 U	330 U	340 U	340 U	300 U	350 U	300 U	330 U	NA	NA
ETHYL PARATHION	390 U	460 U	400 U	2000 U	410 U	430 U	460 U	450 U	400 U	470 U	400 U	450 U	NA	NA
FLUORANTHENE	210 U	250 U	220 U	1100 U	220 U	230 U	240 U	240 U	220 U	250 U	220 U	240 U	NA	NA
FLUORENE	110 U	130 U	110 U	1800	120 U	120 U	130 U	130 U	110 U	130 U	110 U	350 J	NA	NA
HEXACHLOROBENZENE	140 U	160 U	140 U	710 U	150 U	150 U	160 U	160 U	140 U	170 U	140 U	160 U	NA	NA
HEXACHLOROBUTADIENE	120 U	140 U	120 U	610 U	120 U	130 U	140 U	140 U	120 U	140 U	120 U	140 U	NA	NA
HEXACHLOROCYCLOPENTADIENE	160 U	190 U	170 U	840 U	170 U	180 U	190 U	190 U	170 U	200 UR	170 U	190 U	NA	NA
HEXACHLOROETHANE	140 U	170 U	150 U	750 U	160 U	160 U	170 U	170 U	150 U	180 U	150 U	170 U	NA	NA
HEXACHLOROPHENE	170 UR	200 UR	180 U	860 U	180 UR	190 UR	200 UR	190 UR	170 UR	200 UR	170 U	190 U	NA	NA
HEXACHLOROPROPENE	160 U	180 U	160 U	800 U	160 U	170 U	180 U	180 U	160 U	190 U	160 U	180 U	NA	NA
INDENO(1,2,3-CD)PYRENE	280 U	330 U	290 U	1400 UJ	300 U	310 U	330 U	320 U	290 U	340 U	290 U	320 UJ	NA	NA
ISODRIN	180 U	220 U	190 U	940 U	200 U	200 U	220 U	210 U	190 U	220 U	190 U	210 U	NA	NA
ISOPHORONE	120 U	140 U	130 U	630 U	130 U	140 U	140 U	140 U	130 U	150 U	130 U	140 U	NA	NA
ISOSAFROLE	140 U	160 U	140 U	700 U	140 U	150 U	160 U	160 U	140 U	160 U	140 U	160 U	NA	NA
METHAPYRILENE	120 UR	150 UR	130 U	640 U	130 UR	140 UR	150 UR	140 UR	130 UR	150 UR	130 U	140 UR	NA	NA
METHYL METHANE SULFONATE	270 U	320 U	280 U	1400 U	280 U	300 U	310 U	310 U	280 U	320 U	280 U	310 U	NA	NA
NAPHTHALENE	120 U	150 U	130 U	3700	130 U	140 U	150 U	140 U	130 U	150 U	130 U	140 U	NA	NA
NITROBENZENE	120 U	140 U	120 U	590 U	120 U	130 U	140 U	130 U	120 U	140 U	120 U	130 U	NA	NA
N-NITROSODIETHYLAMINE	130 U	150 U	130 U	650 U	130 U	140 U	150 U	150 U	130 U	150 U	130 U	140 U	NA	NA
N-NITROSODIMETHYLAMINE	150 U	180 U	160 U	760 U	160 U	170 U	170 U	170 U	150 U	180 U	150 U	170 UJ	NA	NA
N-NITROSO-DI-N-BUTYLAMINE	240 U	290 U	250 U	1200 U	260 U	270 U	280 U	280 U	250 U	290 U	250 U	280 U	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	190 U	220 U	200 U	960 U	200 U	210 U	220 U	220 U	190 U	230 U	190 U	220 U	NA	NA
N-NITROSODIPHENYLAMINE	250 U	290 U	260 U	1300 U	260 U	280 U	290 U	280 U	260 U	300 U	260 U	280 U	NA	NA
N-NITROSOMETHYLETHYLAMINE	150 UR	170 UR	150 U	750 U	160 UR	160 UR	170 U	170 U	150 U	180 UR	150 U	170 U	NA	NA
N-NITROSOMORPHOLINE	120 U	140 U	120 U	620 U	130 U	130 U	140 U	140 U	120 U	140 U	120 U	140 U	NA	NA

TABLE A2-4
SWMU 9, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-09-SB08**		**MPT-09-SB09**		**MPT-09-SB10**		**MPT-09-SB11**		**MPT-09-SB12**		**MPT-09-SB13**		**MPT-09-SB14**	**MPT-09-SB15**
SAMPLE IDENTIFICATION	MPT-09-SB08-01-103006	MPT-09-SB08-09-103006	MPT-09-SB09-01-110106	MPT-09-SB09-09-110106	MPT-09-SB10-01-103006	MPT-09-SB10-09-103006	MPT-09-SB11-01-103006	MPT-09-SB11-09-103006	MPT-09-SB12-01-103006	MPT-09-SB12-09-103006	MPT-09-SB13-01-110106	MPT-09-SB13-09-110106	MPT-09-SB14-09-020707	MPT-09-SB15-09-020707
SAMPLE DATE	20061030	20061030	20061101	20061101	20061030	20061030	20061030	20061030	20061030	20061030	20061101	20061101	20070207	20070207
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	8	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	9	9
SEMIVOLATILES (µg/kg)														
N-NITROSOPIPERIDINE	120 U	140 U	130 U	630 U	130 U	140 U	140 U	140 U	130 U	150 U	130 U	140 U	NA	NA
N-NITROSOPYRROLIDINE	210 U	250 U	220 U	1100 U	220 U	230 U	240 U	240 U	220 U	250 U	220 U	240 U	NA	NA
O,O,O-TRIETHYL PHOSPHOROTHIOATE	130 U	160 U	140 U	690 U	140 U	150 U	160 U	160 U	140 U	160 U	140 U	150 U	NA	NA
O-TOLUIDINE	630 U	750 U	660 U	3200 U	670 U	710 U	740 U	730 U	650 U	760 U	650 U	720 U	NA	NA
PENTACHLOROBENZENE	97 U	120 U	100 U	500 U	100 U	110 U	110 U	110 U	100 U	120 U	100 U	110 U	NA	NA
PENTACHLORONITROBENZENE	140 U	170 U	150 U	740 U	150 U	160 U	170 U	170 U	150 U	180 U	150 U	170 U	NA	NA
PENTACHLOROPHENOL	670 U	800 U	700 U	3400 U	710 U	750 U	790 U	780 U	690 U	810 U	690 U	770 U	NA	NA
PHENACETIN	210 U	250 U	220 U	1100 U	220 U	240 U	250 U	240 U	220 U	260 U	220 U	240 U	NA	NA
PHENANTHRENE	78 U	93 U	82 U	3200	83 U	88 U	92 U	91 U	81 U	95 U	81 U	90 U	NA	NA
PHENOL	240 U	280 U	250 U	1200 U	250 U	260 U	280 U	270 U	240 U	290 U	240 U	270 U	NA	NA
PRONAMIDE	170 U	200 U	170 U	860 U	180 U	190 U	200 U	190 U	170 U	200 U	170 U	190 U	NA	NA
PYRENE	150 U	180 U	150 U	760 U	160 U	160 U	170 U	170 U	150 U	180 U	150 U	170 U	NA	NA
PYRIDINE	230 U	280 U	240 U	1200 U	250 U	260 U	270 U	270 U	240 U	280 U	240 U	270 U	NA	NA
SAFROLE	160 U	190 U	160 U	810 U	170 U	180 U	180 U	180 U	160 U	190 U	160 U	180 U	NA	NA
SOLVENT YELLOW 2	210 U	250 U	220 U	1100 U	230 U	240 U	250 U	250 U	220 U	260 U	220 U	240 U	NA	NA
SULFOTEPP	160 U	180 U	160 U	800 U	160 U	170 U	180 U	180 U	160 U	190 U	160 U	180 U	NA	NA
THIONAZIN	240 U	290 U	250 U	1200 U	260 U	270 U	280 U	280 U	250 U	290 U	250 U	280 U	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)														
2-METHYLNAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	720000	9 U
BAP EQUIVALENT	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.2	4 U
BAP EQUIVALENT(1)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	16.3	0.0 U
BENZO(A)ANTHRACENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	160 J	4 U
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19 U	4 U
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20 U	4 U
BENZO(K)FLUORANTHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19 U	4 U
CHRYSENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	300 J	3 U
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	24 UJ	4 UJ
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28 U	5 U
NAPHTHALENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6500	3 U
PESTICIDES/PCBS (µg/kg)														
AROCLOR-1016	16 U	19 U	17 U	21 U	17 U	18 U	19 U	19 U	17 U	20 U	17 U	19 U	NA	NA
AROCLOR-1221	12 U	14 U	13 U	16 U	13 U	14 U	14 U	14 U	13 U	15 U	13 U	14 U	NA	NA
AROCLOR-1232	5.4 U	6.4 U	5.6 U	6.9 U	5.7 U	6 U	6.3 U	6.3 U	5.6 U	6.6 U	5.6 U	6.2 U	NA	NA
AROCLOR-1242	6.8 U	8.1 U	7.1 U	8.8 U	7.3 U	7.6 U	8 U	7.9 U	7.1 U	8.3 U	7.1 U	7.8 U	NA	NA
AROCLOR-1248	5.8 U	6.9 U	6.1 U	7.4 U	6.2 U	6.5 U	6.8 U	6.7 U	6 U	7 U	6 U	6.7 U	NA	NA
AROCLOR-1254	13 U	16 U	14 U	17 U	14 U	15 U	16 U	15 U	14 U	16 U	14 U	15 U	NA	NA
AROCLOR-1260	14 U	17 U	15 U	18 U	15 U	16 U	17 U	16 U	15 U	17 U	15 U	16 U	NA	NA
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	NA	NA
TOTAL AROCLOR HALFND	36.5	43.7	38.9	47.55	39.1	41.55	43.55	42.45	38.85	44.95	38.85	42.35	NA	NA
METALS (mg/kg)														
ALUMINUM	1100	800	1430 J	1290 J	1540	543	2140	599	1140	415	1020 J	832 J	NA	NA

TABLE A2-4
SWMU 9, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-09-SB08		MPT-09-SB09		MPT-09-SB10		MPT-09-SB11		MPT-09-SB12		MPT-09-SB13		MPT-09-SB14	MPT-09-SB15
SAMPLE IDENTIFICATION	MPT-09-SB08-01-103006	MPT-09-SB08-09-103006	MPT-09-SB09-01-110106	MPT-09-SB09-09-110106	MPT-09-SB10-01-103006	MPT-09-SB10-09-103006	MPT-09-SB11-01-103006	MPT-09-SB11-09-103006	MPT-09-SB12-01-103006	MPT-09-SB12-09-103006	MPT-09-SB13-01-110106	MPT-09-SB13-09-110106	MPT-09-SB14-09-020707	MPT-09-SB15-09-020707
SAMPLE DATE	20061030	20061030	20061101	20061101	20061030	20061030	20061030	20061030	20061030	20061030	20061101	20061101	20070207	20070207
TOP DEPTH	0	8	0	8	0	8	0	8	0	8	0	8	8	8
BOTTOM DEPTH	1	9	1	9	1	9	1	9	1	9	1	9	9	9
METALS (mg/kg)														
ANTIMONY	0.26 U	0.2 U	0.22 U	0.25 U	0.25 U	0.2 U	0.21 U	0.2 U	0.21 U	0.2 U	0.4 U	0.52 U	NA	NA
ARSENIC	1.1 U	1.5 U	0.71 U	1.1 U	1.4 U	0.74 U	0.77 U	0.75 U	0.94 U	0.53 U	0.87 U	0.98 U	NA	NA
BARIUM	9.4	5	6.4	5.9	8.1	3.3	7.1	3.7	5.6	2.3	5.6	5.3	NA	NA
BERYLLIUM	0.16 U	0.14 U	0.08 U	0.14 U	0.17 U	0.12 U	0.14 U	0.13 U	0.12 U	0.06 U	0.1 U	0.1 U	NA	NA
CADMIUM	0.06 J	0.05 J	0.04 U	0.06 J	0.05 U	0.04 U	0.04 J	0.04 U	0.05 J	0.06	0.05 U	0.05 U	NA	NA
CALCIUM	141000	105000	95500	139000	117000	32200	76600	69500	109000	18300	124000	114000	NA	NA
CHROMIUM	5	3.1	3.5	6.9	4.3	2.2	4.3	2.1	4.1	1.9	2.5 J	4.1	NA	NA
COBALT	0.24	0.29	0.26	0.26	0.3	0.14	0.35	0.17	0.26	0.16	0.27	0.28	NA	NA
COPPER	3 J	0.86 J	3.1 U	1.6 U	0.91 J	0.16 U	1.6 J	0.34 U	1.5 J	0.4 U	1.3 U	0.48 U	NA	NA
IRON	1200	1080	1030	2000	1270	633	1180	658	783	420	878	1360	NA	NA
LEAD	2.9 J	0.67 J	2.3 J	0.93 J	1.7 J	0.39 J	3.5	0.57 J	1.2 J	0.24	3 J	0.72 U	NA	NA
MAGNESIUM	1160 J	766 J	459 J	1900 J	733 J	281 J	571 J	310 J	622 J	246 J	492 J	799 J	NA	NA
MANGANESE	52.7 J	30.2 J	27.1 J	186 J	51 J	14.7 J	37.3 J	23.5 J	40 J	12.4 J	26.3 J	83.5 J	NA	NA
MERCURY	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA
NICKEL	2.3	1.5	1.2 J	0.85 J	1.3 U	0.47 U	1.7	0.57 U	1.4	0.56 U	0.89 J	1.1 J	NA	NA
POTASSIUM	158 J	52 J	93.1	202	72.6 J	65.6 J	102 J	72.3 J	113 J	54.4	111	72 U	NA	NA
SELENIUM	0.39 UJ	0.3 J	0.31 UJ	0.37 UJ	0.37 UJ	0.34 J	0.31 UJ	0.31 UJ	0.31 UJ	0.3 U	0.37 UJ	0.44 UJ	NA	NA
SILVER	0.12 U	0.09 U	0.33 U	0.39 U	0.11 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.39 U	0.46 U	NA	NA
SODIUM	1070 J	980 J	884 J	666 J	1040 J	357 J	596 J	671 J	834 J	172 J	1020 J	1010 J	NA	NA
THALLIUM	0.58 U	0.45 U	0.47 U	0.56 U	0.68	0.44 U	0.47 U	0.46 U	0.47 U	0.45 U	0.56 U	0.65 U	NA	NA
TIN	3 U	2.3 U	2.7 U	3 U	2.9 U	2.4 U	2.5 U	2.4 U	2.4 U	2 U	3 U	3.5 U	NA	NA
VANADIUM	3.8	3.9	3	5.3	5	1.3	3.8	1.4	3.1	1.2	2.4 J	2.8	NA	NA
ZINC	29	3.3 J	34.9	5.4 J	6.7	1.8	24.5	1.8 J	8.3	1.8	5 J	5.6 J	NA	NA
MISCELLANEOUS PARAMETERS (%)														
PERCENT SOLIDS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL SOLIDS	98	82	94	76	92	88	84	85	95	81	95	85	79	84
MISCELLANEOUS PARAMETERS (mg/kg)														
CYANIDE	0.5 U	0.55 U	0.5 U	0.65 U	0.55 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	NA	NA
SULFIDE	26 U	31 U	26 U	27 U	26 U	29 U	27 U	29 U	28 U	29 U	26 U	27 U	NA	NA
PETROLEUM HYDROCARBONS (mg/kg)														
TPH (C08-C40)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE A2-4
SWMU 9, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-09-SB16**	**MPT-09-SB17**	**MPT-09-SB18**	**MPT-09-SB19**
SAMPLE IDENTIFICATION	MPT-09-SB16-09-020707	MPT-09-SB17-09-020707	MPT09-SB18-05-022409	MPT09-SB19-01-022409
SAMPLE DATE	20070207	20070207	20090224	20090224
TOP DEPTH	8	8	4	0
BOTTOM DEPTH	9	9	5	1
VOLATILES (µg/kg)				
1,1,1,2-TETRACHLOROETHANE	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	NA	NA	NA	NA
1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA
1,1,2-TRICHLOROETHANE	NA	NA	NA	NA
1,1-DICHLOROETHANE	NA	NA	NA	NA
1,1-DICHLOROETHENE	NA	NA	NA	NA
1,2,3-TRICHLOROPROPANE	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	NA	NA
1,2-DIBROMO-3-CHLOROPROPANE	NA	NA	NA	NA
1,2-DIBROMOETHANE	NA	NA	NA	NA
1,2-DICHLOROBENZENE	NA	NA	NA	NA
1,2-DICHLOROETHANE	NA	NA	NA	NA
1,2-DICHLOROPROPANE	NA	NA	NA	NA
1,3-DICHLOROBENZENE	NA	NA	NA	NA
1,4-DICHLOROBENZENE	NA	NA	NA	NA
1,4-DIOXANE	NA	NA	NA	NA
2-BUTANONE	NA	NA	NA	NA
2-HEXANONE	NA	NA	NA	NA
3-CHLOROPROPENE	NA	NA	NA	NA
4-METHYL-2-PENTANONE	NA	NA	NA	NA
ACETONE	NA	NA	NA	NA
ACETONITRILE	NA	NA	NA	NA
ACROLEIN	NA	NA	NA	NA
ACRYLONITRILE	NA	NA	NA	NA
BENZENE	NA	NA	NA	NA
BROMODICHLOROMETHANE	NA	NA	NA	NA
BROMOFORM	NA	NA	NA	NA
BROMOMETHANE	NA	NA	NA	NA
CARBON DISULFIDE	NA	NA	NA	NA
CARBON TETRACHLORIDE	NA	NA	NA	NA
CHLOROBENZENE	NA	NA	NA	NA
CHLORODIBROMOMETHANE	NA	NA	NA	NA
CHLOROETHANE	NA	NA	NA	NA
CHLOROFORM	NA	NA	NA	NA
CHLOROMETHANE	NA	NA	NA	NA
CHLOROPRENE	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA
CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA
DIBROMOMETHANE	NA	NA	NA	NA
DICHLORODIFLUOROMETHANE	NA	NA	NA	NA
ETHYL METHACRYLATE	NA	NA	NA	NA

LOCATION	MPT-09-SB16	MPT-09-SB17	MPT-09-SB18	MPT-09-SB19
SAMPLE IDENTIFICATION	MPT-09-SB16-09-020707	MPT-09-SB17-09-020707	MPT09-SB18-05-022409	MPT09-SB19-01-022409
SAMPLE DATE	20070207	20070207	20090224	20090224
TOP DEPTH	8	8	4	0
BOTTOM DEPTH	9	9	5	1
VOLATILES (µg/kg)				
ETHYLBENZENE	NA	NA	NA	NA
ISOBUTANOL	NA	NA	NA	NA
M+P-XYLENES	NA	NA	NA	NA
METHACRYLONITRILE	NA	NA	NA	NA
METHYL IODIDE	NA	NA	NA	NA
METHYL METHACRYLATE	NA	NA	NA	NA
METHYLENE CHLORIDE	NA	NA	NA	NA
O-XYLENE	NA	NA	NA	NA
PENTACHLOROETHANE	NA	NA	NA	NA
PROPIONITRILE	NA	NA	NA	NA
STYRENE	NA	NA	NA	NA
TETRACHLOROETHENE	NA	NA	NA	NA
TOLUENE	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA
TRANS-1,4-DICHLORO-2-BUTENE	NA	NA	NA	NA
TRICHLOROETHENE	NA	NA	NA	NA
TRICHLOROFLUOROMETHANE	NA	NA	NA	NA
VINYL ACETATE	NA	NA	NA	NA
VINYL CHLORIDE	NA	NA	NA	NA
SEMIVOLATILES (µg/kg)				
1,2,4,5-TETRACHLOROBENZENE	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	NA	NA	35 U	35 U
1,2-DICHLOROBENZENE	NA	NA	46 U	46 U
1,3,5-TRINITROBENZENE	NA	NA	NA	NA
1,3-DICHLOROBENZENE	NA	NA	46 U	46 U
1,3-DINITROBENZENE	NA	NA	NA	NA
1,4-DICHLOROBENZENE	NA	NA	42 U	42 U
1,4-NAPHTHOQUINONE	NA	NA	NA	NA
1,4-PHENYLENEDIAMINE	NA	NA	NA	NA
1-NAPHTHYLAMINE	NA	NA	NA	NA
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	35 U	35 U
2,3,4,6-TETRACHLOROPHENOL	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	35 U	35 U
2,4,6-TRICHLOROPHENOL	NA	NA	35 U	35 U
2,4-DICHLOROPHENOL	NA	NA	35 U	35 U
2,4-DIMETHYLPHENOL	NA	NA	35 U	35 U
2,4-DINITROPHENOL	NA	NA	350 U	350 U
2,4-DINITROTOLUENE	NA	NA	35 U	35 U
2,6-DICHLOROPHENOL	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	35 U	35 U

LOCATION	MPT-09-SB16	MPT-09-SB17	MPT-09-SB18	MPT-09-SB19
SAMPLE IDENTIFICATION	MPT-09-SB16-09-020707	MPT-09-SB17-09-020707	MPT09-SB18-05-022409	MPT09-SB19-01-022409
SAMPLE DATE	20070207	20070207	20090224	20090224
TOP DEPTH	8	8	4	0
BOTTOM DEPTH	9	9	5	1
SEMIVOLATILES (µg/kg)				
2-ACETYLAMINOFLUORENE	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	35 U	35 U
2-CHLOROPHENOL	NA	NA	35 U	35 U
2-METHYLNAPHTHALENE	NA	NA	35 U	35 U
2-METHYLPHENOL	NA	NA	35 U	35 U
2-NAPHTHYLAMINE	NA	NA	NA	NA
2-NITROANILINE	NA	NA	71 U	70 U
2-NITROPHENOL	NA	NA	35 U	35 U
2-PICOLINE	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	35 U	35 U
3,3'-DICHLOROBENZIDINE	NA	NA	71 U	70 U
3,3'-DIMETHYLBENZIDINE	NA	NA	NA	NA
3-METHYLCHOLANTHRENE	NA	NA	NA	NA
3-NITROANILINE	NA	NA	71 U	70 U
4,6-DINITRO-2-METHYLPHENOL	NA	NA	110 U	110 U
4-AMINOBIPHENYL	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	35 U	35 U
4-CHLORO-3-METHYLPHENOL	NA	NA	35 U	35 U
4-CHLOROANILINE	NA	NA	71 U	70 U
4-CHLOROPHENYL PHENYL ETHER	NA	NA	35 U	35 U
4-NITROANILINE	NA	NA	71 U	70 U
4-NITROPHENOL	NA	NA	350 U	350 U
4-NITROQUINOLINE-1-OXIDE	NA	NA	NA	NA
5-NITRO-O-TOLUIDINE	NA	NA	NA	NA
7,12-DIMETHYLBENZ(A)ANTHRACENE	NA	NA	NA	NA
A,A-DIMETHYLPHENETHYLAMINE	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	35 U	35 U
ACENAPHTHYLENE	NA	NA	35 U	35 U
ACETOPHENONE	NA	NA	NA	NA
ANILINE	NA	NA	NA	NA
ANTHRACENE	NA	NA	35 U	35 U
ARAMITE	NA	NA	NA	NA
BAP EQUIVALENT	NA	NA	NA	NA
BAP EQUIVALENT(1)	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	35 U	35 U
BENZO(A)PYRENE	NA	NA	35 U	35 U
BENZO(B)FLUORANTHENE	NA	NA	35 U	35 U
BENZO(G,H,I)PERYLENE	NA	NA	35 U	35 U
BENZO(K)FLUORANTHENE	NA	NA	35 U	35 U
BENZOIC ACID	NA	NA	350 U	350 U
BENZYL ALCOHOL	NA	NA	35 U	35 U

LOCATION	MPT-09-SB16	MPT-09-SB17	MPT-09-SB18	MPT-09-SB19
SAMPLE IDENTIFICATION	MPT-09-SB16-09-020707	MPT-09-SB17-09-020707	MPT09-SB18-05-022409	MPT09-SB19-01-022409
SAMPLE DATE	20070207	20070207	20090224	20090224
TOP DEPTH	8	8	4	0
BOTTOM DEPTH	9	9	5	1
SEMIVOLATILES (µg/kg)				
BIS(2-CHLOROETHOXY)METHANE	NA	NA	35 U	35 U
BIS(2-CHLOROETHYL)ETHER	NA	NA	35 U	35 U
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	180 U	180 U
BUTYL BENZYL PHTHALATE	NA	NA	71 U	70 U
CARBAZOLE	NA	NA	35 U	35 U
CHLOROBENZILATE	NA	NA	NA	NA
CHRYSENE	NA	NA	35 U	35 U
DIALLATE	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	35 U	35 U
DIBENZOFURAN	NA	NA	35 U	35 U
DIETHYL PHTHALATE	NA	NA	180 U	180 U
DIMETHOATE	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	71 U	70 U
DI-N-BUTYL PHTHALATE	NA	NA	71 U	70 U
DI-N-OCTYL PHTHALATE	NA	NA	71 U	70 U
DINOSEB	NA	NA	NA	NA
ETHYL METHANE SULFONATE	NA	NA	NA	NA
ETHYL PARATHION	NA	NA	NA	NA
FLUORANTHENE	NA	NA	35 U	35 U
FLUORENE	NA	NA	35 U	35 U
HEXACHLOROBENZENE	NA	NA	35 U	35 U
HEXACHLOROBUTADIENE	NA	NA	35 U	35 U
HEXACHLOROCYCLOPENTADIENE	NA	NA	35 U	35 U
HEXACHLOROETHANE	NA	NA	42 U	42 U
HEXACHLOROPHENE	NA	NA	NA	NA
HEXACHLOROPROPENE	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	35 U	35 U
ISODRIN	NA	NA	NA	NA
ISOPHORONE	NA	NA	35 U	35 U
ISOSAFROLE	NA	NA	NA	NA
METHAPYRILENE	NA	NA	NA	NA
METHYL METHANE SULFONATE	NA	NA	NA	NA
NAPHTHALENE	NA	NA	35 U	35 U
NITROBENZENE	NA	NA	35 U	35 U
N-NITROSODIETHYLAMINE	NA	NA	NA	NA
N-NITROSODIMETHYLAMINE	NA	NA	NA	NA
N-NITROSO-DI-N-BUTYLAMINE	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	35 U	35 U
N-NITROSODIPHENYLAMINE	NA	NA	71 U	70 U
N-NITROSOMETHYLETHYLAMINE	NA	NA	NA	NA
N-NITROSOMORPHOLINE	NA	NA	NA	NA

TABLE A2-4
SWMU 9, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-09-SB16	MPT-09-SB17	MPT-09-SB18	MPT-09-SB19
SAMPLE IDENTIFICATION	MPT-09-SB16-09-020707	MPT-09-SB17-09-020707	MPT09-SB18-05-022409	MPT09-SB19-01-022409
SAMPLE DATE	20070207	20070207	20090224	20090224
TOP DEPTH	8	8	4	0
BOTTOM DEPTH	9	9	5	1
SEMIVOLATILES (µg/kg)				
N-NITROSOPIPERIDINE	NA	NA	NA	NA
N-NITROSOPYRROLIDINE	NA	NA	NA	NA
O,O,O-TRIETHYL PHOSPHOROTHIOATE	NA	NA	NA	NA
O-TOLUIDINE	NA	NA	NA	NA
PENTACHLOROBENZENE	NA	NA	NA	NA
PENTACHLORONITROBENZENE	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	350 U	350 U
PHENACETIN	NA	NA	NA	NA
PHENANTHRENE	NA	NA	35 U	35 U
PHENOL	NA	NA	35 U	35 U
PRONAMIDE	NA	NA	NA	NA
PYRENE	NA	NA	35 U	35 U
PYRIDINE	NA	NA	NA	NA
SAFROLE	NA	NA	NA	NA
SOLVENT YELLOW 2	NA	NA	NA	NA
SULFOTEPP	NA	NA	NA	NA
THIONAZIN	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)				
2-METHYLNAPHTHALENE	440 J	47 U	NA	NA
BAP EQUIVALENT	NA	NA	NA	NA
BAP EQUIVALENT(1)	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA
NAPHTHALENE	620 J	120 J	NA	NA
PESTICIDES/PCBS (µg/kg)				
AROCLOR-1016	NA	NA	NA	NA
AROCLOR-1221	NA	NA	NA	NA
AROCLOR-1232	NA	NA	NA	NA
AROCLOR-1242	NA	NA	NA	NA
AROCLOR-1248	NA	NA	NA	NA
AROCLOR-1254	NA	NA	NA	NA
AROCLOR-1260	NA	NA	NA	NA
TOTAL AROCLOR	NA	NA	NA	NA
TOTAL AROCLOR HALFND	NA	NA	NA	NA
METALS (mg/kg)				
ALUMINUM	NA	NA	NA	NA

LOCATION	MPT-09-SB16	MPT-09-SB17	MPT-09-SB18	MPT-09-SB19
SAMPLE IDENTIFICATION	MPT-09-SB16-09-020707	MPT-09-SB17-09-020707	MPT09-SB18-05-022409	MPT09-SB19-01-022409
SAMPLE DATE	20070207	20070207	20090224	20090224
TOP DEPTH	8	8	4	0
BOTTOM DEPTH	9	9	5	1
METALS (mg/kg)				
ANTIMONY	NA	NA	NA	NA
ARSENIC	NA	NA	NA	NA
BARIUM	NA	NA	NA	NA
BERYLLIUM	NA	NA	NA	NA
CADMIUM	NA	NA	NA	NA
CALCIUM	NA	NA	NA	NA
CHROMIUM	NA	NA	NA	NA
COBALT	NA	NA	NA	NA
COPPER	NA	NA	NA	NA
IRON	NA	NA	NA	NA
LEAD	NA	NA	NA	NA
MAGNESIUM	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA
MERCURY	NA	NA	NA	NA
NICKEL	NA	NA	NA	NA
POTASSIUM	NA	NA	NA	NA
SELENIUM	NA	NA	NA	NA
SILVER	NA	NA	NA	NA
SODIUM	NA	NA	NA	NA
THALLIUM	NA	NA	NA	NA
TIN	NA	NA	NA	NA
VANADIUM	NA	NA	NA	NA
ZINC	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (%)				
PERCENT SOLIDS	NA	NA	95	95
TOTAL SOLIDS	90	78	NA	NA
MISCELLANEOUS PARAMETERS (mg/kg)				
CYANIDE	NA	NA	NA	NA
SULFIDE	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (mg/kg)				
TPH (C08-C40)	NA	NA	5.9 U	NA

Notes:
NA = Not analyzed
U = Indicates compound was analyzed for but not detected at indicated detection limit.
I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J = Estimated value, value not accurate.
R = Data to be rejected

TABLE A2-5
SWMU 11, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-08-MW12S**	**MPT-08-MW12S**	**MPT-08-MW12S**	**MPT-08-MW12S**	**MPT-08-MW12S**	**MPT-11-MW05S**	**MPT-11-MW05S**
SAMPLE IDENTIFICATION	MPT-08-GW-MW12S-110806	MPT-08-MW12S-0408	MPT-08-MW12S-20080828	MPT-08-MW12S-20100525	MPT-08-MW12S-20100709	MPT-11-GW-MW05S-110706	MPT-11-GW-MW05S-20080828
SAMPLE DATE	20061108	20080423	20080828	20100525	20100709	20061107	20080828
METALS (µg/L)							
ARSENIC	NA	NA	0.98 U	NA	NA	NA	4.4
CADMIUM	NA	NA	0.1 U	NA	NA	NA	0.1 U
CHROMIUM	NA	NA	1.8 U	NA	NA	NA	1.2 U
LEAD	NA	NA	1 U	NA	NA	NA	1 U
PESTICIDES/PCBS (µg/L)							
AROCLOR-1016	NA	NA	0.15 UJ	NA	NA	NA	0.15 UJ
AROCLOR-1221	NA	NA	0.38 U	NA	NA	NA	0.38 U
AROCLOR-1232	NA	NA	0.11 U	NA	NA	NA	0.11 U
AROCLOR-1242	NA	NA	0.11 U	NA	NA	NA	0.11 U
AROCLOR-1248	NA	NA	0.075 U	NA	NA	NA	0.075 U
AROCLOR-1254	NA	NA	0.087 U	NA	NA	NA	0.087 U
AROCLOR-1260	NA	NA	0.12 UJ	NA	NA	NA	0.12 UJ
PETROLEUM HYDROCARBONS (mg/L)							
TOTAL PETROLEUM HYDROCARBONS	NA	NA	NA	0.041 J	0.085 U	NA	NA
TPH (C08-C40)	0.23 U	0.057 J	NA	NA	NA	0.57 J	NA
POLYCYCLIC AROMATIC HYDROCARBONS (µg/L)							
1-METHYLNAPHTHALENE	0.1 U	0.02 U	NA	0.025 U	0.03 U	0.1 U	NA
2-METHYLNAPHTHALENE	0.07 U	0.03 U	NA	0.031 U	0.034 J	0.07 U	NA
ACENAPHTHENE	0.07 U	0.02 U	NA	0.011 U	0.03 U	0.07 U	NA
ACENAPHTHYLENE	0.06 U	0.01 U	NA	0.011 U	0.03 U	0.06 U	NA
ANTHRACENE	0.06 U	0.02 U	NA	0.014 U	0.03 U	0.06 U	NA
BAP EQUIVALENT	0.05 U	NA	NA	NA	NA	NA	NA
BAP EQUIVALENT(1)	0.0 U	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	0.07 U	0.02 U	NA	0.01 U	0.03 U	0.07 U	NA
BENZO(A)PYRENE	0.05 U	0.01 U	NA	0.014 U	0.03 U	0.05 U	NA
BENZO(B)FLUORANTHENE	0.08 U	0.02 U	NA	0.01 U	0.03 U	0.08 U	NA
BENZO(G,H,I)PERYLENE	0.08 U	0.02 U	NA	0.014 U	0.03 U	0.08 U	NA

TABLE A2-5
SWMU 11, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-08-MW12S**	**MPT-08-MW12S**	**MPT-08-MW12S**	**MPT-08-MW12S**	**MPT-08-MW12S**	**MPT-11-MW05S**	**MPT-11-MW05S**
SAMPLE IDENTIFICATION	MPT-08-GW-MW12S-110806	MPT-08-MW12S-0408	MPT-08-MW12S-20080828	MPT-08-MW12S-20100525	MPT-08-MW12S-20100709	MPT-11-GW-MW05S-110706	MPT-11-GW-MW05S-20080828
SAMPLE DATE	20061108	20080423	20080828	20100525	20100709	20061107	20080828
POLYCYCLIC AROMATIC HYDROCARBONS (µg/L)							
BENZO(K)FLUORANTHENE	0.1 U	0.02 U	NA	0.014 U	0.03 U	0.1 U	NA
CHRYSENE	0.07 U	0.01 U	NA	0.01 U	0.03 U	0.07 U	NA
DIBENZO(A,H)ANTHRACENE	0.1 U	0.01 U	NA	0.027 U	0.03 U	0.1 U	NA
FLUORANTHENE	0.06 U	0.01 U	NA	0.011 U	0.03 U	0.06 U	NA
FLUORENE	0.07 U	0.02 U	NA	0.029 J	0.03 U	0.07 U	NA
INDENO(1,2,3-CD)PYRENE	0.1 U	0.02 U	NA	0.014 U	0.03 U	0.09 U	NA
NAPHTHALENE	0.1 U	0.02 U	NA	0.023 U	0.043 J	0.1 U	NA
PHENANTHRENE	0.05 U	0.02 U	NA	0.033 J	0.03 U	0.05 U	NA
PYRENE	0.06 U	0.01 U	NA	0.016 U	0.03 U	0.06 U	NA
SEMIVOLATILES (µg/L)							
1,2,4-TRICHLOROBENZENE	NA	NA	2 U	NA	NA	NA	2 U
1,2-DIPHENYLHYDRAZINE	NA	NA	3 U	NA	NA	NA	3 U
2,4,6-TRICHLOROPHENOL	NA	NA	3 U	NA	NA	NA	3 U
2,4-DICHLOROPHENOL	NA	NA	4 U	NA	NA	NA	4 U
2,4-DIMETHYLPHENOL	NA	NA	4 U	NA	NA	NA	4 U
2,4-DINITROTOLUENE	NA	NA	1 U	NA	NA	NA	1 U
2,6-DINITROTOLUENE	NA	NA	1 U	NA	NA	NA	1 U
2-CHLORONAPHTHALENE	NA	NA	2 U	NA	NA	NA	2 U
2-CHLOROPHENOL	NA	NA	3 U	NA	NA	NA	3 U
2-NITROPHENOL	NA	NA	3 U	NA	NA	NA	3 U
3,3'-DICHLOROBENZIDINE	NA	NA	3 U	NA	NA	NA	3 U
4,6-DINITRO-2-METHYLPHENOL	NA	NA	6 U	NA	NA	NA	6 U
4-BROMOPHENYL PHENYL ETHER	NA	NA	1 U	NA	NA	NA	1 U
4-CHLORO-3-METHYLPHENOL	NA	NA	2 U	NA	NA	NA	2 U
4-CHLOROPHENYL PHENYL ETHER	NA	NA	1 U	NA	NA	NA	1 U
4-NITROPHENOL	NA	NA	5 U	NA	NA	NA	5 U
ACENAPHTHENE	NA	NA	2 U	NA	NA	NA	2 U

TABLE A2-5
SWMU 11, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA
PAGE 3 OF 5

LOCATION	**MPT-08-MW12S**	**MPT-08-MW12S**	**MPT-08-MW12S**	**MPT-08-MW12S**	**MPT-08-MW12S**	**MPT-11-MW05S**	**MPT-11-MW05S**
SAMPLE IDENTIFICATION	MPT-08-GW-MW12S-110806	MPT-08-MW12S-0408	MPT-08-MW12S-20080828	MPT-08-MW12S-20100525	MPT-08-MW12S-20100709	MPT-11-GW-MW05S-110706	MPT-11-GW-MW05S-20080828
SAMPLE DATE	20061108	20080423	20080828	20100525	20100709	20061107	20080828
SEMIVOLATILES (µg/L)							
ACENAPHTHYLENE	NA	NA	2 U	NA	NA	NA	2 U
ANTHRACENE	NA	NA	1 U	NA	NA	NA	1 U
BENZIDINE	NA	NA	15 UR	NA	NA	NA	15 UR
BENZO(A)ANTHRACENE	NA	NA	1 U	NA	NA	NA	1 U
BENZO(A)PYRENE	NA	NA	1 U	NA	NA	NA	1 UJ
BENZO(B)FLUORANTHENE	NA	NA	1 U	NA	NA	NA	1 UJ
BENZO(G,H,I)PERYLENE	NA	NA	2 U	NA	NA	NA	2 UJ
BENZO(K)FLUORANTHENE	NA	NA	1 U	NA	NA	NA	1 UJ
BIS(2-CHLOROETHOXY)METHANE	NA	NA	2 U	NA	NA	NA	2 U
BIS(2-CHLOROETHYL)ETHER	NA	NA	2 U	NA	NA	NA	2 U
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	2 U	NA	NA	NA	2 U
BUTYL BENZYL PHTHALATE	NA	NA	1 U	NA	NA	NA	1 U
CHRYSENE	NA	NA	1 U	NA	NA	NA	1 U
DIBENZO(A,H)ANTHRACENE	NA	NA	2 U	NA	NA	NA	2 UJ
DIETHYL PHTHALATE	NA	NA	1 U	NA	NA	NA	1 U
DIMETHYL PHTHALATE	NA	NA	0.7 U	NA	NA	NA	0.7 U
DI-N-BUTYL PHTHALATE	NA	NA	1 U	NA	NA	NA	1 U
DI-N-OCTYL PHTHALATE	NA	NA	2 U	NA	NA	NA	2 UJ
FLUORANTHENE	NA	NA	1 U	NA	NA	NA	1 U
FLUORENE	NA	NA	1 U	NA	NA	NA	1 U
HEXACHLOROBENZENE	NA	NA	0.9 U	NA	NA	NA	0.9 U
HEXACHLOROBUTADIENE	NA	NA	2 U	NA	NA	NA	2 U
HEXACHLOROCYCLOPENTADIENE	NA	NA	1 U	NA	NA	NA	1 U
HEXACHLOROETHANE	NA	NA	2 U	NA	NA	NA	2 U
INDENO(1,2,3-CD)PYRENE	NA	NA	2 U	NA	NA	NA	2 UJ
ISOPHORONE	NA	NA	2 U	NA	NA	NA	2 U
NAPHTHALENE	NA	NA	2 U	NA	NA	NA	2 U

TABLE A2-5
SWMU 11, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-08-MW12S	MPT-08-MW12S	MPT-08-MW12S	MPT-08-MW12S	MPT-08-MW12S	MPT-11-MW05S	MPT-11-MW05S
SAMPLE IDENTIFICATION	MPT-08-GW-MW12S-110806	MPT-08-MW12S-0408	MPT-08-MW12S-20080828	MPT-08-MW12S-20100525	MPT-08-MW12S-20100709	MPT-11-GW-MW05S-110706	MPT-11-GW-MW05S-20080828
SAMPLE DATE	20061108	20080423	20080828	20100525	20100709	20061107	20080828
SEMIVOLATILES (µg/L)							
NITROBENZENE	NA	NA	2 U	NA	NA	NA	2 U
N-NITROSODIMETHYLAMINE	NA	NA	1 U	NA	NA	NA	1 U
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	2 U	NA	NA	NA	2 U
N-NITROSODIPHENYLAMINE	NA	NA	2 U	NA	NA	NA	2 U
PENTACHLOROPHENOL	NA	NA	7 UJ	NA	NA	NA	7 UJ
PHENANTHRENE	NA	NA	0.9 U	NA	NA	NA	0.9 U
PHENOL	NA	NA	2 U	NA	NA	NA	2 U
PYRENE	NA	NA	1 U	NA	NA	NA	1 U
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	NA	NA	0.3 U	NA	NA	NA	0.3 U
1,1,2,2-TETRACHLOROETHANE	NA	NA	0.3 U	NA	NA	NA	0.3 U
1,1,2-TRICHLOROETHANE	NA	NA	0.3 U	NA	NA	NA	0.3 U
1,1-DICHLOROETHANE	NA	NA	0.2 U	NA	NA	NA	0.2 U
1,1-DICHLOROETHENE	NA	NA	0.3 U	NA	NA	NA	0.3 U
1,2-DIBROMOETHANE	0.0065 U	NA	NA	NA	NA	0.0065 U	NA
1,2-DICHLOROETHANE	NA	NA	0.3 U	NA	NA	NA	0.3 U
1,2-DICHLOROPROPANE	NA	NA	0.3 U	NA	NA	NA	0.3 U
2-CHLOROETHYL VINYL ETHER	NA	NA	0.3 U	NA	NA	NA	0.3 U
ACROLEIN	NA	NA	1 U	NA	NA	NA	1 U
ACRYLONITRILE	NA	NA	1 U	NA	NA	NA	1 U
BENZENE	0.5 U	0.23 U	0.3 U	0.27 U	0.27 U	0.5 U	0.3 U
BROMODICHLOROMETHANE	NA	NA	0.3 U	NA	NA	NA	0.3 U
BROMOFORM	NA	NA	0.4 U	NA	NA	NA	0.4 U
BROMOMETHANE	NA	NA	0.3 U	NA	NA	NA	0.3 U
CARBON TETRACHLORIDE	NA	NA	0.4 U	NA	NA	NA	0.4 U
CHLOROBENZENE	NA	NA	0.2 U	NA	NA	NA	0.2 U
CHLORODIBROMOMETHANE	NA	NA	0.3 U	NA	NA	NA	0.3 U

TABLE A2-5
SWMU 11, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-08-MW12S**	**MPT-08-MW12S**	**MPT-08-MW12S**	**MPT-08-MW12S**	**MPT-08-MW12S**	**MPT-11-MW05S**	**MPT-11-MW05S**
SAMPLE IDENTIFICATION	MPT-08-GW-MW12S-110806	MPT-08-MW12S-0408	MPT-08-MW12S-20080828	MPT-08-MW12S-20100525	MPT-08-MW12S-20100709	MPT-11-GW-MW05S-110706	MPT-11-GW-MW05S-20080828
SAMPLE DATE	20061108	20080423	20080828	20100525	20100709	20061107	20080828
VOLATILES (µg/L)							
CHLOROETHANE	NA	NA	0.3 U	NA	NA	NA	0.3 U
CHLOROFORM	NA	NA	0.2 U	NA	NA	NA	0.2 U
CHLOROMETHANE	NA	NA	0.3 U	NA	NA	NA	0.3 U
CIS-1,2-DICHLOROETHENE	NA	NA	0.2 U	NA	NA	NA	0.2 U
CIS-1,3-DICHLOROPROPENE	NA	NA	0.3 U	NA	NA	NA	0.3 U
ETHYLBENZENE	0.3 U	0.34 U	0.3 U	0.26 U	0.26 U	0.3 U	0.3 U
M+P-XYLENES	1 U	NA	0.7 U	0.5 U	NA	1 U	0.7 U
METHYL TERT-BUTYL ETHER	0.5 U	0.21 U	NA	0.24 U	0.24 U	0.5 U	NA
METHYLENE CHLORIDE	NA	NA	0.3 U	NA	NA	NA	0.3 U
O-XYLENE	0.4 U	NA	0.3 U	0.25 U	NA	0.4 U	0.3 U
TETRACHLOROETHENE	NA	NA	0.4 U	NA	NA	NA	0.4 U
TOLUENE	0.4 U	0.28 U	0.4 U	0.3 U	0.30 U	0.4 U	0.4 U
TOTAL XYLENES	1 U	0.38 U	0.9 U	0.5 U	0.50 U	1 U	0.9 U
TRANS-1,2-DICHLOROETHENE	NA	NA	0.4 U	NA	NA	NA	0.4 U
TRANS-1,3-DICHLOROPROPENE	NA	NA	0.2 U	NA	NA	NA	0.2 U
TRICHLOROETHENE	NA	NA	0.4 U	NA	NA	NA	0.4 U
TRICHLOROFLUOROMETHANE	NA	NA	0.5 U	NA	NA	NA	0.5 U
VINYL CHLORIDE	NA	NA	0.3 U	NA	NA	NA	0.3 U

Notes:
NA = Not Analyzed
U = Indicates compound was analyzed for but not detected at indicated detection limit
I = The reported value is betwee the laboratory method detection limit and the laboratory practical quantitation limit
J = Estimated value

TABLE A2-6
SWMU 11, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA
PAGE 1 OF 8

LOCATION	**MPT-11-SB01**	**MPT-11-SB01**	**MPT-11-SB02**	**MPT-11-SB02**	**MPT-11-SB03**	**MPT-11-SB03**	**MPT-11-SB04**	**MPT-11-SB04**	**MPT-11-SB05**	**MPT-11-SB05**	**MPT-11-SB06**	**MPT-11-SB06**	**MPT-11-SB07**	**MPT-11-SB07**	**MPT-11-SB08**
SAMPLE IDENTIFICATION	MPT-11-SB01-01-102506	MPT-11-SB01-13-102506	MPT-11-SB02-01-102606	MPT-11-SB02-11-102606	MPT-11-SB03-01-102506	MPT-11-SB03-13-102506	MPT-11-SB04-01-102606	MPT-11-SB04-11-102606	MPT-11-SB05-01-102606	MPT-11-SB05-11-102606	MPT-11-SB06-01-102506	MPT-11-SB06-13-102506	MPT-11-SB07-01-102506	MPT-11-SB07-11-102506	MPT-11-SB08-01-102606
SAMPLE DATE	20061025	20061025	20061026	20061026	20061025	20061025	20061026	20061026	20061026	20061026	20061025	20061025	20061025	20061025	20061026
TOP DEPTH	0	12	0	10	0	12	0	10	0	10	0	12	0	10	0
BOTTOM DEPTH	1	13	1	11	1	13	1	11	1	11	1	13	1	11	1
METALS (mg/kg)															
ARSENIC	1.9 U	1.2 U	1.6 U	1.4 U	1.6 U	1 U	2.6	1.1 U	1.7 U	0.76 U	1.2 U	1.1 U	1.6 U	2 U	1.3 U
CADMIUM	0.04	0.05 U	0.11	0.1	0.05 U	0.05 U	0.1	0.05 U	0.08	0.04 U	0.06	0.05 U	0.04	0.06	0.1
CHROMIUM	4.3	1.7	6.9	11.7	5.1	3.9	7.9	9.6	5.8	2.4	17.1	1.3	4.4	15.7	5.8
LEAD	1.5	6.4	3.6	3.2	1.6	3.2	4.7	1.7	4.9	1	3.6	7.5	0.63	2.5	2.5
MISCELLANEOUS PARAMETERS (%)															
PERCENT SOLIDS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL SOLIDS	97	82	88	81	96	86	91	89	98	91	95	86	97	74	98
PESTICIDES/PCBS (µg/kg)															
AROCLOR-1016	16 U	19 U	18 U	20 U	17 U	18 U	18 U	18 U	16 U	18 U	17 U	19 U	16 U	22 U	16 U
AROCLOR-1221	12 U	14 U	14 U	15 U	12 U	14 U	13 U	13 U	12 U	13 U	13 U	14 U	12 U	16 U	12 U
AROCLOR-1232	5.5 U	6.4 U	6 U	6.5 U	5.5 U	6.2 U	5.8 U	5.9 U	5.4 U	5.8 U	5.6 U	6.2 U	5.5 U	7.1 U	5.4 U
AROCLOR-1242	6.9 U	8.1 U	7.6 U	8.2 U	7 U	7.8 U	7.4 U	7.5 U	6.8 U	7.4 U	7.1 U	7.8 U	6.9 U	9 U	6.8 U
AROCLOR-1248	5.9 U	6.9 U	6.5 U	7 U	5.9 U	6.6 U	6.3 U	6.4 U	5.8 U	6.3 U	6 U	6.6 U	5.9 U	7.7 U	5.8 U
AROCLOR-1254	13 U	16 U	15 U	16 U	13 U	15 U	14 U	14 U	13 U	14 U	14 U	15 U	13 U	18 U	13 U
AROCLOR-1260	14 U	17 U	16 U	17 U	14 U	16 U	15 U	16 U	14 U	15 U	15 U	16 U	14 U	19 U	14 U
PETROLEUM HYDROCARBONS (mg/kg)															
TPH (C08-C40)	24 J	6400	57 J	36	34	67	37	45	100 J	85 J	30	4500	45 J	28 J	43
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)															
1-METHYLNAPHTHALENE	9 U	11 UR	10 U	11 U	10 U	11 U	10 U	10 U	9 U	10 U	10 U	11 UR	10 U	12 U	9 U
2-METHYLNAPHTHALENE	8 U	9 UR	8 U	9 U	8 U	8 U	8 U	8 U	7 U	8 U	8 U	8 UR	8 U	10 U	7 U
ACENAPHTHENE	6 U	7 UR	7 U	7 U	6 U	7 U	6 U	6 U	6 U	6 U	6 U	44 J	6 U	8 U	6 U
ACENAPHTHYLENE	2 U	3 UR	2 U	3 U	2 U	6 J	2 U	2 U	2 U	2 U	2 U	2 UR	2 U	3 U	2 U
ANTHRACENE	4 U	4 UR	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	10 J	4 U	5 U	4 U
BAP EQUIVALENT	4.5165	10.644	27.731	4 U	3 U	4.4665	4.3165	4.4165	4.3665	3 U	4.5165	12.348	4.3165	19.906	4.4665
BENZO(A)ANTHRACENE	6 J	7 J	27	4 U	3 U	5 J	4 J	5 J	5 J	3 U	6 J	11 J	4 J	20 J	6 J
BENZO(A)PYRENE	3 U	4 UR	19 J	4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	6 J	3 U	13 J	3 U
BENZO(B)FLUORANTHENE	3 U	4 UR	28	4 U	3 U	4 U	3 U	3 U	3 U	3 U	3 U	7 J	3 U	16 J	3 U
BENZO(G,H,I)PERYLENE	3 U	4 UR	13 J	4 U	3 U	4 U	3 U	3 U	4 J	3 U	7 J	4 J	3 U	7 J	3 J
BENZO(K)FLUORANTHENE	3 U	4 UR	11 J	4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	4 UR	3 U	9 J	3 U
CHRYSENE	3 U	4 UR	21 J	4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	8 J	3 U	16 J	3 U
DIBENZO(A,H)ANTHRACENE	4 U	5 UR	4 U	5 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 UR	4 U	5 U	4 U
FLUORANTHENE	4 U	8 J	41	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	21 J	4 U	34	7 J
FLUORENE	3 U	4 UR	4 U	4 U	3 U	4 U	3 U	3 U	3 U	3 U	3 U	61 J	3 U	4 U	3 U
INDENO(1,2,3-CD)PYRENE	5 U	5 UR	11 J	6 U	5 U	5 U	5 U	5 U	4 U	5 U	5 U	5 UR	5 U	7 J	4 U
NAPHTHALENE	3 U	3 UR	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UR	3 U	4 U	3 U
PHENANTHRENE	3 U	12 J	12 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UR	3 U	14 J	3 U
PYRENE	3 U	8 J	38	4 U	3 U	4 U	4 U	4 U	3 U	4 U	3 U	17 J	3 U	23 J	6 J
SEMIVOLATILES (µg/kg)															
1,2,4-TRICHLOROBENZENE	140 U	640 U	150 U	160 U	140 U	150 U	140 U	150 U	130 U	140 U	140 U	610 U	140 U	180 U	130 U
1,2-DIPHENYLHYDRAZINE	410 U	1900 U	450 U	490 U	410 U	460 U	440 U	440 U	400 U	440 U	420 U	1800 U	410 U	540 U	400 U

TABLE A2-6
SWMU 11, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-11-SB01**	**MPT-11-SB01**	**MPT-11-SB02**	**MPT-11-SB02**	**MPT-11-SB03**	**MPT-11-SB03**	**MPT-11-SB04**	**MPT-11-SB04**	**MPT-11-SB05**	**MPT-11-SB05**	**MPT-11-SB06**	**MPT-11-SB06**	**MPT-11-SB07**	**MPT-11-SB07**	**MPT-11-SB08**
SAMPLE IDENTIFICATION	MPT-11-SB01-01-102506	MPT-11-SB01-13-102506	MPT-11-SB02-01-102606	MPT-11-SB02-11-102606	MPT-11-SB03-01-102506	MPT-11-SB03-13-102506	MPT-11-SB04-01-102606	MPT-11-SB04-11-102606	MPT-11-SB05-01-102606	MPT-11-SB05-11-102606	MPT-11-SB06-01-102506	MPT-11-SB06-13-102506	MPT-11-SB07-01-102506	MPT-11-SB07-11-102506	MPT-11-SB08-01-102606
SAMPLE DATE	20061025	20061025	20061026	20061026	20061025	20061025	20061026	20061026	20061026	20061026	20061025	20061025	20061025	20061025	20061026
TOP DEPTH	0	12	0	10	0	12	0	10	0	10	0	12	0	10	0
BOTTOM DEPTH	1	13	1	11	1	13	1	11	1	11	1	13	1	11	1
SEMIVOLATILES (µg/kg)															
2,4,6-TRICHLOROPHENOL	220 U	1000 U	240 U	260 U	220 U	240 U	230 U	230 U	210 U	230 U	220 U	980 U	220 U	280 U	210 U
2,4-DICHLOROPHENOL	260 U	1200 U	290 U	320 U	270 U	300 U	280 U	290 U	260 U	280 U	270 U	1200 U	260 U	350 U	260 U
2,4-DIMETHYLPHENOL	230 U	1100 U	250 U	270 U	230 U	260 U	240 U	250 U	220 U	240 U	230 U	1000 U	230 U	300 U	220 U
2,4-DINITROTOLUENE	220 U	1000 U	250 U	270 U	230 U	250 U	240 U	240 U	220 U	240 U	230 U	1000 U	220 U	290 U	220 U
2,6-DINITROTOLUENE	180 U	860 U	200 U	220 U	180 U	210 U	200 U	200 U	180 U	200 U	190 U	830 U	180 U	240 U	180 U
2-CHLORONAPHTHALENE	250 U	1200 U	280 U	300 U	250 U	280 U	270 U	270 U	240 U	270 U	260 U	1100 U	250 U	330 U	240 U
2-CHLOROPHENOL	240 U	1100 U	270 U	290 U	240 U	270 U	260 U	260 U	240 U	260 U	250 U	1100 U	240 U	320 U	240 U
2-NITROPHENOL	230 U	1100 U	260 U	280 U	230 U	260 U	250 U	250 U	230 U	250 U	240 U	1000 U	230 U	300 U	230 U
3,3'-DICHLOROBENZIDINE	290 U	1400 U	320 UJ	350 UJ	300 UJ	330 UJ	310 UJ	320 UJ	290 UJ	310 UJ	300 UJ	1300 U	290 UJ	380 UJ	290 UJ
4,6-DINITRO-2-METHYLPHENOL	790 U	3700 U	870 U	940 U	800 U	890 U	840 U	860 U	780 U	840 U	810 U	3600 U	790 U	1000 U	780 U
4-BROMOPHENYL PHENYL ETHER	170 U	800 U	190 U	200 U	170 U	190 U	180 U	180 U	170 U	180 U	170 U	760 U	170 U	220 U	170 U
4-CHLORO-3-METHYLPHENOL	340 U	1600 U	370 U	400 U	340 U	380 U	360 U	370 U	330 U	360 U	350 U	1500 U	340 U	440 U	330 U
4-CHLOROPHENYL PHENYL ETHER	130 U	600 U	140 U	150 U	130 U	140 U	140 U	140 U	120 U	140 U	130 U	570 U	130 U	160 U	120 U
4-NITROPHENOL	840 UJ	3900 U	920 U	1000 U	840 U	940 U	890 U	910 U	820 U	900 U	860 U	3800 U	840 U	1100 U	820 U
ACENAPHTHENE	110 U	510 U	120 U	130 U	110 U	120 U	120 U	120 U	110 U	120 U	110 U	500 U	110 U	140 U	110 U
ACENAPHTHYLENE	110 U	510 U	120 U	130 U	110 U	120 U	120 U	120 U	110 U	120 U	110 U	500 U	110 U	140 U	110 U
ANTHRACENE	110 U	510 U	120 U	130 U	110 U	120 U	120 U	120 U	110 U	120 U	110 U	490 U	110 U	140 U	110 U
BAP EQUIVALENT	110 U	520 U	120 U	130 U	110 U	120 U	120 U	120 U	110 U	120 U	110 U	500 U	110 U	140 U	110 U
BENZIDINE	300 U	1400 U	330 UR	350 UR	300 UR	340 UR	320 UR	320 UR	290 UR	320 UR	300 UR	1300 UR	300 UR	390 UR	290 UR
BENZO(A)ANTHRACENE	99 U	470 U	110 U	120 U	100 U	110 U	100 U	110 U	98 U	100 U	100 U	450 U	99 U	130 U	97 U
BENZO(A)PYRENE	110 U	520 U	120 U	130 U	110 U	120 U	120 U	120 U	110 U	120 U	110 U	500 U	110 U	140 U	110 U
BENZO(B)FLUORANTHENE	140 U	650 U	150 U	160 U	140 U	160 U	150 U	150 U	140 U	150 U	140 U	620 U	140 U	180 U	140 U
BENZO(G,H,I)PERYLENE	180 U	830 U	190 U	210 U	180 U	200 U	190 U	190 U	170 U	190 U	180 U	800 U	180 U	230 U	170 U
BENZO(K)FLUORANTHENE	140 U	660 U	150 U	170 U	140 U	160 U	150 U	150 U	140 U	150 U	140 U	640 U	140 U	180 U	140 U
BIS(2-CHLOROETHOXY)METHANE	140 U	650 U	150 U	160 U	140 U	160 U	150 U	150 U	140 U	150 U	140 U	620 U	140 U	180 U	140 U
BIS(2-CHLOROETHYL)ETHER	150 U	690 U	160 UJ	170 UJ	150 U	160 UJ	160 UJ	160 UJ	140 UJ	160 UJ	150 UJ	660 U	150 UJ	190 UJ	140 UJ
BIS(2-ETHYLHEXYL)PHTHALATE	330 U	1600 U	360 U	390 U	330 U	370 U	350 U	360 U	330 U	350 U	340 U	1500 U	330 U	430 U	320 U
BUTYL BENZYL PHTHALATE	150 U	720 U	170 U	180 U	150 U	170 U	160 U	160 U	150 U	160 U	160 U	690 U	150 U	200 U	150 U
CHRYSENE	120 U	570 U	130 U	140 U	120 U	140 U	130 U	130 U	120 U	130 U	120 U	550 U	120 U	160 U	120 U
DIBENZO(A,H)ANTHRACENE	160 U	770 U	180 U	200 U	160 U	180 U	180 U	180 U	160 U	180 U	170 U	740 U	160 U	210 U	160 U
DIETHYL PHTHALATE	220 U	1000 U	240 U	260 U	220 U	240 U	230 U	230 U	210 U	230 U	220 U	980 U	220 U	280 U	210 U
DIMETHYL PHTHALATE	140 U	660 U	150 U	160 U	140 U	160 U	150 U	150 U	140 U	150 U	140 U	630 U	140 U	180 U	140 U
DI-N-BUTYL PHTHALATE	230 U	1100 U	250 U	270 U	230 U	260 U	240 U	250 U	220 U	240 U	230 U	1000 U	230 U	300 U	220 U
DI-N-OCTYL PHTHALATE	260 U	1200 U	290 U	310 U	260 U	290 U	280 U	280 U	260 U	280 U	260 U	1200 U	260 U	340 U	260 U
FLUORANTHENE	210 U	1000 U	230 U	250 U	210 U	240 U	220 U	230 U	210 U	230 U	220 U	960 U	210 U	280 U	210 U
FLUORENE	110 U	520 U	120 U	130 U	110 U	120 U	120 U	120 U	110 U	120 U	110 U	500 U	110 U	140 U	110 U
HEXACHLOROBENZENE	140 U	660 U	150 U	160 U	140 U	160 U	150 U	150 U	140 U	150 U	140 U	630 U	140 U	180 U	140 U
HEXACHLOROBUTADIENE	120 U	560 U	130 U	140 U	120 U	130 U	130 U	130 U	120 U	130 U	120 U	540 U	120 U	160 U	120 U
HEXACHLOROCYCLOPENTADIENE	160 U	780 U	180 UJ	200 U	170 U	180 U	180 U	180 U	160 UJ	180 UJ	170 U	750 U	160 U	220 U	160 UJ
HEXACHLOROETHANE	150 U	690 U	160 U	180 U	150 U	170 U	160 U	160 U	140 U	160 U	150 U	670 U	150 U	190 U	140 U

LOCATION	**MPT-11-SB01**	**MPT-11-SB01**	**MPT-11-SB02**	**MPT-11-SB02**	**MPT-11-SB03**	**MPT-11-SB03**	**MPT-11-SB04**	**MPT-11-SB04**	**MPT-11-SB05**	**MPT-11-SB05**	**MPT-11-SB06**	**MPT-11-SB06**	**MPT-11-SB07**	**MPT-11-SB07**	**MPT-11-SB08**
SAMPLE IDENTIFICATION	MPT-11-SB01-01-102506	MPT-11-SB01-13-102506	MPT-11-SB02-01-102606	MPT-11-SB02-11-102606	MPT-11-SB03-01-102506	MPT-11-SB03-13-102506	MPT-11-SB04-01-102606	MPT-11-SB04-11-102606	MPT-11-SB05-01-102606	MPT-11-SB05-11-102606	MPT-11-SB06-01-102506	MPT-11-SB06-13-102506	MPT-11-SB07-01-102506	MPT-11-SB07-11-102506	MPT-11-SB08-01-102606
SAMPLE DATE	20061025	20061025	20061026	20061026	20061025	20061025	20061026	20061026	20061026	20061026	20061025	20061025	20061025	20061025	20061026
TOP DEPTH	0	12	0	10	0	12	0	10	0	10	0	12	0	10	0
BOTTOM DEPTH	1	13	1	11	1	13	1	11	1	11	1	13	1	11	1
SEMIVOLATILES (µg/kg)															
INDENO(1,2,3-CD)PYRENE	280 U	1300 U	310 U	340 U	280 U	320 U	300 U	300 U	280 U	300 U	290 U	1300 U	280 U	370 U	280 U
ISOPHORONE	120 U	580 U	140 U	150 U	120 U	140 U	130 U	130 U	120 U	130 U	130 U	560 U	120 U	160 U	120 U
NAPHTHALENE	130 U	600 U	140 U	150 U	130 U	140 U	140 U	140 U	120 U	140 U	130 U	570 U	130 U	160 U	120 U
NITROBENZENE	120 U	550 U	130 U	140 U	120 U	130 U	120 U	130 U	110 U	120 U	120 U	530 U	120 U	150 U	110 U
N-NITROSODIMETHYLAMINE	150 U	710 U	170 U	180 U	150 U	170 U	160 U	160 U	150 U	160 U	150 U	680 U	150 U	200 U	150 U
N-NITROSO-DI-N-PROPYLAMINE	190 U	890 U	210 U	220 U	190 U	210 U	200 U	200 U	190 U	200 U	190 U	860 U	190 U	250 U	190 U
N-NITROSODIPHENYLAMINE	250 U	1200 U	280 U	300 U	250 U	280 U	270 U	270 U	240 U	270 U	260 U	1100 U	250 U	330 U	240 U
PENTACHLOROPHENOL	680 U	3200 U	750 U	810 U	680 U	760 U	720 U	740 U	670 U	720 U	690 U	3100 U	680 U	890 U	670 U
PHENANTHRENE	79 U	370 U	88 U	94 U	80 U	89 U	85 U	86 U	78 U	85 U	81 U	360 U	80 U	100 U	78 U
PHENOL	240 U	1100 U	260 U	280 U	240 U	270 U	260 U	260 U	240 U	260 U	240 U	1100 U	240 U	310 U	240 U
PYRENE	150 U	700 U	160 U	180 U	150 U	170 U	160 U	160 U	150 U	160 U	150 U	680 U	150 U	200 U	150 U
SPLP PETROLEUM HYDROCARBONS (µg/L)															
TPH (C08-C40)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOLATILES (µg/kg)															
1,1,1-TRICHLOROETHANE	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
1,1,2,2-TETRACHLOROETHANE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.3 U	0.3 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.3 U
1,1,2-TRICHLOROETHANE	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.3 U	0.3 U	0.4 U	0.4 U	0.3 U	0.3 U	0.4 U	0.3 U
1,1-DICHLOROETHANE	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.4 U	0.4 U	0.5 U	0.5 U	0.4 U	0.5 U	0.5 U	0.4 U
1,1-DICHLOROETHENE	0.8 U	0.8 U	0.9 U	1 U	0.9 U	1 U	1 U	0.7 U	0.8 U	0.8 U	0.9 U	0.8 U	0.8 U	0.9 U	0.7 U
1,2-DICHLOROETHANE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.3 U	0.3 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.3 U
1,2-DICHLOROPROPANE	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.7 U	0.4 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U
2-CHLOROETHYL VINYL ETHER	0.6 UR	0.6 U	0.7 UR	0.8 UR	0.7 UR	0.8 UR	0.9 UR	0.6 UR	0.6 UR	0.7 UR	0.7 UR	0.6 U	0.6 UR	0.7 UR	0.6 UR
ACROLEIN	4 UR	4 UR	5 UR	5 UR	4 UR	5 UR	5 UR	4 UR	4 UR	4 UR	4 UR	4 U	4 UR	4 UR	4 UR
ACRYLONITRILE	10 U	10 U	12 U	12 U	12 U	12 U	14 U	9 U	10 U	10 U	12 U	10 U	10 U	11 U	10 U
BENZENE	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
BROMODICHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.2 U
BROMOFORM	0.7 U	0.7 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.9 U	0.6 U	0.6 U	0.7 U	0.7 U	0.6 U	0.6 U	0.7 U	0.6 U
BROMOMETHANE	0.8 U	0.8 U	0.9 U	1 U	0.9 U	1 U	1 U	0.7 U	0.8 U	0.8 U	0.9 U	0.8 U	0.8 U	0.9 U	0.7 U
CARBON TETRACHLORIDE	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U	0.4 U
CHLOROBENZENE	0.3 U	0.3 UJ	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
CHLORODIBROMOMETHANE	0.7 U	0.7 U	0.8 U	0.9 U	0.8 U	0.8 U	0.9 U	0.6 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.8 U	0.6 U
CHLOROETHANE	0.8 U	0.8 UJ	0.9 U	1 U	0.9 U	0.9 U	1 U	0.7 U	0.7 U	0.8 U	0.9 U	0.7 U	0.8 U	0.9 U	0.7 U
CHLOROFORM	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.5 U	0.5 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
CHLOROMETHANE	0.6 U	0.6 U	0.6 U	0.7 U	1 J	0.7 U	0.7 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U
CIS-1,2-DICHLOROETHENE	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.4 U	0.4 U	0.5 U	0.5 U	0.4 U	0.5 U	0.5 U	0.4 U
CIS-1,3-DICHLOROPROPENE	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 UJ	0.4 U	0.5 U	0.4 U
ETHYLBENZENE	0.3 U	0.3 UJ	0.4 U	0.4 U	0.4 J	0.4 U	0.4 U	0.3 U	0.3 U	0.3 U	0.4 U	0.3 U	0.3 U	0.4 U	0.3 U
M+P-XYLENES	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U
METHYLENE CHLORIDE	1 U	0.8 U	0.9 U	0.9 U	0.9 U	1 U	1 U	0.7 U	0.7 U	0.8 U	1 U	1 U	0.8 U	1 U	0.7 U
O-XYLENE	0.6 U	0.6 UJ	0.7 U	0.8 U	0.7 U	0.8 U	0.8 U	0.6 U	0.6 U	0.6 U	0.7 U	0.6 U	0.6 U	0.7 U	0.6 U

TABLE A2-6
SWMU 11, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-11-SB01**	**MPT-11-SB01**	**MPT-11-SB02**	**MPT-11-SB02**	**MPT-11-SB03**	**MPT-11-SB03**	**MPT-11-SB04**	**MPT-11-SB04**	**MPT-11-SB05**	**MPT-11-SB05**	**MPT-11-SB06**	**MPT-11-SB06**	**MPT-11-SB07**	**MPT-11-SB07**	**MPT-11-SB08**
SAMPLE IDENTIFICATION	MPT-11-SB01-01-102506	MPT-11-SB01-13-102506	MPT-11-SB02-01-102606	MPT-11-SB02-11-102606	MPT-11-SB03-01-102506	MPT-11-SB03-13-102506	MPT-11-SB04-01-102606	MPT-11-SB04-11-102606	MPT-11-SB05-01-102606	MPT-11-SB05-11-102606	MPT-11-SB06-01-102506	MPT-11-SB06-13-102506	MPT-11-SB07-01-102506	MPT-11-SB07-11-102506	MPT-11-SB08-01-102606
SAMPLE DATE	20061025	20061025	20061026	20061026	20061025	20061025	20061026	20061026	20061026	20061026	20061025	20061025	20061025	20061025	20061026
TOP DEPTH	0	12	0	10	0	12	0	10	0	10	0	12	0	10	0
BOTTOM DEPTH	1	13	1	11	1	13	1	11	1	11	1	13	1	11	1
VOLATILES (µg/kg)															
TETRACHLOROETHENE	0.7 U	0.7 U	0.8 U	0.9 U	0.8 U	0.9 U	1 U	0.6 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.8 U	0.7 U
TOLUENE	0.8 U	0.8 U	0.9 U	0.9 U	0.9 U	0.9 U	1 U	0.7 U	0.7 U	0.8 U	0.9 U	0.7 U	0.8 U	0.8 U	0.7 U
TOTAL XYLENES	2 U	2 UJ	2 U	3 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
TRANS-1,2-DICHLOROETHENE	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TRANS-1,3-DICHLOROPROPENE	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TRICHLOROETHENE	0.7 U	0.7 U	0.8 U	0.8 U	0.8 U	0.8 U	0.9 U	0.6 U	0.6 U	0.7 U	0.8 U	0.6 U	0.7 U	0.7 U	0.6 U
TRICHLOROFLUOROMETHANE	0.4 U	0.4 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U	0.4 U
VINYL CHLORIDE	0.6 U	0.6 U	0.7 U	0.8 U	0.7 U	0.7 U	0.8 U	0.6 U	0.6 U	0.6 U	0.7 U	0.6 U	0.6 U	0.7 U	0.6 U

TABLE A2-6
SWMU 11, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-11-SB08**	**MPT-11-SB09**	**MPT-11-SB09**	**MPT-11-SB10**	**MPT-11-SB10**	**MPT-11-SB11**	**MPT-11-SB11**	**MPT-11-SB12**	**MPT-11-SB12**	**MPT-11-SB13**	**MPT-11-SB14**	**MPT-11-SB15**	**MPT-11-SB16**	**MPT-11-SB17**
SAMPLE IDENTIFICATION	MPT-11-SB08-11-102606	MPT-11-SB09-001	MPT-11-SB09-013	MPT-11-SB10-001	MPT-11-SB10-013	MPT-11-SB11-001	MPT-11-SB11-013	MPT-11-SB12-001	MPT-11-SB12-013	MPT11-SB13-10-022409	MPT11-SB14-10-022409	MPT11-SB15-02-022409	MPT11-SB16-05-022409	MPT11-SB17-10-022409
SAMPLE DATE	20061026	20070409	20070409	20070409	20070409	20070409	20070409	20070409	20070409	20090224	20090224	20090224	20090224	20090224
TOP DEPTH	10	0	12	0	12	0	12	0	12	9	9	1	4	9
BOTTOM DEPTH	11	1	13	1	13	1	13	1	13	10	10	2	5	10
METALS (mg/kg)														
ARSENIC	1.4 U	1.2	NA	1.4	NA	1.8	NA	1	NA	NA	NA	NA	NA	NA
CADMIUM	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHROMIUM	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LEAD	3.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (%)														
PERCENT SOLIDS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	86	92	94	93
TOTAL SOLIDS	86	80	79	84	74	79	85	83	79	NA	NA	NA	NA	NA
PESTICIDES/PCBS (µg/kg)														
AROCLOR-1016	19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1221	14 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1232	6.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1242	7.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1248	6.6 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1254	15 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1260	16 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (mg/kg)														
TPH (C08-C40)	32	NA	13000	NA	190	NA	11000	NA	10 U	NA	6.6 U	6.2 U	6 U	6.1 U
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)														
1-METHYLNAPHTHALENE	11 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36 U	NA	NA
2-METHYLNAPHTHALENE	8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36 U	NA	NA
ACENAPHTHENE	7 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	72 U	NA	NA
ACENAPHTHYLENE	2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	72 U	NA	NA
ANTHRACENE	4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36 U	NA	NA
BAP EQUIVALENT	5.1715	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	7 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14 U	NA	NA
BENZO(A)PYRENE	4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14 U	NA	NA
BENZO(B)FLUORANTHENE	4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14 U	NA	NA
BENZO(G,H,I)PERYLENE	4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14 U	NA	NA
BENZO(K)FLUORANTHENE	4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14 U	NA	NA
CHRYSENE	3 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14 U	NA	NA
DIBENZO(A,H)ANTHRACENE	4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14 U	NA	NA
FLUORANTHENE	4 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36 U	NA	NA
FLUORENE	4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	72 U	NA	NA
INDENO(1,2,3-CD)PYRENE	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14 U	NA	NA
NAPHTHALENE	3 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36 U	NA	NA
PHENANTHRENE	3 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36 U	NA	NA
PYRENE	4 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36 U	NA	NA
SEMIVOLATILES (µg/kg)														
1,2,4-TRICHLOROBENZENE	150 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIPHENYLHYDRAZINE	460 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE A2-6
SWMU 11, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-11-SB08**	**MPT-11-SB09**	**MPT-11-SB09**	**MPT-11-SB10**	**MPT-11-SB10**	**MPT-11-SB11**	**MPT-11-SB11**	**MPT-11-SB12**	**MPT-11-SB12**	**MPT-11-SB13**	**MPT-11-SB14**	**MPT-11-SB15**	**MPT-11-SB16**	**MPT-11-SB17**
SAMPLE IDENTIFICATION	MPT-11-SB08-11-102606	MPT-11-SB09-001	MPT-11-SB09-013	MPT-11-SB10-001	MPT-11-SB10-013	MPT-11-SB11-001	MPT-11-SB11-013	MPT-11-SB12-001	MPT-11-SB12-013	MPT11-SB13-10-022409	MPT11-SB14-10-022409	MPT11-SB15-02-022409	MPT11-SB16-05-022409	MPT11-SB17-10-022409
SAMPLE DATE	20061026	20070409	20070409	20070409	20070409	20070409	20070409	20070409	20070409	20090224	20090224	20090224	20090224	20090224
TOP DEPTH	10	0	12	0	12	0	12	0	12	9	9	1	4	9
BOTTOM DEPTH	11	1	13	1	13	1	13	1	13	10	10	2	5	10
SEMIVOLATILES (µg/kg)														
2,4,6-TRICHLOROPHENOL	240 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	300 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	260 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	250 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	210 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	280 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	270 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	260 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	330 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	890 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	190 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	380 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	140 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	950 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	120 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	120 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	120 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BAP EQUIVALENT	120 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZIDINE	340 UR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	110 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	120 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	160 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	160 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	160 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	160 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	370 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	170 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	140 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	180 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	240 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	160 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	260 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	290 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	240 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORENE	120 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	160 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	140 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	190 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	170 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE A2-6
SWMU 11, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-11-SB08	MPT-11-SB09	MPT-11-SB09	MPT-11-SB10	MPT-11-SB10	MPT-11-SB11	MPT-11-SB11	MPT-11-SB12	MPT-11-SB12	MPT-11-SB13	MPT-11-SB14	MPT-11-SB15	MPT-11-SB16	MPT-11-SB17
SAMPLE IDENTIFICATION	MPT-11-SB08-11-102606	MPT-11-SB09-001	MPT-11-SB09-013	MPT-11-SB10-001	MPT-11-SB10-013	MPT-11-SB11-001	MPT-11-SB11-013	MPT-11-SB12-001	MPT-11-SB12-013	MPT11-SB13-10-022409	MPT11-SB14-10-022409	MPT11-SB15-02-022409	MPT11-SB16-05-022409	MPT11-SB17-10-022409
SAMPLE DATE	20061026	20070409	20070409	20070409	20070409	20070409	20070409	20070409	20070409	20090224	20090224	20090224	20090224	20090224
TOP DEPTH	10	0	12	0	12	0	12	0	12	9	9	1	4	9
BOTTOM DEPTH	11	1	13	1	13	1	13	1	13	10	10	2	5	10
SEMIVOLATILES (µg/kg)														
INDENO(1,2,3-CD)PYRENE	320 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPHORONE	140 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	140 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NITROBENZENE	130 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIMETHYLAMINE	170 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	210 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	280 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	770 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	90 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENOL	270 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	170 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP PETROLEUM HYDROCARBONS (µg/L)														
TPH (C08-C40)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1700 U	NA	NA	NA	NA
VOLATILES (µg/kg)														
1,1,1-TRICHLOROETHANE	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-TETRACHLOROETHANE	0.3 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROETHANE	0.3 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHANE	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHENE	0.7 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROETHANE	0.3 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROPROPANE	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROETHYL VINYL ETHER	0.6 UR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACROLEIN	4 UR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACRYLONITRILE	9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZENE	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMODICHLOROMETHANE	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMOFORM	0.6 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMOMETHANE	0.7 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CARBON TETRACHLORIDE	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROBENZENE	0.3 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLORODIBROMOMETHANE	0.6 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROETHANE	0.7 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROFORM	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROMETHANE	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,3-DICHLOROPROPENE	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETHYLBENZENE	0.3 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
M+P-XYLENES	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	0.7 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
O-XYLENE	0.6 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE A2-6
SWMU 11, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-11-SB08**	**MPT-11-SB09**	**MPT-11-SB09**	**MPT-11-SB10**	**MPT-11-SB10**	**MPT-11-SB11**	**MPT-11-SB11**	**MPT-11-SB12**	**MPT-11-SB12**	**MPT-11-SB13**	**MPT-11-SB14**	**MPT-11-SB15**	**MPT-11-SB16**	**MPT-11-SB17**
SAMPLE IDENTIFICATION	MPT-11-SB08-11-102606	MPT-11-SB09-001	MPT-11-SB09-013	MPT-11-SB10-001	MPT-11-SB10-013	MPT-11-SB11-001	MPT-11-SB11-013	MPT-11-SB12-001	MPT-11-SB12-013	MPT11-SB13-10-022409	MPT11-SB14-10-022409	MPT11-SB15-02-022409	MPT11-SB16-05-022409	MPT11-SB17-10-022409
SAMPLE DATE	20061026	20070409	20070409	20070409	20070409	20070409	20070409	20070409	20070409	20090224	20090224	20090224	20090224	20090224
TOP DEPTH	10	0	12	0	12	0	12	0	12	9	9	1	4	9
BOTTOM DEPTH	11	1	13	1	13	1	13	1	13	10	10	2	5	10
VOLATILES (µg/kg)														
TETRACHLOROETHENE	0.6 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOLUENE	0.7 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL XYLENES	2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRICHLOROETHENE	0.6 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRICHLOROFLUOROMETHANE	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VINYL CHLORIDE	0.6 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
NA = Not Analyzed
U = Indicates compound was analyzed for but not detected at indicated detection limit.
I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J = Estimated value.

TABLE A2-7
SWMU 51, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-51-MW01S**		**MPT-51-MW02S**		**MPT-51-MW03S**		**MPT-51-MW04S**	**MPT-51-MW05S**	**MPT-51-MW06S**	**MPT-51-MW07S**		**MPT-51-TW01S**	**MPT-51-TW02S**	**MPT-51-TW03S**	**MPT-51-TW04S**
SAMPLE IDENTIFICATION	MPT-51-GW-MW01S-110806	MPT-51-GW-MW01S-20080827	MPT-51-GW-MW02S-110806	MPT-51-GW-MW02S-20080827	MPT-51-GW-MW03S-110806	MPT-51-GW-MW03S-20080827	MPT-51-MW04S-015	MPT-51-MW05S-015	MPT-51-MW06S-015	MPT-07-TW04S-112806	MPT-51-GW-MW07S-20080828	MPT-51-GW-TW01S-021207	MPT-51-GW-TW02S-021207	MPT-51-TW03S-20080219	MPT-51-TW04S-20080219
SAMPLE DATE	20061108	20080827	20061108	20080827	20061108	20080827	20070419	20070419	20070419	20061128	20080828	20070212	20070212	20080219	20080219
VOLATILES (µg/L)															
1,1,1-TRICHLOROETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA
1,1,2,2-TETRACHLOROETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA
1,1,2-TRICHLOROETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA
1,1-DICHLOROETHANE	NA	0.2 U	NA	0.2 U	NA	0.2 U	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA
1,1-DICHLOROETHENE	NA	0.3 U	NA	0.3 U	NA	0.3 U	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA
1,2-DIBROMOETHANE	0.0065 U	NA	0.0065 U	NA	0.0065 U	NA	NA	NA	NA	0.0065 U	NA	NA	NA	NA	NA
1,2-DICHLOROETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA
1,2-DICHLOROPROPANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA
2-CHLOROETHYL VINYL ETHER	NA	0.3 U	NA	0.3 U	NA	0.3 U	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA
ACROLEIN	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 U	NA	NA	NA	NA
ACRYLONITRILE	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 U	NA	NA	NA	NA
BENZENE	0.5 U	0.3 U	0.5 U	0.3 U	0.5 U	0.3 U	NA	NA	NA	0.5 UJ	0.4 J	NA	NA	NA	NA
BROMODICHLOROMETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA
BROMOFORM	NA	0.4 U	NA	0.4 U	NA	0.4 U	NA	NA	NA	NA	0.4 U	NA	NA	NA	NA
BROMOMETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA
CARBON TETRACHLORIDE	NA	0.4 U	NA	0.4 U	NA	0.4 U	NA	NA	NA	NA	0.4 U	NA	NA	NA	NA
CHLOROBENZENE	NA	0.2 U	NA	0.2 J	NA	0.2 U	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA
CHLORODIBROMOMETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA
CHLOROETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA
CHLOROFORM	NA	0.2 U	NA	0.2 U	NA	0.2 U	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA
CHLOROMETHANE	NA	0.3 U	NA	0.3 U	NA	0.3 U	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	NA	0.2 U	NA	0.2 U	NA	0.2 U	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA
CIS-1,3-DICHLOROPROPENE	NA	0.3 U	NA	0.3 U	NA	0.3 U	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA
ETHYLBENZENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	NA	NA	NA	0.3 U	0.3 U	NA	NA	NA	NA
M+P-XYLENES	1 U	0.7 U	1 U	0.7 U	1 U	0.7 U	NA	NA	NA	1 U	0.7 U	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.5 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	NA	0.5 U	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	NA	0.3 U	NA	0.3 U	NA	0.3 U	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA
O-XYLENE	0.4 U	0.3 U	0.4 U	0.3 J	0.4 U	0.3 U	NA	NA	NA	0.4 U	0.4 J	NA	NA	NA	NA
TETRACHLOROETHENE	NA	0.4 U	NA	0.4 U	NA	0.4 U	NA	NA	NA	NA	0.4 U	NA	NA	NA	NA
TOLUENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	NA	NA	NA	0.4 U	0.4 U	NA	NA	NA	NA
TOTAL XYLENES	1 U	0.9 U	1 U	0.9 U	1 U	0.9 U	NA	NA	NA	1 U	0.9 U	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	0.4 U	NA	0.4 U	NA	0.4 U	NA	NA	NA	NA	0.4 U	NA	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	NA	0.2 U	NA	0.2 U	NA	0.2 U	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA
TRICHLOROETHENE	NA	0.4 U	NA	0.4 U	NA	0.4 U	NA	NA	NA	NA	0.4 U	NA	NA	NA	NA
TRICHLOROFLUOROMETHANE	NA	0.5 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	NA	0.5 U	NA	NA	NA	NA
VINYL CHLORIDE	NA	0.3 U	NA	0.3 U	NA	0.3 U	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA
SEMIVOLATILES (µg/L)															
1,2,4-TRICHLOROBENZENE	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 UJ	NA	NA	NA	NA
1,2-DIPHENYLHYDRAZINE	NA	3 U	NA	3 U	NA	3 U	NA	NA	NA	NA	3 UJ	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	3 U	NA	3 U	NA	3 U	NA	NA	NA	NA	3 U	NA	NA	NA	NA

TABLE A2-7
SWMU 51, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-51-MW01S		MPT-51-MW02S		MPT-51-MW03S		MPT-51-MW04S	MPT-51-MW05S	MPT-51-MW06S	MPT-51-MW07S		MPT-51-TW01S	MPT-51-TW02S	MPT-51-TW03S	MPT-51-TW04S
SAMPLE IDENTIFICATION	MPT-51-GW-MW01S-110806	MPT-51-GW-MW01S-20080827	MPT-51-GW-MW02S-110806	MPT-51-GW-MW02S-20080827	MPT-51-GW-MW03S-110806	MPT-51-GW-MW03S-20080827	MPT-51-MW04S-015	MPT-51-MW05S-015	MPT-51-MW06S-015	MPT-07-TW04S-112806	MPT-51-GW-MW07S-20080828	MPT-51-GW-TW01S-021207	MPT-51-GW-TW02S-021207	MPT-51-TW03S-20080219	MPT-51-TW04S-20080219
SAMPLE DATE	20061108	20080827	20061108	20080827	20061108	20080827	20070419	20070419	20070419	20061128	20080828	20070212	20070212	20080219	20080219
SEMIVOLATILES (µg/L)															
2,4-DICHLOROPHENOL	NA	4 U	NA	4 U	NA	4 U	NA	NA	NA	NA	4 U	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	4 U	NA	4 U	NA	4 U	NA	NA	NA	NA	4 U	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 UJ	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 UJ	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 UJ	NA	NA	NA	NA
2-CHLOROPHENOL	NA	3 U	NA	3 U	NA	3 U	NA	NA	NA	NA	3 U	NA	NA	NA	NA
2-NITROPHENOL	NA	3 U	NA	3 U	NA	3 U	NA	NA	NA	NA	3 U	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	3 U	NA	3 U	NA	3 U	NA	NA	NA	NA	3 UJ	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	6 U	NA	6 U	NA	6 U	NA	NA	NA	NA	6 U	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 UJ	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 U	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 UJ	NA	NA	NA	NA
4-NITROPHENOL	NA	5 U	NA	5 U	NA	5 U	NA	NA	NA	NA	5 U	NA	NA	NA	NA
ACENAPHTHENE	NA	2 J	NA	3 J	NA	2 U	NA	NA	NA	NA	3 J	NA	NA	NA	NA
ACENAPHTHYLENE	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 UJ	NA	NA	NA	NA
ANTHRACENE	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 UJ	NA	NA	NA	NA
BENZIDINE	NA	15 UR	NA	15 UJ	NA	15 UR	NA	NA	NA	NA	15 UR	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 UJ	NA	NA	NA	NA
BENZO(A)PYRENE	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 UJ	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 UJ	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 UJ	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 UJ	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 UJ	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 UJ	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 UJ	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 UJ	NA	NA	NA	NA
CHRYSENE	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 UJ	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 UJ	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 UJ	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	0.7 U	NA	0.7 U	NA	0.7 U	NA	NA	NA	NA	0.7 UJ	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 UJ	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 UJ	NA	NA	NA	NA
FLUORANTHENE	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 UJ	NA	NA	NA	NA
FLUORENE	NA	2 J	NA	4 J	NA	1 U	NA	NA	NA	NA	2 J	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	0.9 U	NA	0.9 U	NA	0.9 U	NA	NA	NA	NA	0.9 UJ	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 UJ	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 UJ	NA	NA	NA	NA
HEXACHLOROETHANE	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 UJ	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 UJ	NA	NA	NA	NA
ISOPHORONE	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 UJ	NA	NA	NA	NA

TABLE A2-7
SWMU 51, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-51-MW01S		MPT-51-MW02S		MPT-51-MW03S		MPT-51-MW04S	MPT-51-MW05S	MPT-51-MW06S	MPT-51-MW07S		MPT-51-TW01S	MPT-51-TW02S	MPT-51-TW03S	MPT-51-TW04S
SAMPLE IDENTIFICATION	MPT-51-GW-MW01S-110806	MPT-51-GW-MW01S-20080827	MPT-51-GW-MW02S-110806	MPT-51-GW-MW02S-20080827	MPT-51-GW-MW03S-110806	MPT-51-GW-MW03S-20080827	MPT-51-MW04S-015	MPT-51-MW05S-015	MPT-51-MW06S-015	MPT-07-TW04S-112806	MPT-51-GW-MW07S-20080828	MPT-51-GW-TW01S-021207	MPT-51-GW-TW02S-021207	MPT-51-TW03S-20080219	MPT-51-TW04S-20080219
SAMPLE DATE	20061108	20080827	20061108	20080827	20061108	20080827	20070419	20070419	20070419	20061128	20080828	20070212	20070212	20080219	20080219
SEMIVOLATILES (µg/L)															
NAPHTHALENE	NA	2 U	NA	2 J	NA	2 U	NA	NA	NA	NA	2 UJ	NA	NA	NA	NA
NITROBENZENE	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 UJ	NA	NA	NA	NA
N-NITROSODIMETHYLAMINE	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 UJ	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 UJ	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 UJ	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	7 UJ	NA	7 U	NA	7 UJ	NA	NA	NA	NA	7 UJ	NA	NA	NA	NA
PHENANTHRENE	NA	0.9 U	NA	1 J	NA	0.9 U	NA	NA	NA	NA	0.9 UJ	NA	NA	NA	NA
PHENOL	NA	2 U	NA	2 U	NA	2 U	NA	NA	NA	NA	2 U	NA	NA	NA	NA
PYRENE	NA	1 U	NA	1 U	NA	1 U	NA	NA	NA	NA	1 UJ	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (µg/L)															
1-METHYLNAPHTHALENE	8	NA	110	NA	8	NA	25	0.5	2	57	NA	0.1 U	0.1 U	NA	NA
2-METHYLNAPHTHALENE	0.07 U	NA	110	NA	1	NA	12	0.3	0.07 U	28	NA	0.07 U	0.07 U	NA	NA
ACENAPHTHENE	1	NA	2	NA	0.8	NA	0.8 J	0.2 J	0.5	2	NA	NA	NA	NA	NA
ACENAPHTHYLENE	0.2 J	NA	0.06 U	NA	0.06 U	NA	0.06 U	0.06 U	0.06 U	0.06 U	NA	NA	NA	NA	NA
ANTHRACENE	0.06 U	NA	0.06 U	NA	0.06 U	NA	0.06 U	0.06 U	0.06 U	0.06 U	NA	NA	NA	NA	NA
BAP EQUIVALENT	0.05 U	NA	0.05 U	NA	0.05 U	NA	0.05 U	0.05 U	0.05 U	NA	NA	NA	NA	NA	NA
BAP EQUIVALENT(1)	0.0 U	NA	0.0 U	NA	0.0 U	NA	0.0 U	0.0 U	0.0 U	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	0.07 U	NA	0.07 U	NA	0.07 U	NA	0.07 UJ	0.07 UJ	0.07 UJ	0.07 U	NA	NA	NA	NA	NA
BENZO(A)PYRENE	0.05 U	NA	0.05 U	NA	0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	0.08 U	NA	0.08 U	NA	0.08 U	NA	0.08 U	0.08 U	0.08 U	0.08 U	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	0.08 U	NA	0.08 U	NA	0.08 U	NA	0.08 U	0.08 U	0.08 U	0.08 U	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	0.1 U	NA	0.1 U	NA	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U	NA	NA	NA	NA	NA
CHRYSENE	0.07 U	NA	0.07 U	NA	0.07 U	NA	0.07 U	0.07 U	0.07 U	0.07 U	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	0.1 U	NA	0.1 U	NA	0.1 U	NA	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	NA	NA	NA	NA	NA
FLUORANTHENE	0.06 U	NA	0.06 U	NA	0.06 U	NA	0.06 U	0.06 U	0.06 U	0.06 U	NA	NA	NA	NA	NA
FLUORENE	2	NA	5 J	NA	2	NA	1 J	0.07 U	0.4	3	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	0.1 U	NA	0.1 U	NA	0.09 U	NA	0.1 UJ	0.1 UJ	0.1 UJ	0.09 U	NA	NA	NA	NA	NA
NAPHTHALENE	0.4	NA	92	NA	1	NA	0.7	0.1 U	0.1 J	1	NA	0.1 U	0.1 U	NA	NA
PHENANTHRENE	0.05 U	NA	3	NA	1	NA	0.05 U	0.05 U	0.05 U	0.6	NA	NA	NA	NA	NA
PYRENE	0.06 U	NA	0.06 U	NA	0.06 U	NA	0.06 U	0.06 U	0.06 U	0.06 U	NA	NA	NA	NA	NA
PESTICIDES/PCBS (µg/L)															
AROCLOR-1016	NA	0.15 UJ	NA	0.15 UJ	NA	0.15 UJ	NA	NA	NA	NA	0.15 UJ	NA	NA	NA	NA
AROCLOR-1221	NA	0.38 UJ	NA	0.38 UJ	NA	0.38 UJ	NA	NA	NA	NA	0.38 UJ	NA	NA	NA	NA
AROCLOR-1232	NA	0.11 UJ	NA	0.11 UJ	NA	0.11 UJ	NA	NA	NA	NA	0.11 UJ	NA	NA	NA	NA
AROCLOR-1242	NA	0.11 UJ	NA	0.11 UJ	NA	0.11 UJ	NA	NA	NA	NA	0.11 UJ	NA	NA	NA	NA
AROCLOR-1248	NA	0.075 UJ	NA	0.075 UJ	NA	0.075 UJ	NA	NA	NA	NA	0.075 UJ	NA	NA	NA	NA
AROCLOR-1254	NA	0.087 UJ	NA	0.087 UJ	NA	0.087 UJ	NA	NA	NA	NA	0.087 UJ	NA	NA	NA	NA
AROCLOR-1260	NA	0.12 UJ	NA	0.12 UJ	NA	0.12 UJ	NA	NA	NA	NA	0.12 UJ	NA	NA	NA	NA
METALS (µg/L)															
ARSENIC	NA	0.98 U	NA	2.9	NA	0.98 U	NA	NA	NA	NA	2.7	NA	NA	NA	NA

TABLE A2-7
SWMU 51, GROUNDWATER ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-51-MW01S		MPT-51-MW02S		MPT-51-MW03S		MPT-51-MW04S	MPT-51-MW05S	MPT-51-MW06S	MPT-51-MW07S		MPT-51-TW01S	MPT-51-TW02S	MPT-51-TW03S	MPT-51-TW04S
SAMPLE IDENTIFICATION	MPT-51-GW-MW01S-110806	MPT-51-GW-MW01S-20080827	MPT-51-GW-MW02S-110806	MPT-51-GW-MW02S-20080827	MPT-51-GW-MW03S-110806	MPT-51-GW-MW03S-20080827	MPT-51-MW04S-015	MPT-51-MW05S-015	MPT-51-MW06S-015	MPT-07-TW04S-112806	MPT-51-GW-MW07S-20080828	MPT-51-GW-TW01S-021207	MPT-51-GW-TW02S-021207	MPT-51-TW03S-20080219	MPT-51-TW04S-20080219
SAMPLE DATE	20061108	20080827	20061108	20080827	20061108	20080827	20070419	20070419	20070419	20061128	20080828	20070212	20070212	20080219	20080219
METALS (µg/L)															
CADMIUM	NA	0.1 U	NA	0.1 U	NA	0.1 U	NA	NA	NA	NA	0.1 U	NA	NA	NA	NA
CHROMIUM	NA	1.1 U	NA	1.6 U	NA	0.87 U	NA	NA	NA	NA	3 U	NA	NA	NA	NA
LEAD	NA	1.8	NA	1.1	NA	1.4	NA	NA	NA	NA	3	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (mg/L)															
TPH (C08-C40)	4.7 J	NA	12 J	NA	2.4 J	NA	7.3	1.7	4.4	11	NA	0.50 J	0.22 U	0.30 U	0.30 U

Notes:
NA = Not analyzed
U = Indicates compound was analyzed for but not detected at indicated detection limit.
I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J = Estimated value, value not accurate.
R = Data to be rejected

TABLE A2-8
SWMU 51, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-51-SB01		MPT-51-SB02		MPT-51-SB03		MPT-51-SB04		MPT-51-SB05	MPT-51-SB06	MPT-51-SB07	MPT-51-SB08		MPT-51-SB09
SAMPLE IDENTIFICATION	MPT-51-SB01-01-102406	MPT-51-SB01-13-102406	MPT-51-SB02-01-102406	MPT-51-SB02-11-102406	MPT-51-SB03-01-102406	MPT-51-SB03-09-102406	MPT-51-SB04-01-102506	MPT-51-SB04-13-102506	MPT-51-SB05-13-020807	MPT-51-SB06-13-020807	MPT-51-SB07-11-020707	MPT-51-SB08-01-102506	MPT-51-SB08-11-102506	MPT-51-SB09-01-102406
SAMPLE DATE	20061024	20061024	20061024	20061024	20061024	20061024	20061025	20061025	20070208	20070208	20070207	20061025	20061025	20061024
TOP DEPTH	0	12	0	10	0	8	0	12	12	12	10	0	10	0
BOTTOM DEPTH	1	13	1	11	1	9	1	13	13	13	11	1	11	1
VOLATILES (µg/kg)														
1,1,1-TRICHLOROETHANE	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.7 U	0.4 U	0.4 U	NA	NA	NA	0.4 U	21 U	0.5 U
1,1,2,2-TETRACHLOROETHANE	0.4 U	0.4 U	0.5 U	0.4 UJ	0.4 U	0.6 U	0.4 U	0.4 U	NA	NA	NA	0.3 U	19 U	0.4 U
1,1,2-TRICHLOROETHANE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.6 U	0.4 U	0.4 U	NA	NA	NA	0.3 U	19 U	0.4 U
1,1-DICHLOROETHANE	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.9 U	0.5 U	0.5 U	NA	NA	NA	0.4 U	25 U	0.6 U
1,1-DICHLOROETHENE	1 U	0.8 U	1 U	0.9 U	0.9 U	1 U	0.9 U	0.8 U	NA	NA	NA	0.7 U	43 U	1 U
1,2-DICHLOROETHANE	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.7 U	0.4 U	0.4 U	NA	NA	NA	0.3 U	19 U	0.4 U
1,2-DICHLOROPROPANE	0.6 U	0.5 U	0.7 U	0.6 U	0.6 U	0.9 U	0.6 U	0.5 U	NA	NA	NA	0.5 U	28 U	0.6 U
2-CHLOROETHYL VINYL ETHER	0.8 UR	0.7 UR	0.8 UR	0.7 UR	0.7 UR	1 UR	0.7 UR	0.7 UR	NA	NA	NA	0.6 UR	34 U	0.8 UR
ACROLEIN	5 UR	4 UR	5 UR	4 UR	4 UR	7 UR	4 UR	4 UR	NA	NA	NA	4 UR	210 UR	5 UR
ACRYLONITRILE	12 U	10 U	13 U	11 U	11 U	19 U	11 U	11 U	NA	NA	NA	10 U	550 U	12 U
BENZENE	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.7 U	0.4 U	0.4 U	NA	NA	NA	0.4 U	20 U	0.4 U
BROMODICHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.3 U	0.3 U	NA	NA	NA	0.2 U	14 U	0.3 U
BROMOFORM	0.8 U	0.7 U	0.8 U	0.7 U	0.7 U	1 U	0.7 U	0.7 U	NA	NA	NA	0.6 U	36 U	0.8 U
BROMOMETHANE	1 U	0.8 U	1 U	0.9 U	0.9 U	1 U	0.9 U	0.8 U	NA	NA	NA	0.7 U	43 U	1 U
CARBON TETRACHLORIDE	0.5 U	0.4 U	0.6 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	NA	NA	NA	0.4 U	23 U	0.5 U
CHLOROBENZENE	0.4 U	0.3 U	0.4 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	NA	NA	NA	0.3 U	16 U	0.4 U
CHLORODIBROMOMETHANE	0.8 U	0.7 U	0.9 U	0.8 U	0.8 U	1 U	0.8 U	0.7 U	NA	NA	NA	0.6 U	38 U	0.8 U
CHLOROETHANE	0.9 U	0.8 U	1 U	0.9 U	0.8 U	1 U	0.8 U	0.8 U	NA	NA	NA	0.7 U	42 UJ	0.9 U
CHLOROFORM	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.7 U	0.4 U	0.4 U	NA	NA	NA	0.4 U	21 U	0.5 U
CHLOROMETHANE	0.7 U	0.6 U	0.7 U	0.6 U	0.6 U	1 U	0.6 U	0.6 U	NA	NA	NA	0.5 U	30 U	0.7 U
CIS-1,2-DICHLOROETHENE	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.9 U	0.5 U	0.5 U	NA	NA	NA	0.4 U	26 U	0.6 U
CIS-1,3-DICHLOROPROPENE	0.5 U	0.4 U	0.6 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	NA	NA	NA	0.4 U	24 U	0.5 U
ETHYLBENZENE	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U	0.6 U	0.4 U	0.3 U	NA	NA	NA	0.3 J	18 U	0.4 U
M+P-XYLENES	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	NA	NA	NA	1 U	86 U	2 U
METHYLENE CHLORIDE	2 U	2 U	3 U	2 U	2 U	3 U	2 U	3 U	NA	NA	NA	2 U	41 U	2 U
O-XYLENE	0.8 U	0.6 U	0.8 U	0.7 U	0.7 U	1 U	0.7 U	0.7 U	NA	NA	NA	0.6 U	34 U	0.8 U
TETRACHLOROETHENE	0.9 U	0.7 U	0.9 U	0.8 U	0.8 U	1 U	0.8 U	0.8 U	NA	NA	NA	0.7 U	38 U	0.9 U
TOLUENE	0.9 U	0.8 U	1 U	0.9 U	0.8 U	1 U	0.8 U	0.8 U	NA	NA	NA	0.7 U	41 U	0.9 U
TOTAL XYLENES	3 U	2 U	3 U	2 U	2 U	4 U	2 U	2 U	NA	NA	NA	2 U	120 U	3 U
TRANS-1,2-DICHLOROETHENE	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.7 U	0.4 U	0.4 U	NA	NA	NA	0.4 U	20 U	0.4 U
TRANS-1,3-DICHLOROPROPENE	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.7 U	0.4 U	0.4 U	NA	NA	NA	0.4 U	21 U	0.5 U
TRICHLOROETHENE	0.8 U	0.7 U	0.9 U	0.8 U	0.7 U	1 U	0.7 U	0.7 U	NA	NA	NA	0.6 U	36 U	0.8 U
TRICHLOROFLUOROMETHANE	0.5 U	0.4 U	0.6 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	NA	NA	NA	0.4 U	23 UJ	0.5 U
VINYL CHLORIDE	0.8 U	0.6 U	0.8 U	0.7 U	0.7 U	1 U	0.7 U	0.7 U	NA	NA	NA	0.6 U	33 U	0.8 U
SEMIVOLATILES (µg/kg)														
1,2,4-TRICHLOROBENZENE	150 U	150 U	140 U	160 U	150 U	200 U	140 U	160 U	NA	NA	NA	140 U	160 U	150 U
1,2-DIPHENYLHYDRAZINE	460 U	460 U	440 U	480 U	460 U	600 U	420 U	490 U	NA	NA	NA	410 U	490 U	460 U
2,4,6-TRICHLOROPHENOL	240 U	240 U	230 U	250 U	240 U	310 U	220 U	260 U	NA	NA	NA	220 U	260 U	240 U
2,4-DICHLOROPHENOL	300 U	300 U	280 U	310 U	300 U	380 U	270 U	320 U	NA	NA	NA	270 U	320 U	300 U
2,4-DIMETHYLPHENOL	250 U	260 U	240 U	270 U	260 U	330 U	240 U	270 U	NA	NA	NA	230 U	270 U	260 U

TABLE A2-8
SWMU 51, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-51-SB01**		**MPT-51-SB02**		**MPT-51-SB03**		**MPT-51-SB04**		**MPT-51-SB05**	**MPT-51-SB06**	**MPT-51-SB07**	**MPT-51-SB08**		**MPT-51-SB09**
SAMPLE IDENTIFICATION	MPT-51-SB01-01-102406	MPT-51-SB01-13-102406	MPT-51-SB02-01-102406	MPT-51-SB02-11-102406	MPT-51-SB03-01-102406	MPT-51-SB03-09-102406	MPT-51-SB04-01-102506	MPT-51-SB04-13-102506	MPT-51-SB05-13-020807	MPT-51-SB06-13-020807	MPT-51-SB07-11-020707	MPT-51-SB08-01-102506	MPT-51-SB08-11-102506	MPT-51-SB09-01-102406
SAMPLE DATE	20061024	20061024	20061024	20061024	20061024	20061024	20061025	20061025	20070208	20070208	20070207	20061025	20061025	20061024
TOP DEPTH	0	12	0	10	0	8	0	12	12	12	10	0	10	0
BOTTOM DEPTH	1	13	1	11	1	9	1	13	13	13	11	1	11	1
SEMIVOLATILES (µg/kg)														
2,4-DINITROTOLUENE	250 U	250 U	240 U	260 U	250 U	330 U	230 U	270 U	NA	NA	NA	230 U	270 U	250 U
2,6-DINITROTOLUENE	200 U	210 U	200 U	220 U	200 U	270 U	190 U	220 U	NA	NA	NA	180 U	220 U	200 U
2-CHLORONAPHTHALENE	280 U	280 U	270 U	290 U	280 U	360 U	260 U	300 U	NA	NA	NA	250 U	300 U	280 U
2-CHLOROPHENOL	270 U	270 U	260 U	290 U	270 U	350 U	250 U	290 U	NA	NA	NA	240 U	290 U	270 U
2-NITROPHENOL	260 U	260 U	250 U	270 U	260 U	340 U	240 U	280 U	NA	NA	NA	230 U	280 U	260 U
3,3'-DICHLOROBENZIDINE	330 UJ	330 UJ	310 UJ	350 UJ	330 UJ	430 UJ	300 UJ	350 UJ	NA	NA	NA	300 UJ	350 UJ	330 UJ
4,6-DINITRO-2-METHYLPHENOL	880 U	890 U	840 U	930 U	880 U	1100 U	820 U	940 U	NA	NA	NA	800 U	940 U	880 U
4-BROMOPHENYL PHENYL ETHER	190 U	190 U	180 U	200 U	190 U	240 U	180 U	200 U	NA	NA	NA	170 U	200 U	190 U
4-CHLORO-3-METHYLPHENOL	380 U	380 U	360 U	400 U	380 U	490 U	350 U	400 U	NA	NA	NA	340 U	400 U	380 U
4-CHLOROPHENYL PHENYL ETHER	140 U	140 U	140 U	150 U	140 U	180 U	130 U	150 U	NA	NA	NA	130 U	150 U	140 U
4-NITROPHENOL	930 U	940 UJ	900 U	990 UJ	940 U	1200 UJ	870 UJ	1000 UJ	NA	NA	NA	840 U	1000 UJ	940 U
ACENAPHTHENE	120 U	280 J	120 U	130 U	120 U	160 U	110 U	130 U	NA	NA	NA	110 U	140 J	120 U
ACENAPHTHYLENE	120 U	120 U	120 U	130 U	120 U	160 U	110 U	130 U	NA	NA	NA	110 U	130 U	120 U
ANTHRACENE	120 U	120 U	120 U	130 U	120 U	160 U	110 U	130 U	NA	NA	NA	110 U	130 U	120 U
BAP EQUIVALENT	120 U	120 U	120 U	130 U	120 U	160 U	110 U	130 U	NA	NA	NA	110 U	130 U	120 U
BAP EQUIVALENT(1)	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	NA	NA	NA	0.0 U	0.0 U	0.0 U
BENZIDINE	330 UR	340 UR	320 UR	350 UR	330 UR	430 UR	310 UR	360 UR	NA	NA	NA	300 UR	360 UR	330 UR
BENZO(A)ANTHRACENE	110 U	110 U	100 U	120 U	110 U	140 U	100 U	120 U	NA	NA	NA	100 U	120 U	110 U
BENZO(A)PYRENE	120 U	120 U	120 UJ	130 U	120 U	160 U	110 U	130 U	NA	NA	NA	110 U	130 U	120 U
BENZO(B)FLUORANTHENE	150 U	160 U	150 UJ	160 U	150 U	200 U	140 U	160 U	NA	NA	NA	140 U	160 U	150 U
BENZO(G,H,I)PERYLENE	200 U	200 U	190 UJ	210 U	200 U	260 U	180 U	210 U	NA	NA	NA	180 U	210 U	200 U
BENZO(K)FLUORANTHENE	160 U	160 U	150 UJ	160 U	160 U	200 U	140 U	170 U	NA	NA	NA	140 U	170 U	160 U
BIS(2-CHLOROETHOXY)METHANE	150 U	160 U	150 U	160 U	150 U	200 U	140 U	160 U	NA	NA	NA	140 U	160 U	150 U
BIS(2-CHLOROETHYL)ETHER	160 U	160 U	160 UJ	170 U	160 U	210 U	150 U	170 U	NA	NA	NA	150 U	180 U	160 U
BIS(2-ETHYLHEXYL)PHTHALATE	370 U	370 U	350 U	390 U	370 U	480 U	340 U	390 U	NA	NA	NA	330 U	400 U	370 U
BUTYL BENZYL PHTHALATE	170 U	170 U	160 U	180 U	170 U	220 U	160 U	180 U	NA	NA	NA	150 U	180 U	170 U
CHRYSENE	130 U	140 U	130 U	140 U	140 U	170 U	120 U	140 U	NA	NA	NA	120 U	140 U	140 U
DIBENZO(A,H)ANTHRACENE	180 U	180 U	180 UJ	190 U	180 U	240 U	170 U	200 U	NA	NA	NA	160 U	200 U	180 U
DIETHYL PHTHALATE	240 U	240 U	230 U	260 U	240 U	310 U	220 U	260 U	NA	NA	NA	220 U	260 U	240 U
DIMETHYL PHTHALATE	160 U	160 U	150 U	160 U	160 U	200 U	140 U	160 U	NA	NA	NA	140 U	170 U	160 U
DI-N-BUTYL PHTHALATE	260 U	260 U	240 U	270 U	260 U	330 U	240 U	270 U	NA	NA	NA	230 U	270 U	260 U
DI-N-OCTYL PHTHALATE	290 U	290 U	280 UJ	310 U	290 U	380 U	270 U	310 U	NA	NA	NA	260 U	310 U	290 U
FLUORANTHENE	240 U	240 U	230 U	250 U	240 U	310 U	220 U	250 U	NA	NA	NA	210 U	250 U	240 U
FLUORENE	120 U	560	120 U	130 U	120 U	160 U	110 U	130 U	NA	NA	NA	110 U	130 J	120 U
HEXACHLOROBENZENE	160 U	160 U	150 U	160 U	160 U	200 U	140 U	160 U	NA	NA	NA	140 U	170 U	160 U
HEXACHLOROBUTADIENE	130 U	130 U	130 U	140 U	130 U	170 U	120 U	140 U	NA	NA	NA	120 U	140 U	130 U
HEXACHLOROCYCLOPENTADIENE	180 U	180 U	180 U	190 U	180 U	240 U	170 U	200 U	NA	NA	NA	170 U	200 U	180 U
HEXACHLOROETHANE	160 U	160 U	160 U	170 U	160 U	210 U	150 U	180 U	NA	NA	NA	150 U	180 U	160 U
INDENO(1,2,3-CD)PYRENE	310 U	320 U	300 UJ	330 U	320 U	410 U	290 U	340 U	NA	NA	NA	280 U	340 U	320 U
ISOPHORONE	140 U	140 U	130 U	150 U	140 U	180 U	130 U	150 U	NA	NA	NA	120 U	150 U	140 U

LOCATION	MPT-51-SB01		MPT-51-SB02		MPT-51-SB03		MPT-51-SB04		MPT-51-SB05	MPT-51-SB06	MPT-51-SB07	MPT-51-SB08		MPT-51-SB09
SAMPLE IDENTIFICATION	MPT-51-SB01-01-102406	MPT-51-SB01-13-102406	MPT-51-SB02-01-102406	MPT-51-SB02-11-102406	MPT-51-SB03-01-102406	MPT-51-SB03-09-102406	MPT-51-SB04-01-102506	MPT-51-SB04-13-102506	MPT-51-SB05-13-020807	MPT-51-SB06-13-020807	MPT-51-SB07-11-020707	MPT-51-SB08-01-102506	MPT-51-SB08-11-102506	MPT-51-SB09-01-102406
SAMPLE DATE	20061024	20061024	20061024	20061024	20061024	20061024	20061025	20061025	20070208	20070208	20070207	20061025	20061025	20061024
TOP DEPTH	0	12	0	10	0	8	0	12	12	12	10	0	10	0
BOTTOM DEPTH	1	13	1	11	1	9	1	13	13	13	11	1	11	1
SEMIVOLATILES (µg/kg)														
NAPHTHALENE	140 U	200 J	140 U	150 U	140 U	180 U	130 U	150 U	NA	NA	NA	130 U	1600	140 U
NITROBENZENE	130 U	130 U	120 U	140 U	130 U	170 U	120 U	140 U	NA	NA	NA	120 U	140 U	130 U
N-NITROSODIMETHYLAMINE	170 U	170 U	160 U	180 U	170 U	220 U	160 U	180 U	NA	NA	NA	150 U	180 U	170 U
N-NITROSO-DI-N-PROPYLAMINE	210 U	210 U	200 U	220 U	210 U	280 U	200 U	230 U	NA	NA	NA	190 U	230 U	210 U
N-NITROSODIPHENYLAMINE	280 U	280 U	270 U	290 U	280 U	360 U	260 U	300 U	NA	NA	NA	250 U	300 U	280 U
PENTACHLOROPHENOL	760 U	760 U	720 U	800 U	760 U	980 U	700 U	810 U	NA	NA	NA	680 U	810 U	760 U
PHENANTHRENE	89 U	960	85 U	94 U	89 U	120 U	82 U	95 U	NA	NA	NA	80 U	95 U	89 U
PHENOL	270 U	270 U	260 U	280 U	270 U	350 U	250 U	280 U	NA	NA	NA	240 U	290 U	270 U
PYRENE	170 U	170 U	160 U	180 U	170 U	220 U	160 U	180 U	NA	NA	NA	150 U	180 U	170 U
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)														
1-METHYLNAPHTHALENE	10 U	3500	10 U	130	11 U	14 U	10 U	33	20 J	79000	12 U	10 U	8100	11 U
2-METHYLNAPHTHALENE	8 U	3600	8 U	180	8 U	11 U	8 U	39	NA	110000	9 U	8 U	8900	8 U
ACENAPHTHENE	7 U	210 J	6 U	7 U	7 U	9 U	6 U	7 U	NA	4700	NA	6 U	180 U	7 U
ACENAPHTHYLENE	2 U	2 U	2 U	3 U	2 U	3 U	2 U	3 U	NA	NA	NA	2 U	130 J	2 U
ANTHRACENE	4 U	120 J	4 J	4 U	4 U	5 U	4 U	4 U	NA	NA	NA	4 U	110 U	4 J
BAP EQUIVALENT	4	3	3	4 U	8	4 U	4	4 U	NA	NA	NA	16	92	16
BAP EQUIVALENT(1)	4	3	3	0.0 U	8	0.0 U	4	0.0 U	NA	NA	NA	16	92	16
BENZO(A)ANTHRACENE	7 J	10 J	18 J	4 U	11 J	4 UJ	7 J	4 U	NA	NA	NA	18 J	130 J	19 J
BENZO(A)PYRENE	4 J	3 U	3 U	4 U	8 J	4 U	4 J	4 U	NA	NA	NA	16 J	92 U	16 J
BENZO(B)FLUORANTHENE	4 J	4 U	21 J	4 U	10 J	5 U	4 J	4 U	NA	NA	NA	19 J	96 U	20 J
BENZO(G,H,I)PERYLENE	4 U	4 U	3 U	4 U	4 U	5 U	3 U	4 U	NA	NA	NA	12 J	96 U	13 J
BENZO(K)FLUORANTHENE	3 U	3 U	7 J	4 U	3 J	4 U	3 U	4 U	NA	NA	NA	8 J	92 U	8 J
CHRYSENE	5 J	19 J	33	4 U	12 J	4 U	4 J	4 U	NA	NA	NA	15 J	89 U	18 J
DIBENZO(A,H)ANTHRACENE	4 U	4 U	4 U	5 U	4 U	6 U	4 U	5 U	NA	NA	NA	4 U	120 U	4 U
FLUORANTHENE	5 J	24 J	17 J	4 U	9 J	5 U	9 J	4 U	NA	NA	NA	24	110 U	33
FLUORENE	4 U	600	3 U	25	4 U	5 U	3 U	11 J	NA	NA	NA	3 U	120 J	4 U
INDENO(1,2,3-CD)PYRENE	5 U	5 U	5 U	5 U	5 U	7 U	5 U	6 U	NA	NA	NA	9 J	140 U	5 U
NAPHTHALENE	3 U	89 J	3 U	9 J	3 U	4 U	3 U	3 U	NA	2200 J	3 U	3 U	1700	3 U
PHENANTHRENE	4 J	940	26	42	6 J	4 U	4 J	18 J	NA	NA	NA	7 J	88 J	21 J
PYRENE	6 J	67 J	37	4 U	9 J	5 U	6 J	4 U	NA	NA	NA	18 J	99 U	21 J
PESTICIDES/PCBS (µg/kg)														
AROCLOR-1016	18 UJ	18 UJ	18 UJ	19 UJ	18 UJ	24 UJ	17 U	20 U	NA	NA	NA	17 U	20 U	18 UJ
AROCLOR-1221	14 UJ	14 U	13 U	15 U	14 U	18 U	13 U	15 U	NA	NA	NA	12 U	15 U	14 UJ
AROCLOR-1232	6.1 UJ	6.1 U	5.8 U	6.4 U	6.1 U	7.9 U	18 U	6.5 U	NA	NA	NA	5.5 U	6.5 U	6.1 UJ
AROCLOR-1242	7.7 UJ	7.8 U	7.4 U	8.2 U	7.7 U	10 U	7.2 U	8.2 U	NA	NA	NA	7 U	8.3 U	7.7 UJ
AROCLOR-1248	6.6 UJ	6.6 U	6.3 U	6.9 U	6.6 U	8.5 U	6.1 U	7 U	NA	NA	NA	5.9 U	7 U	6.6 UJ
AROCLOR-1254	15 UJ	15 U	14 U	16 U	15 U	19 U	14 U	16 U	NA	NA	NA	14 U	16 U	15 UJ
AROCLOR-1260	16 UJ	16 U	15 U	17 U	16 U	21 U	15 U	17 U	NA	NA	NA	14 U	17 U	16 UJ
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	NA	NA	NA	0 U	0 U	0 U
TOTAL AROCLOR HALFND	41.7	41.75	39.75	44.25	41.7	54.2	45.15	44.85	NA	NA	NA	37.7	44.9	41.7

TABLE A2-8
SWMU 51, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-51-SB01**		**MPT-51-SB02**		**MPT-51-SB03**		**MPT-51-SB04**		**MPT-51-SB05**	**MPT-51-SB06**	**MPT-51-SB07**	**MPT-51-SB08**		**MPT-51-SB09**
SAMPLE IDENTIFICATION	MPT-51-SB01-01-102406	MPT-51-SB01-13-102406	MPT-51-SB02-01-102406	MPT-51-SB02-11-102406	MPT-51-SB03-01-102406	MPT-51-SB03-09-102406	MPT-51-SB04-01-102506	MPT-51-SB04-13-102506	MPT-51-SB05-13-020807	MPT-51-SB06-13-020807	MPT-51-SB07-11-020707	MPT-51-SB08-01-102506	MPT-51-SB08-11-102506	MPT-51-SB09-01-102406
SAMPLE DATE	20061024	20061024	20061024	20061024	20061024	20061024	20061025	20061025	20070208	20070208	20070207	20061025	20061025	20061024
TOP DEPTH	0	12	0	10	0	8	0	12	12	12	10	0	10	0
BOTTOM DEPTH	1	13	1	11	1	9	1	13	13	13	11	1	11	1
METALS (mg/kg)														
ARSENIC	0.62 U	0.33 U	0.23 U	0.66 U	0.95 U	2.8 U	1.2 U	0.95 U	NA	NA	NA	1 U	0.42 U	1.5 U
CADMIUM	0.05 U	0.04 U	0.2 U	0.06 U	0.06 U	0.07 U	0.04 U	0.06 U	NA	NA	NA	0.05 U	0.05 U	0.18 U
CHROMIUM	4.8 J	1.2 J	7.9 J	5.9 J	4 J	23.7 J	8 J	1.2 J	NA	NA	NA	7.9 J	3.5 J	8.3 J
LEAD	4	0.39	2.2	0.78	1.2	5.8	2	0.21 U	NA	NA	NA	3.9	7.3	7.1
MISCELLANEOUS PARAMETERS (%)														
PERCENT SOLIDS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL SOLIDS	87	86	91	82	87	67	94	81	80	82	79	96	81	86
PETROLEUM HYDROCARBONS (mg/kg)														
TPH (C08-C40)	97	3700	1600	81 J	180 J	3.3 U	17 J	34 J	86	640	11 U	70	1200	170

TABLE A2-8
SWMU 51, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-51-SB09**	**MPT-51-SB10**		**MPT-51-SB11**		**MPT-51-SB12**	**MPT-51-SB13**	**MPT-51-SB14**		**MPT-51-SB15**		**MPT-51-SB16**	**MPT-51-SB17**	**MPT-51-SB18**
SAMPLE IDENTIFICATION	MPT-51-SB09-13-102406	MPT-51-SB10-01-102406	MPT-51-SB10-11-102406	MPT-51-SB11-01-102406	MPT-51-SB11-11-102406	MPT-51-SB12-11-020807	MPT-51-SB13-11-020707	MPT-51-SB14-001	MPT-51-SB14-013	MPT-51-SB15-001	MPT-51-SB15-013	MPT-51-SB16-011	MPT51-SB17-01-022409	MPT51-SB18-01-022409
SAMPLE DATE	20061024	20061024	20061024	20061024	20061024	20070208	20070207	20070410	20070410	20070410	20070410	20070410	20090224	20090224
TOP DEPTH	12	0	10	0	10	10	10	0	12	0	12	0	0	0
BOTTOM DEPTH	13	1	11	1	11	11	11	1	13	1	13	1	1	1
VOLATILES (µg/kg)														
1,1,1-TRICHLOROETHANE	2900 U	0.6 U	21 U	0.4 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-TETRACHLOROETHANE	2900 U	0.5 U	19 U	0.4 U	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-TRICHLOROETHANE	2900 U	0.5 U	19 U	0.4 U	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHANE	2900 U	0.7 U	25 U	0.5 U	0.6 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-DICHLOROETHENE	2900 U	1 U	43 U	0.9 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROETHANE	2900 U	0.5 U	19 U	0.4 U	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DICHLOROPROPANE	2900 U	0.7 U	27 U	0.6 U	0.6 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROETHYL VINYL ETHER	2900 U	0.9 UR	34 U	0.7 UR	0.8 UR	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACROLEIN	14000 UR	6 UR	210 UR	4 UR	5 UR	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACRYLONITRILE	14000 U	14 U	550 U	12 U	13 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZENE	2900 U	0.5 U	20 U	0.4 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMODICHLOROMETHANE	2900 U	0.4 U	14 U	0.3 U	0.3 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMOFORM	2900 U	0.9 U	36 U	0.8 U	0.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
BROMOMETHANE	5700 U	1 U	42 U	0.9 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
CARBON TETRACHLORIDE	2900 U	0.6 U	23 U	0.5 U	0.6 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROBENZENE	2900 U	0.4 U	16 U	0.3 U	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLORODIBROMOMETHANE	2900 U	1 U	38 U	0.8 U	0.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROETHANE	5700 UJ	1 U	42 UJ	0.9 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROFORM	2900 U	0.6 U	21 U	0.4 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLOROMETHANE	5700 U	0.8 U	30 U	0.6 U	0.7 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	2900 U	0.7 U	26 U	0.6 U	0.6 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,3-DICHLOROPROPENE	2900 U	0.6 U	24 U	0.5 U	0.6 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETHYLBENZENE	2900 U	0.5 U	18 U	0.4 U	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
M+P-XYLENES	5700 U	2 U	85 U	2 U	2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYLENE CHLORIDE	14000 U	1 U	41 U	2 U	2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
O-XYLENE	2900 U	0.9 U	34 U	0.7 U	0.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE	2900 U	1 U	38 U	0.8 U	0.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOLUENE	2900 U	1 U	41 U	0.9 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL XYLENES	8600 U	3 U	120 U	2 U	3 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	2900 U	0.5 U	20 U	0.4 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	2900 U	0.6 U	21 U	0.4 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRICHLOROETHENE	2900 U	1 U	36 U	0.8 U	0.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
TRICHLOROFLUOROMETHANE	5700 UJ	0.6 U	23 UJ	0.5 U	0.6 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
VINYL CHLORIDE	5700 U	0.9 U	33 U	0.7 U	0.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (µg/kg)														
1,2,4-TRICHLOROBENZENE	1700 U	140 U	3200 U	140 U	150 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-DIPHENYLHYDRAZINE	5300 U	440 U	9800 U	430 U	460 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	2800 U	230 U	5200 U	230 U	240 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-DICHLOROPHENOL	3400 U	280 U	6400 U	280 U	290 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	2900 U	240 U	5500 U	240 U	250 U	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE A2-8
SWMU 51, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-51-SB09**	**MPT-51-SB10**		**MPT-51-SB11**		**MPT-51-SB12**	**MPT-51-SB13**	**MPT-51-SB14**		**MPT-51-SB15**		**MPT-51-SB16**	**MPT-51-SB17**	**MPT-51-SB18**
SAMPLE IDENTIFICATION	MPT-51-SB09-13-102406	MPT-51-SB10-01-102406	MPT-51-SB10-11-102406	MPT-51-SB11-01-102406	MPT-51-SB11-11-102406	MPT-51-SB12-11-020807	MPT-51-SB13-11-020707	MPT-51-SB14-001	MPT-51-SB14-013	MPT-51-SB15-001	MPT-51-SB15-013	MPT-51-SB16-011	MPT51-SB17-01-022409	MPT51-SB18-01-022409
SAMPLE DATE	20061024	20061024	20061024	20061024	20061024	20070208	20070207	20070410	20070410	20070410	20070410	20070410	20090224	20090224
TOP DEPTH	12	0	10	0	10	10	10	0	12	0	12	0	0	0
BOTTOM DEPTH	13	1	11	1	11	11	11	1	13	1	13	1	1	1
SEMIVOLATILES (µg/kg)														
2,4-DINITROTOLUENE	2900 U	240 U	5400 U	240 U	250 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-DINITROTOLUENE	2400 U	200 U	4400 U	190 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLORONAPHTHALENE	3200 U	270 U	6000 U	260 U	280 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROPHENOL	3100 U	260 U	5800 U	250 U	270 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-NITROPHENOL	3000 U	250 U	5600 U	240 U	260 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	3800 UJ	310 UJ	7000 UJ	310 UJ	330 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	10000 U	840 U	19000 U	830 U	880 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	2200 U	180 U	4100 U	180 U	190 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	4400 U	360 U	8100 U	360 U	380 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	1600 U	140 U	3000 U	130 U	140 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-NITROPHENOL	11000 UJ	890 U	20000 U	880 UJ	930 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACENAPHTHENE	9100	120 U	14000	110 U	120 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACENAPHTHYLENE	1400 U	120 U	2600 U	110 U	120 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	1400 U	120 U	4300 J	110 U	120 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
BAP EQUIVALENT	1400 U	120 U	2600 U	120 U	120 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
BAP EQUIVALENT(1)	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZIDINE	3800 UR	320 UR	7200 UR	310 UR	330 UR	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	1300 U	100 U	2400 U	100 U	110 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	1400 U	120 U	2600 U	120 U	120 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	1800 U	150 U	3300 U	140 U	150 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	2300 U	190 U	4200 U	180 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	1800 U	150 U	3400 U	150 U	160 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	1800 U	150 U	3300 U	140 U	150 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	1900 U	160 UJ	3500 U	150 U	160 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	4300 U	350 U	7900 U	350 U	370 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	2000 U	160 U	3700 U	160 U	170 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	1600 U	130 U	2900 U	130 U	130 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	2100 U	180 U	3900 U	170 U	180 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIETHYL PHTHALATE	2800 U	230 U	5200 U	230 U	240 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIMETHYL PHTHALATE	1800 U	150 U	3300 U	150 U	150 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	3000 U	240 U	5500 U	240 U	250 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	3400 U	280 U	6200 U	270 U	290 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	2700 U	220 U	5100 U	220 U	230 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORENE	15000	120 U	24000	120 U	120 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	1800 U	150 U	3300 U	150 U	150 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	1500 U	130 U	2900 U	120 U	130 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	2100 U	180 U	4000 U	170 U	180 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	1900 U	160 U	3500 U	150 U	160 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	3600 U	300 U	6800 U	300 U	310 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
ISOPHORONE	1600 U	130 U	3000 U	130 U	140 U	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE A2-8
SWMU 51, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-51-SB09**	**MPT-51-SB10**		**MPT-51-SB11**		**MPT-51-SB12**	**MPT-51-SB13**	**MPT-51-SB14**		**MPT-51-SB15**		**MPT-51-SB16**	**MPT-51-SB17**	**MPT-51-SB18**
SAMPLE IDENTIFICATION	MPT-51-SB09-13-102406	MPT-51-SB10-01-102406	MPT-51-SB10-11-102406	MPT-51-SB11-01-102406	MPT-51-SB11-11-102406	MPT-51-SB12-11-020807	MPT-51-SB13-11-020707	MPT-51-SB14-001	MPT-51-SB14-013	MPT-51-SB15-001	MPT-51-SB15-013	MPT-51-SB16-011	MPT51-SB17-01-022409	MPT51-SB18-01-022409
SAMPLE DATE	20061024	20061024	20061024	20061024	20061024	20070208	20070207	20070410	20070410	20070410	20070410	20070410	20090224	20090224
TOP DEPTH	12	0	10	0	10	10	10	0	12	0	12	0	0	0
BOTTOM DEPTH	13	1	11	1	11	11	11	1	13	1	13	1	1	1
SEMIVOLATILES (µg/kg)														
NAPHTHALENE	14000	140 U	21000	130 U	140 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
NITROBENZENE	1500 U	120 U	2800 U	120 U	130 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIMETHYLAMINE	1900 U	160 U	3600 U	160 U	170 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	2400 U	200 U	4600 U	200 U	210 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	3200 U	270 U	6000 U	260 U	280 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	8800 U	720 U	16000 U	710 U	750 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	26000	85 U	44000	83 U	88 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENOL	3100 U	260 UJ	5700 U	250 U	260 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	2000 J	160 U	3600 J	160 U	170 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)														
1-METHYLNAPHTHALENE	91000	10 U	140000	10 U	10 U	110000	12 U	NA	NA	NA	NA	NA	36 U	35 U
2-METHYLNAPHTHALENE	110000	8 U	200000	8 U	8 U	150000	10 U	NA	NA	NA	NA	NA	36 U	35 U
ACENAPHTHENE	6600	6 U	12000	6 U	7 U	4400	8 U	NA	NA	NA	NA	NA	72 U	71 U
ACENAPHTHYLENE	150 U	7 J	270 U	2 U	2 U	NA	NA	NA	NA	NA	NA	NA	72 U	71 U
ANTHRACENE	2400	12 J	4500	4 U	4 U	NA	NA	NA	NA	NA	NA	NA	36 U	35 U
BAP EQUIVALENT	200	14	370 U	3 U	3 U	NA	NA	NA	5.0515	NA	51.27	2105.5	NA	NA
BAP EQUIVALENT(1)	200	14	0.0 U	0.0 U	0.0 U	NA	NA	NA	0.6	NA	8.47	2082	NA	NA
BENZO(A)ANTHRACENE	380 J	17 J	370 U	3 UJ	3 UJ	NA	NA	NA	6 J	NA	83 J	3000	41.5	22.5 J
BENZO(A)PYRENE	200 U	14 J	370 U	3 U	3 U	NA	NA	NA	4 U	NA	34 U	1500	38	25.4 J
BENZO(B)FLUORANTHENE	210 U	38	380 U	3 U	4 U	NA	NA	NA	4 UJ	NA	35 UJ	1800 J	31.8	25.9 J
BENZO(G,H,I)PERYLENE	210 U	20 J	380 U	3 U	4 U	NA	NA	NA	NA	NA	NA	NA	21.8 J	14 U
BENZO(K)FLUORANTHENE	200 U	13 J	370 U	3 U	3 U	NA	NA	NA	4 U	NA	34 U	930	33.1	17.7 J
CHRYSENE	470 J	24	360 U	3 U	3 U	NA	NA	NA	3 U	NA	170 J	2000	38.2	23.7 J
DIBENZO(A,H)ANTHRACENE	250 U	4 U	470 U	4 U	4 U	NA	NA	NA	4 UJ	NA	43 UJ	47 UJ	14 U	14 U
FLUORANTHENE	480 J	53	940 J	4 U	4 U	NA	NA	NA	NA	NA	NA	NA	67.6 J	35 U
FLUORENE	14000 J	3 U	23000 J	3 U	4 U	NA	NA	NA	NA	NA	NA	NA	72 U	71 U
INDENO(1,2,3-CD)PYRENE	300 U	8 J	560 U	5 U	5 U	NA	NA	NA	5 U	NA	51 U	1000	22.9 J	14.9 J
NAPHTHALENE	9200	3 U	17000	3 U	3 U	2600 J	3 U	NA	NA	NA	NA	NA	36 U	35 U
PHENANTHRENE	24000	9 J	41000	3 U	3 J	NA	NA	NA	NA	NA	NA	NA	36 U	35 U
PYRENE	1700	28	3000	3 U	4 U	NA	NA	NA	NA	NA	NA	NA	61.9 J	35 U
PESTICIDES/PCBS (µg/kg)														
AROCLOR-1016	21 UJ	18 UJ	20 UJ	17 UJ	18 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1221	16 U	13 U	15 U	13 U	14 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1232	7.1 U	5.8 U	6.6 U	5.7 U	6.1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1242	8.9 U	7.4 U	8.3 U	7.3 U	7.7 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1248	7.6 U	6.3 U	7 U	6.2 U	6.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1254	17 U	14 U	16 U	14 U	15 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
AROCLOR-1260	19 U	15 U	17 U	15 U	16 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL AROCLOR HALFND	48.3	39.75	44.95	39.1	41.65	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE A2-8
SWMU 51, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA
PAGE 8 OF 12

LOCATION	**MPT-51-SB09**	**MPT-51-SB10**		**MPT-51-SB11**		**MPT-51-SB12**	**MPT-51-SB13**	**MPT-51-SB14**		**MPT-51-SB15**		**MPT-51-SB16**	**MPT-51-SB17**	**MPT-51-SB18**
SAMPLE IDENTIFICATION	MPT-51-SB09-13-102406	MPT-51-SB10-01-102406	MPT-51-SB10-11-102406	MPT-51-SB11-01-102406	MPT-51-SB11-11-102406	MPT-51-SB12-11-020807	MPT-51-SB13-11-020707	MPT-51-SB14-001	MPT-51-SB14-013	MPT-51-SB15-001	MPT-51-SB15-013	MPT-51-SB16-011	MPT51-SB17-01-022409	MPT51-SB18-01-022409
SAMPLE DATE	20061024	20061024	20061024	20061024	20061024	20070208	20070207	20070410	20070410	20070410	20070410	20070410	20090224	20090224
TOP DEPTH	12	0	10	0	10	10	10	0	12	0	12	0	0	0
BOTTOM DEPTH	13	1	11	1	11	11	11	1	13	1	13	1	1	1
METALS (mg/kg)														
ARSENIC	1 U	0.7 U	0.61 U	0.42 U	0.75 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
CADMIUM	0.05 U	0.3 U	0.04 U	0.05 U	0.05 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHROMIUM	3.8 J	8.4 J	1.8 J	2.3 J	6.8 J	NA	NA	NA	NA	NA	NA	NA	NA	NA
LEAD	1.5	3.2	0.69	0.37	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (%)														
PERCENT SOLIDS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	92.5	93
TOTAL SOLIDS	75	91	81	92	87	77	75	98	84	98	88	81	NA	NA
PETROLEUM HYDROCARBONS (mg/kg)														
TPH (C08-C40)	48000	260	43000	33 J	70 J	34000	38 U	56	18 U	42	13000	15000	22	27.3

TABLE A2-8
SWMU 51, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-51-SB19	MPT-51-SB20	MPT-51-SB21
SAMPLE IDENTIFICATION	MPT51-SB19-01-022409	MPT51-SB20-01-022409	MPT51-SB21-09-022409
SAMPLE DATE	20090224	20090224	20090224
TOP DEPTH	0	0	8
BOTTOM DEPTH	1	1	9
VOLATILES (µg/kg)			
1,1,1-TRICHLOROETHANE	NA	NA	NA
1,1,2,2-TETRACHLOROETHANE	NA	NA	NA
1,1,2-TRICHLOROETHANE	NA	NA	NA
1,1-DICHLOROETHANE	NA	NA	NA
1,1-DICHLOROETHENE	NA	NA	NA
1,2-DICHLOROETHANE	NA	NA	NA
1,2-DICHLOROPROPANE	NA	NA	NA
2-CHLOROETHYL VINYL ETHER	NA	NA	NA
ACROLEIN	NA	NA	NA
ACRYLONITRILE	NA	NA	NA
BENZENE	NA	NA	NA
BROMODICHLOROMETHANE	NA	NA	NA
BROMOFORM	NA	NA	NA
BROMOMETHANE	NA	NA	NA
CARBON TETRACHLORIDE	NA	NA	NA
CHLOROBENZENE	NA	NA	NA
CHLORODIBROMOMETHANE	NA	NA	NA
CHLOROETHANE	NA	NA	NA
CHLOROFORM	NA	NA	NA
CHLOROMETHANE	NA	NA	NA
CIS-1,2-DICHLOROETHENE	NA	NA	NA
CIS-1,3-DICHLOROPROPENE	NA	NA	NA
ETHYLBENZENE	NA	NA	NA
M+P-XYLENES	NA	NA	NA
METHYLENE CHLORIDE	NA	NA	NA
O-XYLENE	NA	NA	NA
TETRACHLOROETHENE	NA	NA	NA
TOLUENE	NA	NA	NA
TOTAL XYLENES	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	NA	NA	NA
TRICHLOROETHENE	NA	NA	NA
TRICHLOROFLUOROMETHANE	NA	NA	NA
VINYL CHLORIDE	NA	NA	NA
SEMIVOLATILES (µg/kg)			
1,2,4-TRICHLOROBENZENE	NA	NA	NA
1,2-DIPHENYLHYDRAZINE	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA

TABLE A2-8
SWMU 51, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-51-SB19	MPT-51-SB20	MPT-51-SB21
SAMPLE IDENTIFICATION	MPT51-SB19-01-022409	MPT51-SB20-01-022409	MPT51-SB21-09-022409
SAMPLE DATE	20090224	20090224	20090224
TOP DEPTH	0	0	8
BOTTOM DEPTH	1	1	9
SEMIVOLATILES (µg/kg)			
2,4-DINITROTOLUENE	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA
2-NITROPHENOL	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA
4-NITROPHENOL	NA	NA	NA
ACENAPHTHENE	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA
ANTHRACENE	NA	NA	NA
BAP EQUIVALENT	NA	NA	NA
BAP EQUIVALENT(1)	NA	NA	NA
BENZIDINE	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA
CHRYSENE	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA
FLUORANTHENE	NA	NA	NA
FLUORENE	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA
ISOPHORONE	NA	NA	NA

TABLE A2-8
SWMU 51, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	MPT-51-SB19	MPT-51-SB20	MPT-51-SB21
SAMPLE IDENTIFICATION	MPT51-SB19-01-022409	MPT51-SB20-01-022409	MPT51-SB21-09-022409
SAMPLE DATE	20090224	20090224	20090224
TOP DEPTH	0	0	8
BOTTOM DEPTH	1	1	9
SEMIVOLATILES (µg/kg)			
NAPHTHALENE	NA	NA	NA
NITROBENZENE	NA	NA	NA
N-NITROSODIMETHYLAMINE	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA
PHENANTHRENE	NA	NA	NA
PHENOL	NA	NA	NA
PYRENE	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (µg/kg)			
1-METHYLNAPHTHALENE	35 U	35 U	34 U
2-METHYLNAPHTHALENE	35 U	35 U	34 U
ACENAPHTHENE	70 U	71 U	69 U
ACENAPHTHYLENE	70 U	71 U	69 U
ANTHRACENE	35 U	35 U	34 U
BAP EQUIVALENT	NA	NA	NA
BAP EQUIVALENT(1)	NA	NA	NA
BENZO(A)ANTHRACENE	14 U	14 U	14 U
BENZO(A)PYRENE	14 U	14 U	14 U
BENZO(B)FLUORANTHENE	14 U	14 U	14 U
BENZO(G,H,I)PERYLENE	14 U	14 U	14 U
BENZO(K)FLUORANTHENE	14 U	14 U	14 U
CHRYSENE	14 U	14 U	14 U
DIBENZO(A,H)ANTHRACENE	14 U	14 U	14 U
FLUORANTHENE	35 U	35 U	34 U
FLUORENE	70 U	71 U	69 U
INDENO(1,2,3-CD)PYRENE	14 U	14 U	14 U
NAPHTHALENE	35 U	35 U	34 U
PHENANTHRENE	35 U	35 U	34 U
PYRENE	35 U	35 U	34 U
PESTICIDES/PCBS (µg/kg)			
AROCLOR-1016	NA	NA	NA
AROCLOR-1221	NA	NA	NA
AROCLOR-1232	NA	NA	NA
AROCLOR-1242	NA	NA	NA
AROCLOR-1248	NA	NA	NA
AROCLOR-1254	NA	NA	NA
AROCLOR-1260	NA	NA	NA
TOTAL AROCLOR	NA	NA	NA
TOTAL AROCLOR HALFND	NA	NA	NA

TABLE A2-8
SWMU 51, SOIL ANALYTICAL SUMMARY
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

LOCATION	**MPT-51-SB19**	**MPT-51-SB20**	**MPT-51-SB21**
SAMPLE IDENTIFICATION	MPT51-SB19-01-022409	MPT51-SB20-01-022409	MPT51-SB21-09-022409
SAMPLE DATE	20090224	20090224	20090224
TOP DEPTH	0	0	8
BOTTOM DEPTH	1	1	9
METALS (mg/kg)			
ARSENIC	NA	NA	NA
CADMIUM	NA	NA	NA
CHROMIUM	NA	NA	NA
LEAD	NA	NA	NA
MISCELLANEOUS PARAMETERS (%)			
PERCENT SOLIDS	94.3	92.5	96
TOTAL SOLIDS	NA	NA	NA
PETROLEUM HYDROCARBONS (mg/kg)			
TPH (C08-C40)	7.5 J	6 U	5.9 U

Notes:
NA = Not analyzed
U = Indicates compound was analyzed for but not detected at indicated detection limit.
I = The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J = Estimated value, value not accurate.
R = Data to be rejected

APPENDIX B

RFI ADDENDUM FIELD SHEETS

Tetra Tech NUS, Inc.

DOCUMENTATION OF FIELD CALIBRATION

PROJECT NAME : SWMU 51

SITE NAME: NAVSTA Mayport

PROJECT No.: 112G00436

INSTRUMENT NAME/MODEL:

MANUFACTURER:

SERIAL NUMBER:

Date of Calibration	Instrument Name and Model	Instrument I.D. Number	Person Performing Calibration	Instrument Settings Pre-calibration	Instrument Settings Post-calibration	Instrument Readings Pre-calibration	Instrument Readings Post-calibration	Calibration Standard (Lot No.)	Remarks and Comments
2/12/07	YSI 556 MPS	05D1436 A6	TC	COND	1.409	1.381	1.409		
				pH	4.0	4.05	4.00		
				pH	10.0	9.94	10.00		
				ORP	240.0	222.5	240.0		
				DO	100%	101.8%	100.0%		
				TEMP	°C	18.6°C	19°C		
2/12/07	LAMOTTE 2020	3542-3302	TC	NTU	1.0	1.00	1.00		
				NTU	10.0	10.0	10.0		

Tetra Tech NUS, Inc.

DOCUMENTATION OF FIELD CALIBRATION

PROJECT NAME : SWMU

SITE NAME: NAVSTA Mayport

PROJECT No.: 112G00436

INSTRUMENT NAME/MODEL: YSI 556 MPS

MANUFACTURER: YSI

SERIAL NUMBER: 05H2352 AP

Date of Calibration	Instrument Name and Model	Instrument I.D. Number	Person Performing Calibration	Instrument Settings		Instrument Readings		Calibration Standard (Lot No.)	Remarks and Comments
				Pre-calibration	Post-calibration	Pre-calibration	Post-calibration		
11/06/06	YSI 556 MPS	05H2352	J. Foster	pH.	4.0	4.06	4.00	NA	
				pH	10.0	9.93	10.00	NA	
				Cond.	1409 ms/cm	1.344	1.409	NA	
				ORP					
				D.O.	100%	91.9	100.0%	NA	
	LaMotte 2020	1552-0100		Turb.	1.0	3.2	1.0	8180-PS4659	Exp. 2/07
				Turb.	10.0	9.7	10.0	8184-PS68485	Exp. 2/07

Tetra Tech NUS, Inc.

DOCUMENTATION OF FIELD CALIBRATION

PROJECT NAME : SWMU

SITE NAME: NAVSTA Mayport

PROJECT No.: 112G00436

INSTRUMENT NAME/MODEL: YSI 556 MPS

MANUFACTURER: YSI

SERIAL NUMBER: 05H2352

Date of Calibration	Instrument Name and Model	Instrument I.D. Number	Person Performing Calibration	Instrument Settings		Instrument Readings		Calibration Standard (Lot No.)	Remarks and Comments
				Pre-calibration	Post-calibration	Pre-calibration	Post-calibration		
11-8-06	YSI 556 MPS	05H2352	J. Foster	pH	4.0	4.04	4.00	NA	
				pH	10.0	9.99	10.00	NA	
				Cond.	1409 µmho/cm	1,331	1.409	NA	
				D.O.	100%	101.7	100 %	NA	
	LaMotte 2020	1552-0100		Turb.	1.0	2.4	1.0	8180-156649	Exp. 2/07
					10.0	9.0	10	8184-156895	Exp. 2/07

8-52

Tetra Tech NUS, Inc.

EQUIPMENT CALIBRATION LOG

PROJECT NAME : SWMU 6/7

SITE NAME: NS Mayport

PROJECT No.: 112G00436 sm

INSTRUMENT NAME/MODEL:

MANUFACTURER:

SERIAL NUMBER:

YSI 556 MPS

LaMotte 2020

Date of Calibration	Instrument I.D. Number	Person Performing Calibration	Instrument Settings		Instrument Readings		Calibration Standard (Lot No.)	Remarks and Comments
			Pre-calibration	Post-calibration	Pre-calibration	Post-calibration		
11-13-06	05H2352	WH	pH	4.0	4.02	4.00		S/N 05H2352
			pH	10.0	9.91	10.00		
			cond	1.409	1.078	1.408		
			D.O.	%100	94.7	100.0		
11-13-06	1553-0100	WH		1.0	1.32	1.00		
				10.0	6.8	10.00		

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: SWMU 11
Project No.: 112G00436

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-11-B11-001-040907 / MPT-11-B11-013-040907
Sample Location: MPT-11-SB 11
Sampled By: Mark Yarbrough
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4/9/07 Time: 1130 0-1 / 1200 12-13	0 - 1	Lt Brown	Fine Sand Sea Shells (Dry)
Method: Geoprobe Monitor Reading (ppm): 0	12 - 13	Greenish/gray	fine sand Sea shells wet

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

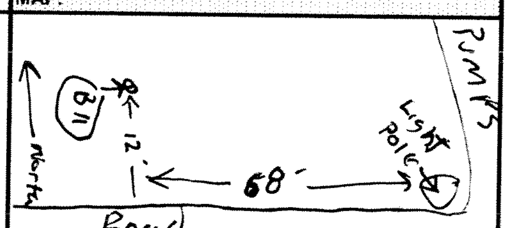
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
0-1 bls get SW 846 6010B	1# 2oz Jar (6)	1130	0-1
12-13 bls get fl. Pro	1# 8oz Jar (6)	1200	12-13

OBSERVATIONS / NOTES:

Strong Diesel odor
Possible free product
12-13

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name:	SWMU 11	Sample ID No.:	MPT-11-B09-001-040907 MPT-11-B09-013-040907
Project No.:	112G00436	Sample Location:	MPT-11-B09
		Sampled By:	Mark Yarbrough
		C.O.C. No.:	

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4/9/07			
Time: 1330 / 1400	0-1 bls	Lt Brown	fine sand with sea shells (Dry)
Method: Hand Auger Geoprobe	12-13 bls	greenish Grey	fine sand with sea shells (wet)
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

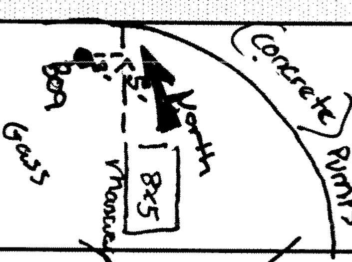
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
SW846 6010B (Arsenic)	1# 2oz Jar (G)	1330	0-1' bls
FL Pro	1# 8oz Jar (G)	1400	12-13' bls

OBSERVATIONS / NOTES:

Strong Petro odor

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): Mark Yarbrough

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: SWMU 11
Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-11-B10-001-040907 / MPT-11-B10-013-040907
Sample Location: MPT-11-B10-~~[illegible]~~
Sampled By: Mark Y
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4/9/07			
Time: 0-1 1230 12-13 1300	0-1	Lt Brown	Fine Sand with seashells (Dry)
Method:			
Monitor Reading (ppm): 0	12-13	Greenish Grey	Fine Sand with seashells Wet

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
SW846 6010B Arsenic	1# 2oz Jar (G)	1230	0-1
FL Pro	1# 8oz Jar (G)	1300	12-13

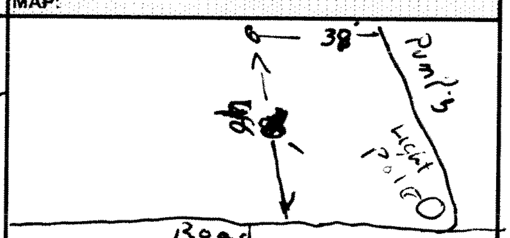
OBSERVATIONS / NOTES:

Possible Free product IN 12-13

Strong Diesel odor

~~[illegible]~~

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: SWMU 11-~~B12-01~~
Project No.: 112G00436

- [] Surface Soil
- [] Subsurface Soil
- [] Sediment
- [] Other:
- [] QA Sample Type:

Sample ID No.: MPT-11-B12-001-04090? / MPT-11-B12-013-040907
Sample Location: MPT-11-B12
Sampled By:
C.O.C. No.:

Type of Sample:
- [] Low Concentration
- [] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4/9/07			
Time: 0-1 1430 / 12-13 1500	0-1	Lt Brown	fine sand with sea shells (Dry)
Method: Hand Auger/Geoprobe			
Monitor Reading (ppm):	12-13	Greenish Gray	fine sand with sea shells (wet)

COMPOSITE SAMPLE DATA:

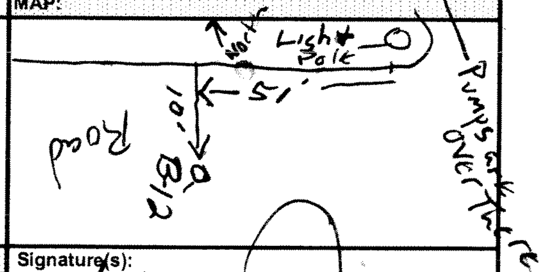
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
SW-846 6010B Arsenic	1# 2oz Jar	1430	0-1
FI Pro	1# 8oz Jar	1500	12-13

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

MPT 51 SB14-013-0410

Project Site Name:	SWMU 51 - ~~2~~	Sample ID No.:	MPT-51-SB14-001-0410
Project No.:	112G00436	Sample Location:	MPT-51-SB14
		Sampled By:	Mark Yurgrouyl
		C.O.C. No.:	

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4/10/07			
Time: 0-1 1000 / 12-13 1030	0 - 1 bls	Lt Brown	fine Sand Sea shells (Dry) No odor
Method: Hand Auger / Geoprobe	12-13' bls	greenish Grey	Fine Sand with seashells (wet)
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

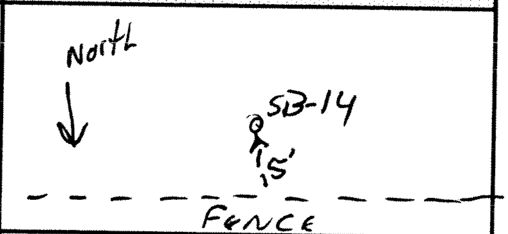
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
Fl Pro	1 # 8oz Jar	1000	0 - 1
FlPro - SW846 8270C SIM or 8310	1 # 8oz Jar	1030	12-13

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Mark Y

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name:	SWMU 51	Sample ID No.:	MPT-51-SB15-013-04100? MPT-51-SB15-001-04100?
Project No.:	112G00436	Sample Location:	MPT51-SB15
		Sampled By:	Mark Yarbrough
		C.O.C. No.:	

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4/10/07			
Time: 0-1' 1050/1130	0-1'	Lt Brown	fine sand with sea shells Dry
Method: Hand Auger (Geoprobe)			
Monitor Reading (ppm):	12-13'	Greenish Grey	" " " " wet

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

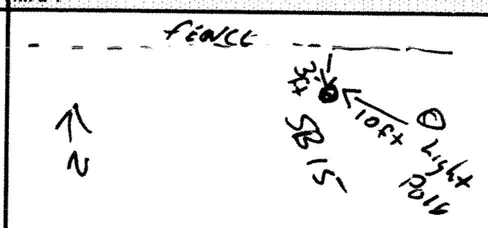
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
Fl PRO	1# 8oz Jar	1050	0-1
Fl.Pro - SW846 8270C Sim or 8310	1# 8oz Jar	1130	12-13

OBSERVATIONS / NOTES:

strong Diesel/Petro odor
12-13' bls

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Mark Yarbrough

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU51
Project No.: 112G00436

- [] Surface Soil
- [] Subsurface Soil
- [] Sediment
- [] Other:
- [] QA Sample Type:

Sample ID No.: MPT-51-SB16-011-041
Sample Location: MPT-51-SB16
Sampled By: Mark Y
C.O.C. No.:

Type of Sample:
- [] Low Concentration
- [] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4/10/07 Time: 1230 Method: Geoprobe Monitor Reading (ppm):	10-11' bls	greenish grey	fine sand with seashells (wet)

COMPOSITE SAMPLE DATA:

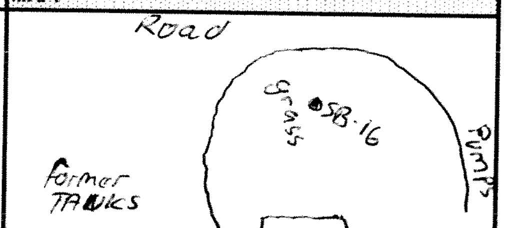
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
SW-846 8270C SIM or 8310	1 - 8 oz Jar (G)	1230	10-11' bls
FL PRO	SAME container	Same as	above

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

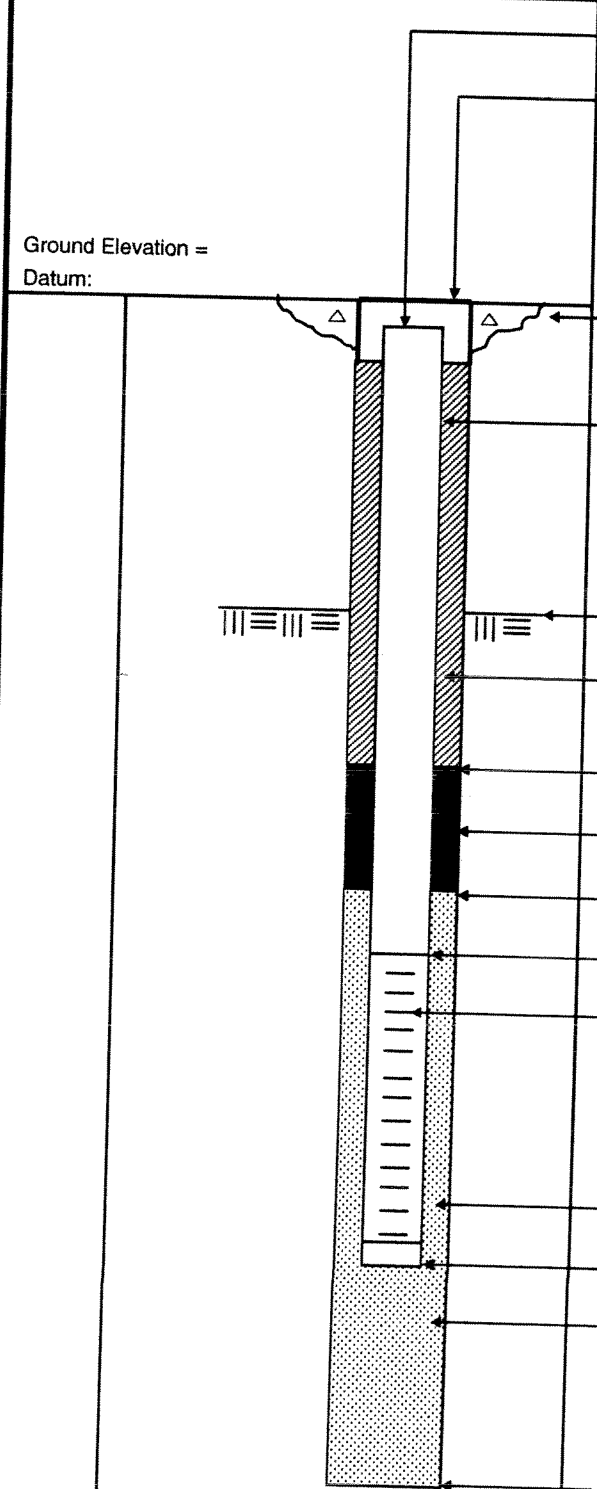
1# Soil Drum generated 3/4 full

Tetra Tech NUS, Inc.

WELL No.: MW 04S

MONITORING WELL SHEET

PROJECT:	NAUSTA Mayport	DRILLING Co.:	Partridge	BORING No.:	MW 04S
PROJECT No.:	112G00436	DRILLER:	Gary Oakes	DATE COMPLETED:	4/11/07
SITE:	SWMU 51	DRILLING METHOD:	Hollowstem Auger	NORTHING:	
GEOLOGIST:	N/A	DEV. METHOD:	Sub Pump	EASTING:	



Not to Scale

Elevation / Depth of Top of Riser: 2" / bMSW

Elevation / Height of Top of Surface Casing: 0" / bls

I.D. of Surface Casing: 2"

Type of Surface Casing: Sch 40 PVC

Type of Surface Seal: grout

I.D. of Riser: 2"

Type of Riser: Sch 40 PVC

Borehole Diameter: 9"

Elevation / Depth Top of Rock: ~~N/A~~ /

Type of Backfill: grout

Elevation / Depth of Seal: 3 ft / ~~3ft.~~

Type of Seal: Bentonite

Elevation / Depth of Top of Filter Pack: 4 ft /

Elevation / Depth of Top of Screen: 5 ft /

Type of Screen: Sch 40 PVC

Slot Size x Length: .010/10'

I.D. of Screen: 2"

Type of Filter Pack: 20/30 Silica

Elevation / Depth of Bottom of Screen: 15 ft /

Elevation / Depth of Bottom of Filter Pack: 15 ft /

Type of Backfill Below Well:

Elevation / Total Depth of Borehole: 15 ft

Tetra Tech NUS, Inc.

Page _

PROJECT NAME: Swmu 51
PROJECT NUMBER: 112G00436
DRILLING COMPANY: Partridge
DRILLING RIG: Geoprobe

BORING NUMBER: MW04S
DATE: 4/11/07
GEOLOGIST: N/A
DRILLER: Gary Oakes

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID: Sample
N/A	N/A		N/S	0-1	fine	Lt Brown	fine sand with seashells		Dry	N/S
				1-2						
				2-3						
				3-4						
				4-6						
				6-8		greenish Gray			Moist	
				8-10					wet@ 8 bls	
				10-12						
				12-15						

1" soil Drum generated 3/4 full

Tetra Tech NUS, Inc.

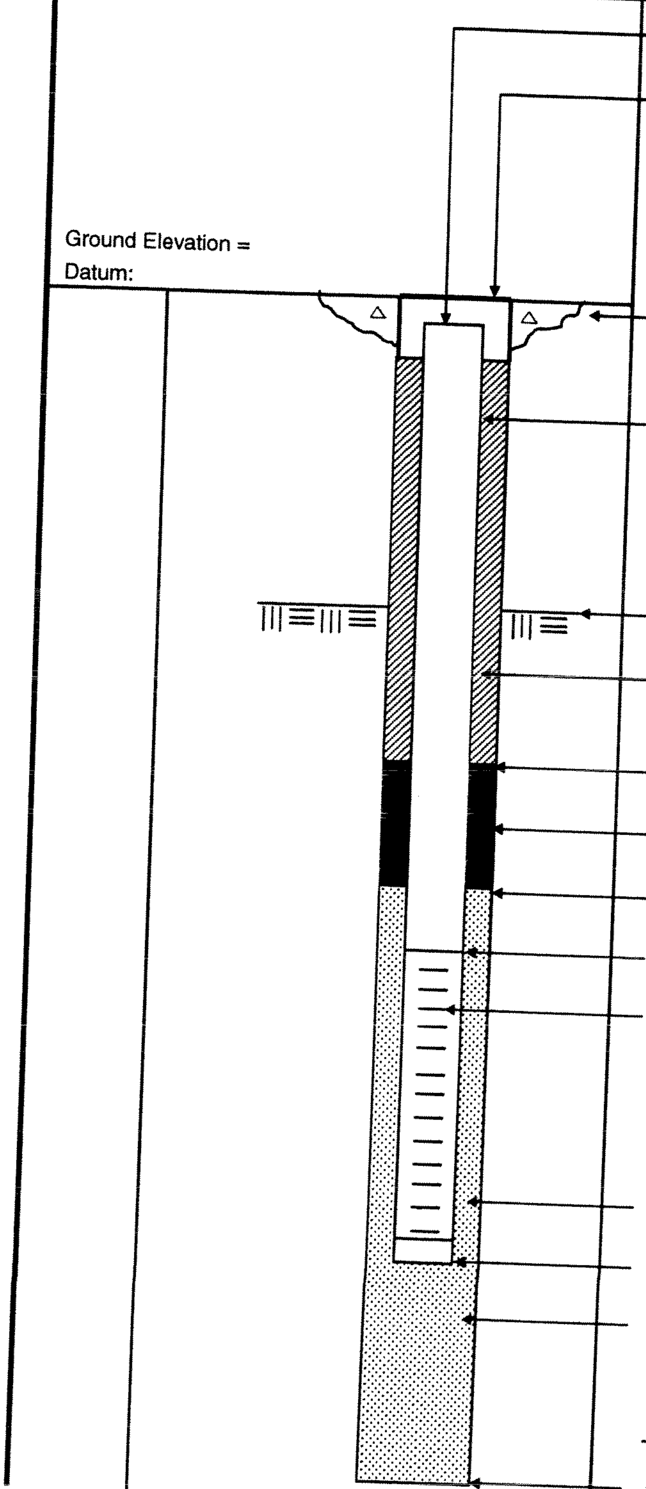
WELL No.: MW 06S

MONITORING WELL SHEET

PROJECT:	Navsta Mayport	DRILLING Co.:	Partridge	BORING No.:	MW-06S
PROJECT No.:	112G00436	DRILLER:	Gary Oakes	DATE COMPLETED:	4/11/07
SITE:	SWMU 51	DRILLING METHOD:	Hollow stem Auger	NORTHING:	
GEOLOGIST:	N/A	DEV. METHOD:	Sub. Pump	EASTING:	

Ground Elevation =

Datum:



Elevation / Depth of Top of Riser:	2" / bls
Elevation / Height of Top of Surface Casing:	0 / bls
I.D. of Surface Casing:	2"
Type of Surface Casing:	Sch 40 PVC
Type of Surface Seal:	grout
I.D. of Riser:	2"
Type of Riser:	Sch 40 PVC
Borehole Diameter:	9"
Elevation / Depth Top of Rock:	N/A
Type of Backfill:	grout
Elevation / Depth of Seal:	3 ft / bls
Type of Seal:	Bentonite
Elevation / Depth of Top of Filter Pack:	4 ft / bls
Elevation / Depth of Top of Screen:	5 ft / bls
Type of Screen:	Sch 40 PVC
Slot Size x Length:	.010
I.D. of Screen:	2"
Type of Filter Pack:	20/30 silica
Elevation / Depth of Bottom of Screen:	15 ft / bls
Elevation / Depth of Bottom of Filter Pack:	15 ft / bls
Type of Backfill Below Well:	
Elevation / Total Depth of Borehole:	15 ft / bls

Not to Scale

Tetra Tech NUS, Inc.

Page _

PROJECT NAME: SWMU 51
PROJECT NUMBER: 112G00436
DRILLING COMPANY: Partridge
DRILLING RIG: Geoprobe

BORING NUMBER: MW06S
DATE: 4/11/07
GEOLOGIST: N/A
DRILLER: Gary Oakes

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID: Sample
N/A	N/A		N/S	0-1	fine	Lt Brown	fine sand with seashells		Dry	N/S
				1-2						
				2-3						
				3-4						
				4-6						
				6-8		greenish Gray			Moist	
				8-10					wet@ 8 bls	
				10-12						
				12-15						

Soil Drum generated [illegible]

Tetra Tech NUS, Inc.

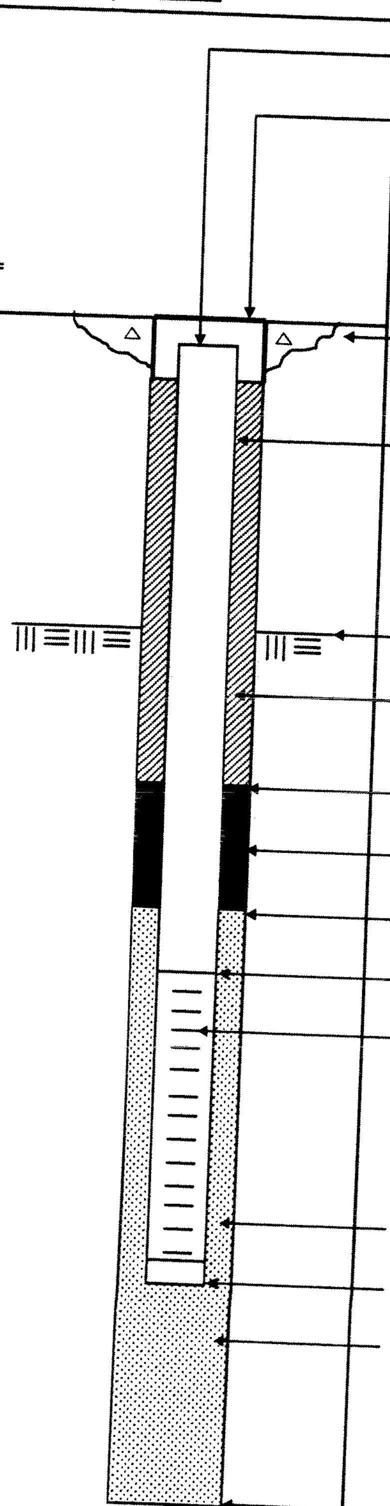
WELL No.: MW-05S

MONITORING WELL SHEET

PROJECT:	Navsta Mayport	DRILLING Co.:	Partridge	BORING No.:	MW-05S
PROJECT No.:	112G00436	DRILLER:	Gary Oakes	DATE COMPLETED:	4/11/07
SITE:	SWMU 51	DRILLING METHOD:	Hollow stem auger	NORTHING:	
GEOLOGIST:	N/A	DEV. METHOD:	Sub-Pump	EASTING:	

Ground Elevation =

Datum:



Not to Scale

Elevation / Depth of Top of Riser:	2" / Below manway
Elevation / Height of Top of Surface Casing:	0 / @ land surface
I.D. of Surface Casing:	2"
Type of Surface Casing:	Sch 40 PVC
Type of Surface Seal:	grout
I.D. of Riser:	2"
Type of Riser:	Sch 40 PVC
Borehole Diameter:	9"
Elevation / Depth Top of Rock:	N/A
Type of Backfill:	grout
Elevation / Depth of Seal:	3' / bls
Type of Seal:	Bentonite
Elevation / Depth of Top of Filter Pack:	4' / bls
Elevation / Depth of Top of Screen:	5' / bls
Type of Screen:	Sch 40 PVC Slotted
Slot Size x Length:	.010/10'
I.D. of Screen:	2"
Type of Filter Pack:	20/30 Silica
Elevation / Depth of Bottom of Screen:	15' / bls
Elevation / Depth of Bottom of Filter Pack:	15' / bls
Type of Backfill Below Well:	
Elevation / Total Depth of Borehole:	15' / bls

Tetra Tech NUS, Inc.

Page __

PROJECT NAME: SWMU 51
PROJECT NUMBER: 112G00436
DRILLING COMPANY: Partridge
DRILLING RIG: Geoprobe

BORING NUMBER: MW05S
DATE: 4/11/07
GEOLOGIST: N/A
DRILLER: Gary Oakes

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID: Sample
N/A	N/A		N/S	0-1	Fine	Lt Brown	Fine sand with seashells		Dry	N/S
				1-2						
				2-3						
				3-4						
				4-6						
				6-8		greenish Gray			Moist	
				8-10					wet@ 8bls	
				10-12						
				12-15						

Florida Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME: SWMU 51	SITE LOCATION: Fuel Farm mayport Naval Station
WELL NO: MPT-51-MW06S	SAMPLE ID: MPT-51-MW06S-015-041907
DATE: 4/19/07	

PURGING DATA

WELL DIAMETER (in): 2"	TOTAL WELL DEPTH (ft): 15	STATIC DEPTH TO WATER (ft): 7.0	WELL CAPACITY (gal/ft): .16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =
= (15 – 7.0) x .16 = 1.28

PURGE METHOD:	PURGE INITIATED AT: 1055	PURGE ENDED AT: 1131	TOTAL VOL. PURGED (gal): 1.52

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR	orp
1125	1.28	1.28	.042	7.03	6.94	23.35	1.45	2.84	0	Clear	N/D	-136
1128	.12	1.40	↓	7.03	6.94	23.35	1.45	2.85	0	↓	↓	-14[illegible]
1131	.12	1.52	↓	7.03	6.94	23.34	1.45	2.84	0	↓	↓	-14[illegible]

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Mark Y Tetra Tech NUS	SAMPLER(S) SIGNATURE(S): Mark Y	
SAMPLING METHOD(S): RFPP	SAMPLING INITIATED AT: 1132	SAMPLING ENDED AT: 1145
FIELD DECONTAMINATION: Y (circled) N	FIELD-FILTERED: Y N (circled)	DUPLICATE: Y N (circled)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
2	AG	1 L	N/A	—	N/A	PAHS
1	AG	1 L	HCL	—	<2	TRPH

REMARKS:

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

Florida Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME: SUMU 51	SITE LOCATION: Fuel Farm Mayport Naval Station

WELL NO: MPT-51-MW05S	SAMPLE ID: MPT-51-MW05S-015-041907	DATE: 4/19/07

PURGING DATA

WELL DIAMETER (in): 2"	TOTAL WELL DEPTH (ft): 15	STATIC DEPTH TO WATER (ft):	WELL CAPACITY (gal/ft): .16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =

= (15 – 8.52) X .16 = 1.03

PURGE METHOD: RFPP	PURGE INITIATED AT: 0910	PURGE ENDED AT: 0946	TOTAL VOL. PURGED (gal): 1.23

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (~~µmhos~~)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR	ORP
0940	1.03	1.03	.034	8.58	7.01	22.59	1.26	3.84	0	Clear	N/D	-17
0943	.10	1.13	↓	8.58	7.00	22.58	1.26	3.84	0	↓	↓	-18
0946	.10	1.23	↓	8.58	7.00	22.57	1.26	3.82	0			-19

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Mark Y Tetra Tech NUS	SAMPLER(S) SIGNATURE(S): Mark Yarbrough	
SAMPLING METHOD(S): RFPP	SAMPLING INITIATED AT: 0947	SAMPLING ENDED AT: 0958
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N)	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
2	AG	1 Lt	N/A	—	N/A	SW 846 8270C or 8310
1	AG	1 Lt	HCL	—	<2	↓ TRPH

REMARKS:

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

Florida Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME: Swmv 51	SITE LOCATION: Fuel Farm Mayport Naval Station
WELL NO: MPT 51 - MW04S	SAMPLE ID: MPT-51-MW04S-015-041907 — DATE: 4/19/07

PURGING DATA

WELL DIAMETER (in): 2"	TOTAL WELL DEPTH (ft): 15	STATIC DEPTH TO WATER (ft): 8.82	WELL CAPACITY (gal/ft): .16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =

= (15 – 8.82) X .16 = .98

PURGE METHOD: RFPP	PURGE INITIATED AT: 1000	PURGE ENDED AT: 1031	TOTAL VOL. PURGED (gal): 1.20

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (~~µmhos~~) S/cm	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR	ORP
1025	.98	.98	.039	8.83	6.70	22.02	1.30	3.20	0	Clear	N/D	-122
1028	.11	1.09	↓	8.83	6.72	22.02	1.30	3.20	0	↓	↓	-12
1031	.11	1.20	↓	8.83	6.72	22.02	1.30	3.19	0	↓	↓	-12

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Mark Y Tetra Tech	SAMPLER(S) SIGNATURE(S): Mark Y [signature]	
SAMPLING METHOD(S): RFPP	SAMPLING INITIATED AT: 1032	SAMPLING ENDED AT: 1047
FIELD DECONTAMINATION: Y (circled) N	FIELD-FILTERED: Y N (circled)	DUPLICATE: Y N (circled)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
2	AG	1 Lt	N/A	—	N/A	SW846 8270C or 8310
1	AG	1 Lt	HCL	—	<2	↓ TRPH

REMARKS:

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 8
PROJECT NUMBER: 112G00436
DRILLING COMPANY: Partridge
DRILLING RIG: 6610 DT
BORING NUMBER: 08SB58
DATE: 10/26/06
GEOLOGIST: Ronald Haraldson
DRILLER: G. Oakes

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS*	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					Br	M. Sand w/shell						
	1-2					Br	M. Sand w/ shell						
	2-3					Br	M. Sand w/ shell						
	3-4					Br	M. Sand w/ shell						
	4-5					Br	M. Sand w/ shell						
	5-6					Br	M. Sand w/ shell						
	6-7					Br	M. Sand w/ shell						
	7-8					Br	→ Tan Sand w/ shell						
	8-9					Tan	M. Sand w/ shell						
	9-10		9.5	▽		Tan	→ Gray M. Sand w/shell						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 8
PROJECT NUMBER: 112600436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG: 6610 DT
BORING NUMBER: 08SB33
DATE: 10/26/06
GEOLOGIST: T. COTTENOIR
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	SAND W/SHELLS						
	1-2					BRN	SAND W/SHELLS						
	2-3					BRN	SAND W/SHELLS						
	3-4					BRN	SAND W/SHELLS						
	4-5					BRN	SAND W/SHELLS						
	5-6					BRN	SAND W/SHELLS						
	6-7					BRN	CLAYEY SAND						
	7-8					BRN	SAND W/SHELLS						
	8-9			∇		BRN	SAND W/SHELLS						
	9-10					GRY	SAND						

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ____

Drilling Area Background (ppm): ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 8
BORING NUMBER: 08 SB34
PROJECT NUMBER: 112G00436
DATE: 10/26/06
DRILLING COMPANY: PARTRIDGE WELL DRILLING
GEOLOGIST: T. COTTENOIR
DRILLING RIG: 6610 DT
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	SAND w/ SHELLS						
	1-2					BRN	SAND w/ SHELLS						
	2-3					BRN	SAND w/ SHELLS						
	3-4					BRN	SAND w/ SHELLS						
	4-5					BRN	SAND						
	5-6					TAN	SAND						
	6-7					LT. BRN	SAND						
	7-8					LT BRN	CLAYEY SAND						
	8-9			∇		LT BRN	SAND w/ SHELLS						
	9-10					GRY	SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ______

Drilling Area Background (ppm): ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 8
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG: 6610DT
BORING NUMBER: 08SB35
DATE: 10/26/06
GEOLOGIST: T. COTTENOIR
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sampla Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	SAND W/SHELLS						
	1-2					BRN	SAND W/SHELLS						
	2-3					BRN	SAND W/SHELLS						
	3-4					BRN	SAND W/SHELLS						
	4-5					BRN	SAND W/SHELLS						0
	5-6					BRN	SAND W/SHELLS						
	6-7					BRN	SAND		2" CLAY LENS				
	7-8					BRN	SAND W/SHELLS						
	8-9			▽		BRN	SAND W/SHELLS						
	9-10					GRY	SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 8
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG: 6610 DT

BORING NUMBER: 08 SB36
DATE: 10/27/06
GEOLOGIST: W. HARDEN
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND W/SHELLS						
	1-2				LT	BRN	FINE SAND W/SHELLS						
	2-3				LT	BRN	FINE SAND W/SHELLS						
	3-4				LT	BRN	FINE SAND W/SHELLS						
	4-5				LT	BRN	FINE SAND W/SHELLS						0
	5-6				LT	BRN	FINE SAND W/SHELLS						
	6-7				LT	BRN	FINE SAND W/SHELLS						
	7-8				LT	BRN	FINE SAND W/SHELLS						
	8-9			∇	LT	BRN	FINE SAND W/SHELLS						
	9-10					GRY	SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ______

Drilling Area Background (ppm): ______

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 8
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG: 6610DT
BORING NUMBER: 08 SB37
DATE: 10/27/06
GEOLOGIST: W. HARDEN
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1				LT	BRN	FINE SAND W/SHELLS						
	1-2				LT	BRN	FINE SAND W/SHELLS						
	2-3				LT	BRN	FINE SAND W/SHELLS						
	3-4					BRN	FINE SAND W/SHELLS						
	4-5					BRN	FINE SAND W/SHELLS						0
	5-6					BRN	FINE SAND W/SHELLS						
	6-7					BRN	FINE SAND W/SHELLS						
	7-8					BRN	FINE SAND W/SHELLS						
	8-9			▽		BRN	FINE SAND W/SHELLS						
	9-10					GRY	SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 8
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG: 6610 DT

BORING NUMBER: 08 SB32
DATE: 10/27/06
GEOLOGIST: W. HARDEN
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND W/SHELLS						
	1-2					BRN	FINE SAND W/SHELLS						
	2-3				LT.	BRN	FINE SAND W/SHELLS						
	3-4				LT	BRN	FINE SAND W/SHELLS						
	4-5				LT	BRN	FINE SAND W/SHELLS						0
	5-6				LT.	BRN	FINE SAND W/SHELLS						
	6-7				LT	BRN	FINE SAND W/SHELLS						
	7-8					BRN	FINE SAND W/SHELLS						
	8-9			∇		BRN	FINE SAND W/SHELLS						
	9-10					GRY	SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 8
BORING NUMBER: 08 SB 29
PROJECT NUMBER: 112G00436
DATE: 10/27/06
DRILLING COMPANY: PARTRIDGE
GEOLOGIST: W. HARDEN
DRILLING RIG: 6610 DT
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Intarval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1				DK.	BRN	FINE SILTY SAND w/SHELLS						
	1-2					BRN	FINE SAND w/SHELLS						
	2-3				LT.	BRN	FINE SAND w/SHELLS						
	3-4				LT.	BRN	FINE SAND w/SHELLS						
	4-5				LT.	BRN	FINE SAND w/SHELLS						0
	5-6					BRN	FINE SAND w/SHELLS						
	6-7				LT.	BRN	FINE SAND w/SHELLS						
	7-8				LT.	BRN	FINE SAND w/SHELLS						
	8-9			▽	LT.	BRN	FINE SAND w/SHELLS						
	9-10					GRY	FINE SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ____________________

Drilling Area Background (ppm): ____

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 8
BORING NUMBER: 08 SB31
PROJECT NUMBER: 112G00436
DATE: 10/27/06
DRILLING COMPANY: PARTRIDGE
GEOLOGIST: W. HARDEN
DRILLING RIG: 6610 DT
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1				LT.	BRN	FINE SILTY SAND W/SHELLS						
	1-2				LT.	BRN	FINE SILTY SAND W/SHELLS						
	2-3				LT.	BRN	FINE SAND W/SHELLS						
	3-4				LT.	BRN	FINE SAND W/SHELLS						
	4-5				LT.	BRN	FINE SAND W/SHELLS						0
	5-6					BRN	FINE SAND W/SHELLS						
	6-7				LT.	BRN	FINE SAND W/SHELLS						
	7-8				LT.	BRN	FINE SAND W/SHELLS						
	8-9			▽	LT.	BRN	FINE SAND W/SHELLS						
	9-10					GRY	FINE SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 8
BORING NUMBER: 08 SB25
PROJECT NUMBER: 112G00436
DATE: 10/27/06
DRILLING COMPANY: PARTRIDGE
GEOLOGIST: T. COTTENOIR
DRILLING RIG: 6610DT
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SILTY SAND W/SHELLS						
	1-2					BRN	FINE SILTY SAND W/SHELLS						
	2-3					BRN	FINE SILTY SAND W/SHELLS						
	3-4					BRN	FINE SAND W/SHELLS						
	4-5				LT	BRN	FINE SAND W/SHELLS						0
	5-6				LT	BRN	FINE SAND W/SHELLS						
	6-7				LT.	BRN	FINE SAND W/SHELLS						
	7-8				LT.	BRN	FINE SAND W/SHELLS						
	8-9			▽	LT.	BRN	FINE SAND W/SHELLS						
	9-10					GRY	FINE SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 8
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG: 6610 DT
BORING NUMBER: 08 SB30
DATE: 10/27/06
GEOLOGIST: W. HARDEN
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SILTY SAND W/SHELLS						
	1-2					BRN	FINE SILTY SAND W/SHELLS						
	2-3					BRN	FINE SILTY SAND W/SHELLS						
	3-4					BRN	FINE SAND W/SHELLS						
	4-5					BRN	FINE SAND W/SHELLS						0
	5-6					BRN	FINE SAND W/SHELLS						
	6-7				LT	BRN	FINE SAND W/SHELLS						
	7-8				LT	BRN	FINE SAND W/SHELLS						
	8-9			▽	LT	BRN	FINE SAND W/SHELLS						
	9-10					GRY	FINE SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ______

Drilling Area Background (ppm): ______

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 8
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG: 6610DT
BORING NUMBER: 08 SB27
DATE: 10/27/06
GEOLOGIST: W. HARDEN
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS*	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SILTY SAND W/SHELLS						
	1-2				LT	BRN	FINE SILTY SAND W/SHELLS						
	2-3				LT	BRN	FINE SILTY SAND W/SHELLS						
	3-4				LT	BRN	FINE SAND W/SHELLS						
	4-5				LT	BRN	FINE SAND W/SHELLS						0
	5-6				LT	BRN	FINE SAND W/SHELLS						
	6-7				LT	BRN	FINE SAND W/SHELLS						
	7-8				LT	BRN	FINE SAND W/SHELLS						
	8-9			▽	LT	BRN	FINE SAND W/SHELLS						
	9-10					GRY	FINE SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: ~~112G0047~~ SWMU 9
BORING NUMBER: 09SB07
PROJECT NUMBER: 112G00436
DATE: 10/30/06
DRILLING COMPANY: PARTRIDGE
GEOLOGIST: T. COTTENOIR
DRILLING RIG: 6610DT
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	SAND w/SHELLS						
	1-2					BRN	SAND w/SHELLS						
	2-3					BRN	SAND w/SHELLS						
	3-4					BRN	SAND w/SHELLS						
	4-5					BRN	SAND w/SHELLS						0
	5-6					BRN	SAND						
	6-7					BRN	SAND						
	7-8					BRN	SAND w/SHELLS						
	8-9					BRN	SAND w/SHELLS						
	9-10					GRY	SAND w/SHELLS						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

Page 1 of 1

PROJECT NAME: SWMU 9
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG: 6610 DT
BORING NUMBER: 09 SB 11
DATE: 10/30/06
GEOLOGIST: T. COTTENOIR
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	SAND w/SHELLS						
	1-2					BRN	SAND w/SHELLS						
	2-3					BRN	SAND w/SHELLS						
	3-4					BRN	SAND w/SHELLS						
	4-5					BRN	SAND w/SHELLS						0
	5-6					Brn	sand w/ shells						
	6-7					Brn	Sand w/ shells						
	7-8					Brn	sand w/ shells		3" clay stringer at 7.5'				
	8-9			▽		Brn	sand w/ shells						
	9-10					Brn	→ Gray sand w/ shells						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 9
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG: 6610DT
BORING NUMBER: 09 SB12
DATE: 10/30/06
GEOLOGIST: T. COTTENOIR
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	SAND W/SHELLS						
	1-2					BRN	SAND W/SHELLS						
	2-3					BRN	SAND W/SHELLS						
	3-4					BRN	SAND W/SHELLS						
	4-5					BRN	SAND W/SHELLS						0
	5-6					BRN	SAND W/SHELLS						
	6-7					LT BRN	SAND						
	7-8					LT BRN	SAND		1" CLAY STRINGER				
	8-9			▽		BRN	SAND W/SHELLS						
	9-10					GRY	SAND W/SHELLS						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 9
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG: 6610DT

BORING NUMBER: 09SB10
DATE: 10/30/06
GEOLOGIST: T. COTTENOIR
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sampla Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	SAND W/SHELLS						
	1-2					BRN	SAND W/SHELLS		6" CLAY Stringer				
	2-3					BRN	SAND W/SHELLS						
	3-4					BRN	SAND W/SHELLS						
	4-5					BRN	SAND W/SHELLS						0
	5-6					BRN	SAND W/SHELLS						
	6-7					LT. BRN	SAND W/SHELLS						
	7-8					LT. BRN	SAND						
	8-9			∇		BRN	SAND W/SHELLS						
	9-10					GRY	SAND W/SHELLS						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 9
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG: 6610 DT
BORING NUMBER: 09SB08
DATE: 10/30/06
GEOLOGIST: T. COTTENOIR
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	SAND W/SHELLS						
	1-2					BRN	SAND W/SHELLS						
	2-3					BRN	SAND W/SHELLS						
	3-4					BRN	SAND W/SHELLS						
	4-5					BRN	SAND W/SHELLS						0
	5-6					BRN	SAND W/SHELLS						
	6-7					LT. BRN	SAND W/SHELLS						
	7-8					LT. BRN	SAND W/SHELLS						
	8-9			∇		BRN	SAND W/SHELLS						
	9-10					GRY	SAND W/SHELLS						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ______

Drilling Area Background (ppm): ______

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 9
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG: 6610 DT
BORING NUMBER: 09SB02
DATE: 10/30/06
GEOLOGIST: T. COTTENOIR
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS*	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	SAND w/ SHELLS						
	1-2					BRN	SAND w/ SHELLS						
	2-3					BRN	SAND w/ SHELLS						
	3-4					BRN	SAND w/ SHELLS						
	4-5					BRN	SAND w/ SHELLS						0
	5-6					Brn	Sand w/ shells						
	6-7					Brn	Sand w/ shells						
	7-8					Brn	Sand w/ shells						
	8-9			▽		Brn	→ gray Sand w/shells						
	9-10					GR	Sand w/shells						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME:	SWMU 9	BORING NUMBER:	09SB03
PROJECT NUMBER:	112G00436	DATE:	10/30/06
DRILLING COMPANY:	PARTRIDGE	GEOLOGIST:	T. COTTENOIR
DRILLING RIG:	6610DT	DRILLER:	G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	SAND w/SHELLS						
	1-2					BRN	SAND w/SHELLS						
	2-3					BRN	SAND w/SHELLS						
	3-4					BRN	SAND w/SHELLS						
	4-5					BRN	SAND w/SHELLS						0
	5-6					BRN	SAND w/SHELLS						
	6-7					BRN	SAND w/SHELLS						
	7-8					BRN	SAND w/SHELLS						
	8-9			▽		BRN	SAND w/SHELLS						
	9-10					GRY	SAND w/SHELLS						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ______

Drilling Area Background (ppm): ______

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 9
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG: 6610 DT
BORING NUMBER: 09 SB04
DATE: 10/30/06
GEOLOGIST: T. COTTENDIR
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	SAND W/SHELLS						
	1-2					BRN	SAND W/SHELLS						
	2-3					BRN	SAND W/SHELLS						
	3-4					BRN	SAND W/SHELLS						
	4-5					BRN	SAND W/SHELLS						0
	5-6					BRN	SAND W/SHELLS						
	6-7					BRN	SAND W/SHELLS						
	7-8					BRN	SAND W/SHELLS						
	8-9			▽		BRN	SAND W/SHELLS						
	9-10					GRY	SAND W/SHELLS						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 9
PROJECT NUMBER: 112G06436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:

BORING NUMBER: 09 SB01
DATE: 11/1/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS*	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1				DK.	BRN	FINE SAND W/SHELLS						
	1-2					BRN	FINE SAND W/SHELLS						
	2-3					BRN	FINE SAND W/SHELLS						
	3-4					BRN	FINE SAND W/SHELLS						
	4-5				LT	BRN	FINE SAND W/SHELLS						0
	5-6				LT	BRN	FINE SAND W/SHELLS						
	6-7					BRN	FINE SAND W/SHELLS						
	7-8				LT	BRN	FINE SAND W/SHELLS						
	8-9			▽	LT	BRN	FINE SAND W/SHELLS						
	9-10					GRY	FINE SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 9
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:
BORING NUMBER: 09 SB09
DATE: 11/1/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1				DK	BRN	FINE SAND w/SHELLS						
	1-2					BRN	FINE SAND w/SHELLS						
	2-3					BRN	FINE SAND w/SHELLS						
	3-4					BRN	FINE SAND w/SHELLS						
	4-5					BRN	FINE SAND w/SHELLS						0
	5-6					BRN	FINE SAND w/SHELLS						
	6-7					BRN	FINE SAND w/SHELLS						
	7-8					BRN	FINE SAND						
	8-9			∇		GRY	FINE SAND		STRONG ODOR				
	9-10					GRY	FINE SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #:

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 9
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:
BORING NUMBER: 09 SB05
DATE: 11/1/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Intervel	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND w/SHELLS						
	1-2					BRN	FINE SAND w/SHELLS						
	2-3					BRN	FINE SAND w/SHELLS						
	3-4					BRN	FINE SAND w/SHELLS						
	4-5					BRN	FINE SAND w/SHELLS						0
	5-6					BRN	FINE SAND w/SHELLS						
	6-7					Brn	Fine Sand w/ shells						
	7-8					Brn	Fine sand w/ shells						
	8-9					Gry	Fine sand w/ shells						
	9-10		9.5	▽		Gry	Fine sand w/ shells						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm):

Remarks:

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 9
PROJECT NUMBER: 112600436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:

BORING NUMBER: 09SB06
DATE: 11/1/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND w/SHELLS						
	1-2					BRN	FINE SAND w/SHELLS						
	2-3					BRN	FINE SAND w/SHELLS						
	3-4					BRN	FINE SAND w/SHELLS						
	4-5					BRN	FINE SAND w/SHELLS						0
	5-6					BRN	FINE SAND w/SHELLS						
	6-7					BRN	FINE SAND w/SHELLS						
	7-8					BRN	FINE SAND w/SHELLS						
	8-9			∇		BRN	FINE SAND w/SHELLS						
	9-10					GRY	FINE SAND w/SHELLS						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm):

Remarks:

Converted to Well: Yes ______ No ______ Well I.D. #: ______

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Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 9
BORING NUMBER: 09SB13
PROJECT NUMBER: 112G00436
DATE: 11/1/06
DRILLING COMPANY: PARTRIDGE
GEOLOGIST: T. COTTENOIR
DRILLING RIG:
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND w/SHELLS						
	1-2					BRN	FINE SAND w/SHELLS						
	2-3					BRN	FINE SAND w/SHELLS						
	3-4					BRN	FINE SAND w/SHELLS						
	4-5					BRN	FINE SAND w/SHELLS						0
	5-6					BRN	FINE SAND w/SHELLS						
	6-7					BRN	FINE SAND w/SHELLS						
	7-8					BRN	FINE SAND w/SHELLS						
	8-9			▽		BRN	FINE SAND w/SHELLS						
	9-10					GRY	FINE SAND		1" CLAY STRINGER				

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 11
PROJECT NUMBER: 112G00436
DRILLING COMPANY: Partridge
DRILLING RIG: 6610 DT
BORING NUMBER: 11 SB 06
DATE: 10/25/06
GEOLOGIST: Donald Hardison
DRILLER: G. Oakes

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					Wh	Lime Rock						
	1-2					Br	Sand w/ shell						
	2-3					Br	Sand w/ shell						
	3-4					Br	Sand w/ Shell						
	4-5					Gr	Sand w/ shell						
	5-6					Br	Sand w/ Shell						
	6-7					Gr	Sand w/ shell						
	7-8					Tan	Sand w/ shell						
	8-9					Tan-Br	Sand w/ Shell		2" clay stringers 8.5'				
	9-10					Br	Sand w/ Shell						
	10-11					Br	Sand w/ shell						
	11-12			▽		Br	to Gray Sand w/ shell						
	12-13					GRAY	Sand w/ Shell						
	13-14					GRAY	Sand w/ Shell						
	14-15					GRAY	Sand w/ SHELL						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ____________________

Drilling Area Background (ppm): ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____________

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 11
PROJECT NUMBER: 112G00436
DRILLING COMPANY: Partridge
DRILLING RIG: 6610 DT

BORING NUMBER: 11 SB03
DATE: 10/25/06
GEOLOGIST: Donald Haraldson
DRILLER: G. Oakes

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	PID/FID Reading (ppm): Sampler BZ	PID/FID Reading (ppm): Borehole**	PID/FID Reading (ppm): Driller BZ**
	0-1					Br	M. Sand w/ shell						
	1-2					Br	M. Sand w/ shell						
	2-3					Br	M. Sand w/ shell						
	3-4					Br	M. Sand w/ shell						
	4-5					Br-Tan	M. Sand w/ shell						
	5-6					Br-Tan	M. Sand w/ shell						
	6-7					Tan	M. Sand w/ shell						
	7-8					Tan	M. Sand w/ shell		3" clay stringer @ 7', Fe Nodules below				
	8-9					Tan	M. Sand w/ shell		2" clay stringer at 8.5'				
	9-10					Br	M. Sand w/ shell						
	10-11					Br	M Sand w/ shell						
	11-12			∇		Br	to Gray Sand w/ shell						
	12-13					GRAY	SAND w/ SHELLS						
	13-14					GRAY	SAND w/ SHELLS						
	14-15					Gray	Sand w/ shell						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ______

Drilling Area Background (ppm): ______

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

Page 1 of 1

PROJECT NAME: Swmu 11
PROJECT NUMBER: 112G00436
DRILLING COMPANY: Partridge
DRILLING RIG: 6610 DT
BORING NUMBER: 11SB01
DATE: 10/25/08
GEOLOGIST: Donald Handl[illegible]
DRILLER: G. Oakes

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					Br	Brn M. Sand w/ Shell		4-8" limerock				
	1-2					Br	Brn M. Sand w/ Shell						
	2-3					Br	M. Sand w/ Shell						
	3-4					Br	M. Sand w/ Shell						
	4-5					Br	M. Sand w/ Shell		Dk Br Clay Stringer				
	5-6					Br - Tan	M. Sand w/ Shell						
	6-7					Tan	M. Sand w/ Shell						
	7-8					Tan	M. Sand w/ Shell						
	8-9					Tan	M. Sand w/ Shell		1" clay stringer 8.5'				
	9-10					Tan - Br	M. Sand w/ Shell						
	10-11					Tan - Br	M. Sand w/ Shell						
	11-12					Tan - Gray	M. Sand w/ Shell						
	12-13		12.5	12		Br - Gray	M. Sand w/ Shell						
	13-14												
	14-15												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 11
PROJECT NUMBER: 112G00436
DRILLING COMPANY: Partridge
DRILLING RIG: 6610 DT
BORING NUMBER: 11 SB 67
DATE: 10/25/06
GEOLOGIST: Donald Haraldson
DRILLER: G. Oakes

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					Br	Sand w/ shells						
	1-2					Br	Sand w/ shells						
	2-3					Br - Tan	Sand w/ shells						
	3-4					Tan	Sand w/ shells						
	4-5					Tan	Sand w/ shells						
	5-6					Tan	Sand w/ shells						
	6-7					Tan - Br	sand w/ shells						
	7-8					Br	Sand w/ shells		2" clay stringer at 8'				
	8-9					Br	Sand w/ shells						
	9-10					Br	Sand w/ shells						
	10-11					Br	Sand w/ shells						
	11-12					Br	- Gray, Sand w/ shells						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm):

Remarks:

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

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PROJECT NAME: SWMU 11
PROJECT NUMBER: 112G00436
DRILLING COMPANY: Partridge
DRILLING RIG: ~~Partridge~~ DH 6610DT

BORING NUMBER: 11 SB04
DATE: 10/26/06
GEOLOGIST: Donald Hardison
DRILLER: G. Oakes

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					Br	M. Sand w/ shell						
	1-2					Br	M. Sand w/ shell						
	2-3					Br	M. Sand w/ shell						
	3-4					Br-Tan	M Sand w/ shell						
	4-5					Tan	M. Sand w/ shell						
	5-6					Tan	M. Sand w/ shell						
	6-7					Tan	M. Sand w/ shell						
	7-8					Tan	M. Sand w/ shell		2" clay stringer at 8'				
	8-9					Tan	M. Sand w/ shell		2" sandy clay at 9'				
	9-10					Tan-brown	M. Sand w/ shell						
	10-11					Br	M. Sand w/ shell						
	11-12					Br-Gray	M. Sand w/ shell						
	12-13			12.5 ▽		Gr	M. Sand w/ shell						

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Swmu 11
PROJECT NUMBER: 112G00436
DRILLING COMPANY: Partridge
DRILLING RIG: 6610 DT

BORING NUMBER: 11 SB02
DATE: 10/26/06
GEOLOGIST: Donald Hendrikson
DRILLER: G. Oakes

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					Br	M. Sand w/ shell						
	1-2					DkBr	M. Sand w/ shell						
	2-3					DkBr	M. Sand w/ shell						
	3-4					DkBr	M. Sand w/ shell						
	4-5					Tan	M. Sand w/ shell						
	5-6					Tan	M. Sand w/ shell						
	6-7					Tan	M. Sand w/ shell						
	7-8					Br	D.F. clay ⇒ Tan M. Sand in lower 6 inches						
	8-9					Tan	M Sand w/ shell		2" clay stringer at 8.5'				
	9-10					Tan	M Sand w/ shell						
	10-11					Tan	→ Br M Sand w/ shell						
	11-12					Br	M Sand w/ shell						
	12-13		12.5			Br	→ Gray M Sand w/ shell						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Swmu 11
PROJECT NUMBER: 112G00436
DRILLING COMPANY: Partridge
DRILLING RIG: 6610 DT
BORING NUMBER: 11 SB 08
DATE: 10/26/06
GEOLOGIST: Ronald Nordison
DRILLER: G. Oakes

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS*	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					Br	M. Sand w/ shell						
	1-2					Br	M. sand w/ shell						
	2-3					Br	M. Sand w/ shell						
	3-4					Br	M. Sand w/ shell						
	4-5					Br	M. Sand w/ shell						
	5-6					Br	M. Sand w/ shell						
	6-7					Tan	M. Sand w/ shell						
	7-8					Tan	M. Sand w/ shell						
	8-9					Tan	M. Sand w/ shell		2" sandy clay at 9'				
	9-10					Tan	M. Sand w/ shell		3" clay stringer at 9.5'				
	10-11					Br	M. Sand w/ shell						
	11-12					Br	M. sand w/ shell						
	12-13		12.5			Br	→ Lt. Gray M. sand w/ shell						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Swmu 11
PROJECT NUMBER: 112G00436
DRILLING COMPANY: Partridge
DRILLING RIG: 6610 DT
BORING NUMBER: 11 SB05
DATE: 10/26/06
GEOLOGIST: Donald [illegible]
DRILLER: G. Dukes

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	PID/FID Reading (ppm): Sampler BZ	PID/FID Reading (ppm): Borehole**	PID/FID Reading (ppm): Driller BZ**
	0-1					Br	M. Sand w/ shell						
	1-2					Br	M. Sand w/ shell						
	2-3					Br	M. Sand w/ shell						
	3-4					Br	M. Sand w/ shell						
	4-5					Br	M. Sand w/ shell						
	5-6					Br	M. Sand w/ shell						
	6-7					Br	M. Sand w/ shell						
	7-8					DkBr	M. Sand w/ shell						
	8-9					Tan	M. Sand w/ shell		2 2" clay stringers at 8.5 => 9'				
	9-10					Tan	M. Sand w/ shell						
	10-11					Br	M. Sand w/ shell						
	11-12			▽		DkBr	M. Sand w/ shell						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm):

Remarks:

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 51
BORING NUMBER: 51SB11
PROJECT NUMBER: 112600436
DATE: 10/24/06
DRILLING COMPANY: PARTRIDGE
GEOLOGIST: TERRY COTTENOIR
DRILLING RIG: 6610 DT
DRILLER: GARY OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	SAND W/ SHELLS		HAND Auger				
	1-2					BRN	SAND W/ SHELLS		"				
	2-3					BRN	SAND		"				
	3-4					BRN	SAND		"				
	4-5					BRN	~~SAND~~ CLAYEY SAND		"				
	5-6					BRN	SAND		DPT CORE				
	6-7					BRN	SAND		"				
	7-8					BRN	SAND		"				
	8-9					BRN	SAND		"				
	9-10					BRN	~~SANDY CLAY~~ CLAYEY	SAND	"				
	10-11					BRN	~~SANDY CLAY~~ CLAYEY	SAND					
	11-12					BRN	SAND		WATER TABLE				
	12-13					BRN	SAND						
	13-14					BRN	SAND		~~WATER TABLE~~				
	14-15					BRN	SAN						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0.0

Converted to Well: Yes ____ No X Well I.D. #:

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 51 | BORING NUMBER: 51SB10
PROJECT NUMBER: 112G00436 | DATE: 10/24/06
DRILLING COMPANY: PARTRIDGE | GEOLOGIST: TERRY COTTENOIR
DRILLING RIG: 6610DT | DRILLER: GARY OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1				DARK	BRN	SAND w/ SHELLS						
	1-2					BRN	SAND w/ SHELLS						
	2-3					BRN	SAND w/ SHELLS						
	3-4					BRN	SAND w/ SHELLS						
	4-5					BRN	SAND						
	5-6					BRN	SAND						
	6-7					BRN	SAND						
	7-8					BRN	SAND						
	8-9					BRN	SAND						
	9-10				LIGHT	BRN	CLAYEY SAND						
	10-11				LIGHT	BRN	CLAYEY SAND						
	11-12					BLK	SAND		STRONG ODER				
	12-13					BLK	SAND						
	13-14					BLK	SAND						
	14-15					BLK	SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ______

Drilling Area Background (ppm): ______

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: SWMU 51
BORING NUMBER: 51 SB09
PROJECT NUMBER: 112G00436
DATE: 10/24/06
DRILLING COMPANY: PARTRIDGE
GEOLOGIST: TERRY COTTENOIR
DRILLING RIG: 6610DT
DRILLER: GARY OAKES.

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	SAND W/SHELLS						
	1-2					BRN	SAND W/SHELLS						
	2-3					BRN	SAND W/SHELLS						
	3-4					BRN	SAND						
	4-5					DARK BRN	SANDY CLAY LENS						
	5-6					DARK BRN	SANDY CLAY						
	6-7					BRN	SAND						
	7-8					BRN	SAND						
	8-9					BRN	SAND						
	9-10					BRN	SAND						
	10-11					BRN	SAND						
	11-12					GREY	SAND						
	12-13			▽		GREY	SAND						
	13-14					GREY	SAND						
	14-15					GREY	SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ______

Drilling Area Background (ppm): ______

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 51 BORING NUMBER: 51 SB01
PROJECT NUMBER: 112G00436 DATE: 10/24/06
DRILLING COMPANY: PARTRIDGE GEOLOGIST: TERRY COTTENOIR
DRILLING RIG: 6610 DT DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS*	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	SAND W/SHELLS						
	1-2					BRN	SAND W/SHELLS						
	2-3					BRN	SAND W/SHELLS						
	3-4					BRN	SAND W/SHELLS						
	4-5					BRN	SAND W/SHELLS						
	5-6					BRN	SAND W/SHELLS						
	6-7					BRN	SAND W/SHELLS						
	7-8					BRN	SAND W/SHELLS						
	8-9					BRN	SAND W/SHELLS						
	9-10					BRN	SAND						
	10-11					BRN	SAND						
	11-12					GRY	SAND						
	12-13					GRY	SAND						
	13-14			∇		GRY	SAND						
	14-15					GRY	SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ______

Drilling Area Background (ppm): ______

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 51
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG: 6610DT

BORING NUMBER: 51SB02
DATE: 10/24/06
GEOLOGIST: T. COTTENOIR
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	PID/FID Reading (ppm): Sampler BZ	PID/FID Reading (ppm): Borehole**	PID/FID Reading (ppm): Driller BZ**
	0-1					BRN	SAND W/SHELLS						
	1-2					BRN	SAND W/SHELLS						
	2-3					BRN	SAND W/SHELLS						
	3-4					BRN	SAND W/SHELLS						
	4-5					BRN	SAND W/SHELLS						
	5-6					BRN	SAND W/SHELLS						
	6-7					BRN	SAND W/SHELLS						
	7-8					BRN	SAND W/SHELLS						
	8-9					BRN	SAND W/SHELLS						
	9-10					BRN	SAND W/SHELLS						
	10-11					BRN	SAND						
	11-12			∇		BRN	SAND						
	12-13					GRY	SAND						
	13-14					GRY	SAND						
	14-15					GRY	SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 51 | BORING NUMBER: 51 SB03
PROJECT NUMBER: 112G00436 | DATE: 10/24/06
DRILLING COMPANY: PARTRIDGE | GEOLOGIST: T. COTTENOIR
DRILLING RIG: 6610 DT | DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS*	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	SAND W/ SHELLS						
	1-2					BRN	SAND W/ SHELLS						
	2-3					BRN	SAND W/ SHELLS						
	3-4					BRN	SAND W/ SHELLS						
	4-5					BRN	SAND W/ SHELLS						
	5-6					BRN	SAND						
	6-7					BRN	SAND						
	7-8					BRN	SAND W/ CLAY LENS						
	8-9					BRN	SAND						
	9-10			▽		GRY	SAND						
	10-11					GRY	SAND						
	11-12					GRY	SAND						
	12-13					GRY	SAND						
	13-14					BRN	SAND						
	14-15					BRN	SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ____________________

Drilling Area Background (ppm): ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 51
BORING NUMBER: 51 SB04
PROJECT NUMBER: 112G00436
DATE: 10/25/06
DRILLING COMPANY: PARTRIDGE
GEOLOGIST: T. COTTENOIR
DRILLING RIG: 6610DT
DRILLER: G. OAKES

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	SAND W/ SHELLS						
	1-2					BRN	SAND W/ SHELLS						
	2-3					BRN	SAND W/ SHELLS						
	3-4					BRN	SAND W/ SHELLS						
	4-5					BRN	SAND W/ SHELLS						
	5-6					Gry	Sand						
	6-7					Gry	Sand						
	7-8					Gry	Sand -> Brn Sand		clay strings @ 8'				
	8-9					Gry	Sand w/ shells						
	9-10					Gry	Sand w/ shells						
	10-11					Gry	Sand						
	11-12					Gry	Sand						
	12-13					Gry	Sand w/ shells						
	13-14					Gry	Sand w/ shells						
	14-15					Gry	Sand w/ shells						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ____

Drilling Area Background (ppm): ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Swmu 51
PROJECT NUMBER: 112G00436
DRILLING COMPANY: Partridge
DRILLING RIG: 6610 DT
BORING NUMBER: 51 SB08
DATE: 10/25/06
GEOLOGIST: Donald Hatchison
DRILLER: G. Oakes

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					Brn	Sand w/ shell						
	1-2					Brn	Sand w/ shell						
	2-3					Brn	Sand w/ shell						
	3-4					Brn	Sand w/ shell						
	4-5					Brn	Sand w/ shell						
	5-6					Brn	Sand w/ shell						
	6-7					Brn	Sand w/ shell						
	7-8					Brn	Sand w/ shell						
	8-9					Brn	Sand w/ shell						
	9-10					Gry	Sand w/ shell						
	10-11					Brn	→ Gry Sand w/ shell						
	11-12					Gry	→ Blk Sand w/ shell						
	12-13		12.5			Blk	Sand w/ shell						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ______

Drilling Area Background (ppm): ______

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: SWMUs 6/7
PROJECT NUMBER: 112600436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:
BORING NUMBER: 6/7 SB01
DATE: 11/9/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND W/SHELLS						
	1-2					BRN	FINE SAND W/SHELLS						
	2-3					BRN	FINE SAND W/SHELLS						
	3-4					BRN	FINE SAND W/SHELLS						
	4-5				LT	BRN	FINE SAND W/SHELLS						0
	5-6				LT	BRN	FINE SAND W/SHELLS						
	6-7				LT	BRN	FINE SAND W/SHELLS						
	7-8				LT	BRN	FINE SAND W/SHELLS						
	8-9			∇	DK	BRN	FINE SAND						
	9-10					GRY	FINE SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ______

Drilling Area Background (ppm): ______

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: SWMUs 6/7
PROJECT NUMBER: 112600436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:
BORING NUMBER: 6/7 SB02
DATE: 11/9/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	U S C S *	Remarks	PID/FID Reading (ppm): Sample	PID/FID Reading (ppm): Sampler BZ	PID/FID Reading (ppm): Borehole**	PID/FID Reading (ppm): Driller BZ**
	0-1				DK	BRN	FINE SAND w/SHELLS						
	1-2				DK	BRN	FINE SAND w/SHELLS						
	2-3				DK	BRN	FINE SAND w/SHELLS						
	3-4				DK	BRN	FINE SAND w/SHELLS						
	4-5					BRN	FINE SAND w/SHELLS						0
	5-6					BRN	FINE SAND w/SHELLS						
	6-7				lt	Br	Fine Sand w/ Shells						
	7-8				Light	Brn	Fine Sand w/ Shells						
	8-9			▽		BRN	FINE SAND						
	9-10					GRY	FINE SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ______

Drilling Area Background (ppm): ______

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: SWMUs 6 & 7
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:

BORING NUMBER: 6/7 SB03
DATE: 11/9/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS*	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND W/SHELL						
	1-2					BRN	FINE SAND W/SHELL						
	2-3				LT	BRN	FINE SAND W/SHELLS						
	3-4				LT	BRN	FINE SAND W/SHELLS						
	4-5				LT	BRN	FINE SAND W/SHELLS						0
	5-6					BRN	FINE SAND W/SHELLS						
	6-7				LT	BRN	FINE SAND W/SHELLS						
	7-8				LT	BRN	FINE SAND W/SHELLS						
	8-9			∇	LT	BRN	FINE SAND						
	9-10					GRY	FINE SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ____________________

Drilling Area Background (ppm): ____

Converted to Well: Yes ______ No ______ Well I.D. #: ____________

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMUs 6/7
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:

BORING NUMBER: 6/7 SB04
DATE: 11/9/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND w/SHELLS						
	1-2				LT	BRN	FINE SAND w/SHELLS						
	2-3					BRN	FINE SAND w/SHELLS						
	3-4					BRN	FINE SAND w/SHELLS						
	4-5					BRN	FINE SAND w/SHELLS						0
	5-6					BRN	FINE SAND w/SHELLS						
	6-7					BRN	FINE SAND w/SHELLS						
	7-8					GRY	FINE SAND w/SHELLS						
	8-9			∇		GRY	FINE SAND						
	9-10					GRY	FINE SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ______

Drilling Area Background (ppm): ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: SWMU 6/7
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:
BORING NUMBER: 6/7 SB05
DATE: 11/9/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1				DK	BRN	FINE SAND W/SHELLS						
	1-2				DK.	BRN	FINE SAND W/SHELLS						
	2-3					BRN	FINE SAND W/SHELLS						
	3-4					BRN	FINE SAND W/SHELLS						
	4-5					BRN	FINE SAND W/SHELLS						0
	5-6					BRN	FINE SAND W/SHELLS						
	6-7					BRN	FINE SAND W/SHELLS						
	7-8					BRN	FINE SAND W/SHELLS						
	8-9			∇		GRY	FINE SAND W/SHELLS						
	9-10					GRY	FINE SAND						

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: SWMU 6/7
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:

BORING NUMBER: 6/7 SB06
DATE: 11/9/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND W/SHELLS						
	1-2					BRN	FINE SAND W/SHELLS						
	2-3				LT	BRN	FINE SAND W/SHELLS						
	3-4				LT	BRN	FINE SAND W/SHELLS						
	4-5				LT	BRN	FINE SAND W/SHELLS						0
	5-6				LT	BRN	FINE SAND W/SHELLS						
	6-7					BRN	FINE SAND W/SHELLS						
	7-8					BRN	FINE SAND W/SHELLS						
	8-9			▽		BRN→GRY	FINE SAND W/SHELLS						
	9-10					GRY	FINE SAND W/SHELLS						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: SWMU 6/7
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG: ______

BORING NUMBER: 6/7 SB07
DATE: 11/9/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1				DK.	BRN	FINE SAND W/SHELLS						
	1-2					BRN	FINE SAND W/SHELLS						
	2-3					BRN	FINE SAND W/SHELLS						
	3-4					BRN	FINE SAND W/SHELLS						
	4-5					BRN	FINE SAND W/SHELLS						0
	5-6					BRN	FINE SAND W/SHELLS						
	6-7				DK	BRN	FINE SAND W/SHELLS						
	7-8					GRY	FINE SAND W/SHELLS						
	8-9			∇		GRY	FINE SAND W/SHELLS		3" clay stringer				
	9-10					GRY	FINE SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ______

Drilling Area Background (ppm): ______

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: SWMU 6/7
PROJECT NUMBER: 112G004B6
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:

BORING NUMBER: 6/7 SB08
DATE: 11/9/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	PID/FID Reading (ppm): Sampler BZ	PID/FID Reading (ppm): Borehole**	PID/FID Reading (ppm): Driller BZ**
	0-1					BRN	FINE SAND w/SHELLS						
	1-2					BRN	FINE SAND w/SHELLS						
	2-3					BRN	FINE SAND w/SHELLS						
	3-4				LT.	BRN	FINE SAND w/SHELLS						
	4-5					BRN	FINE SAND w/SHELLS						
	5-6					BRN	FINE SAND w/SHELLS						0
	6-7					BRN	FINE SAND w/SHELLS						
	7-8				LT	BRN	FINE SAND w/SHELLS						
	8-9			▽		BRN	FINE SAND w/SHELLS						
	9-10					GRY	FINE SAND						

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes _____ No _____ Well I.D. #:

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: SWMU 6/7
PROJECT NUMBER: 112600436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG: ______

BORING NUMBER: 6/7 SB 09
DATE: 11/9/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND						
	1-2					BRN	FINE SAND w/SHELLS						
	2-3					BRN	FINE SAND w/SHELLS						
	3-4					BRN	FINE SAND w/SHELLS						
	4-5					BRN	FINE SAND w/SHELLS						0
	5-6					BRN	FINE SAND w/SHELLS						
	6-7					BRN	FINE SAND w/SHELLS						
	7-8					BRN	FINE SAND w/SHELLS						
	8-9			▽		GRY	FINE SAND w/SHELLS						
	9-10					GRY	FINE SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ______

Drilling Area Background (ppm): ______

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: SWMU 6/7
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:
BORING NUMBER: 6/7 SB10
DATE: 11/9/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND						
	1-2					BRN	FINE SAND W/SHELLS						
	2-3				LT	BRN	FINE SAND W/SHELLS						
	3-4				LT	BRN	FINE SAND W/SHELLS						
	4-5				LT	BRN	FINE SAND W/SHELLS						0
	5-6				LT	BRN	FINE SAND W/SHELLS						
	6-7					BRN	FINE SAND W/SHELLS						
	7-8					GRY	FINE SAND W/SHELLS						
	8-9			∇		GRY	FINE SAND W/SHELLS						
	9-10					GRY	FINE SAND						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 6/7
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:

BORING NUMBER: 6/7 SB11
DATE: 11/10/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	PID/FID Reading (ppm): Sampler BZ	PID/FID Reading (ppm): Borehole**	PID/FID Reading (ppm): Driller BZ**
	0-1					BRN	FINE SAND W/SHELLS						
	1-2					BRN	FINE SAND W/SHELLS						
	2-3					BRN	FINE SAND W/SHELLS						
	3-4					BRN	FINE SAND W/SHELLS						
	4-5					BRN	FINE SAND W/SHELLS						0
	5-6				LT	BRN	FINE SAND W/SHELLS						
	6-7					BRN	FINE SAND W/SHELLS						
	7-8					GRY	FINE SAND W/SHELLS						
	8-9			∇		GRY	FINE SAND W/SHELLS						
	9-10					GRY	FINE SAND W/SHELLS						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: SWMU 6/7
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:

BORING NUMBER: 6/7 SB12
DATE: 11/10/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND W/SHELLS						
	1-2					BRN	FINE SAND W/SHELLS						
	2-3					BRN	FINE SAND W/SHELLS						
	3-4					BRN	FINE SAND W/SHELLS						
	4-5				DK	BRN	FINE SAND W/SHELLS						0
	5-6				DK	BRN	FINE SAND W/SHELLS						
	6-7					GRY	FINE SAND W/SHELLS						
	7-8					GRY	FINE SAND W/SHELLS						
	8-9			∇		GRY	FINE SAND W/SHELLS		2" CLAY STRINGER				
	9-10					GRY	FINE SAND W/SHELLS						

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 6/7
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG: ______

BORING NUMBER: 6/7 SB13
DATE: 11/10/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND w/SHELLS						
	1-2					BRN	FINE SAND w/SHELLS						
	2-3					BRN	FINE SAND w/SHELLS						
	3-4					BRN	FINE SAND w/SHELLS						
	4-5			▽		GRY	FINE SAND w/SHELLS						0
	5-6					GRY	FINE SAND w/SHELLS						
	6-7					GRY	FINE SAND w/SHELLS						
	7-8					GRY	FINE SAND w/SHELLS						
	8-9					GRY	FINE SAND w/SHELLS						
	9-10					GRY	FINE SAND w/SHELLS						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ______

Drilling Area Background (ppm): ______

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SWMU 6/7
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:

BORING NUMBER: 6/7 SB 14
DATE: 11/10/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND w/SHELLS						
	1-2					BRN	FINE SAND w/SHELLS						
	2-3					BRN	FINE SAND w/SHELLS						
	3-4					BRN	FINE SAND w/SHELLS						
	4-5			▽		GRY	FINE SAND w/SHELLS						0
	5-6					GRY	FINE SAND w/SHELLS						
	6-7					GRY	FINE SAND w/SHELLS						
	7-8					GRY	FINE SAND w/SHELLS						
	8-9					GRY	FINE SAND w/SHELLS						
	9-10					GRY	FINE SAND w/SHELLS						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: ____________________

Drilling Area Background (ppm): ____

Converted to Well: Yes ______ No ______ Well I.D. #: ____________

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: SWMU 6/7
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:

BORING NUMBER: 6/7 SB 15
DATE: 11/10/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND W/SHELLS						
	1-2					BRN	FINE SAND W/SHELLS						
	2-3					BRN	FINE SAND W/SHELL						
	3-4					BRN	FINE SAND W/SHELL						
	4-5					BRN	FINE SAND W/SHELLS						0
	5-6					BRN	FINE SAND W/SHELLS						
	6-7					BRN	FINE SAND W/SHELLS						
	7-8					BRN	FINE SAND W/SHELLS						
	8-9			▽		GRY	FINE SAND W/SHELLS						
	9-10					GRY	FINE SAND W/SHELLS						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: SWMU 6/7
PROJECT NUMBER: 112600436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:

BORING NUMBER: 6/7 SB 16
DATE: 10/11/06
GEOLOGIST: T. COTTENOUR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1				LT	BRN	FINE SAND W/SHELLS						
	1-2				LT	BRN	FINE SAND W/SHELLS						
	2-3				LT	BRN	FINE SAND W/SHELLS						
	3-4				LT	BRN	FINE SAND W/SHELLS						
	4-5				LT	BRN	FINE SAND W/SHELLS						0
	5-6				LT	BRN	FINE SAND W/SHELLS						
	6-7				LT	BRN	FINE SAND W/SHELLS		1" CLAY STRINGER				
	7-8				LT	BRN	FINE SAND W/SHELLS						
	8-9				LT	BRN	FINE SAND W/SHELLS						
	9-10					GRY	FINE SAND W/SHELLS						
	10-11					GRY	FINE SAND W/SHELLS						
	11-12			▽		GRY	FINE SAND W/SHELLS						
	12-13					GRY	FINE SAND W/SHELLS						
	13-14					GRY	FINE SAND W/SHELLS						

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: SWMU 6/7
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:

BORING NUMBER: 6/7 SB17
DATE: 10/11/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND						
	1-2					BRN	FINE SAND						
	2-3					BRN	FINE SAND						
	3-4					BRN	FINE SAND						
	4-5					BRN	FINE SAND						0
	5-6					BRN	FINE SAND						
	6-7					BRN	FINE SAND W/SHELLS						
	7-8					BRN	FINE SAND W/SHELLS						
	8-9				DK	GRY	FINE SAND W/SHELLS						
	9-10					GRY	FINE SAND W/SHELLS						
	10-11					GRY	FINE SAND W/SHELLS						
	11-12			▽		GRY	FINE SAND W/SHELLS						
	12-13					GRY	FINE SAND W/SHELLS						
	13-14					GRY	FINE SAND W/SHELLS						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: SWMU 6/7
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:

BORING NUMBER: 6/7 SB18
DATE: 10/11/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND W/SHELLS						
	1-2					BRN	FINE SAND						
	2-3					BRN	FINE SAND						
	3-4					BRN	FINE SAND W/SHELLS						
	4-5					BRN	FINE SAND W/SHELLS						0
	5-6					BRN	FINE SAND W/SHELLS						
	6-7					BRN	FINE SAND W/SHELLS						
	7-8					BRN	FINE SAND W/SHELLS						
	8-9				DK	GRY	FINE SAND W/SHELLS						
	9-10					GRY	FINE SAND W/SHELLS		2" CLAY STRINGER				

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: SWMU 6/7
PROJECT NUMBER: 112G00436
DRILLING COMPANY: PARTRIDGE
DRILLING RIG:

BORING NUMBER: 6/7 SB19
DATE: 11/10/06
GEOLOGIST: T. COTTENOIR
DRILLER: M. NICHOLSON

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U S C S *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-1					BRN	FINE SAND w/SHELLS						
	1-2					BRN	FINE SAND w/SHELLS						
	2-3					BRN	FINE SAND w/SHELLS						
	3-4					BRN	FINE SAND w/SHELLS						
	4-5					BRN	FINE SAND w/SHELLS						0
	5-6					BRN	FINE SAND w/SHELLS						
	6-7					BRN	FINE SAND w/SHELLS						
	7-8				LT	BRN	FINE SAND w/SHELLS						
	8-9			∇		GRY	FINE SAND w/SHELLS						
	9-10					GRY	FINE SAND w/SHELLS						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm):

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 8
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT08-SB39-01-020707
Sample Location: MPT08-SB39
Sampled By: TERRY COTTENOIR
C.O.C. No.: 2509

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/7/07 Time: 1305 Method: HAND AUGER Monitor Reading (ppm):	0-1 ft	BROWN	FINE SAND w/SHELLS

COMPOSITE SAMPLE DATA:

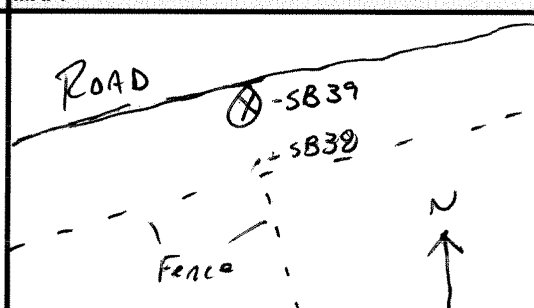
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Dibenzo(a,h)anthracene Indeno(1,2,3-cd)pyrene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cotten[illegible]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:	SWMU 8	Sample ID No.:	MPT08-SB40-01-020707
Project No.:	112G00436	Sample Location:	MPT08-SB40
		Sampled By:	TERRY COTTENOIR
		C.O.C. No.:	2509

[] Surface Soil (SS)
[] Subsurface Soil (SU)
[] Sediment (SD)
[] Other: ________
[] QA Sample Type: ________

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/7/07 Time: 1315 Method: HAND AUGER Monitor Reading (ppm):	0-1 ft	BROWN	FINE SAND W/SHELLS

COMPOSITE SAMPLE DATA:

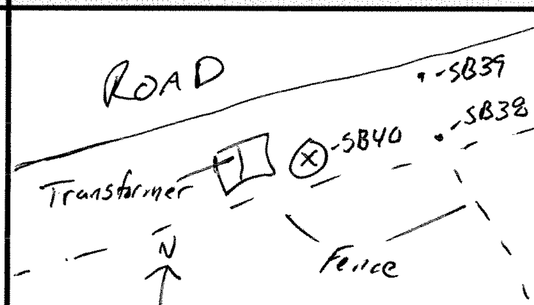
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				NO COMPOSITE SAMPLE COLLECTED

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Dibenzo(a,h)anthracene Indeno(1,2,3-cd)pyrene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 8
Project No.: 112G00436

[] Surface Soil (SS)
[] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT08-SB41-01-020707
Sample Location: MPT08-SB41
Sampled By: TERRY COTTENOIR
C.O.C. No.: 2509

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/7/07 Time: 1310 Method: HAND AUGER Monitor Reading (ppm):	0-1 ft	BROWN	FINE SAND w/SHELLS

COMPOSITE SAMPLE DATA:

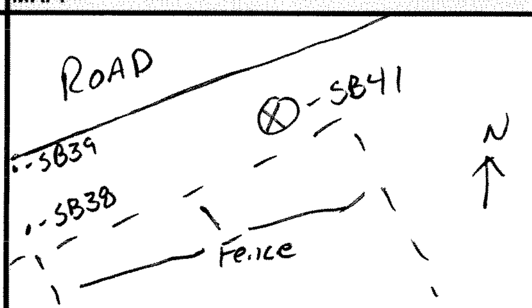
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Dibenzo(a,h)anthracene Indeno(1,2,3-cd)pyrene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cottenoir

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 8
Project No.: 112G00436

[] Surface Soil (SS)
[] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT08-SB42-02-020707
Sample Location: MPT08-SB42
Sampled By: TERRY COTTENOIR
C.O.C. No.: 2509

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 2/7/07	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1130 Method: HAND AUGER Monitor Reading (ppm):	1-2 ft	BLACK	FINE SAND w/SHELLS (WET)

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

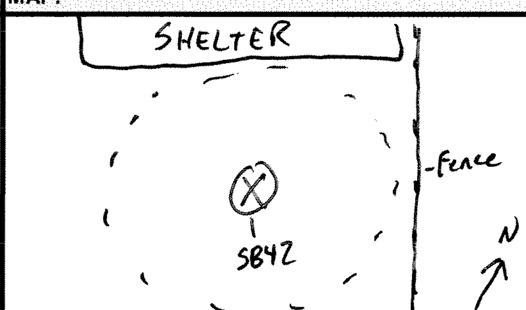
SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Appendix IX VOC	SW-846 8260B	3 x 40 ml; 1x 40ml DI H_2O; MeOH	✓	Katahdin
Appendix IX SVOC	SW-846 8270B	1 x 8 oz. *	✓	Katahdin
TAL Metals plus tin	SW-846 6010B	1 x 2 oz. **	✓	Katahdin
Sulfide	USEPA 376.2	1 x 2 oz.	✓	Katahdin
Cyanide	ILM04.1	1 x 2 oz. **	✓	Katahdin
PCBs	SW-846 8082	1 x 8 oz. *	✓	Katahdin

OBSERVATIONS / NOTES:

* SVOC and PCBs combined in one 8 oz. jar
** Metals and Cyanide combined in one 2 oz. jar

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cottenoir

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:	SWMU 9	Sample ID No.:	MPT09-SB14-09-020707
Project No.:	112G00436	Sample Location:	MPT09-SB14
		Sampled By:	TERRY COTTENOIR
		C.O.C. No.:	2509

- [] Surface Soil (SS)
- [X] Subsurface Soil (SU)
- [] Sediment (SD)
- [] Other:
- [] QA Sample Type:

Type of Sample:
- [] Low Concentration
- [] High Concentration

GRAB SAMPLE DATA:

Date: 2/7/07	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0947	8-9 ft	GRAY	FINE SAND W/SHELLS
Method: DPT			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

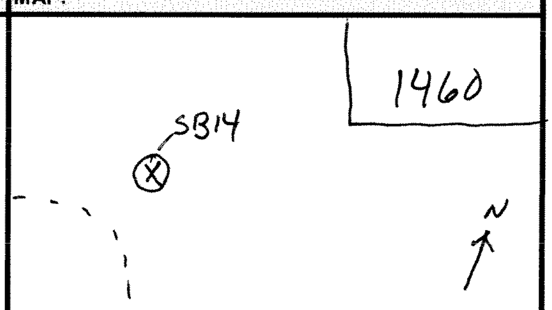
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:	NO COMPOSITE SAMPLE COLLECTED			
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Benzo(a)anthracene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin
Benzo(a)pyrene				
Benzo(b)fluoranthene				
Benzo(k)fluoranthene				
Chrysene				
Dibenzo(a,h)anthracene				
Indeno(1,2,3-cd)pyrene				
2-Methylnaphthalene				
Naphthalene				

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cottenoir

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 9
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT09-SB15-09-020707
Sample Location: MPT09-SB15
Sampled By: TERRY COTTENOIR
C.O.C. No.: 2509

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/7/07 Time: 0959 Method: DPT Monitor Reading (ppm):	8-9 ft	BROWN	FINE SAND w/SHELLS

COMPOSITE SAMPLE DATA:

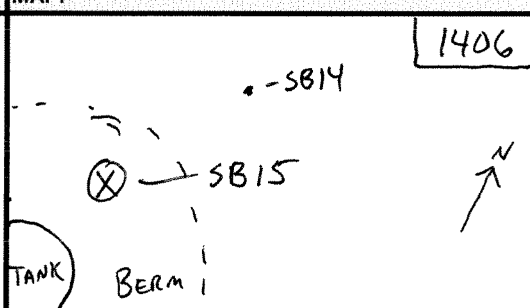
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Dibenzo(a,h)anthracene Indeno(1,2,3-cd)pyrene 2-Methylnaphthalene Naphthalene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): Terry Cottenoir

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:	SWMU 9	Sample ID No.:	MPT09-SB16-09-020707
Project No.:	112G00436	Sample Location:	MPT09-SB16
		Sampled By:	TERRY COTTENOIR
		C.O.C. No.:	2509

[] Surface Soil (SS)
[] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/7/07 Time: 1042 Method: DPT Monitor Reading (ppm):	8-9 ft	GRAY	FINE SAND W/SHELLS

COMPOSITE SAMPLE DATA:

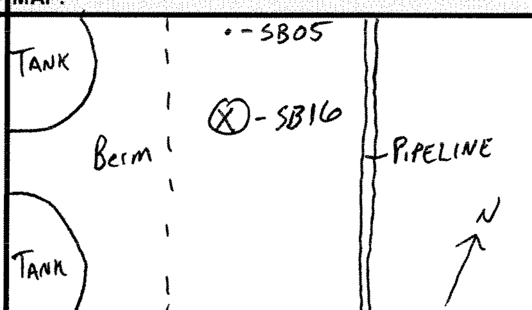
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
2-Methylnaphthalene Naphthalene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cottenoir

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 9
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT09-SB17-09-020707
Sample Location: MPT09-SB17
Sampled By: TERRY COTTENOIR
C.O.C. No.: 2509

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/7/07 Time: 1055 Method: DPT Monitor Reading (ppm):	8-9 ft	BROWN TO GRAY	FINE SAND W/SHELLS

COMPOSITE SAMPLE DATA:

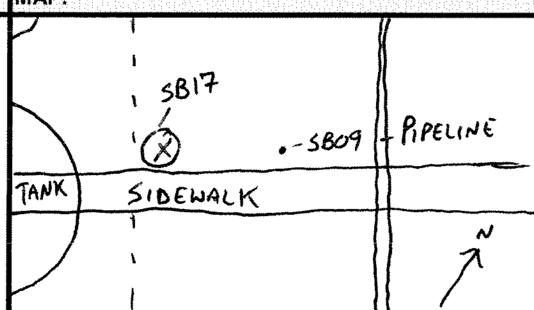
	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
2-Methylnaphthalene Naphthalene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cottenoir

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 51
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT51-SB05-13-020807
Sample Location: MPT51-SB05
Sampled By: TERRY COTTENOIR
C.O.C. No.: 2511

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/8/07 Time: 1130 Method: DPT Monitor Reading (ppm):	12-13 ft	GRAY	FINE SAND w/SHELLS (WET)

COMPOSITE SAMPLE DATA:

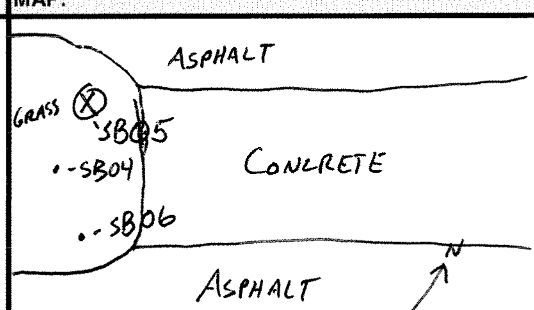
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
1-Methylnaphthalene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin
TRPH	FDEP FL-PRO	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Terry Cottenoir

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:	SWMU 51	Sample ID No.:	MPT51-SB06-13-020807
Project No.:	112G00436	Sample Location:	MPT51-SB06
		Sampled By:	TERRY COTTENOIR
		C.O.C. No.:	2511

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/8/07	12-13 ft		
Time: 1100			
Method: DPT			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

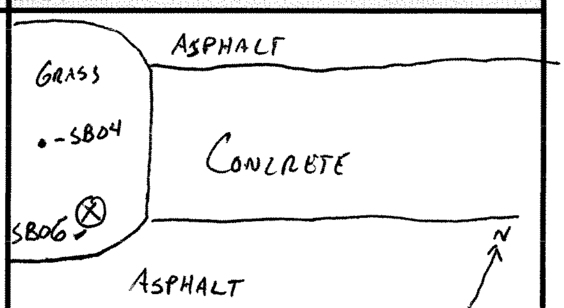
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				NO COMPOSITE SAMPLE COLLECTED

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Acenaphthene	SW-846 8270C SIM or 8310	1 x 4oz.	✓	Katahdin
1-Methylnaphthalene				
2-Methynaphthalene				
Naphthalene				
TRPH	FDEP FL-PRO	1 x 4oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cotten

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 51
Project No.: 112G00436

[] Surface Soil (SS)
[] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT51-SB07-11-020707
Sample Location: MPT51-SB07
Sampled By: TERRY COTTENOIR
C.O.C. No.: 2509

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/7/07 Time: 1423 Method: DPT Monitor Reading (ppm):	10-11 ft	GRAY	FINE SAND w/SHELLS (WET)

COMPOSITE SAMPLE DATA:

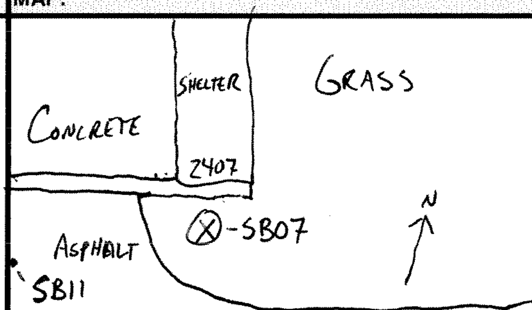
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
1-Methylnaphthalene 2-Methylnaphthalene Naphthalene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin
TRPH	FDEP FL-PRO	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 51
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT51-SB12-11-020807
Sample Location: MPT51-SB12
Sampled By: TERRY COTTENOIR
C.O.C. No.: 2511

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 2/8/07	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1032	10-11 ft	BROWN	FINE SAND W/SHELLS (WET)
Method: DPT			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

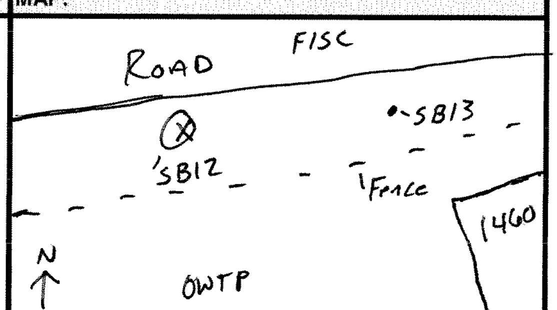
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Acenaphthene 1-Methylnaphthalene 2-Methylnaphthalene Naphthalene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin
TRPH	FDEP FL-PRO	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cottenoir

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:	SWMU 51	Sample ID No.:	MPT51-SB13-11-020707
Project No.:	112G00436	Sample Location:	MPT51-SB13
		Sampled By:	TERRY COTTENOIR
		C.O.C. No.:	2509

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/7/07 Time: 1455 Method: DPT Monitor Reading (ppm):	10-11 ft	GRAY	FINE SAND w/SHELLS (WET)

COMPOSITE SAMPLE DATA:

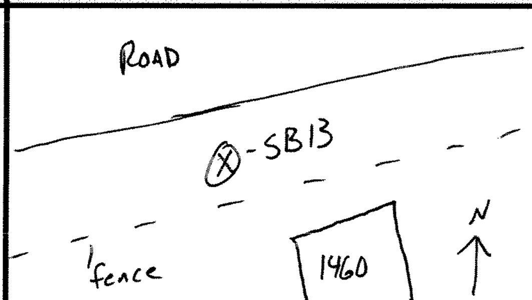
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Acenaphthene 1-Methylnaphthalene 2-Methylnaphthalene Naphthalene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin
TRPH	FDEP FL-PRO	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): Terry Cottenoir

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:	SWMU 8	Sample ID No.:	MPT08-SB39-01-020707
Project No.:	112G00436	Sample Location:	MPT08-SB39
		Sampled By:	TERRY COTTENOIR
		C.O.C. No.:	2509

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/7/07 Time: 1305 Method: HAND AUGER Monitor Reading (ppm):	0-1 ft	BROWN	FINE SAND w/SHELLS

COMPOSITE SAMPLE DATA:

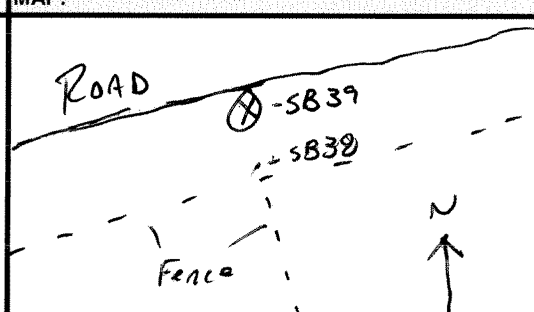
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Dibenzo(a,h)anthracene Indeno(1,2,3-cd)pyrene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cotten[illegible]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:	SWMU 8	Sample ID No.:	MPT08-SB40-01-020707
Project No.:	112G00436	Sample Location:	MPT08-SB40
		Sampled By:	TERRY COTTENOIR
		C.O.C. No.:	2509

[] Surface Soil (SS)
[] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/7/07 Time: 1315 Method: HAND AUGER Monitor Reading (ppm):	0-1 ft	BROWN	FINE SAND W/SHELLS

COMPOSITE SAMPLE DATA:

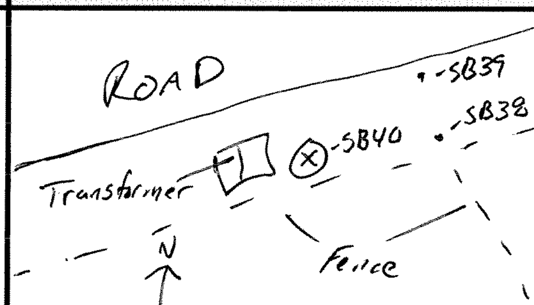
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Dibenzo(a,h)anthracene Indeno(1,2,3-cd)pyrene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 8
Project No.: 112G00436

[] Surface Soil (SS)
[] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT08-SB41-01-020707
Sample Location: MPT08-SB41
Sampled By: TERRY COTTENOIR
C.O.C. No.: 2509

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/7/07	0-1 ft	BROWN	FINE SAND W/SHELLS
Time: 1310			
Method: HAND AUGER			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

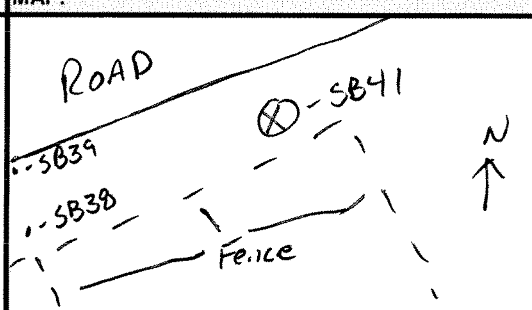
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:	NO COMPOSITE SAMPLE COLLECTED			
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Benzo(a)anthracene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin
Benzo(a)pyrene				
Benzo(b)fluoranthene				
Benzo(k)fluoranthene				
Chrysene				
Dibenzo(a,h)anthracene				
Indeno(1,2,3-cd)pyrene				

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cotten[illegible]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:	SWMU 8	Sample ID No.:	MPT08-SB42-02-020707
Project No.:	112G00436	Sample Location:	MPT08-SB42
		Sampled By:	TERRY COTTENOIR
		C.O.C. No.:	2509

[] Surface Soil (SS)
[] Subsurface Soil (SU)
[] Sediment (SD)
[] Other: ______
[] QA Sample Type: ______

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 2/7/07	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1130	1-2 ft	BLACK	FINE SAND w/SHELLS (WET)
Method: HAND AUGER			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

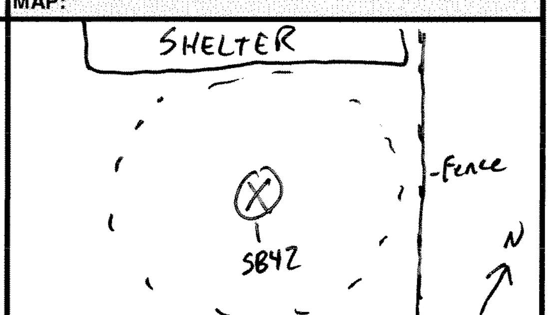
SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Appendix IX VOC	SW-846 8260B	3 x 40 ml; 1x 40ml DI H_2O; MeOH	✓	Katahdin
Appendix IX SVOC	SW-846 8270B	1 x 8 oz. *	✓	Katahdin
TAL Metals plus tin	SW-846 6010B	1 x 2 oz. **	✓	Katahdin
Sulfide	USEPA 376.2	1 x 2 oz.	✓	Katahdin
Cyanide	ILM04.1	1 x 2 oz. **	✓	Katahdin
PCBs	SW-846 8082	1 x 8 oz. *	✓	Katahdin

OBSERVATIONS / NOTES:

* SVOC and PCBs combined in one 8 oz. jar
** Metals and Cyanide combined in one 2 oz. jar

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 9
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT09-SB14-09-020707
Sample Location: MPT09-SB14
Sampled By: TERRY COTTENOIR
C.O.C. No.: 2509

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/7/07 Time: 0947 Method: DPT Monitor Reading (ppm):	8-9 ft	GRAY	FINE SAND W/SHELLS

COMPOSITE SAMPLE DATA:

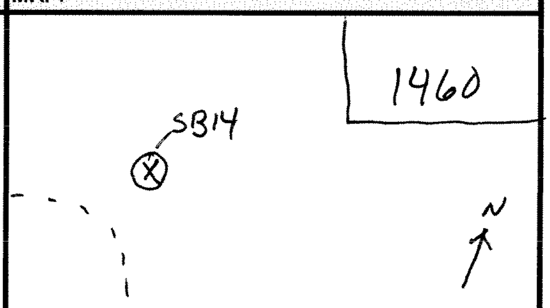
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Benzo(a)anthracene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin
Benzo(a)pyrene				
Benzo(b)fluoranthene				
Benzo(k)fluoranthene				
Chrysene				
Dibenzo(a,h)anthracene				
Indeno(1,2,3-cd)pyrene				
2-Methylnaphthalene				
Naphthalene				

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cottenoir

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:	SWMU 9	Sample ID No.:	MPT09-SB15-09-020707
Project No.:	112G00436	Sample Location:	MPT09-SB15
		Sampled By:	TERRY COTTENOIR
		C.O.C. No.:	2509

- [] Surface Soil (SS)
- [X] Subsurface Soil (SU)
- [] Sediment (SD)
- [] Other:
- [] QA Sample Type:

Type of Sample:
- [] Low Concentration
- [] High Concentration

GRAB SAMPLE DATA:

Date: 2/7/07	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0959	8-9 ft	BROWN	FINE SAND w/SHELLS
Method: DPT			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

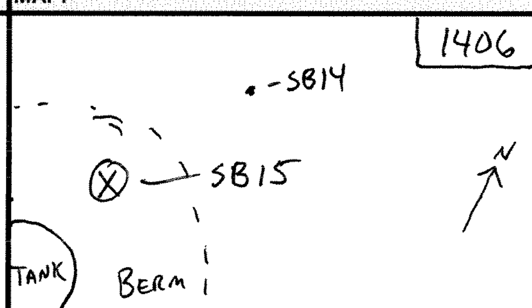
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:	NO COMPOSITE SAMPLE COLLECTED			
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Benzo(a)anthracene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin
Benzo(a)pyrene				
Benzo(b)fluoranthene				
Benzo(k)fluoranthene				
Chrysene				
Dibenzo(a,h)anthracene				
Indeno(1,2,3-cd)pyrene				
2-Methylnaphthalene				
Naphthalene				

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	Terry Cotten[illegible]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 9
Project No.: 112G00436

[] Surface Soil (SS)
[] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT09-SB16-09-020707
Sample Location: MPT09-SB16
Sampled By: TERRY COTTENOIR
C.O.C. No.: 2509

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/7/07 Time: 1042 Method: DPT Monitor Reading (ppm):	8-9 ft	GRAY	FINE SAND W/SHELLS

COMPOSITE SAMPLE DATA:

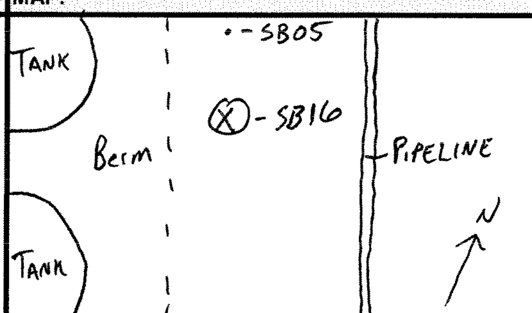
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
2-Methylnaphthalene Naphthalene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Terry Cottenoir

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page_1_ of _1_

Project Site Name: SWMU 9
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT09-SB17-09-020707
Sample Location: MPT09-SB17
Sampled By: TERRY COTTENOIR
C.O.C. No.: 2509

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/7/07 Time: 1055 Method: DPT Monitor Reading (ppm):	8-9 ft	BROWN TO GRAY	FINE SAND W/SHELLS

COMPOSITE SAMPLE DATA:

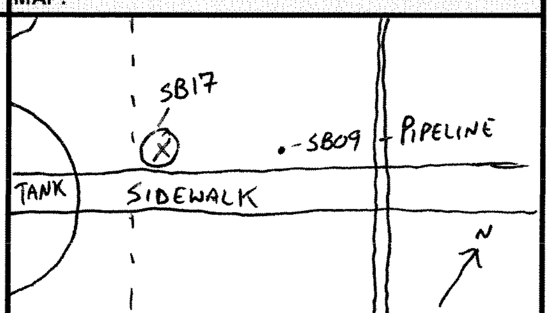
	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
2-Methylnaphthalene Naphthalene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 51
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT51-SB05-13-020807
Sample Location: MPT51-SB05
Sampled By: TERRY COTTENOIR
C.O.C. No.: 2511

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/8/07 Time: 1130 Method: DPT Monitor Reading (ppm):	12-13 ft	GRAY	FINE SAND w/SHELLS (WET)

COMPOSITE SAMPLE DATA:

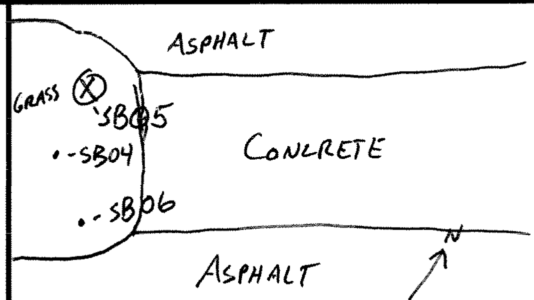
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
1-Methylnaphthalene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin
TRPH	FDEP FL-PRO	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): Terry Cottenoir

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:	SWMU 51	Sample ID No.:	MPT51-SB06-13-020807
Project No.:	112G00436	Sample Location:	MPT51-SB06
		Sampled By:	TERRY COTTENOIR
		C.O.C. No.:	2511

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other: ______
[] QA Sample Type: ______

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 2/8/07	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1100	12-13 ft		
Method: DPT			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

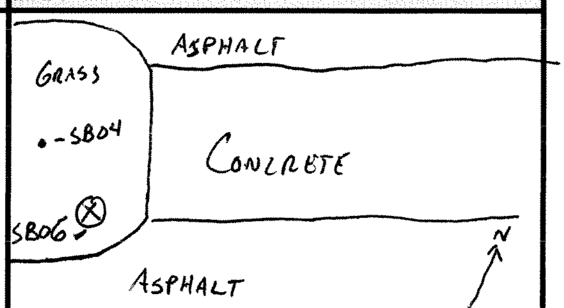
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:	NO COMPOSITE SAMPLE COLLECTED			
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Acenaphthene	SW-846 8270C SIM or 8310	1 x 4oz.	✓	Katahdin
1-Methylnaphthalene				
2-Methynaphthalene				
Naphthalene				
TRPH	FDEP FL-PRO	1 x 4oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cotte[illegible]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 51
Project No.: 112G00436

[] Surface Soil (SS)
[] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT51-SB07-11- 020707
Sample Location: MPT51-SB07
Sampled By: TERRY COTTENOIR
C.O.C. No.: 2509

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/7/07 Time: 1423 Method: DPT Monitor Reading (ppm):	10-11 ft	GRAY	FINE SAND w/SHELLS (WET)

COMPOSITE SAMPLE DATA:

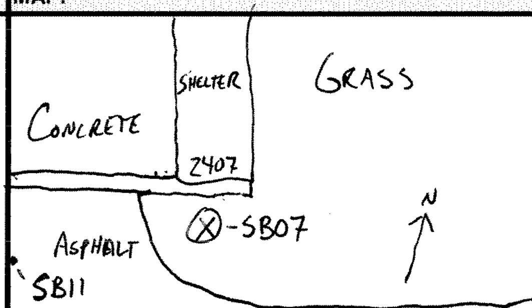
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
1-Methylnaphthalene 2-Methylnaphthalene Naphthalene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin
TRPH	FDEP FL-PRO	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 51
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT51-SB12-11-020807
Sample Location: MPT51-SB12
Sampled By: TERRY COTTENOIR
C.O.C. No.: 2511

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/8/07 Time: 1032 Method: DPT Monitor Reading (ppm):	10-11 ft	BROWN	FINE SAND W/SHELLS (WET)

COMPOSITE SAMPLE DATA:

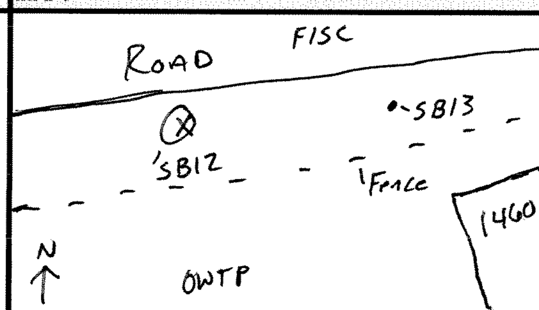
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				NO COMPOSITE SAMPLE COLLECTED

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Acenaphthene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin
1-Methylnaphthalene				
2-Methylnaphthalene				
Naphthalene				
TRPH	FDEP FL-PRO	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): Terry Cottenoir

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 51
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT51-SB13-11-020707
Sample Location: MPT51-SB13
Sampled By: TERRY COTTENOIR
C.O.C. No.: 2509

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 2/7/07 Time: 1455 Method: DPT Monitor Reading (ppm):	10-11 ft	GRAY	FINE SAND W/SHELLS (WET)

COMPOSITE SAMPLE DATA:

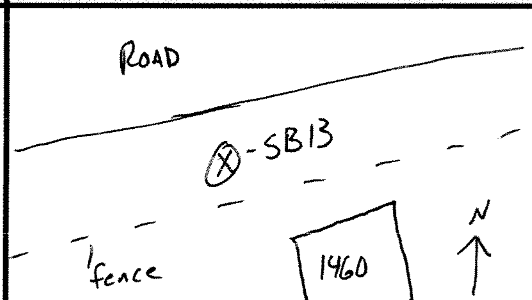
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
Acenaphthene 1-Methylnaphthalene 2-Methylnaphthalene Naphthalene	SW-846 8270C SIM or 8310	1 x 4 oz.	✓	Katahdin
TRPH	FDEP FL-PRO	1 x 4 oz.	✓	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cottenoir

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: SWMU 8
Project No.: 112G00436

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT08-SB38-01-102606
MPT08-SB38-09-102606
Sample Location: 08 SB38
Sampled By: T.C.
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/26/06	0-1 ft	BROWN	FINE SAND W/SHELLS
Time: 1244 / 1320	8-9 ft.	LT. BROWN	FINE SAND W/SHELLS
Method: H.A. / DPT			
Monitor Reading (ppm): NA/NA *			

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

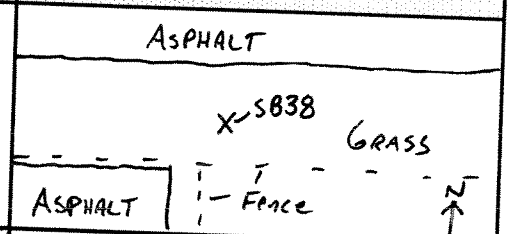
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1244	1320	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz	—	"	"	"
METALS / 6010B, CYANIDE / ILM04.1	1 x 4 oz	—	"	"	"
SVOA / 8270C, PCBs / 8082	1 x 8 oz	—	"	"	"

OBSERVATIONS / NOTES:

* FID NOT WORKING; NO READINGS
LOCATED IN FISC AREA

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cottini

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 8

Project No.: 112G00436

Sample ID No.: MPT08-SB33-01-102606 / MPT08-SB33-09-102606

Sample Location: 08 SB33

Sampled By: T.C.

C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/26/06			
Time: 1450 / 1510	0-1 ft	BROWN	FINE SAND w/SHELLS
Method: H.A. / DPT	8-9 ft.	BROWN	FINE SAND w/SHELLS
Monitor Reading (ppm): NA / NA *			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

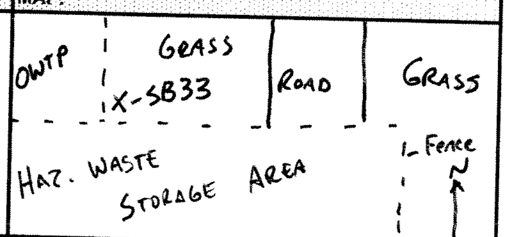
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1450	1510	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz	–	"	"	"
METALS / 6010B, CYANIDE / ILM04.1	1 x 4 oz	–	"	"	"
SVOA / 8270C, PCBs / 8082	1 x 8 oz	–	"	"	"

OBSERVATIONS / NOTES:

* FID NOT WORKING; NO READINGS

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: SWMU 8
Project No.: 112G00436

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT08-SB34-01-102606 / MPT08-SB34-09-102606
Sample Location: 08 SB34
Sampled By: T.C.
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/26/06			
Time: 1530 / 1545	0-1 ft	BROWN	FINE SAND W/SHELLS
Method: H.A. / DPT			
Monitor Reading (ppm): NA/NA*	8-9 ft.	LT. BROWN	FINE SAND W/SHELLS

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

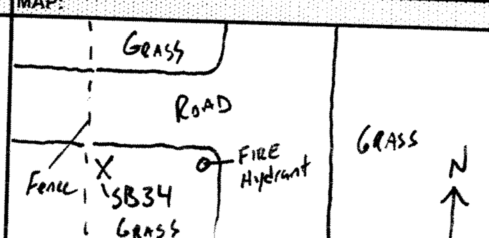
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA/8260B (low soil)	3×40 mL	DI H_2O	1530	1545	KATAHDIN
VOA/8260B (med. soil)	1×40 mL	MeOH	"	"	"
SULFIDE/376.2	1×2 oz	–	"	"	"
METALS/6010B, CYANIDE/ILM04.1	1×4 oz	–	"	"	"
SVOA/8270C, PCBs/8082	1×8 oz	–	"	"	"

OBSERVATIONS / NOTES:

* FID NOT WORKING; NO READINGS

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cottrill

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 8
Project No.: 112G00436

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT08-SB35-01-102606
MPT08-SB35-09-102606
Sample Location: 08SB35
Sampled By: T.C.
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/26/06	0-1 ft.	BROWN	FINE SAND W/SHELLS
Time: 1601 / 1615	8-9 ft.	BROWN	FINE SAND W/SHELLS
Method: H.A. / DPT			
Monitor Reading (ppm): NA / NA *			

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

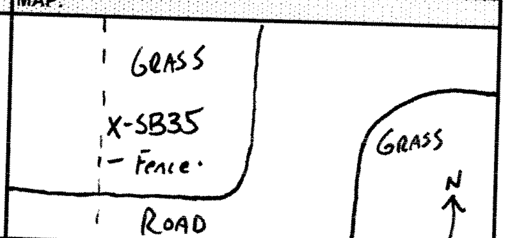
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1601	1615	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz	-	"	"	"
METALS / 6010B, CYANIDE / ILM04.1	1 x 4 oz	-	"	"	"
SVOA / 8270C, PCBs / 8082	1 x 8 oz	-	"	"	"

OBSERVATIONS / NOTES:

* FID NOT WORKING; NO READINGS

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cotterman

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: SWMU 8
Project No.: 112G00436

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT08-SB36-01-102706 / MPT08-SB36-09-102706
Sample Location: 08 SB 36
Sampled By: D.H.
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: ~~0850 / 0925~~ 10/27/06	0-1 ft.	BROWN	FINE SAND W/SHELLS
Time: 0850/0925	8-9 ft.	LT. BROWN	FINE SAND W/SHELLS
Method: H.A. / DPT			
Monitor Reading (ppm): 0.0/0.0			

COMPOSITE SAMPLE DATA:

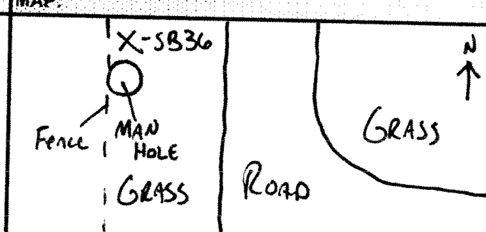
	Time	Depth Interval	Color	Deacription (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3x40 mL	DI H_2O	0850	0925	KATAHDIN
VOA / 8260B (med. soil)	1x40 mL	MeOH	"	"	"
SULFIDE / 376.2	1x2 oz	-	"	"	"
METALS / 6010B, CYANIDE / ILM04.1	1x4 oz	-	"	"	"
SVOA / 8270C, PCBs / 8082	1x8 oz	-	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 8
Project No.: 112G00436

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT08-SB37-01-102706
MPT08-SB37-09-102706
Sample Location: 08 SB37
Sampled By: DH
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/27/06			
Time: 0930 / 0950	0 - 1 ft	LT. BROWN	FINE SAND W/SHELLS
Method: H.A. / DPT			
Monitor Reading (ppm): 0.0 / 0.0	8 - 9 ft.	BROWN	FINE SAND W/SHELLS

COMPOSITE SAMPLE DATA:

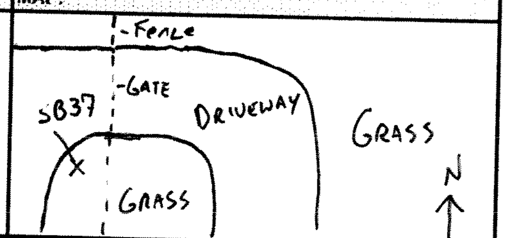
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	0930	0950	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz	–	"	"	"
METALS / 6010B, CYANIDE / ILM04.1	1 x 4 oz	–	"	"	"
SVOA / 8270C, PCBs / 8082	1 x 8 oz	–	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 8
Project No.: 112G00436

Sample ID No.: MPT08-SB32-01-102706 / MPT08-SB32-09-102706
Sample Location: 08 SB32
Sampled By: D.H.
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/27/06	0 - 1 ft	BROWN	FINE SAND W/SHELLS
Time: 1025 / 1049	8 - 9 ft.	BROWN	FINE SAND W/SHELL
Method: H.A. / DPT			
Monitor Reading (ppm): 0.0 / 0.0			

COMPOSITE SAMPLE DATA:

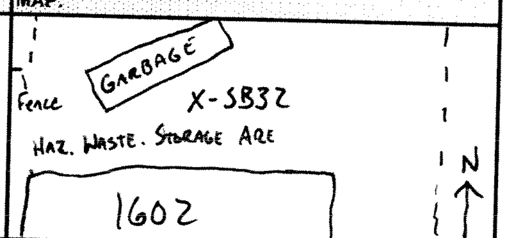
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1025	1049	KATAHDIN
VOA / 8260B (med. soil	1 x 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz	–	"	"	"
METALS / 6010B, CYANIDE / ILM04.1	1 x 4 oz	–	"	"	"
SVOA / 8270C, PCBs / 8082	1 x 8 oz	–	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cottini

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 8
Project No.: 112G00436

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT08-SB29-01-102706 / MPT08-SB29-09-102706
Sample Location: 08 SB29
Sampled By: D. H.
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/27/06			
Time: 1100 / 1120	0-1 ft.	DARK BROWN	FINE SILTY SAND W/SHELLS
Method: H.A. / DPT	8-9 ft.	LIGHT BROWN	FINE SAND W/SHELLS
Monitor Reading (ppm): 0.0/0.0			

COMPOSITE SAMPLE DATA:

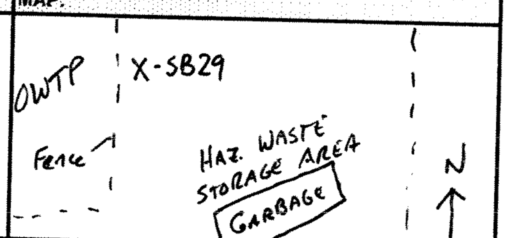
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1100	1120	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz	–	"	"	"
METALS / 6010B, CYANIDE / ILM04.1	1 x 4 oz	–	"	"	"
SVOA / 8270C, PCBs / 8082	1 x 8 oz	–	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cottenain

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: SWMU 8

Project No.: 112G00436

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT08-SB31-01-102706 / MPT08-SB31-09-102706

Sample Location: 08 SB31

Sampled By: D. H.

C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/27/06			
Time: 1149 / 1210	0 - 1 ft.	LIGHT BROWN	FINE SILTY SAND W/SHELLS
Method: H.A. / DPT	8 - 9 ft.	LIGHT BROWN	FINE SAND W/SHELLS
Monitor Reading (ppm): 0.0/0.0			

COMPOSITE SAMPLE DATA:

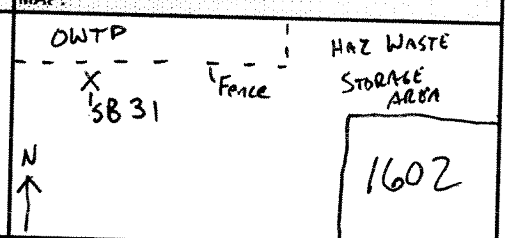
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1149	1210	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz	–	"	"	"
METALS / 6010B, CYANIDE / ILM04.1	1 x 4 oz	–	"	"	"
SVOA / 8270C, PCBs / 8082	1 x 8 oz	–	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Tony Catterini

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 8
Project No.: 112G00436

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT08-SB25-01-102706
MPT08-SB25-09-102706
Sample Location: 08 SB25
Sampled By: D.H.
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 10/27/06	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1354 / 1415			
Method: H.A. / DPT	0-1 ft.	BROWN	FINE SILTY SAND W/SHELLS
Monitor Reading (ppm): 0.0 / 0.0	8-9 ft.	LIGHT BROWN	FINE SAND W/SHELLS

COMPOSITE SAMPLE DATA:

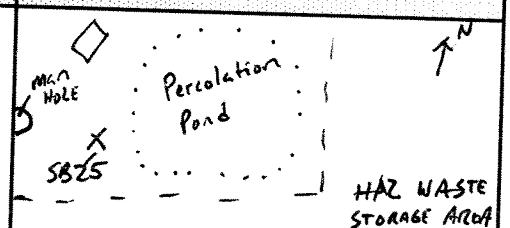
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3× 40 mL	DI H_2O	1354	1415	KATAHDIN
VOA / 8260B (med. soil)	1 × 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 × 2 oz	—	"	"	"
METALS / 6010B, CYANIDE / ILM04.1	1 × 4 oz	—	"	"	"
SVOA / 8270C, PCBs / 8082	1 × 8 oz	—	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: SWMU 8

Project No.: 112G00436

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT08-SB30-01-110206 / MPT08-SB30-09-102706

Sample Location: 08SB30

Sampled By: T.C. / D.H.

C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11/2/06 / 10/27/06	0-1 ft.	BROWN	FINE SILTY SAND W/SHELLS
Time: 0915 / 1505	8-9 ft.	LIGHT BROWN	FINE SAND W/SHELLS
Method: H.A./DPT			
Monitor Reading (ppm): 0.0/0.0			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

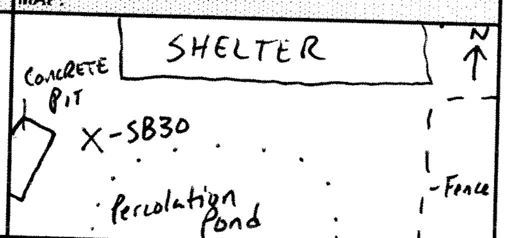
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	0915	1505	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz	—	"	"	"
METALS / 6010B, CYANIDE / ILM04.1	1 x 4 oz	—	"	"	"
SVOA / 8270C, PCBs / 8082	1 x 8 oz	—	"	"	"

OBSERVATIONS / NOTES:

HAD TO RESAMPLE MPT08-SB30-01 BECAUSE JAR BROKE DURING SHIPMENT OF ORIGINAL SAMPLE.

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 8
Project No.: 112G00436

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT08-SB27-01-102706, MPT08-SB27-09-102706
Sample Location: 08 SB27
Sampled By: DH
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/27/06			
Time: 1525 / 1540			
Method: H.A. / DPT	0-1 ft	BROWN	FINE SILTY SAND W/SHELLS
Monitor Reading (ppm): 0.0/0.0	8-9 ft	LIGHT BROWN	FINE SAND W/SHELLS

COMPOSITE SAMPLE DATA:

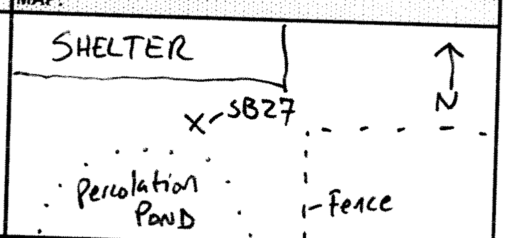
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1525	1540	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz	–	"	"	"
Metals / 6010B, CYANIDE / ILM04.1	1 x 4 oz	–	"	"	"
SVOA / 8270C, PCBs 8082	1 x 8 oz	–	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cotter

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 9
Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

MPT09-SB07-01-~~103006~~ 103006
Sample ID No.: MPT09-SB07-09-103006
Sample Location: 09 SB07
Sampled By: D. H.
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/30/06			
Time: 0945 / 1010	0 - 1 ft.	BROWN	FINE SAND W/SHELLS
Method: H.A. / DPT			
Monitor Reading (ppm): 0.0 / 0.0	8 - 9 ft.	BROWN	FINE SAND W/SHELLS

COMPOSITE SAMPLE DATA:

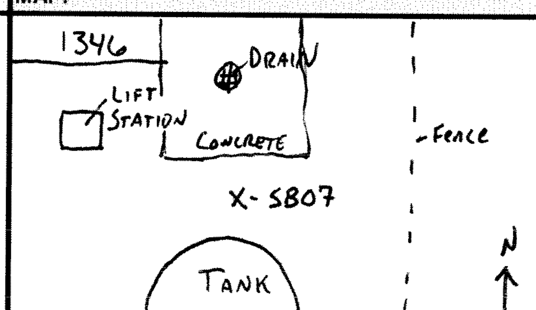
	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: NA				
Method: NA				No composites collected
Monitor Readings (Range in ppm): NA				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		LAB
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	0945	1010	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz	-	"	"	"
METALS / 6010B, CYANIDE / ILM04.1	1 x 4 oz	-	"	"	"
SVOA / 8270C, PCBs / 8082	1 x 8 oz	-	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 9
Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT09-SB11-01-103006 / MPT09-SB11-09-103006
Sample Location: 09 SB11
Sampled By: D. H.
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/30/06	0-1 ft	Brown	Fine Sand w/shells
Time: 1015 / 1045	8-9 ft.	Brown	Fine Sand w/shells
Method: ~~DPT~~ H.A. / DPT			
Monitor Reading (ppm): 0.0 / 0.0			

COMPOSITE SAMPLE DATA:

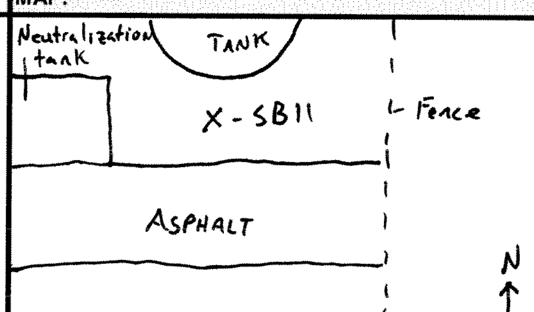
	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: NA				
Method: NA		No composites collected		
Monitor Readings (Range in ppm): NA				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		LAB
VOA / 8260B (low soil)	3×40 mL	DI H_2O	1015	1045	Katahdin
VOA / 8260B (med. soil)	1×40 mL	MeOH	"	"	"
Sulfide / 376.2	1×2 oz	–	"	"	"
Metals / 6010B, Cyanide / ILM04.1	1×4 oz	–	"	"	"
SVOA / 8270C, PCBs / 8082	1×8 oz	–	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Terry Cothin

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 9
Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT09-SB12-01-103006 / MPT09-SB12-09-103006
Sample Location: 09SB12
Sampled By: D.H.
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/30/06	0 - 1 ft.	BROWN	FINE SAND w/SHELLS
Time: 1055 / 1120			
Method: [redacted] H.A. / DPT	8 - 9 ft.	BROWN	FINE SAND w/SHELLS
Monitor Reading (ppm): 0.0/0.0			

COMPOSITE SAMPLE DATA:

	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: NA				
Method: NA				
Monitor Readings (Range in ppm): NA				

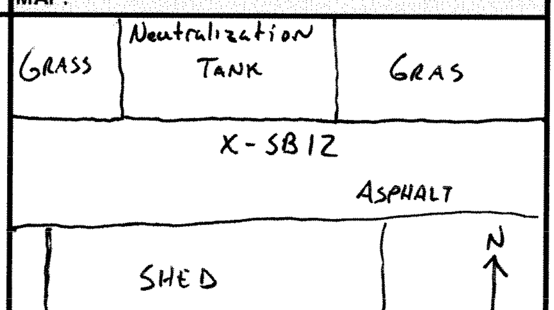
No composites collected

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		LAB
VOA / 8260B (low soil)	3x40 mL	DI H_2O	1055	1120	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz	–	"	"	"
Metals / 6010B, CYANIDE / ILM04.1	1 x 4 oz	–	"	"	"
SVOA / 8270C, PCBs / 8082	1 x 8 oz	–	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [illegible]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: SWMU 9
Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT09-SB10-01-103006
MPT09-SB10-09-103006
Sample Location: 09SB10
Sampled By: D. H.
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/30/06	0-1 ft	BROWN	SAND (FINE) W/SHELLS
Time: 1300 / 1320			
Method: ~~DPT~~ H.A. / DPT	8-9 ft.	BROWN	FINE SAND W/SHELLS
Monitor Reading (ppm): 0.0/0.0			

COMPOSITE SAMPLE DATA:

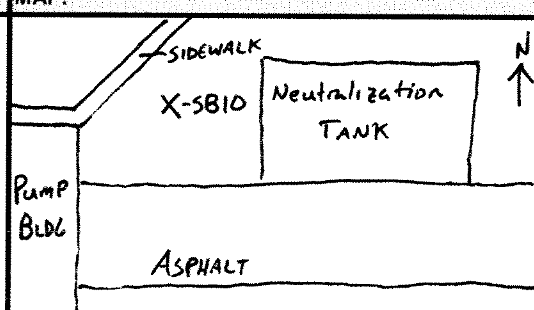
	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: NA				
Method: NA				No composites collected
Monitor Readings (Range in ppm): NA				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		LAB
VOA /8260B (low soil)	3 x 40 mL	DI H_2O	1300	1320	KATAHDIN
VOA /8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE /376.2	1 x 2 oz	-	"	"	"
METALS /6010B, CYANIDE /ILM04.1	1 x 4 oz	-	"	"	"
SVOA /8270C, PCBs /8082	1 x 8 oz	-	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 9
Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT09-SB08-01-103006
MPT09-SB08-09-103006
Sample Location: 09SB08
Sampled By: D.H.
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/30/06	0-1 ft.	BROWN	FINE SAND W/SHELLS
Time: 1330/1340	8-9 ft.	BROWN	FINE SAND W/SHELLS
Method: H.A./DPT			
Monitor Reading (ppm): 0.0/0.0			

COMPOSITE SAMPLE DATA:

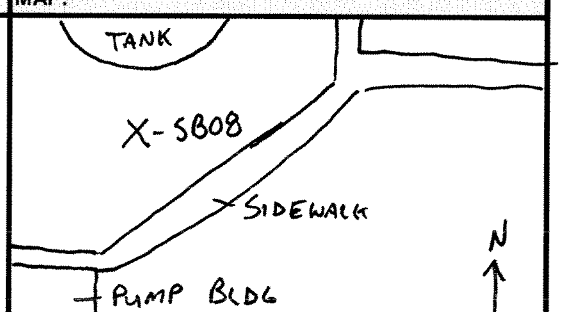
	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: NA				
Method: NA				No composites collected
Monitor Readings (Range in ppm): NA				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		LAB
VOA/8260B (low soil)	3 x 40 mL	DI H_2O	1330	1340	KATAHDIN
VOA/8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE/376.2	1 x 2 oz	–	"	"	"
METALS/6010B, CYANIDE/ILM04.1	1 x 4 oz	–	"	"	"
SVOA/8270C, PCBs/8082	1 x 8 oz	–	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 9

Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT09-SB02-01-103006 / MPT09-SB02-09-103006

Sample Location: 09SB02

Sampled By: D.H.

C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/30/06	0 - 1	BROWN	FINE SAND w/SHELLS
Time: 1350 / 1405			
Method: ~~[illegible]~~ H.A. / DPT	8 - 9	BROWN	FINE SAND w/SHELLS
Monitor Reading (ppm): 0.0/0.0			

COMPOSITE SAMPLE DATA:

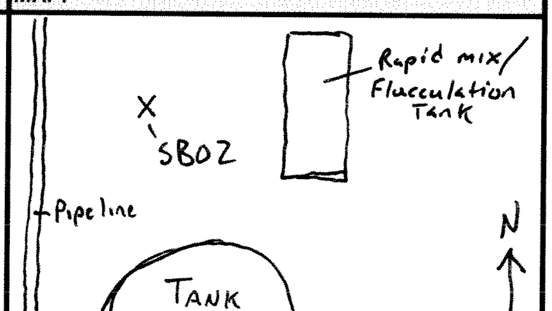
	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: NA				No composites collected
Method: NA				
Monitor Readings (Range in ppm): NA				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		LAB
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1350	1405	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz	-	"	"	"
METALS / 6010B, CYANIDE / ILM04.1	1 x 4 oz	-	"	"	"
SVOA / 8270C, PCBs 8082	1 x 8 oz	-	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 9
Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT09-SB03-01-103006
MPT09-SB03-09-103006
Sample Location: 09 SB03
Sampled By: D.H.
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/30/06	0-1 ft	BROWN	FINE SAND W/SHELLS
Time: 1420 / 1440			
Method: [redacted] H.A. / DPT	8-9 ft.	BROWN	FINE SAND W/SHELLS
Monitor Reading (ppm): 0.0/0.0			

COMPOSITE SAMPLE DATA:

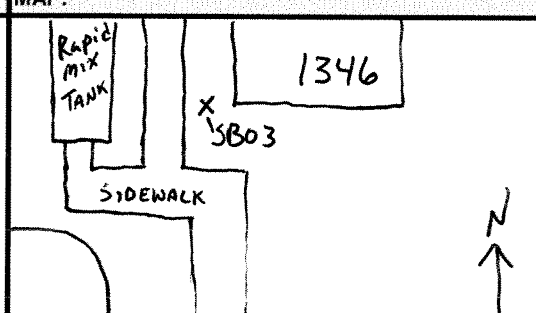
	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: NA				
Method: NA				No composites collected
Monitor Readings (Range in ppm): NA				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		LAB
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1420	1440	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz	-	"	"	"
METALS / 6010B, CYANIDE / ILM04.1	1 x 4 oz	-	"	"	"
SVOA / 8270C, PCBs / 8082	1 x 8 oz	-	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD
Duplicate ID No.:

Signature(s): Terry Cotter

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: SWMU 9

Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT09-SB04-01-103006 / MPT09-SB04-09-103006

Sample Location: 09 SB04

Sampled By: D.H.

C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/30/06	0 - 1 ft.	BROWN	FINE SAND w/SHELLS
Time: 1500 / 1540			
Method: ~~[illegible]~~ H.A. / DPT	8 - 9 ft.	BROWN	FINE SAND w/SHELLS
Monitor Reading (ppm): 0.0/0.0			

COMPOSITE SAMPLE DATA:

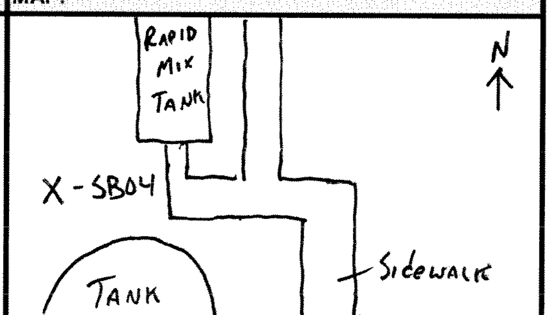
	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: NA				
Method: NA				No composites collected
Monitor Readings (Range in ppm): NA				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected		LAB
VOA / 8260B (low soil)	3 x 40 mL DI H_2O	1500	1540	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz -	"	"	"
METALS / 6010B, CYANIDE / ILM04.1	1 x 4 oz -	"	"	"
SVOA / 8270C, PCBs / 8082	1 x 8 oz -	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:	SWMU 9	Sample ID No.:	MPT09-SB01-01-110106 MPT09-SB01-09-110106
Project No.:	112600436	Sample Location:	09SB01
		Sampled By:	D.H.
		C.O.C. No.:	

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11/1/06			
Time: 0956 /	0-1 ft	DARK BROW	FINE SAND w/SHELLS
Method: H.A. / DPT			
Monitor Reading (ppm): 0.0/0.0	8-9 ft	LT. BROWN	FINE SAND w/SHELLS

COMPOSITE SAMPLE DATA:

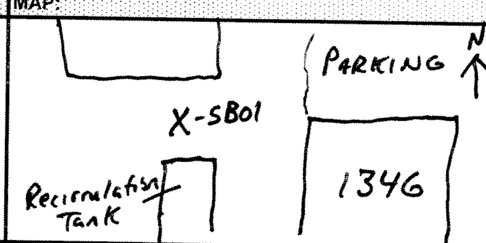
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	0956	1015	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz	-	"	"	"
Metals / 6010B, CYANIDE / ILM04.1	1 x 4 oz	-	"	"	"
SVOA / 8270C, PCBs / 8082	1 x 8 oz	-	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: SWMU 9
Project No.: 112600436

Sample ID No.: MPT09-SB09-01-110106
MPT09-SB09-09-110106
Sample Location: 09SB09
Sampled By: D.H.
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11/1/06			
Time: 1020 / 1040	0 - 1 ft	DK. BROWN	FINE SAND W/SHELLS
Method: H.A. / DPT	8 - 9 ft	GRAY	FINE SAND
Monitor Reading (ppm): 0.0 / 48.6			

COMPOSITE SAMPLE DATA:

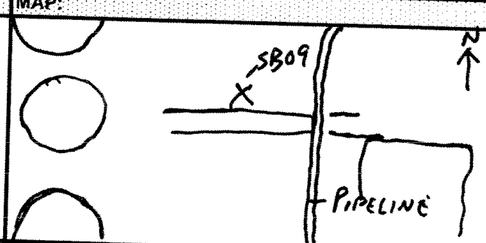
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1020	1040	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz	–	"	"	"
Metals / 6010B, CYANIDE / ILM04.1	1 x 4 oz	–	"	"	"
SVOA / 8270C, PCBs / 8082	1 x 8 oz	–	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Tony Collins

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: SWMU 9
Project No.: 112G00436

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT09-SB05-01-110106 / MPT09-SB05-09-110106
Sample Location: 09SB05
Sampled By: D. H.
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11/1/06			
Time: 1050 / 1150			
Method: H.A. / DPT	0-1 ft	BROWN	FINE SAND W/SHELLS
Monitor Reading (ppm): 0.0 / 96.9	8-9 ft	GRAY	FINE SAND W/SHELLS

COMPOSITE SAMPLE DATA:

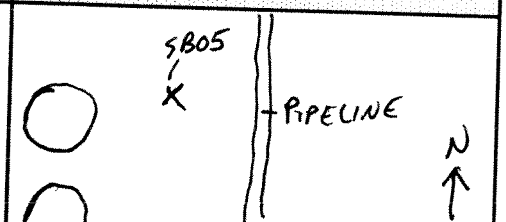
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1050	1150	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz	—	"	"	"
Metals / 6010B, CYANIDE / ILM04.1	1 x 4 oz	—	"	"	"
SVOA / 8270C, PCBs / 8082	1 x 8 oz	—	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: SWMU 9
Project No.: 112G00436

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT09-SB06-01-110106 / MPT09-SB06-09-110106
Sample Location: 09SB06
Sampled By: D.H.
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11/1/06	0 - 1 ft	BROWN	FINE SAND W/SHELLS
Time: 1200 / 1220	8 - 9 ft	BROWN	FINE SAND W/SHELLS
Method: H.A. / DPT			
Monitor Reading (ppm): 0.0 / 0.0			

COMPOSITE SAMPLE DATA:

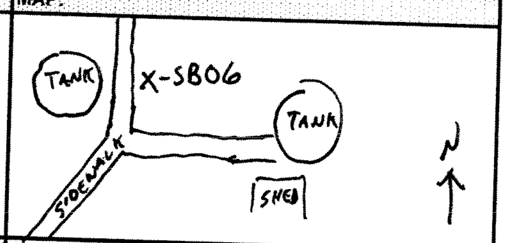
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3x40mL	DI H_2O	1200	1220	KATAHDIN
VOA / 8260B (med. soil)	1x40mL	MeOH	"	"	"
SULFIDE / 376.2	1x2oz	–	"	"	"
Metals / 6010B, CYANIDE / ILM04.1	1x4oz	–	"	"	"
SVOA / 8270C, PCBs / 8082	1x8oz	–	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cottrill

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 9
Project No.: 112G00436

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT09-SB13-01-110106
MPT09-SB13-09-110106
Sample Location: 09SB13
Sampled By: D.H.
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11/1/06	0-1 ft.	BROWN	FINE SAND W/SHELLS
Time: 1400 / 1425	8-9 ft.	BROWN	FINE SAND W/SHELLS
Method: H.A. / DPT			
Monitor Reading (ppm): 0.0 / 113.0			

COMPOSITE SAMPLE DATA:

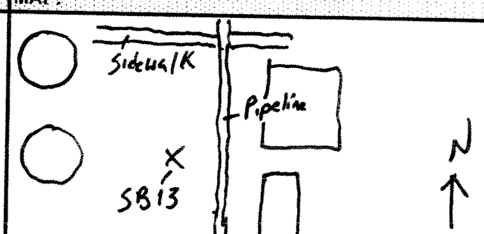
	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1400	1425	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
SULFIDE / 376.2	1 x 2 oz	-	"	"	"
METALS / 6010B, CYANIDE / ILM04.1	1 x 4 oz	-	"	"	"
SVOA / 8270C, PCBs / 8082	1 x 8 oz	-	"	"	"

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 11
Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT11-SB06-01-102506 / MPT11-SB06-13-102506
Sample Location: 11 SB06
Sampled By: T.C.
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/25/06	0-1 ft.	BROWN	FINE SAND W/SHELLS
Time: 1235 / 1300			
Method: H.A. / DPT	12-13 ft.	GRAY	FINE SAND W/SHELLS
Monitor Reading (ppm): NA/NA *			

COMPOSITE SAMPLE DATA:

	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: NA				
Method: NA				
Monitor Readings (Range in ppm): NA				

No composites collected

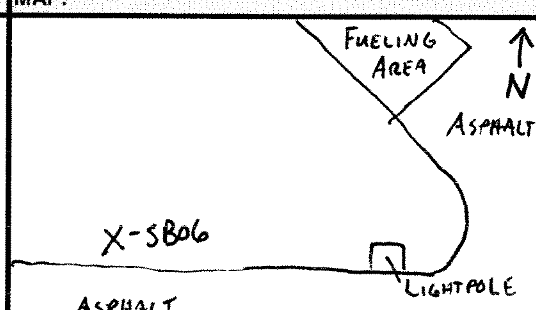
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		LAB
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1235	1300	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
METALS / 6010B	1 x 2 oz	–	"	"	"
PCBs / 8082	1 x 4 oz	–	"	"	"
PAH/8270C or 8310, SVOA/8270C, TRPH/FL-PRO	1 x 8 oz	–	"	"	"

OBSERVATIONS / NOTES:

* FID NOT WORKING; NO READING
LOCATED IN FISC AREA

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cotterman

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 11

Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT11-SB03-01-102506
MPT11-SB03-13-102506

Sample Location: 11 SB03

Sampled By: T.C.

C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/25/06	~~Brw~~ 0-1 ft	BROWN	FINE SAND W/SHELLS
Time: 1318 / 1339			
Method: ~~[illegible]~~ H.A./DPT	12-13 ft	GRAY	FINE SAND W/SHELLS
Monitor Reading (ppm): NA/NA *			

COMPOSITE SAMPLE DATA:

	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: NA				
Method: NA				
Monitor Readings (Range in ppm): NA			No composites collected	

SAMPLE COLLECTION INFORMATION:

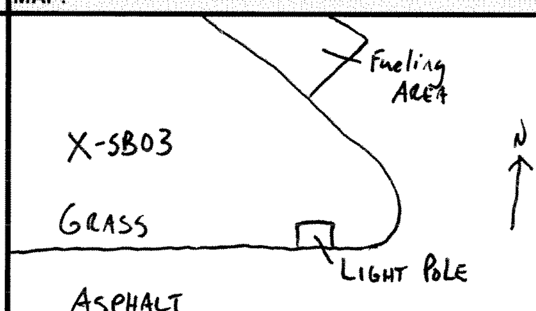
Analysis	Container Requirements		Collected		LAB
VOA/8260B (low soil)	3 x 40 mL	DI H_2O	1318	1339	KATAHDIN
VOA/8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
METALS/6010B	1 x 2 oz	-	"	"	"
PCBs/8280	1 x 4 oz	-	"	"	"
PAH/8270C or 8310, SVOA/8270C, TRPH/FL-PRO	1 x 8 oz	-	"	"	"

OBSERVATIONS / NOTES:

* FID NOT WORKING; NO READING

LOCATED IN FISC AREA

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 11
Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT11-SB01-01-102506 / MPT11-SB01-13-102506
Sample Location: 11 SB01
Sampled By: T.C.
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/25/06	0 - 1 ft.	BROWN	FINE SAND W/SHELLS
Time: 1355 / 1418	12 - 13 ft.	GRAY	FINE SAND W/SHELLS
Method: ~~DPT~~ H.A. / DPT			
Monitor Reading (ppm): NA / NA *			

COMPOSITE SAMPLE DATA:

	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: NA				
Method: NA				
Monitor Readings (Range in ppm): NA	No composites collected			

SAMPLE COLLECTION INFORMATION:

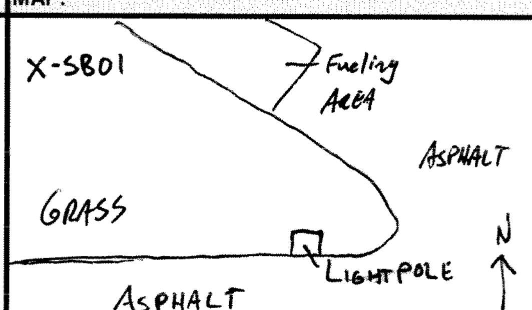
Analysis	Container Requirements		Collected		LAB
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1355	1418	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
METALS / 6010B	1 x 2 oz	–	"	"	"
PCBs / 8082	1 x 4 oz	–	"	"	"
PAH / 8270C or 8310, SVOA / 8270C, TRPH / FL-PRO	1 x 8 oz	–	"	"	"

OBSERVATIONS / NOTES:

*FID NOT WORKING; NO READINGS

LOCATED IN FISC AREA

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 11
Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT11-SB07-01-102506 / MPT11-SB07-11-102506
Sample Location: 11 SB07
Sampled By: T.C.
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 10/25/06	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1432 / 1453	0-1 ft	BROWN	FINE SAND W/SHELLS
Method: H.A. / DPT			
Monitor Reading (ppm): NA / NA *	10-11 ft	LT. BROWN	FINE SAND W/SHELLS

COMPOSITE SAMPLE DATA:

Date: NA	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: NA				
Monitor Readings (Range in ppm): NA				No composites collected

SAMPLE COLLECTION INFORMATION:

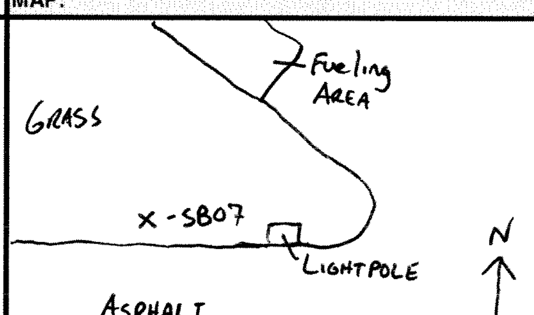
Analysis	Container Requirements		Collected		LAB
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1432	1453	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
METALS / 6010B	1 x 2 oz	-	"	"	"
PCBs / 8280	1 x 4 oz	-	"	"	"
PAH/8270C or 8280, SVOA/8270C, TRPH/FL-PRO	1 x 8 oz	-	"	"	"

OBSERVATIONS / NOTES:

* FID NOT WORKING; NO READINGS

LOCATED IN FISC AREA

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: SWMU 11
Project No.: 112G00436

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT11-SB04-01-102606 / MPT11-SB04-11-102606
Sample Location: 11 SB04
Sampled By: T.C.
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/26/06	0-1 ft.	BROWN	FINE SAND W/SHELLS
Time: 0901 / 0925	10-11 ft.	BROWN	FINE SAND W/SHELLS
Method: H.A. / DPT			
Monitor Reading (ppm): NA / NA*			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

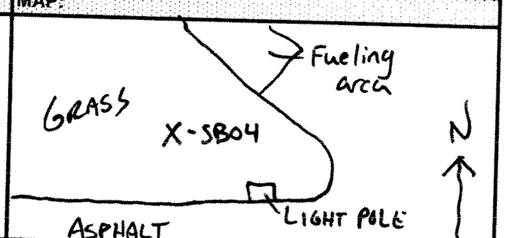
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	0901	0925	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
METALS / 6010B	1 x 2 oz	-	"	"	"
PCBs / 8082	1 x 4 oz	-	"	"	"
PAH/8270C or 8310, SVOA/8270C, TRPH/FL-PRO	1 x 8 oz	-	"	"	"

OBSERVATIONS / NOTES:

*FID NOT WORKING; NO READING
LOCATED IN FISC AREA

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cotterini

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 11
Project No.: 112G00436

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT11-SB02-01-102606 MPT11-SB02-11-102606
Sample Location: 11 SB02
Sampled By: T.C.
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/26/06			
Time: 0939 / 1003	0-1 ft.	BROWN	FINE SAND w/SHELLS
Method: H.A. /DPT			
Monitor Reading (ppm): NA/NA *	10-11 ft.	LT. BROWN	FINE SAND w/SHELLS

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

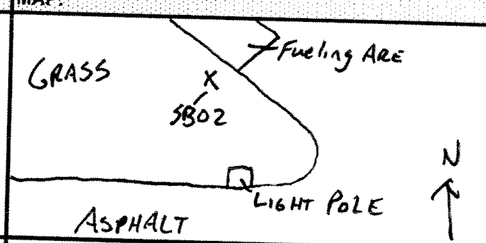
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA/8260B (low soil)	3 x 40 mL	DI H_2O	0939	1003	KATAHDIN
VOA/8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
METALS/6010B	1 x 2 oz	–	"	"	"
PCBs/8082	1 x 4 oz	–	"	"	"
PAH/8270C or 8310, SVOA/8270C, TRPH/FL-PRO	1 x 8 oz	–	"	"	"

OBSERVATIONS / NOTES:

* FID NOT WORKING; NO READING
LOCATED IN FISC AREA

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): Terry Cotton

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 11
Project No.: 112G00436

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT11-SB08-01-102606
MPT11-SB08-11-102606
Sample Location: 11SB08
Sampled By: T.C.
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/26/06			
Time: 1015/1130	0-1 ft	BROWN	FINE SAND W/SHELLS
Method: H.A./DPT	10-11 ft	BROWN	FINE SAND W/SHELLS
Monitor Reading (ppm): NA/NA*			

COMPOSITE SAMPLE DATA:

	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				

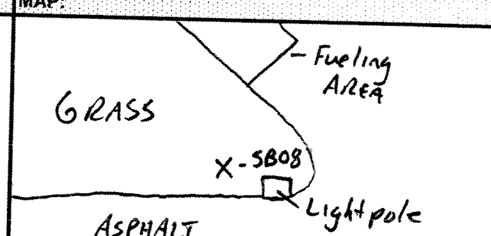
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA/8260B (low soil)	3 x 40 mL	DI H_2O	1015	1130	KATAHDIN
VOA/8260B (med. soil)	1 x 40 mL	MeOH	"	"	
METALS/6010B	1 x 2oz	–	"	"	
PCBs/8082	1 x 4oz	–	"	"	
PAH/8270C or 8310, SVOA/8270C, TRPH/FL-PRO	1 x 8oz	–	"	"	

OBSERVATIONS / NOTES:

*FID NOT WORKING; NO READINGS
LOCATED IN FISC AREA

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: SWMU 11
Project No.: 112G00436

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT11-SB05-01-102606 MPT11-SB05-11-102606
Sample Location: 11 SB05
Sampled By: T.C.
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/26/06			
Time: 1150 / 1205	0 - 1 ft	Brown	Fine sand w/shells
Method: H.A. / DPT	10 - 11 ft	Brown	Fine sand w/shells
Monitor Reading (ppm): NA / NA *			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

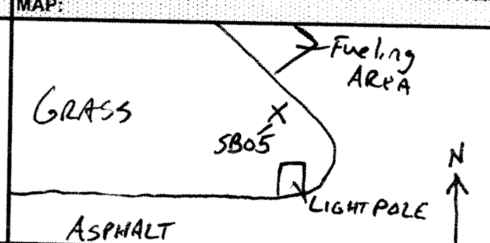
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		Other
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1150	1205	Katahdin
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
Metals / 6010B	1 x 2 oz	–	"	"	"
PCBs / 8082	1 x 4 oz	–	"	"	"
PAH / 8270C or 8310, SVOA / 8270C, TRPH / FL-PRO	1 x 8 oz	–	"	"	"

OBSERVATIONS / NOTES:

* FID Not Working; No Readings
Located in FISC Area

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cotter

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: SWMU 51
Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

MPT51-SB11-01-102406
Sample ID No.: MPT51-SB11-11-102406
Sample Location: 51 SB11
Sampled By: T.C.
C.O.C. No.: 2004102401

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/24/06			
Time: 0947/ 1057	0 - 1 ft.	BROWN	FINE SAND W/SHELLS
Method: HAND AUGER /DPT			
Monitor Reading (ppm): 0.0 /0.0	10 - 11 ft.	BROWN	CLAYEY SAND

COMPOSITE SAMPLE DATA:

	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: NA				
Method: NA		No composites collected		
Monitor Readings (Range in ppm): NA				

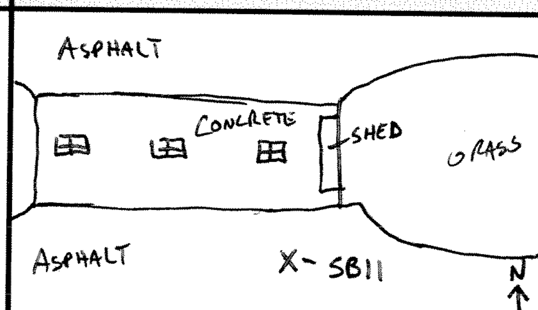
SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements		Collected		LAB
VOA (low soil)	8260B	3 x 40 mL	DI H_2O	0947	1057	KATAHDIN
VOA (med. soil)	8260B	1 x 40 mL	MeOH	"	"	"
Metals	6010B	1 x 2 oz	–	"	"	"
PCBs	8082	1 x 4 oz	–	"	"	"
PAH/8270C or 8310, SVOA/8270C, TRPH/FL-PRO		1 x 8 oz	–	"	"	

OBSERVATIONS / NOTES:

LOCATED IN FISC AREA

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cottenois

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 51
Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT51-SB10-01-102406 / MPT51-SB10-11-102406
Sample Location: 51 SB10
Sampled By: T. COTTENOIR
C.O.C. No.: 2004102401

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/24/06			
Time: 1131 / ~~1235~~ 1141	0 - 1 ft	BROWN	FINE SAND W/ SHELLS
Method: HAND AUGER / DPT			
Monitor Reading (ppm): 0.0 / 598	10 - 11 ft	LIGHT BROWN	CLAYEY SAND

COMPOSITE SAMPLE DATA:

	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: NA				
Method: NA				
Monitor Readings (Range in ppm): NA	No composites collected			

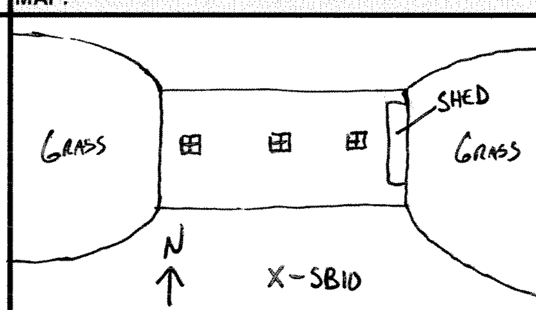
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected 1141		LAB
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1131	~~1235~~	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
Metals / 6010B	1 x 2 oz	-	"	"	"
PCBs / 8082	1 x 4 oz	-	"	"	"
PAH / 8270C or 8310, SVOA / 8270C, TRPH / FL-PRO	1 x 8 oz	-	"	"	"

OBSERVATIONS / NOTES:

LOCATED IN FISC AREA

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cottenoir

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:	SWMU 51	Sample ID No.:	MPT51-SB09-01-102406 MPT51-SB09-13-102406
Project No.:	112G00436	Sample Location:	51 SB09
		Sampled By:	T. C.
		C.O.C. No.:	2004102401

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 10/24/06	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1235 / 1250 Method: ~~DPT~~ HAND AUGER / DPT	0 - 1 ft.	BROWN	FINE SAND W/SHELLS
Monitor Reading (ppm): 0.0 / 24013	12 - 13 ft.	GRAY	FINE SAND

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
NA				
Method: NA			No composites collected	
Monitor Readings (Range in ppm): NA				

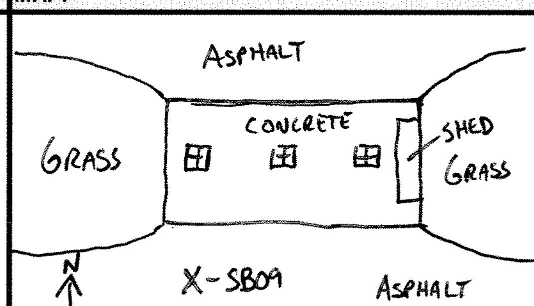
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		LAB
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1235	1250	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
Metals / 6010B	1 x 2 oz	-	"	"	"
PCBs / 8082	1 x 4 oz	-	"	"	"
PAH/8270C or 8310, SVOA/8270C, TRPH/FL-PRO	1 x 8 oz	-	"	"	"

OBSERVATIONS / NOTES:

LOCATED IN FISC AREA

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 51

Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT51-SB01-01-102406, MPT51-SB01-13-102406

Sample Location: 51 SB01

Sampled By: T.C.

C.O.C. No.: 2004102401

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/24/06			
Time: 1309 / 1316	0-1 ft.	BROWN	FINE SAND w/SHELLS
Method: ~~DPT~~ H.A. / DPT			
Monitor Reading (ppm): 0.0 / 595	12-13 ft.	GRAY	FINE SAND

COMPOSITE SAMPLE DATA:

	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: NA				
Method: NA				
Monitor Readings (Range in ppm): NA	No composites collected			

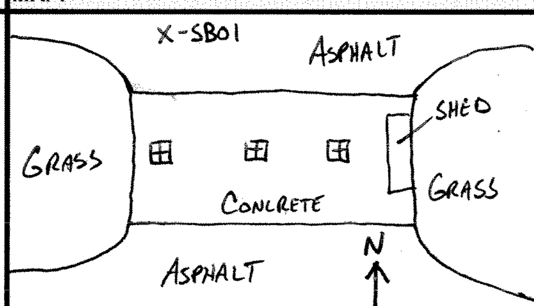
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected		LAB
VOA/8260B (low soil)	3 x 40 mL DI H_2O	1309	1316	KATAHDIN
VOA/8260 (med soil)	1 x 40 mL MeOH	"	"	"
Metals/6010B	1 x 2 oz –	"	"	"
PCBs/8082	1 x 4 oz –	"	"	"
PAH/8270C or 8310, SVOA/8270C, TRPH/FL-PRO	1 x 8 oz –	"	"	"

OBSERVATIONS / NOTES:

LOCATED IN FISC AREA

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 51
Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT51-SB02-01-102406 / MPT51-SB02-11-102406
Sample Location: 51 SB02
Sampled By: T.C.
C.O.C. No.: 2004102401

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/24/06			
Time: 1353 / 1407	0 - 1 ft	BROWN	FINE SAND W/SHELLS
Method: H.A. / DPT			
Monitor Reading (ppm): 0.0 / 358	10 - 11 ft	BROWN	FINE SAND

COMPOSITE SAMPLE DATA:

	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: NA				
Method: NA				No composites collected
Monitor Readings (Range in ppm): NA				

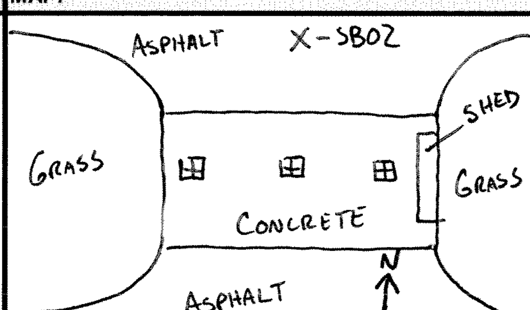
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected		LAB
VOA / 8260B (low soil)	3 x 40 mL DI H_2O	1353	1407	KATAHDIN
VOA / 8260B (med soil)	1 x 40 mL MeOH	"	"	"
Metals / 6010B	1 x 2 oz –	"	"	"
PCBs / 8082	1 x 4 oz –	"	"	"
PAH/8270C or 8310, SVOA/8270C, TRPH/FL-PRO	1 x 8 oz –	"	"	"

OBSERVATIONS / NOTES:

LOCATED IN FISC AREA

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:	SWMU 51	Sample ID No.:	MPT51-SB03-01-102406 MPT51-SB03-09-102406
Project No.:	112G00436	Sample Location:	51 SB03
		Sampled By:	T.C.
		C.O.C. No.:	2004102401

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 10/24/06	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1437 / 1452	0-1 ft.	BROWN	FINE SAND W/SHELLS
Method: H.A. / DPT			
Monitor Reading (ppm): 0.0 / 0.0	8-9 ft	BROWN	FINE SAND

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
NA				
Method: NA				No composites collected
Monitor Readings (Range in ppm): NA				

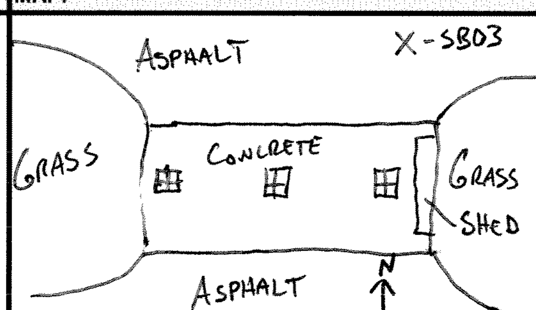
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		LAB
VOA / 8260B (low soil)	3x 40 mL	DI H_2O	1437	1452	KATAHDIN
VOA / 8260B (med. soil)	1x 40mL	MeOH	"	"	"
Metals / 6010B	1x 2oz	–	"	"	"
PCBs / 8082	1x 4oz	–	"	"	"
PAH / 8270C or 8310, SVOA / 8270C, TRPH / FL-PRO	1x 8oz	–	"	"	"

OBSERVATIONS / NOTES:

LOCATED IN FISC AREA

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cotterini

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 51
Project No.: 112G00436

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: MPT51-SB04-01-102506
MPT51-SB04-13-102506
Sample Location: 51 SB04
Sampled By: TC
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/25/06			
Time: 0948 / 1012	0 - 1 ft	BROWN	FINE SAND W/SHELLS
Method: ~~[illegible]~~ H.A. / DPT			
Monitor Reading (ppm): NA/NA *	12-13 ft	GRAY	FINE SAND W/SHELLS

COMPOSITE SAMPLE DATA:

	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: NA				
Method: NA				No composites collected
Monitor Readings (Range in ppm): NA				

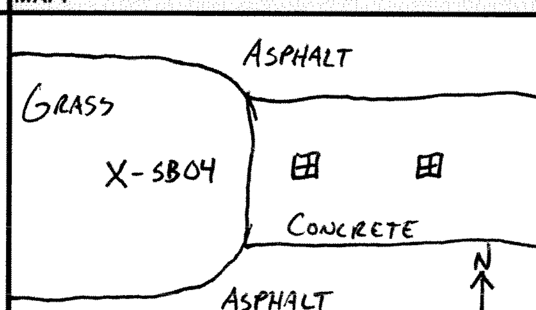
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected		LAB
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	0948	1012	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
METALS / 6010B	1 x 2 oz	-	"	"	"
PCBs / 8082	1 x 4 oz	-	"	"	"
PAH/8270C or 8310, SVOA/8270C, TRPH/FL-PRO	1 x 8 oz	-	"	"	"

OBSERVATIONS / NOTES:

* FID NOT WORKING; NO READINGS
LOCATED IN FISC AREA

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Terry Cotteronni

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMU 51	Sample ID No.: MPT51-SB08-01-102506 MPT51-SB08-11-102506
Project No.: 112G00436	Sample Location: 51 SB08
	Sampled By: T.C.
[] Surface Soil	C.O.C. No.:
[X] Subsurface Soil	
[] Sediment	Type of Sample:
[] Other:	[x] Low Concentration
[] QA Sample Type:	[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/25/06			
Time: 1103 / 1145	0 - 1 ft	BROWN	FINE SAND W/SHELLS
Method: H.A /DPT			
Monitor Reading (ppm): NA/NA *	10 - 11 ft	GRAY	FINE SAND W/SHELLS

COMPOSITE SAMPLE DATA:

	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: NA				
Method: NA				No composites collected
Monitor Readings (Range in ppm): NA				

SAMPLE COLLECTION INFORMATION:

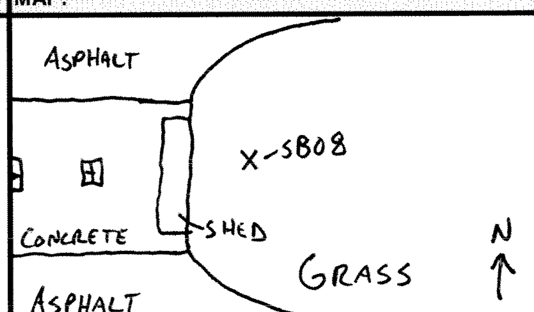
Analysis	Container Requirements		Collected		LAB
VOA / 8260B (low soil)	3 x 40 mL	DI H_2O	1103	1145	KATAHDIN
VOA / 8260B (med. soil)	1 x 40 mL	MeOH	"	"	"
METALS / 6010B	1 x 2 oz	—	"	"	"
PCBs / 8082	1 x 4 oz	—	"	"	"
PAH / 8270C or 8310, SVOA / 8270C, TRPH / FL-PRO	1 x 8 oz	—	"	"	"

OBSERVATIONS / NOTES:

* FID NOT WORKING; NO READING

LOCATED IN FISC AREA.

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

[signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMUs 6 & 7
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-6/7-SB-DPT001-009-110906
Sample Location: 6/7-SB01
Sampled By: John Foster
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11-9-06 Time: 0950 Method: ~~EPH/VPH~~ DPT (KW) Monitor Reading (ppm): 94.2	8-9	Brown ~~Fine Sand~~	Fine Sand

COMPOSITE SAMPLE DATA:

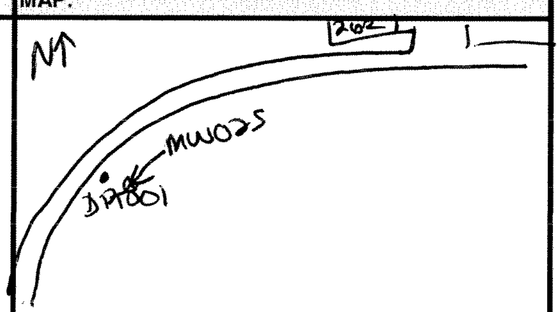
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				NO COMPOSITE SAMPLE COLLECTED

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	0950	Katahdin
EPH	1 x 4 oz.	-	0950	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Kara J. Wimble

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMUs 6 & 7
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-6/7-SB-DPT002-009-110906
Sample Location: 6/7-SB02
Sampled By: JF
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11-9-06 Time: 1015 Method: ~~EPH, VPH~~ DPT Monitor Reading (ppm): 124.0	8-9	Brn	Fine Sand

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

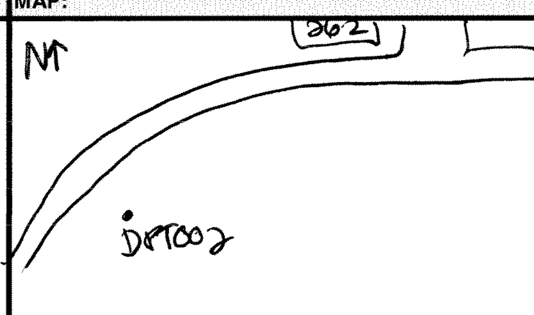
NO COMPOSITE SAMPLE COLLECTED

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1015	Katahdin
EPH	1 x 4 oz.	-	1015	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Kara J Wimble

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMUs 6 & 7

Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-617-SB-DPT003 009-110906 DPT 003

Sample Location: 617-SB03

Sampled By: JF

C.O.C. No.:

Type of Sample:
[] Low Concentration
[X] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11-9-06	8-9' bls	~~Brn~~ Yellow Gray	Fine Sand
Time: 1050 (KJ)			
Method: ~~EPH NPH~~ DPT			
Monitor Reading (ppm): 66.4			

COMPOSITE SAMPLE DATA:

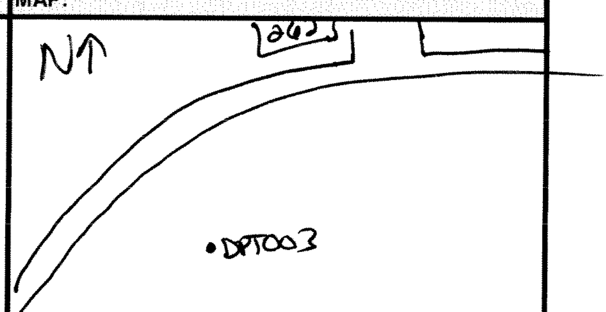
	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:	NO COMPOSITE SAMPLE COLLECTED			
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1050	Katahdin
EPH	1 x 4 oz.	-	1050	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Kara J. Wimble

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMUs 6 & 7
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-6/7-SB-DPT004-009-110906
Sample Location: 6/7-SB 04
Sampled By: JF
C.O.C. No.:

Type of Sample:
[] Low Concentration
[X] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11-9-06 Time: 1125 KW Method: ~~EPH, VPH~~ DPT Monitor Reading (ppm): 237.0	8-9'	gray	fine sand

COMPOSITE SAMPLE DATA:

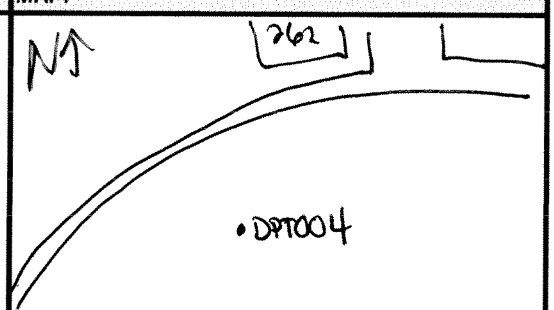
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1125	Katahdin
EPH	1 x 4 oz.	-	1125	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMUs 6 & 7
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-6/7-SB-DPT005-110906
Sample Location: 6/7 SB-~~05~~ 05
Sampled By: JF
C.O.C. No.:

Type of Sample:
[] Low Concentration
[X] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11-9-06 Time: 1155 KJ Method: ~~EPH, VPH~~ DPT Monitor Reading (ppm): 222	8-9	Gray	Fine Sand w/ Shells

COMPOSITE SAMPLE DATA:

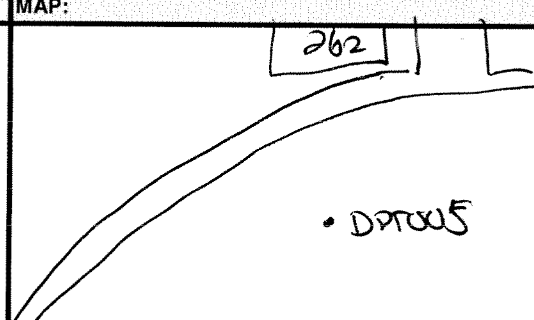
	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1155	Katahdin
EPH	1 x 4 oz.	-	1155	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): Kara J. Wimble

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMUs 6 & 7
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-617-SB-DPT006 009-110906
Sample Location: 617-SB06
Sampled By:
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11-9-06 Time: 1225 KW Method: ~~EPH, VPH~~ DPT Monitor Reading (ppm): 209.0	8-9	gray	fine sand

COMPOSITE SAMPLE DATA:

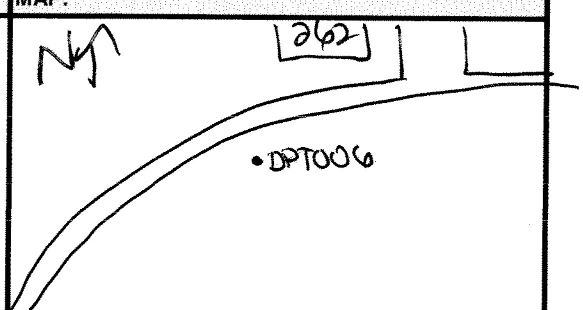
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1225	Katahdin
EPH	1 x 4 oz.	-	1225	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Kara J. Wimble

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMUs 6 & 7
Project No.: 112G00436

[] Surface Soil (SS)
✓ [] Subsurface Soil (SU)
✓ [] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-6/7-SB-DPT007-009-110906
Sample Location: SB07
Sampled By: ~~JP~~ JF
C.O.C. No.:

Type of Sample:
[] Low Concentration
[X] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11-9-06 Time: 1340 Method: ~~EPH, VPH~~ TC Monitor Reading (ppm): 105.00	8-9' bls	gray	clayey sand, w/ shells

COMPOSITE SAMPLE DATA:

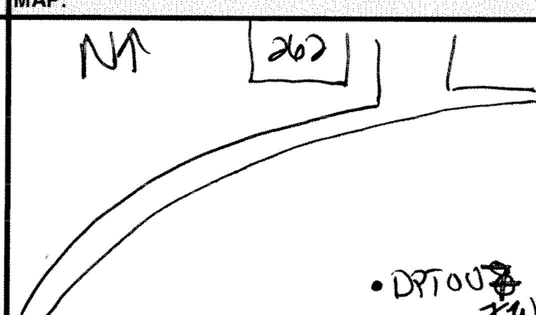
	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:	NO COMPOSITE SAMPLE COLLECTED			
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1340	Katahdin
EPH	1 x 4 oz.	-	1340	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:	SWMUs 6 & 7	Sample ID No.:	MPT-617-SB-DPT009-110906
Project No.:	112G00436	Sample Location:	617-SB08
		Sampled By:	JF
		C.O.C. No.:	

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[X] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11-9-06 Time: 1405 KW Method: ~~EPH, VPH~~ DPT Monitor Reading (ppm): 0817	8-9	grey	fine sand w/ shells

COMPOSITE SAMPLE DATA:

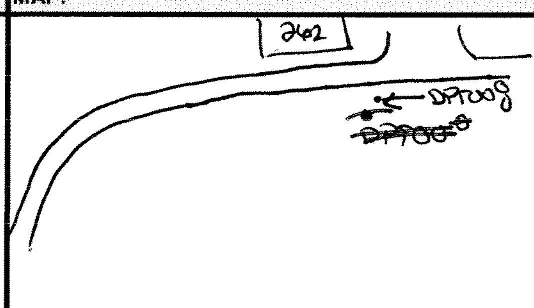
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1405	Katahdin
EPH	1 x 4 oz.	-	1405	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Karen J Winkle

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMUs 6 & 7
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-6/7-SB-DPT009-009-110906
Sample Location: 6/7-SB09
Sampled By: JF
C.O.C. No.:

Type of Sample:
[] Low Concentration
[X] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11-9-06 Time: 1430 (KJ) Method: ~~VPH, EPH~~ DPT Monitor Reading (ppm): 204	8-9' bls	grey	fine sand w/ shells

COMPOSITE SAMPLE DATA:

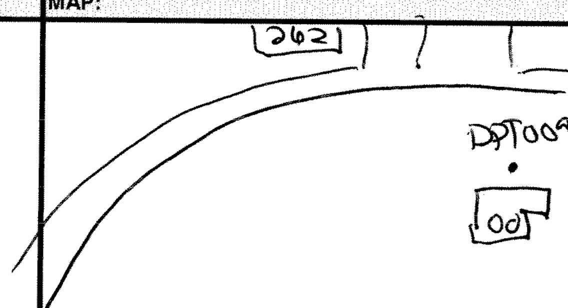
	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:	NO COMPOSITE SAMPLE COLLECTED			
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1430	Katahdin
EPH	1 x 4 oz.	-	1430	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMUs 6 & 7
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-6/7-SB-DPT010-009-110906
Sample Location: 6/7-SB010
Sampled By: JF
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11-9-06	8-9	GRAY	FINE SAND w/SHELLS
Time: 1505 (KW)			
Method: ~~EPH, VPH~~ DPT			
Monitor Reading (ppm): 720			

COMPOSITE SAMPLE DATA:

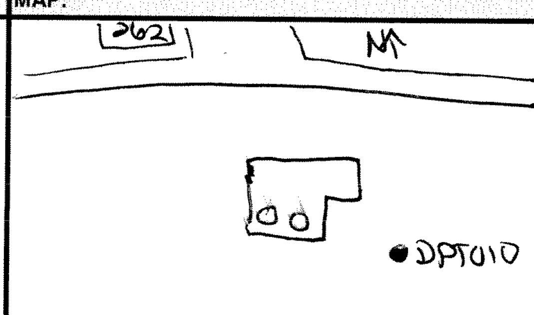
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:	NO COMPOSITE SAMPLE COLLECTED			
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1505	Katahdin
EPH	1 x 4 oz.	-	1505	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMUs 6 & 7

Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-6/7-SB-DPT011-009-111006
Sample Location: 6/7-SB011
Sampled By: TC
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 11-10-06 Time: 1046 Method: ~~EPA, VPH~~ DPT Monitor Reading (ppm): 256.6	8-9' bls	gray	fine sand w/ shells

COMPOSITE SAMPLE DATA:

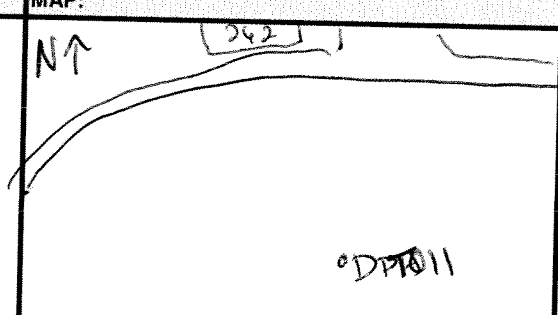
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1046	Katahdin
EPH	1 x 4 oz.	-	1046	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Karen J Wimble

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page_1_ of _1_

Project Site Name: SWMUs 6 & 7
Project No.: 112G00436

[] Surface Soil (SS)
[✓] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-617-SB-DPT012-029-111006
Sample Location: 617-SB012
Sampled By: TC
C.O.C. No.: 2485

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 111006 Time: 1127 Method: ~~EPA VPH~~ DPT (KW) Monitor Reading (ppm): 139.4	8-9' bls	grey	clayey sand w/ shells

COMPOSITE SAMPLE DATA:

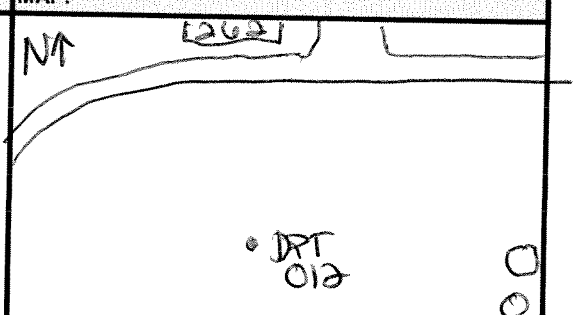
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1127	Katahdin
EPH	1 x 4 oz.	-	1127	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Kara J. Wimble

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMUs 6 & 7
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-617-SB-DPT013 005-111006
Sample Location: 617-SB13
Sampled By: TC
C.O.C. No.: 2485

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 111006 Time: 1145 KW Method: ~~VPH,EPH~~ DPT Monitor Reading (ppm): 118.6	4-5	gray	sand w/ shells. moist

COMPOSITE SAMPLE DATA:

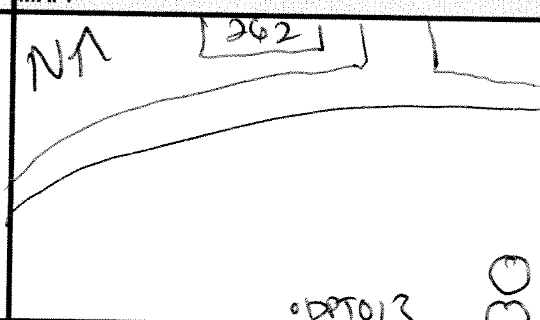
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1145	Katahdin
EPH	1 x 4 oz.	-	1145	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Kara J. Wimble

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMUs 6 & 7
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-6/7-SB-DPT014-005-111006
Sample Location: 6/7-SB014
Sampled By: TC
C.O.C. No.: 2485

Type of Sample:
[] Low Concentration
[X] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 111006 Time: 1206 (KC) Method: ~~EPH, VPH~~ DPT Monitor Reading (ppm): 235.8	4-5'	grey	fine sand w/shells

COMPOSITE SAMPLE DATA:

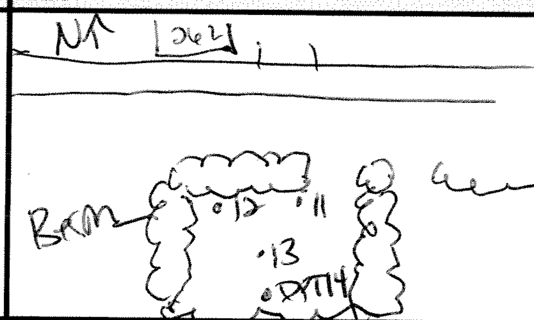
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				NO COMPOSITE SAMPLE COLLECTED

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1206	Katahdin
EPH	1 x 4 oz.	-	1206	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMUs 6 & 7
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-617-SB-DPT015 009-111006
Sample Location: 617-SB015
Sampled By: TC
C.O.C. No.: ~~248~~ 2485

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 111006 Time: 1228 (KW) Method: ~~EPH, VPH~~ DPT Monitor Reading (ppm): 96.4	8-9' bls	grey	clayey sand w/ shells

COMPOSITE SAMPLE DATA:

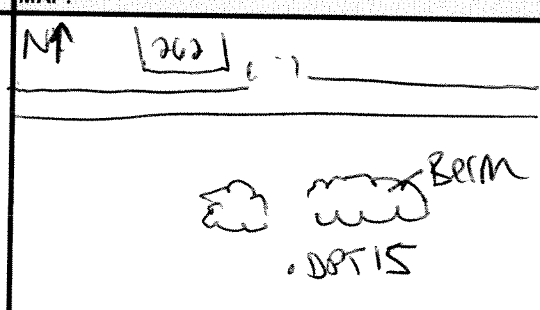
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1228	Katahdin
EPH	1 x 4 oz.	-	1228	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMUs 6 & 7
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-6/7-SB-DPT016-011-111006
Sample Location: 6/7-SB016
Sampled By: TC
C.O.C. No.: 2485

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 111006 Time: 1412 Method: ~~EPH, VPH~~ DPT KW Monitor Reading (ppm): 52.1	10-11	grey	fine sand w/ lots of shells

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:	NO COMPOSITE SAMPLE COLLECTED			
Monitor Readings (Range in ppm):				

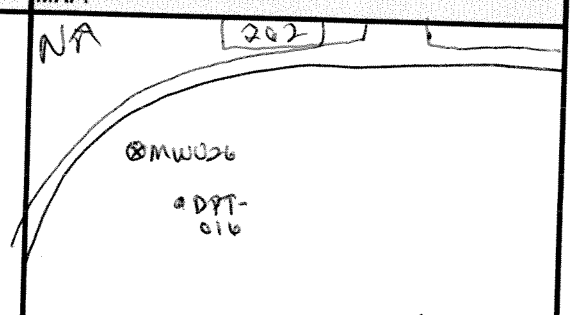
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1412	Katahdin
EPH	1 x 4 oz.	-	1412	Katahdin

OBSERVATIONS / NOTES:

HC odor

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMUs 6 & 7
Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-6/7-SB-DPT017-009-111006
Sample Location: 6/7-SB17
Sampled By: TC
C.O.C. No.: 2485

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 111006 Time: 1447 KW Method: EPH, VPH DPT Monitor Reading (ppm): 125	8-9	grey	fine sand w/ shells

COMPOSITE SAMPLE DATA:

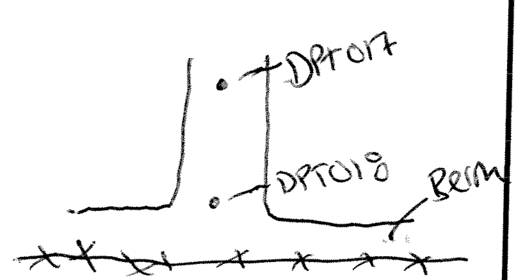
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1447	Katahdin
EPH	1 x 4 oz.	-	1447	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name:	SWMUs 6 & 7
Project No.:	112G00436
Sample ID No.:	MPT-6/7-SB-DPT018-009-111006
Sample Location:	6/7-SB18
Sampled By:	TC
C.O.C. No.:	2485

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[/] Sediment (SD)
[] Other: ____
[] QA Sample Type: ____

Type of Sample:
[] Low Concentration
[X] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 111006	8-9' bls	blk	fine sand
Time: 1501			
Method: EPH, DPT			
Monitor Reading (ppm): 88.4			

COMPOSITE SAMPLE DATA:

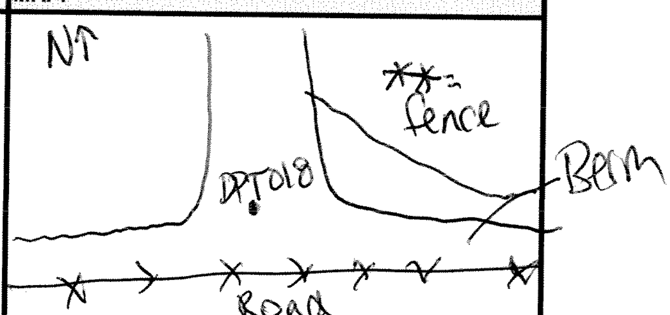
	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:				
Method:				
Monitor Readings (Range in ppm):				NO COMPOSITE SAMPLE COLLECTED

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1501	Katahdin
EPH	1 x 4 oz.	-	1501	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Kara J. Wimble

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: SWMUs 6 & 7

Project No.: 112G00436

[] Surface Soil (SS)
[X] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-6/7-SB-DPT019-009 111006

Sample Location: 6/7-SB19

Sampled By: TC

C.O.C. No.: 2485

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 111006 Time: 1526 Method: ~~EPH, VPH~~ DPT Monitor Reading (ppm): 74.1	8-9	grey	fine sand w/ shells

COMPOSITE SAMPLE DATA:

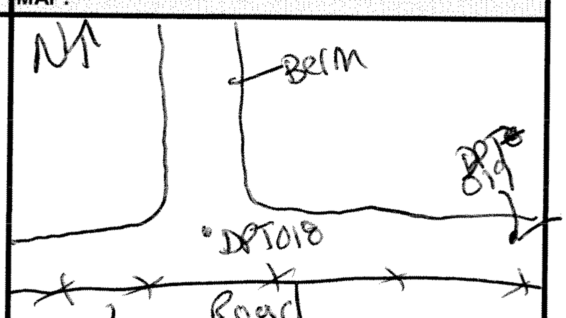
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):	NO COMPOSITE SAMPLE COLLECTED			

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements		Collected	LAB
VPH	2 x 40 mL	MeOH	1526	Katahdin
EPH	1 x 4 oz.	-	1526	Katahdin

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

WELL NO.: 08MW22S

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

PROJECT: MPT08	LOCATION: SWMU8	DRILLER: Partridge
PROJECT NO.: 112G00436	BORING: 08MW22S	DRILLING METHOD: Hollow Stem
DATE BEGUN: 11/1/06	DATE COMPLETED: 11/02/06	DEVELOPMENT METHOD:
FIELD GEOLOGIST: D. Hardison		
GROUND ELEVATION:	DATUM:	

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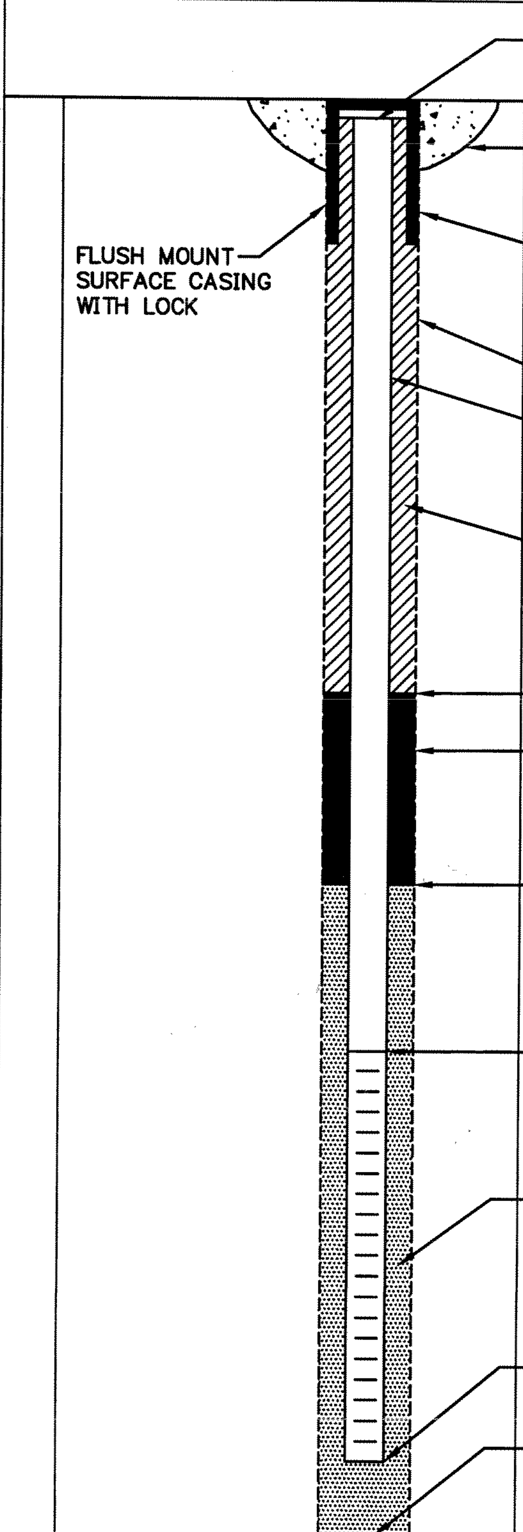


ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: concrete pad

TYPE OF PROTECTIVE CASING:

I.D. OF PROTECTIVE CASING:

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE:

RISER PIPE I.D.:

TYPE OF BACKFILL/SEAL: Grout 0.5 ft

ELEVATION/DEPTH TOP OF SEAL: / 2 ft

TYPE OF SEAL: Fine Sand

ELEVATION/DEPTH TOP OF SAND: / 3 ft

ELEVATION/DEPTH TOP OF SCREEN: / 5 ft

TYPE OF SCREEN:

SLOT SIZE x LENGTH:

TYPE OF SAND PACK: 20/30 silica sand

DIAMETER OF HOLE IN BEDROCK: 6"

ELEVATION / DEPTH BOTTOM OF SCREEN: / 15 ft

ELEVATION / DEPTH BOTTOM OF SAND: / 15 ft

ELEVATION/DEPTH BOTTOM OF HOLE: / 15 ft

BACKFILL MATERIAL BELOW SAND:

Tetra Tech NUS, Inc.

WELL NO.: 08MW21S

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

PROJECT: MPT 08
PROJECT NO.: 112G00436
DATE BEGUN: 11/2/06
FIELD GEOLOGIST: D. Hardison
GROUND ELEVATION:

LOCATION: SWMU 08
BORING: 08MW21S
DATE COMPLETED:
DATUM:

DRILLER: Partridge
DRILLING METHOD: Hollow Stem
DEVELOPMENT METHOD:

ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: Concrete pad

TYPE OF PROTECTIVE CASING:

I.D. OF PROTECTIVE CASING:

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE:

RISER PIPE I.D.:

TYPE OF BACKFILL/SEAL: Grout

ELEVATION/DEPTH TOP OF SEAL: / 2ft

TYPE OF SEAL: Fine sand

ELEVATION/DEPTH TOP OF SAND: / 3ft

ELEVATION/DEPTH TOP OF SCREEN: / 5ft
TYPE OF SCREEN:
SLOT SIZE x LENGTH:

TYPE OF SAND PACK: 20/30 Silica Sand

DIAMETER OF HOLE IN BEDROCK: 6"

ELEVATION / DEPTH BOTTOM OF SCREEN: / 15ft
ELEVATION / DEPTH BOTTOM OF SAND: / 15ft
ELEVATION/DEPTH BOTTOM OF HOLE: / 15ft
BACKFILL MATERIAL BELOW SAND:

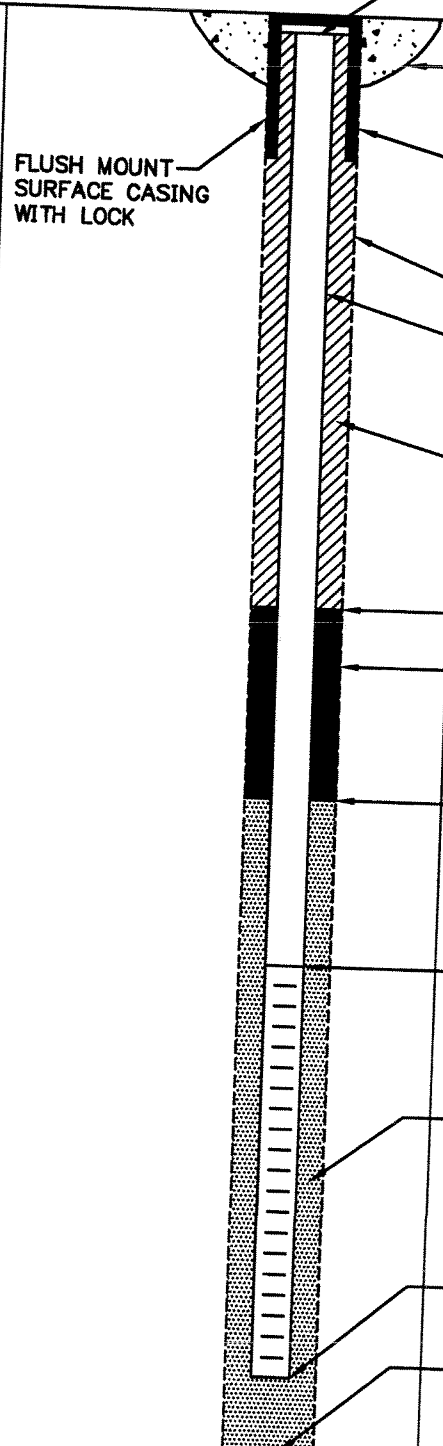
ACAD:FORM_MWFM.dwg 07/20/99 INL

WELL NO.: 09MW04S

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

PROJECT: MPT 09	LOCATION: SWMU 09	DRILLER: Partridge
PROJECT NO.: 112G00486	BORING: 09MW04S	DRILLING METHOD: Hollow Stem
DATE BEGUN: 11/3/06	DATE COMPLETED: 11/3/06	DEVELOPMENT METHOD:
FIELD GEOLOGIST: D. Henderson		
GROUND ELEVATION:	DATUM:	



ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: Concrete Pad

TYPE OF PROTECTIVE CASING:

I.D. OF PROTECTIVE CASING:

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE:

RISER PIPE I.D.:

TYPE OF BACKFILL/SEAL: Grout

ELEVATION/DEPTH TOP OF SEAL: / 2ft

TYPE OF SEAL: Fine sand

ELEVATION/DEPTH TOP OF SAND: / 3ft

ELEVATION/DEPTH TOP OF SCREEN: / 5ft

TYPE OF SCREEN:

SLOT SIZE x LENGTH:

TYPE OF SAND PACK: 20/30 Silica Sand

DIAMETER OF HOLE IN BEDROCK:

ELEVATION / DEPTH BOTTOM OF SCREEN: / 15ft

ELEVATION / DEPTH BOTTOM OF SAND: / 15ft

ELEVATION/DEPTH BOTTOM OF HOLE: / 15ft

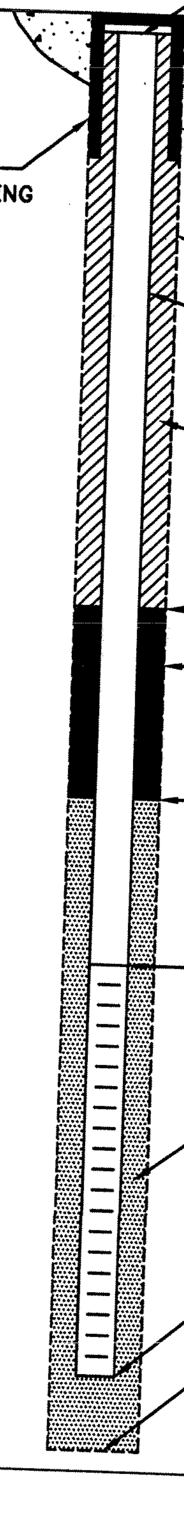
BACKFILL MATERIAL BELOW SAND:

WELL NO.: 09MW05S

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

PROJECT: MPT 8TH 09	LOCATION: SWMU 8TH 09	DRILLER: Partridge	
PROJECT NO.: 112600436	BORING: 0908MW05S	DRILLING METHOD: Hollow Stem	
DATE BEGUN: 11/2/06	DATE COMPLETED: 11/2/06	DEVELOPMENT METHOD:	
FIELD GEOLOGIST: D. Hardison			
GROUND ELEVATION:	DATUM:		



FLUSH MOUNT SURFACE CASING WITH LOCK

ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: concrete pad

TYPE OF PROTECTIVE CASING:

I.D. OF PROTECTIVE CASING:

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE:

RISER PIPE I.D.:

TYPE OF BACKFILL/SEAL: Grout

ELEVATION/DEPTH TOP OF SEAL: 12ft

TYPE OF SEAL: Fine Sand

ELEVATION/DEPTH TOP OF SAND: 13ft

ELEVATION/DEPTH TOP OF SCREEN: 15ft

TYPE OF SCREEN:

SLOT SIZE x LENGTH:

TYPE OF SAND PACK: 20/30 Silica Sand

DIAMETER OF HOLE IN BEDROCK: 6"

ELEVATION / DEPTH BOTTOM OF SCREEN: 115ft

ELEVATION / DEPTH BOTTOM OF SAND: 115ft

ELEVATION/DEPTH BOTTOM OF HOLE: 115ft

BACKFILL MATERIAL BELOW SAND:

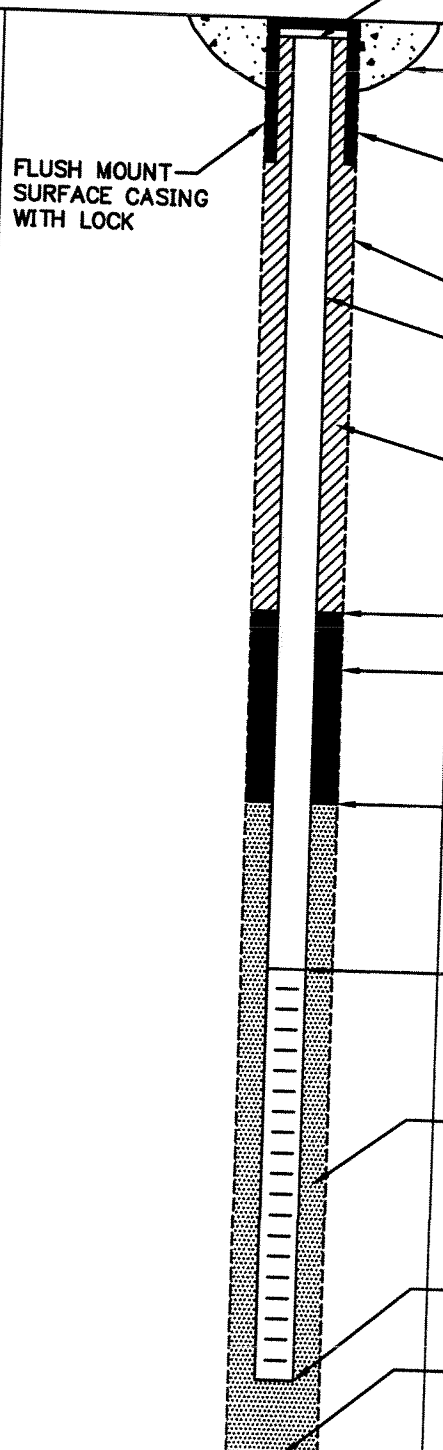
ACAD:FORM_MWFM.dwg 07/20/99 INL

Tetra Tech NUS, Inc.

WELL NO.: 09MW06S

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

PROJECT MPT09	LOCATION NS Mayport	DRILLER Partridge
PROJECT NO. 112G00436	BORING 09MW06S	DRILLING METHOD Hollow Stem
DATE BEGUN 11/3/06	DATE COMPLETED 11/3/06	
FIELD GEOLOGIST D. Hendrison		
GROUND ELEVATION	DATUM	DEVELOPMENT METHOD



ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: Concrete Pad

TYPE OF PROTECTIVE CASING:

I.D. OF PROTECTIVE CASING:

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE:

RISER PIPE I.D.:

TYPE OF BACKFILL/SEAL: Grout

ELEVATION/DEPTH TOP OF SEAL: /2ft

TYPE OF SEAL:

ELEVATION/DEPTH TOP OF SAND: /3ft

ELEVATION/DEPTH TOP OF SCREEN: /5ft

TYPE OF SCREEN:

SLOT SIZE x LENGTH:

TYPE OF SAND PACK:

DIAMETER OF HOLE IN BEDROCK: 6"

ELEVATION / DEPTH BOTTOM OF SCREEN: /15ft

ELEVATION / DEPTH BOTTOM OF SAND: /15ft

ELEVATION/DEPTH BOTTOM OF HOLE: /15ft

BACKFILL MATERIAL BELOW SAND:

ACAD:FORM_MWFM.dwg 07/20/99 INL

WELL NO.: ~~MPT10DM~~ 10 MW01S

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

PROJECT: MPT 10
PROJECT NO.: 112G00436
DATE BEGUN: 11/2/06
FIELD GEOLOGIST: D. Hardison
GROUND ELEVATION:

LOCATION: SWMU 10
BORING: MPT10-MW01S
DATE COMPLETED: 11/2/06
DATUM:

DRILLER: Partridge
DRILLING METHOD: Hollow stem
DEVELOPMENT METHOD:

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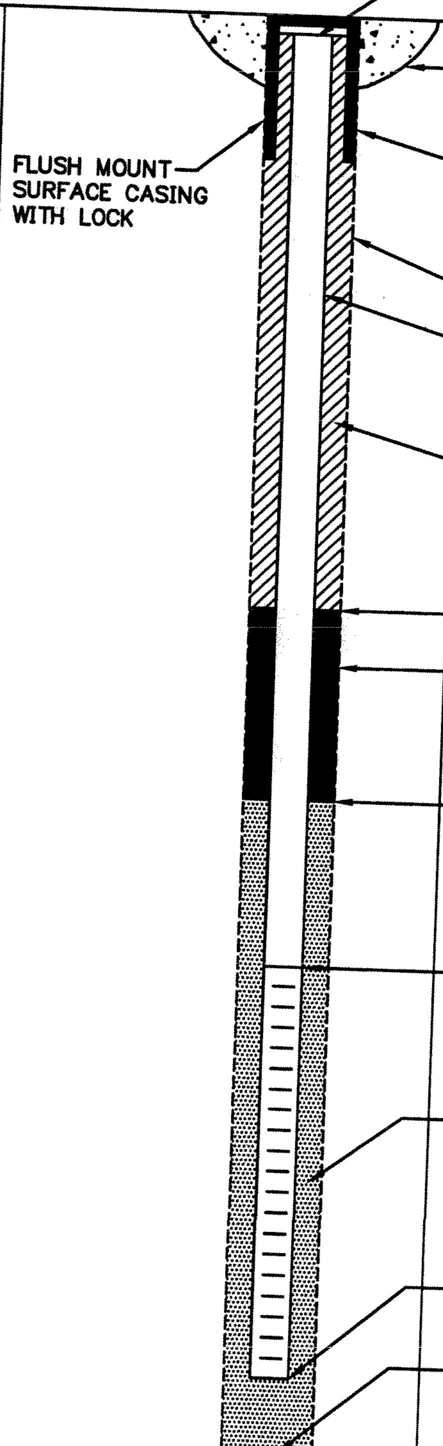


ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: concrete pad

TYPE OF PROTECTIVE CASING:

I.D. OF PROTECTIVE CASING:

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE:

RISER PIPE I.D.:

TYPE OF BACKFILL/SEAL: Grout

ELEVATION/DEPTH TOP OF SEAL: / 2ft

TYPE OF SEAL: Fine Sand

ELEVATION/DEPTH TOP OF SAND: / 3ft

ELEVATION/DEPTH TOP OF SCREEN: / 5ft

TYPE OF SCREEN:

SLOT SIZE x LENGTH:

TYPE OF SAND PACK: 20/30 silica Sand

DIAMETER OF HOLE IN BEDROCK: 6"

ELEVATION / DEPTH BOTTOM OF SCREEN: / 15ft

ELEVATION / DEPTH BOTTOM OF SAND: / 15ft

ELEVATION/DEPTH BOTTOM OF HOLE: / 15ft

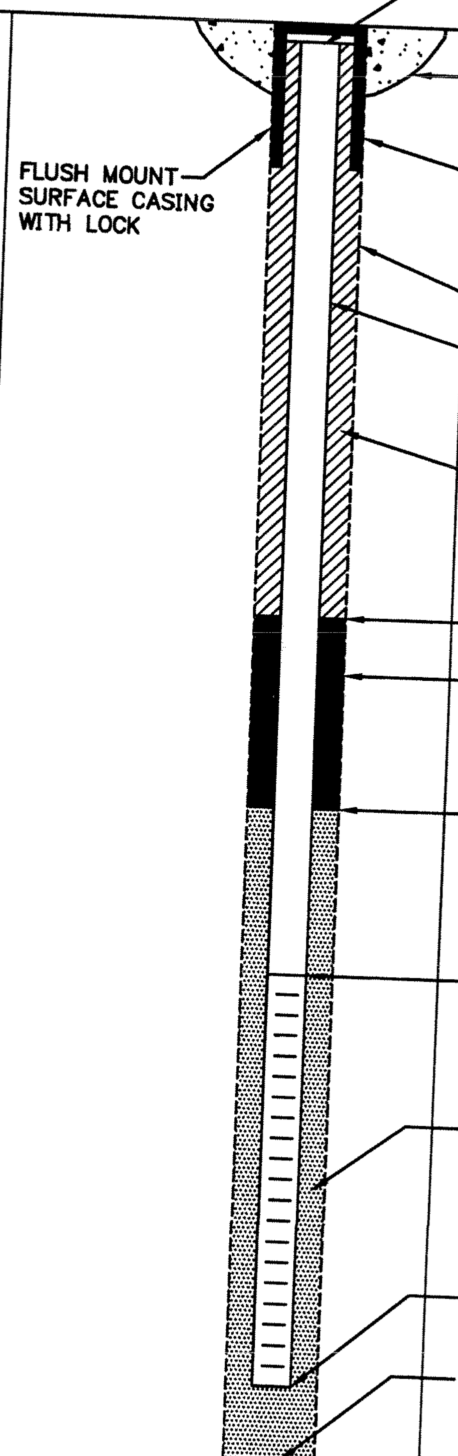
BACKFILL MATERIAL BELOW SAND:

Tetra Tech NUS, Inc.

WELL NO.: 11MW05S

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

PROJECT: MPT 11
PROJECT NO.: 112G00436
DATE BEGUN: 11/3/06
FIELD GEOLOGIST: D. Hardison
GROUND ELEVATION:
LOCATION: NS Mayport
BORING: 11MW05S
DATE COMPLETED:
DATUM:
DRILLER: Partridge
DRILLING METHOD: Hollow Stem
DEVELOPMENT METHOD:



ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: concrete pad

TYPE OF PROTECTIVE CASING:

I.D. OF PROTECTIVE CASING:

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE:

RISER PIPE I.D.:

TYPE OF BACKFILL/SEAL: Grout

ELEVATION/DEPTH TOP OF SEAL: / 4ft

TYPE OF SEAL: Fine Sand

ELEVATION/DEPTH TOP OF SAND: / 6ft

ELEVATION/DEPTH TOP OF SCREEN: / 8ft

TYPE OF SCREEN:

SLOT SIZE x LENGTH:

TYPE OF SAND PACK: 20/30 silica sand

DIAMETER OF HOLE IN BEDROCK: 6"

ELEVATION / DEPTH BOTTOM OF SCREEN: / 18ft

ELEVATION / DEPTH BOTTOM OF SAND: / 18ft

ELEVATION/DEPTH BOTTOM OF HOLE: / 18ft

BACKFILL MATERIAL BELOW SAND:

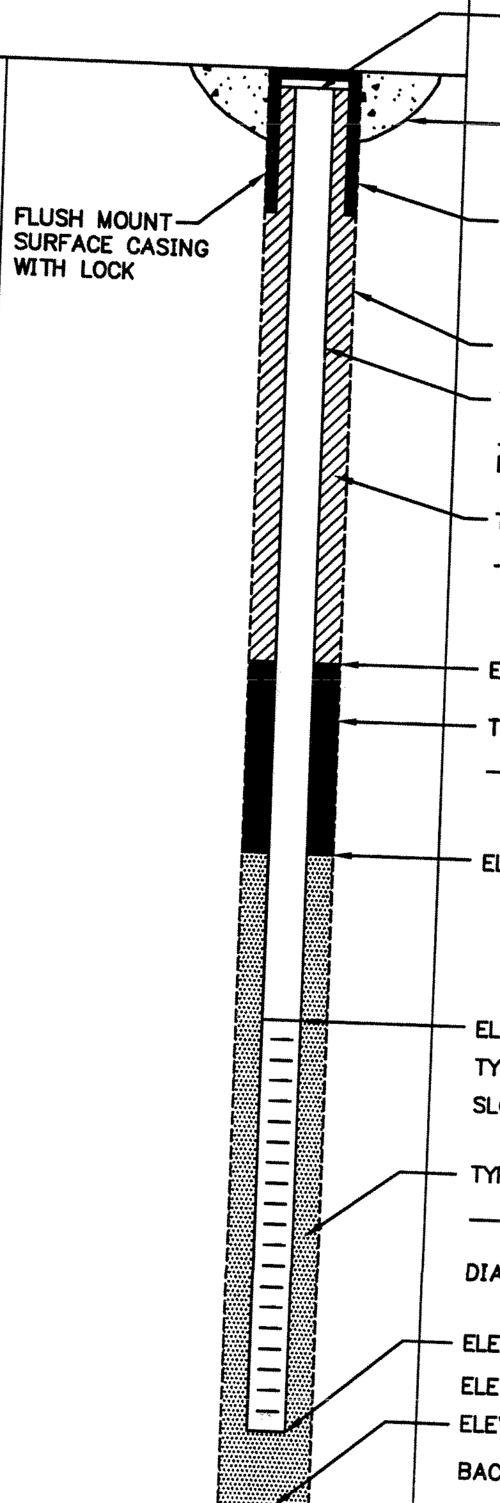
ACAD:FORM_MWFM.dwg 07/20/99 INL

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

WELL NO.: 51 MW01S

PROJECT SWMU 51	LOCATION NS MAYPORT	DRILLER M. NICHOLSON
PROJECT NO. 112G00436	BORING NORTH OF 51SB01	DRILLING METHOD H.S.A.
DATE BEGUN 11/6/06	DATE COMPLETED	DEVELOPMENT METHOD
FIELD GEOLOGIST T. COTTENOIR		
GROUND ELEVATION	DATUM	



ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: CONCRETE PAD 2' x 2'

TYPE OF PROTECTIVE CASING:

I.D. OF PROTECTIVE CASING:

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE:

RISER PIPE I.D.:

TYPE OF BACKFILL/SEAL: GROUT

ELEVATION/DEPTH TOP OF SEAL: / 4ft

TYPE OF SEAL: FINE SAND

ELEVATION/DEPTH TOP OF SAND: / 6 ft

ELEVATION/DEPTH TOP OF SCREEN: / 8 ft.

TYPE OF SCREEN:

SLOT SIZE x LENGTH:

TYPE OF SAND PACK: 20/30 SILICA SAND

DIAMETER OF HOLE IN BEDROCK: 6''

ELEVATION / DEPTH BOTTOM OF SCREEN: / 18 ft

ELEVATION / DEPTH BOTTOM OF SAND: / 18 ft

ELEVATION/DEPTH BOTTOM OF HOLE: / 18 ft.

BACKFILL MATERIAL BELOW SAND:

ACAD:FORM_MWFM.dwg 07/20/99 INL

Tetra Tech NUS, Inc.

WELL NO.: 51 MW02S

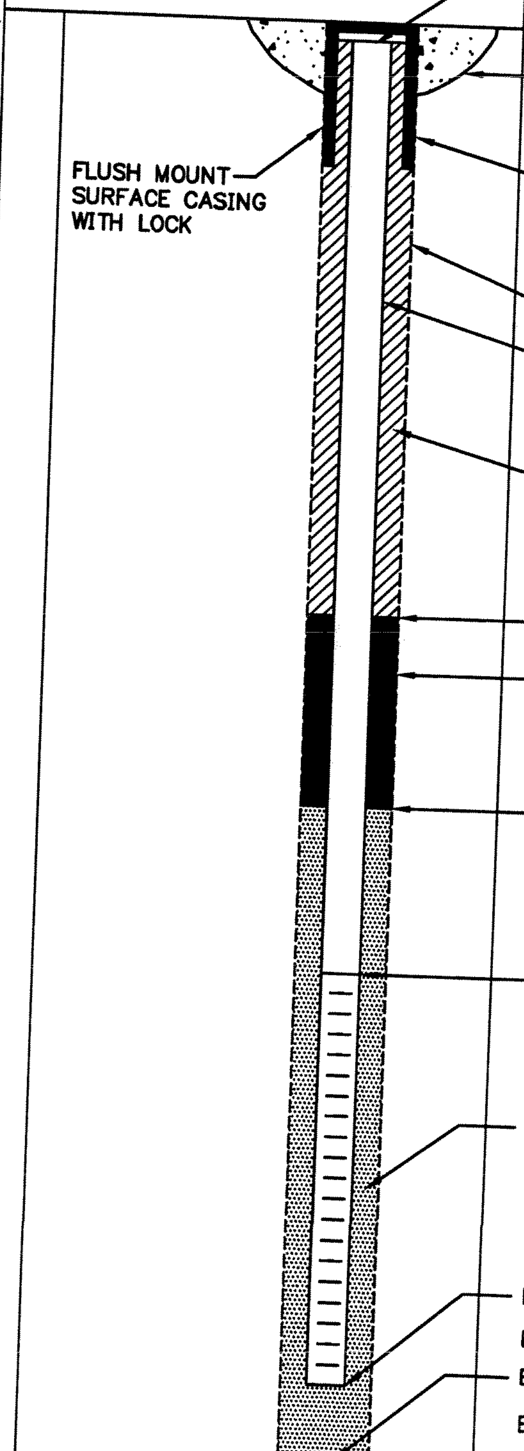
OVERBURDEN
MONITORING WELL SHEET
FLUSH - MOUNT

PROJECT SWMU 51
PROJECT NO. 112G00436
DATE BEGUN 11/6/06
FIELD GEOLOGIST TERRY COTTENOIR
GROUND ELEVATION ________

LOCATION NS MAYPORT
BORING NORTH OF 51SB02
DATE COMPLETED ________
DATUM ________

DRILLER M. NICHOLSON
DRILLING METHOD H.S.A.
DEVELOPMENT METHOD ________

ACAD:FORM_MWFM.dwg 07/20/99 INL



ELEVATION TOP OF RISER: ________

TYPE OF SURFACE SEAL: 2' x 2' CONCRETE PAD w/ 8" ~~AA~~ Steel Manhole

TYPE OF PROTECTIVE CASING: STEEL MANHOLE

I.D. OF PROTECTIVE CASING: 8"

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE: ~~2"~~ SCH 40 PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: GROUT

ELEVATION/DEPTH TOP OF SEAL: 14ft

TYPE OF SEAL: 30/65 FINE SAND

ELEVATION/DEPTH TOP OF SAND: 16ft

ELEVATION/DEPTH TOP OF SCREEN: 18 ft

TYPE OF SCREEN: ________

SLOT SIZE x LENGTH: 20/30 Silica SAND

TYPE OF SAND PACK: ________

DIAMETER OF HOLE IN BEDROCK: 6"

ELEVATION / DEPTH BOTTOM OF SCREEN: 18 ft

ELEVATION / DEPTH BOTTOM OF SAND: 18 ft

ELEVATION/DEPTH BOTTOM OF HOLE: 18 ft

BACKFILL MATERIAL BELOW SAND: ________

Tetra Tech NUS, Inc.

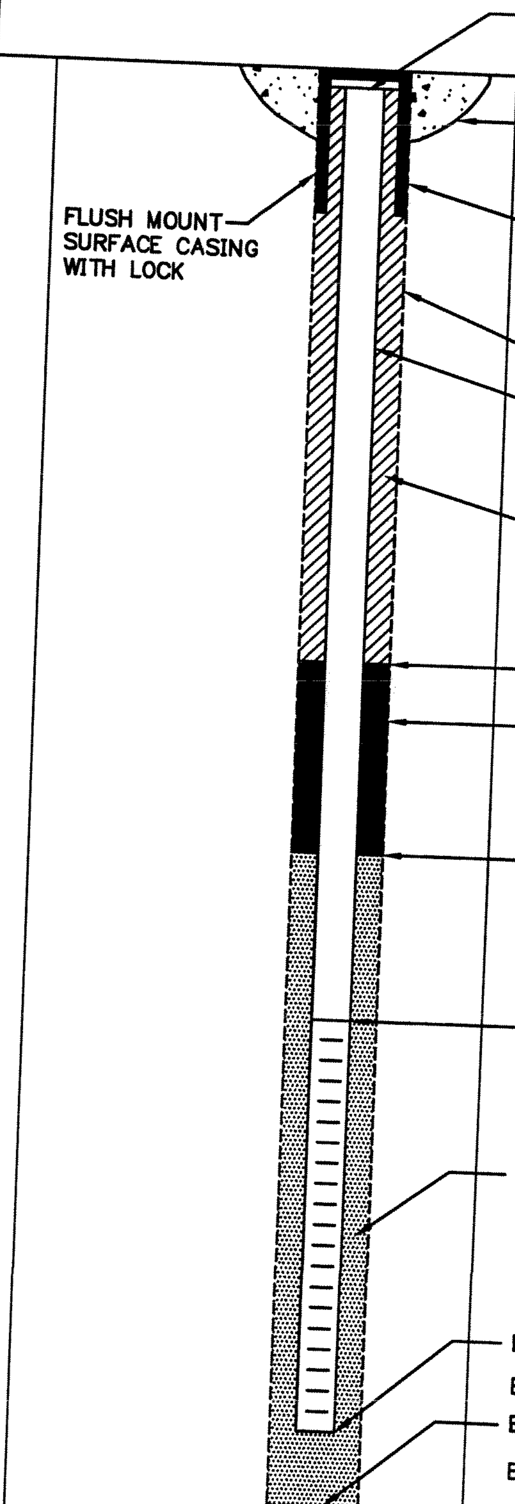
OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

WELL NO.: 51 MW03S

PROJECT: SWMU 51
PROJECT NO.: 112G00436
DATE BEGUN: 11/6/06
FIELD GEOLOGIST: TERRY COTTENOIR
GROUND ELEVATION:

LOCATION: NS MAYPORT
BORING: NORTH OF 51SB03
DATE COMPLETED: 11/6/06
DATUM:

DRILLER: M. NICHOLSON
DRILLING METHOD: H.S.A
DEVELOPMENT METHOD:



ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: 2'x2' CONCRETE PAD

TYPE OF PROTECTIVE CASING: STEEL MANHOLE COVER

I.D. OF PROTECTIVE CASING: 8"

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE: SCH 40 PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: GROUT

ELEVATION/DEPTH TOP OF SEAL: 14 ft

TYPE OF SEAL: 30/65 FINE SAND

ELEVATION/DEPTH TOP OF SAND: 16 ft

ELEVATION/DEPTH TOP OF SCREEN: 18 ft

TYPE OF SCREEN:

SLOT SIZE x LENGTH:

TYPE OF SAND PACK: 20/30 SILICA SAND

DIAMETER OF HOLE IN BEDROCK:

ELEVATION / DEPTH BOTTOM OF SCREEN: 18 ft

ELEVATION / DEPTH BOTTOM OF SAND: 18 ft

ELEVATION/DEPTH BOTTOM OF HOLE: 18 ft

BACKFILL MATERIAL BELOW SAND:

ACAD: FORM_MWFM.dwg 07/20/99 INL

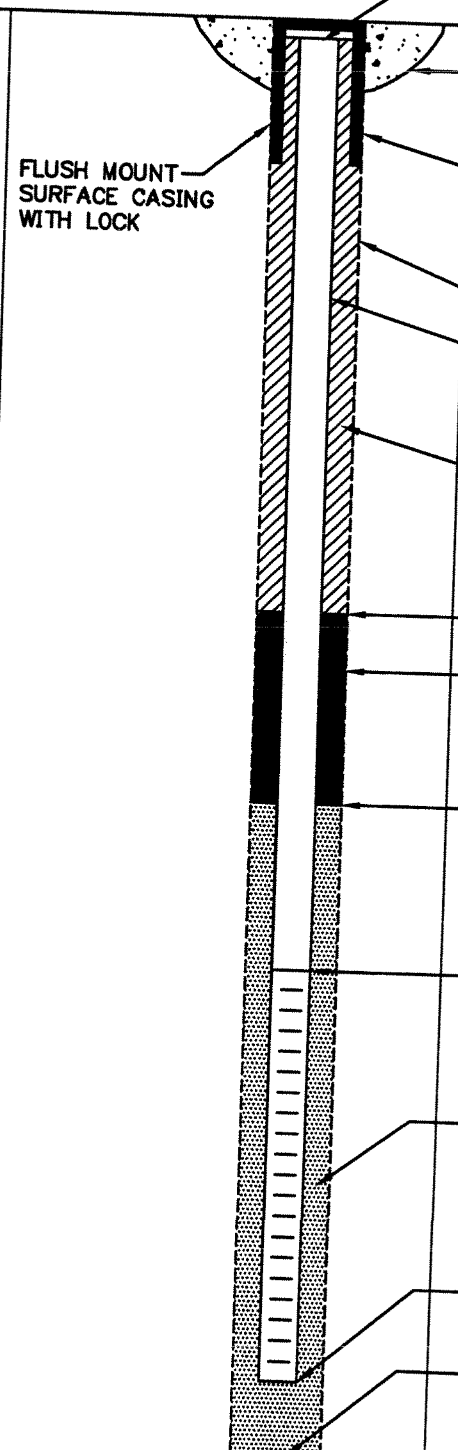
Tetra Tech NUS, Inc.

WELL NO.: 07 TW01S

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

TEMPORARY WELL

PROJECT: SWMUs 6 & 7	LOCATION: NAVSTA MAYPORT	DRILLER: M. NICHOLSON
PROJECT NO.: 112G00436	BORING: 07 TW02S	DRILLING METHOD: H.S.A.
DATE BEGUN: 11/7/06	DATE COMPLETED: 11/7/06	DEVELOPMENT METHOD:
FIELD GEOLOGIST: TERRY COTTENDIR		
GROUND ELEVATION:	DATUM:	



ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: N/A

TYPE OF PROTECTIVE CASING: N/A

I.D. OF PROTECTIVE CASING:

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE: SCH 40 PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: ~~30/65 FINE SAND~~ TC 20/30 SILICA SAND

ELEVATION/DEPTH TOP OF SEAL: /10 ft.

TYPE OF SEAL: ~~30/65 FINE SAND~~ TC 20/30 SILICA SAND

ELEVATION/DEPTH TOP OF SAND: /10 ft

ELEVATION/DEPTH TOP OF SCREEN: /8 ft

TYPE OF SCREEN: 2" PVC

SLOT SIZE x LENGTH: 0.010-mil x 10 ft

TYPE OF SAND PACK: 20/30 SILICA SAND

DIAMETER OF HOLE IN BEDROCK: 6"

ELEVATION / DEPTH BOTTOM OF SCREEN: /18 ft

ELEVATION / DEPTH BOTTOM OF SAND: /18 ft

ELEVATION/DEPTH BOTTOM OF HOLE: /18 ft.

BACKFILL MATERIAL BELOW SAND:

ACAD:FORM_MWFM.dwg 07/20/99 INL

Tetra Tech NUS, Inc.

WELL NO.: ~~06~~ 07 TW02S

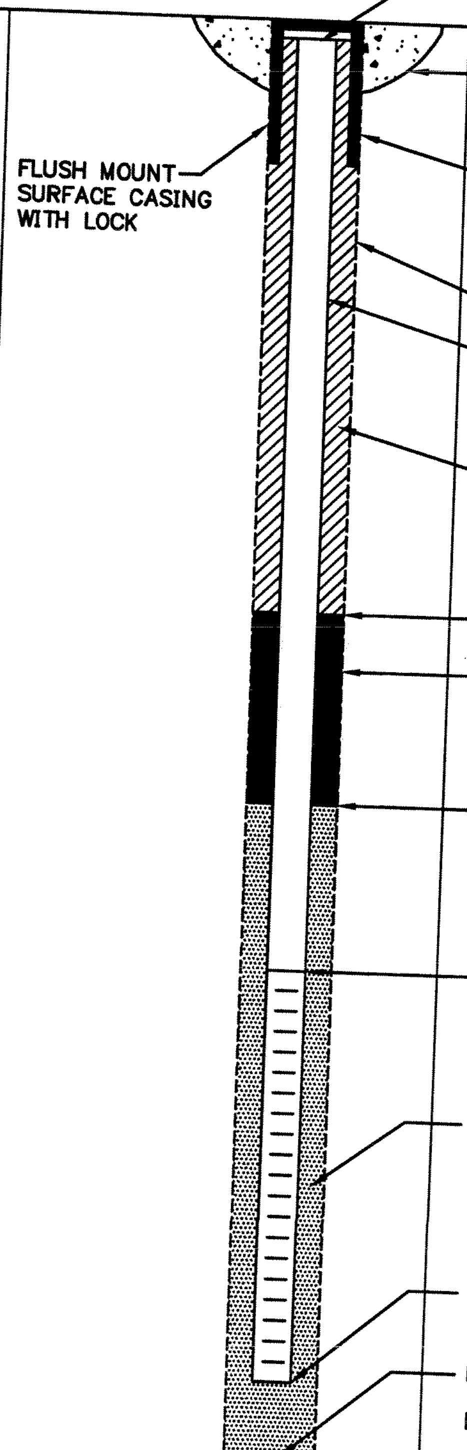
OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

TEMPORARY WELL

PROJECT SWMUs 6 & 7
PROJECT NO. 112G00436
DATE BEGUN 11/7/06
FIELD GEOLOGIST TERRY COTTENOIR
GROUND ELEVATION ____

LOCATION NAVSTA MAYPORT
BORING ~~06~~ 07 TW02S
DATE COMPLETED 11/7/06
DATUM ____

DRILLER MIKE NICHOLSON
DRILLING METHOD H.S.A.
DEVELOPMENT METHOD ____



ELEVATION TOP OF RISER: ____

TYPE OF SURFACE SEAL: N/A

TYPE OF PROTECTIVE CASING: N/A

I.D. OF PROTECTIVE CASING: N/A

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE: SCH 40 PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: 20/30 SILICA SAND

ELEVATION/DEPTH TOP OF SEAL: /0 ft

TYPE OF SEAL: 20/30 SILICA SAND

ELEVATION/DEPTH TOP OF SAND: /0 ft

ELEVATION/DEPTH TOP OF SCREEN: /5 ft

TYPE OF SCREEN: 2" PVC

SLOT SIZE x LENGTH: 0.010-mil X 10 ft

TYPE OF SAND PACK: 20/30 SILICA SAND

DIAMETER OF HOLE IN BEDROCK: 6"

ELEVATION / DEPTH BOTTOM OF SCREEN: /15 ft

ELEVATION / DEPTH BOTTOM OF SAND: /15 ft

ELEVATION/DEPTH BOTTOM OF HOLE: /15 ft

BACKFILL MATERIAL BELOW SAND: ____

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Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

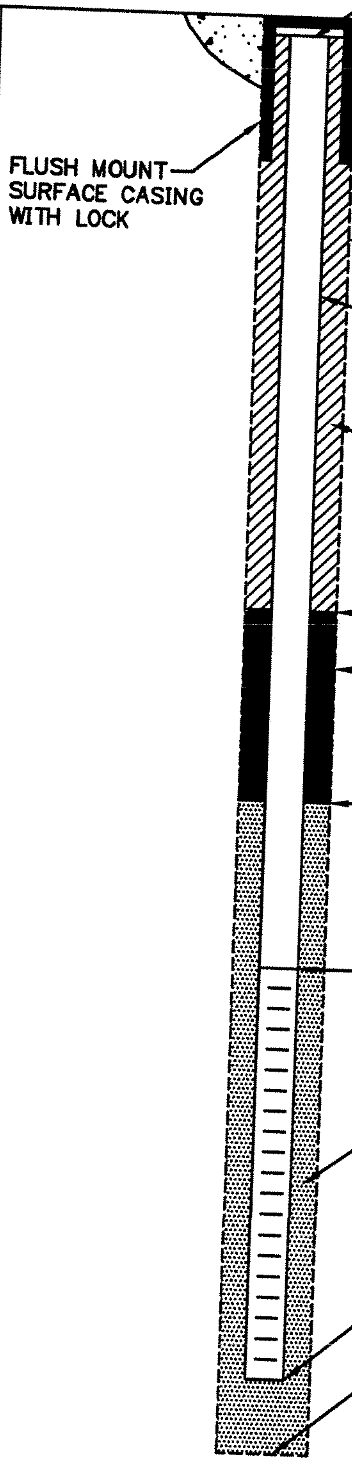
TEMPORARY WELL

WELL NO.: 07TW03S

PROJECT SWMUs 6 & 7
PROJECT NO. 112G00436
DATE BEGUN 11/7/06
FIELD GEOLOGIST TERRY COTTENOIR
GROUND ELEVATION ______

LOCATION NAVSTA MAYPORT
BORING 07TW03S
DATE COMPLETED 11/7/06
DATUM ______

DRILLER M. NICHOLSON
DRILLING METHOD H.S.A.
DEVELOPMENT METHOD ______



ELEVATION TOP OF RISER: ______

TYPE OF SURFACE SEAL: N/A

TYPE OF PROTECTIVE CASING: N/A

I.D. OF PROTECTIVE CASING: N/A

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE: SCH 40 PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: 20/30 SILICA SAND

ELEVATION/DEPTH TOP OF SEAL: 1Ø ft

TYPE OF SEAL: 20/30 SILICA SAND

ELEVATION/DEPTH TOP OF SAND: 1Ø ft

ELEVATION/DEPTH TOP OF SCREEN: 5 ft

TYPE OF SCREEN: 2" PVC

SLOT SIZE x LENGTH: 0.010-mil x 10 ft

TYPE OF SAND PACK: 20/30 SILICA SAND

DIAMETER OF HOLE IN BEDROCK: 6"

ELEVATION / DEPTH BOTTOM OF SCREEN: 15 ft

ELEVATION / DEPTH BOTTOM OF SAND: 15 ft

ELEVATION/DEPTH BOTTOM OF HOLE: 15 ft

BACKFILL MATERIAL BELOW SAND: ______

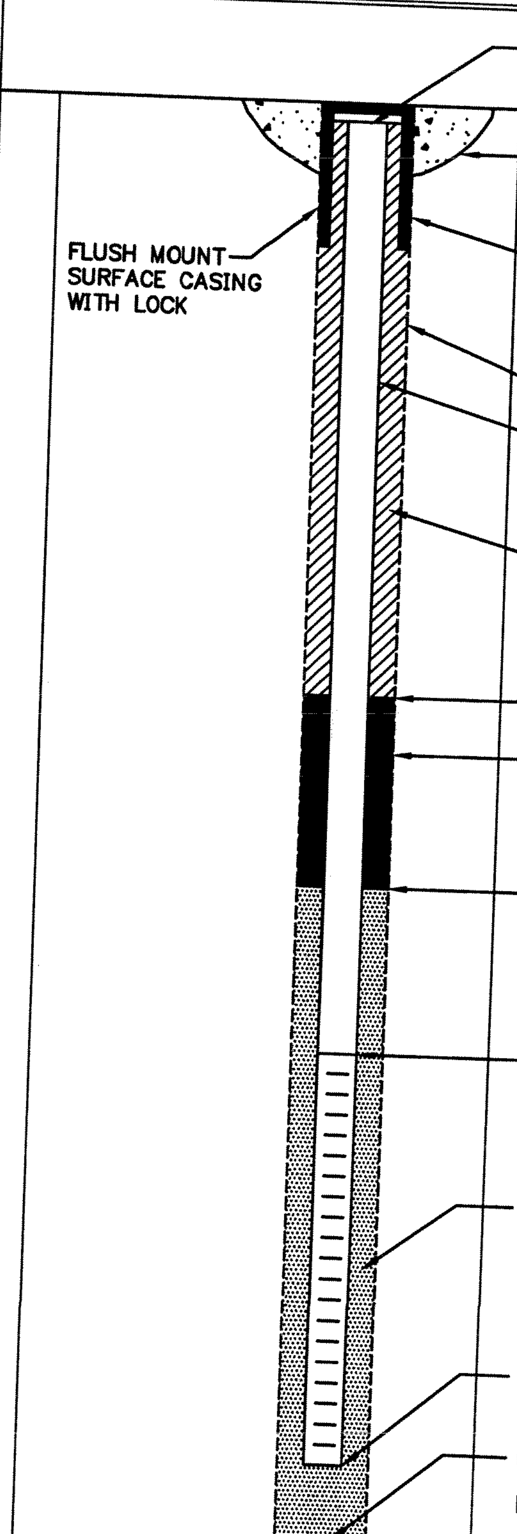
Tetra Tech NUS, Inc.

WELL NO.: 06TW01S

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

TEMPORARY WELL

PROJECT SWMUs 6 & 7	LOCATION NAVSTA MAYPORT	DRILLER M. NICHOLSON
PROJECT NO. 112G00436	BORING 06TW01S	DRILLING METHOD H.S.A.
DATE BEGUN 11/7/06	DATE COMPLETED 11/7/06	DEVELOPMENT METHOD
FIELD GEOLOGIST TERRY COTTENOIR		
GROUND ELEVATION	DATUM	



ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: N/A

TYPE OF PROTECTIVE CASING: N/A

I.D. OF PROTECTIVE CASING: N/A

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE: SCH 40 PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: 20/30 SILICA SAND

ELEVATION/DEPTH TOP OF SEAL: /10 ft.

TYPE OF SEAL: 20/30 SILICA SAND

ELEVATION/DEPTH TOP OF SAND: /10 ft.

ELEVATION/DEPTH TOP OF SCREEN: /5 ft.

TYPE OF SCREEN: 2" PVC

SLOT SIZE x LENGTH: 0.010-mil x 10 ft

TYPE OF SAND PACK: 20/30 SILICA SAND

DIAMETER OF HOLE IN BEDROCK: 6"

ELEVATION / DEPTH BOTTOM OF SCREEN: /15 ft

ELEVATION / DEPTH BOTTOM OF SAND: /15 ft

ELEVATION/DEPTH BOTTOM OF HOLE: /15 ft

BACKFILL MATERIAL BELOW SAND:

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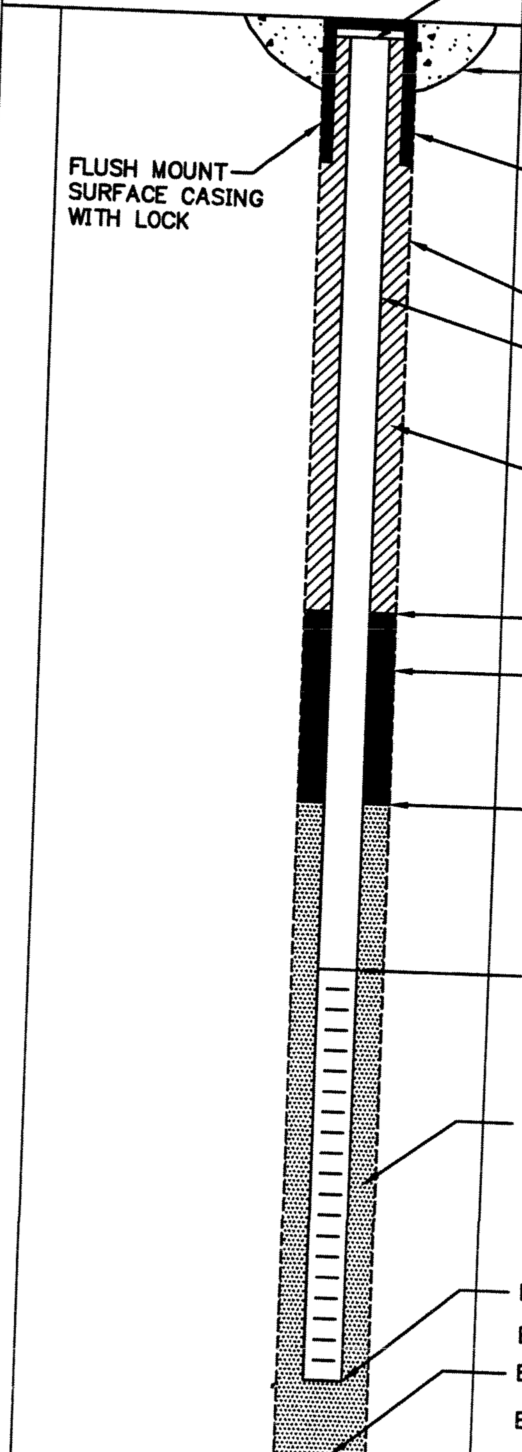
WELL NO.: 07TW04S

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

PROJECT Swmu 6+7	LOCATION NS Mayport	DRILLER M. Nicholson
PROJECT NO. 112G00436	BORING ~~02~~ 07TW04S	DRILLING METHOD Hollow Stem
DATE BEGUN 11/8/06	DATE COMPLETED 11/8/06	DEVELOPMENT METHOD
FIELD GEOLOGIST D. Hardison		
GROUND ELEVATION	DATUM	



ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: Concrete

TYPE OF PROTECTIVE CASING:

I.D. OF PROTECTIVE CASING:

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE: SCH 40 PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: Grout

ELEVATION/DEPTH TOP OF SEAL: / 4ft

TYPE OF SEAL: Fine sand

ELEVATION/DEPTH TOP OF SAND: / 6ft

ELEVATION/DEPTH TOP OF SCREEN: / 8ft

TYPE OF SCREEN: 2" PVC

SLOT SIZE x LENGTH: 0.010 mil x 10ft

TYPE OF SAND PACK: 20/30 Silica Sand

DIAMETER OF HOLE IN BEDROCK: 6"

ELEVATION / DEPTH BOTTOM OF SCREEN: / 18ft

ELEVATION / DEPTH BOTTOM OF SAND: / 18ft

ELEVATION/DEPTH BOTTOM OF HOLE: / 18ft

BACKFILL MATERIAL BELOW SAND:

ACAD:FORM_MWFM.dwg 07/20/99 INL

Tetra Tech NUS, Inc.

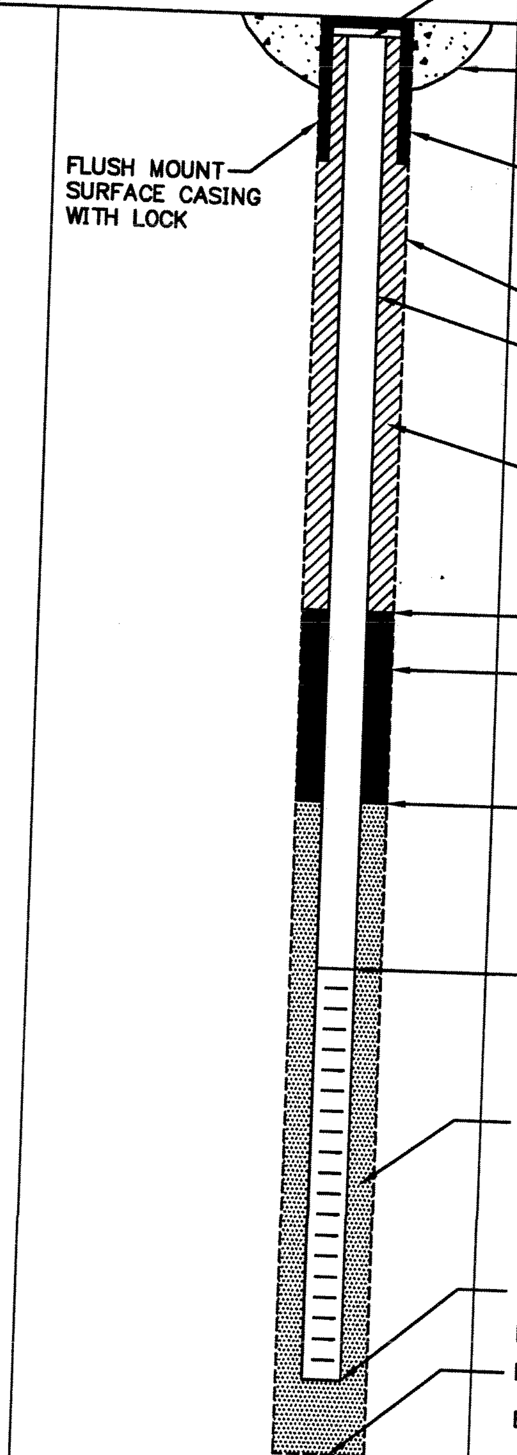
WELL NO.: 07TW055

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

PROJECT Swmus 6+7
PROJECT NO. 112600436
DATE BEGUN 11/8/06
FIELD GEOLOGIST D. Hardison
GROUND ELEVATION ______

LOCATION NAVSTA Mayport
BORING 07TW055
DATE COMPLETED 11/8/06
DATUM ______

DRILLER M. Nicholson
DRILLING METHOD Hollow Stem
DEVELOPMENT METHOD ______



ELEVATION TOP OF RISER: ______

TYPE OF SURFACE SEAL: N/A

TYPE OF PROTECTIVE CASING: N/A

I.D. OF PROTECTIVE CASING: N/A

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE: SCH 40 PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: 20/30 silica Sand

ELEVATION/DEPTH TOP OF SEAL: /

TYPE OF SEAL: ______

ELEVATION/DEPTH TOP OF SAND: 10ft

ELEVATION/DEPTH TOP OF SCREEN: /5ft

TYPE OF SCREEN: 2" PVC

SLOT SIZE x LENGTH: 0.010 in x 10ft

TYPE OF SAND PACK: 20/30 silica Sand

DIAMETER OF HOLE IN BEDROCK: 6"

ELEVATION / DEPTH BOTTOM OF SCREEN: /15ft

ELEVATION / DEPTH BOTTOM OF SAND: /15ft

ELEVATION/DEPTH BOTTOM OF HOLE: /15ft

BACKFILL MATERIAL BELOW SAND: ______

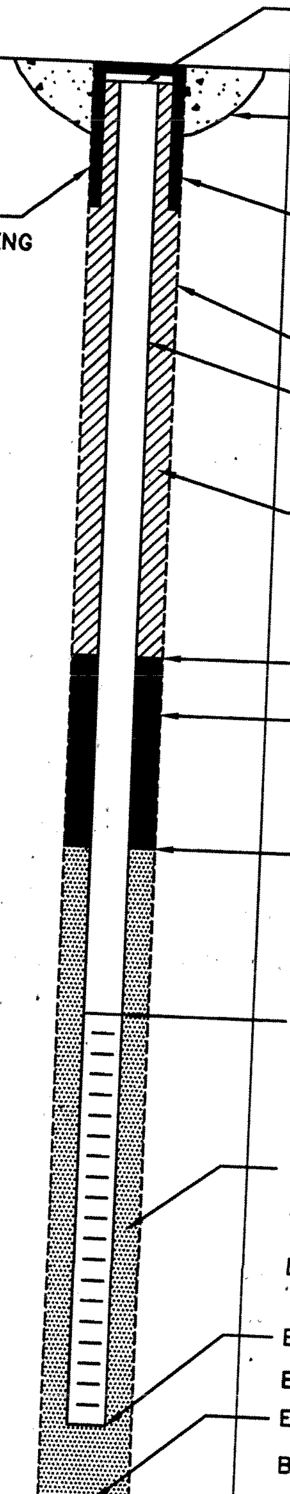
ACAD:FORM_MWFM.dwg 07/20/99 INL

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

WELL NO.: 07TW06S

PROJECT: SWMUs 647	LOCATION: NAVSTA Mayport	DRILLER: M. Nicholson
PROJECT NO.: 112G00436	BORING: 07TW06S	DRILLING METHOD: Hollow Stem
DATE BEGUN: 11/8/06	DATE COMPLETED: 11/8/06	DEVELOPMENT METHOD:
FIELD GEOLOGIST: D. Hardison		
GROUND ELEVATION:	DATUM:	



ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: N/A

TYPE OF PROTECTIVE CASING: N/A

I.D. OF PROTECTIVE CASING: N/A

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE: SCH 40 PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: 20/30 Silica Sand

ELEVATION/DEPTH TOP OF SEAL: /

TYPE OF SEAL:

ELEVATION/DEPTH TOP OF SAND: /0 ft

ELEVATION/DEPTH TOP OF SCREEN: /5 ft

TYPE OF SCREEN: 2" PVC

SLOT SIZE x LENGTH: 0.010 mil x 10 ft

TYPE OF SAND PACK: 20/30 Silica Sand

DIAMETER OF HOLE IN BEDROCK: 6"

ELEVATION / DEPTH BOTTOM OF SCREEN: /15 ft

ELEVATION / DEPTH BOTTOM OF SAND: /15 ft

ELEVATION/DEPTH BOTTOM OF HOLE: /15 ft

BACKFILL MATERIAL BELOW SAND:

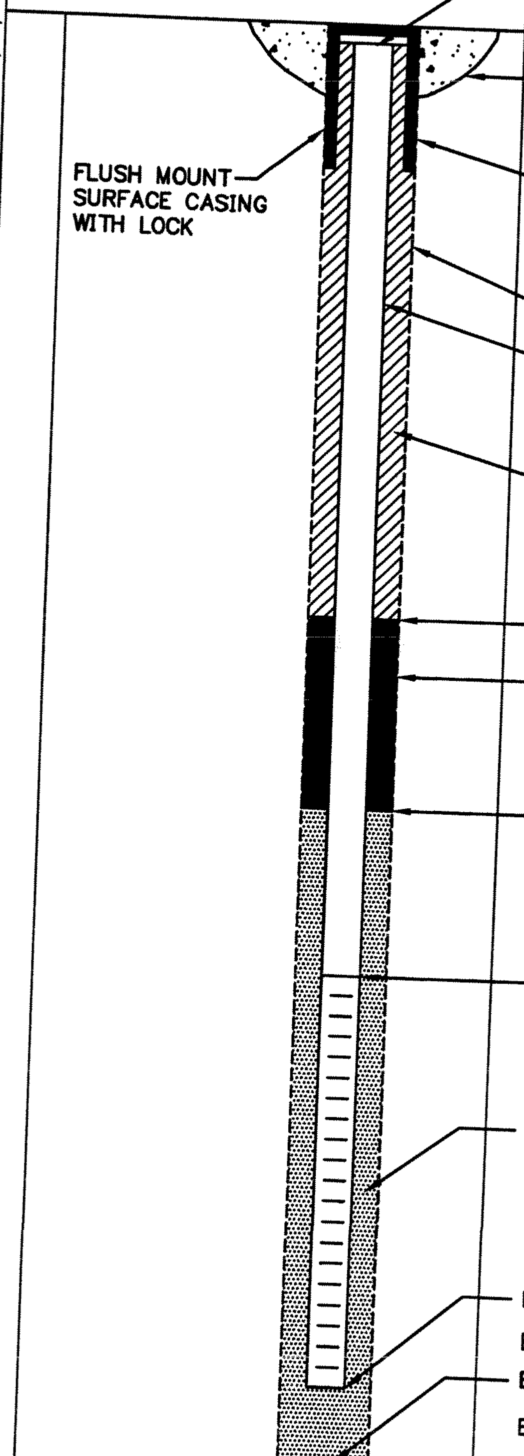
ACAD: FORM_MWFM.dwg 07/20/99 INL

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

WELL NO.: 07TW07S

PROJECT SWMUs 6 47	LOCATION NAVSTA Mayport	DRILLER M. Nicholson
PROJECT NO. 112G00436	BORING 07TW07S	DRILLING METHOD Hollow Stem
DATE BEGUN 11/8/06	DATE COMPLETED 11/8/06	DEVELOPMENT METHOD
FIELD GEOLOGIST D. Hardison		
GROUND ELEVATION	DATUM	



ELEVATION TOP OF RISER: ______

TYPE OF SURFACE SEAL: N/A

TYPE OF PROTECTIVE CASING: N/A

I.D. OF PROTECTIVE CASING: N/A

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE: SCH 40 PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: 20/30 silica sand

ELEVATION/DEPTH TOP OF SEAL: /

TYPE OF SEAL:

ELEVATION/DEPTH TOP OF SAND: / 0ft

ELEVATION/DEPTH TOP OF SCREEN: / 5ft

TYPE OF SCREEN: 2" PVC

SLOT SIZE x LENGTH: 0.010 mil x 10ft

TYPE OF SAND PACK: 20/30 silica sand

DIAMETER OF HOLE IN BEDROCK: 6"

ELEVATION / DEPTH BOTTOM OF SCREEN: / 15ft

ELEVATION / DEPTH BOTTOM OF SAND: / 15ft

ELEVATION/DEPTH BOTTOM OF HOLE: / 15ft

BACKFILL MATERIAL BELOW SAND:

ACAD: FORM_MWFM.dwg 07/20/99 INL

TW02

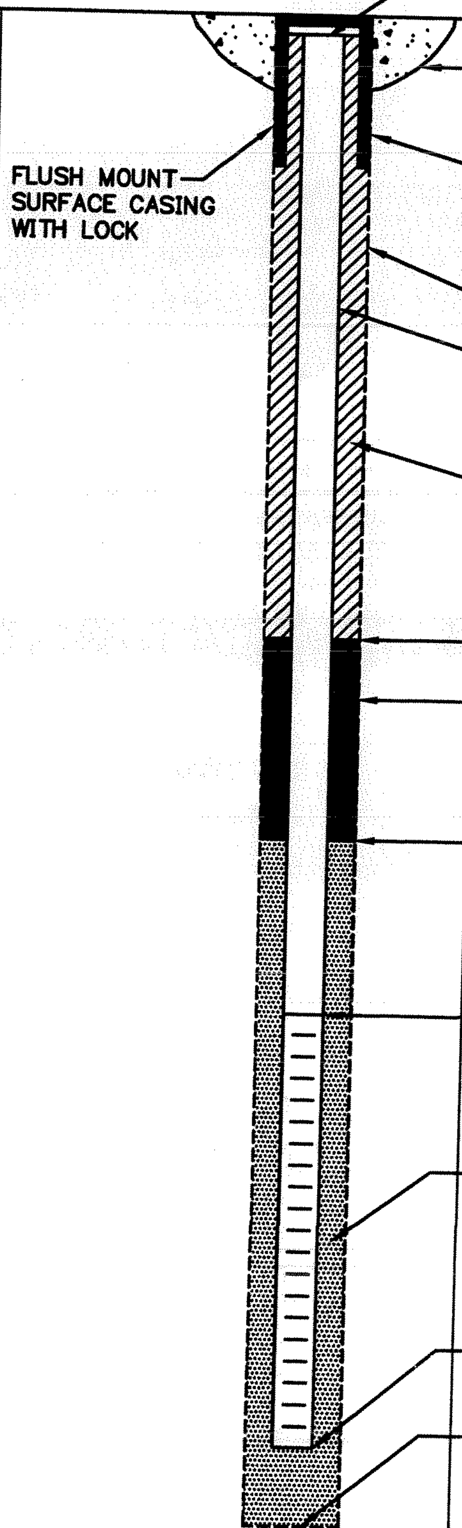
WELL NO.: MPT51 -

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

TEMPORARY WELL

PROJECT SWMU 51	LOCATION NAUSTA MAYPORT	DRILLER GARY OAKES
PROJECT NO. 112G00436	BORING TW02S	DRILLING METHOD HAND AUGER
DATE BEGUN 2/8/07	DATE COMPLETED 2/8/07	DEVELOPMENT METHOD N/A
FIELD GEOLOGIST TERRY COTTENOIR		
GROUND ELEVATION	DATUM	



ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: NATURAL SAND FILL

TYPE OF PROTECTIVE CASING: NONE

I.D. OF PROTECTIVE CASING: NONE

DIAMETER OF HOLE: 4" INCH

TYPE OF RISER PIPE: Sch 40 PVC

RISER PIPE I.D.: 1 INCH

TYPE OF BACKFILL/SEAL: NATURAL SAND FILL

ELEVATION/DEPTH TOP OF SEAL: , 0ft

TYPE OF SEAL: NATURAL SAND FILL

ELEVATION/DEPTH TOP OF SAND: , 0ft

ELEVATION/DEPTH TOP OF SCREEN: , 1 ft

TYPE OF SCREEN: Sch 40 PVC Factory Slotted

SLOT SIZE x LENGTH: 0.010 IN x 5 ft

TYPE OF SAND PACK: NATURAL SAND FILL

DIAMETER OF HOLE IN BEDROCK: N/A

ELEVATION / DEPTH BOTTOM OF SCREEN: , 6 ft

ELEVATION / DEPTH BOTTOM OF SAND: , 6 ft

ELEVATION/DEPTH BOTTOM OF HOLE: , 6 ft

BACKFILL MATERIAL BELOW SAND: NATURAL SAND FILL

ACAD: FORM_MWFM.dwg 07/20/99 INL

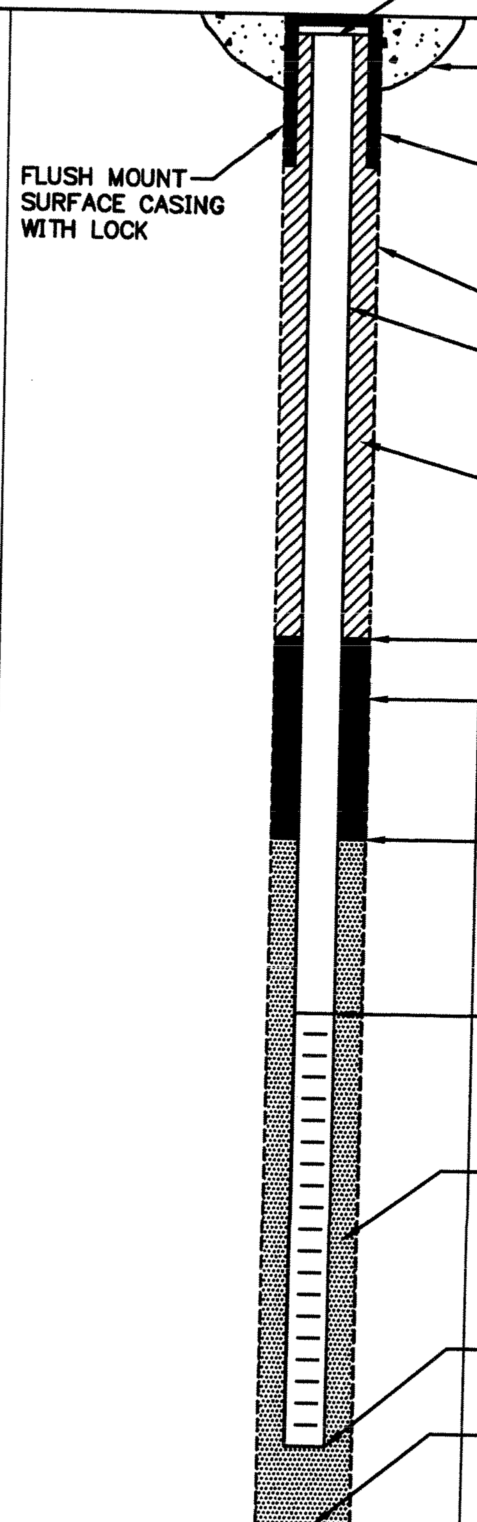
WELL NO.: MPT51-TW01S

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

TEMPORARY WELL

PROJECT SWMU 51	LOCATION NAVSTA MAYPORT	DRILLER GARY OAKES
PROJECT NO. 112G00436	BORING TW01S	DRILLING METHOD HAND AUGER
DATE BEGUN 2/8/07	DATE COMPLETED 2/8/07	DEVELOPMENT METHOD N/A
FIELD GEOLOGIST TERRY COTTENOIR		
GROUND ELEVATION	DATUM	



ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: NATURAL SAND FILL

TYPE OF PROTECTIVE CASING: N/A

I.D. OF PROTECTIVE CASING: N/A

DIAMETER OF HOLE: 4-INCH

TYPE OF RISER PIPE: SCH 40 PVC

RISER PIPE I.D.: 1-INCH

TYPE OF BACKFILL/SEAL: NATURAL SAND FILL

ELEVATION/DEPTH TOP OF SEAL: / 0 ft

TYPE OF SEAL: NATURAL SAND FILL

ELEVATION/DEPTH TOP OF SAND: / 0 ft

ELEVATION/DEPTH TOP OF SCREEN: / 1 ft

TYPE OF SCREEN: SCH 40 PVC Factory Slotted

SLOT SIZE x LENGTH: 0.010-in x 5 ft

TYPE OF SAND PACK: NATURAL SAND FILL

DIAMETER OF HOLE IN BEDROCK: ~~4~~ N/A

ELEVATION / DEPTH BOTTOM OF SCREEN: / 6 ft

ELEVATION / DEPTH BOTTOM OF SAND: / 6 ft

ELEVATION/DEPTH BOTTOM OF HOLE: / 6 ft

BACKFILL MATERIAL BELOW SAND: NATURAL SAND FILL

ACAD: FORM_MWFM.dwg 07/20/99 INL

WELL NO.: MPT51- ~~[illegible]~~ TW01

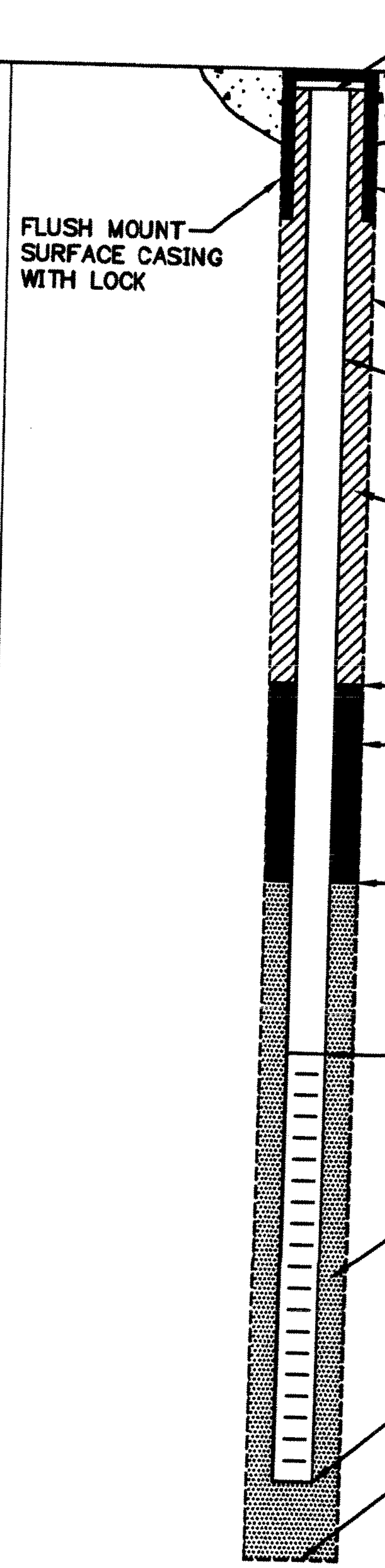
Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

TEMPORARY WELL

PROJECT SWMU 51	LOCATION NAUSTA MAYPORT	DRILLER GARY OAKES
PROJECT NO. 112G00436	BORING TW01S	DRILLING METHOD HAND AUGER
DATE BEGUN 2/8/07	DATE COMPLETED 2/8/07	DEVELOPMENT METHOD N/A
FIELD GEOLOGIST TERRY COTTENOIR		
GROUND ELEVATION	DATUM	

ACAD: FORM_MWFM.dwg 07/20/99 INL



ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: NATURAL SAND FILL

TYPE OF PROTECTIVE CASING: N/A

I.D. OF PROTECTIVE CASING: N/A

DIAMETER OF HOLE: 4-INCH

TYPE OF RISER PIPE: SCH 40 PVC

RISER PIPE I.D.: 1-INCH

TYPE OF BACKFILL/SEAL: NATURAL SAND FILL

ELEVATION/DEPTH TOP OF SEAL: 0 ft

TYPE OF SEAL: NATURAL SAND FILL

ELEVATION/DEPTH TOP OF SAND: 0 ft

ELEVATION/DEPTH TOP OF SCREEN: 1 ft

TYPE OF SCREEN: SCH 40 PVC Factory Slotted

SLOT SIZE x LENGTH: 0.010-in x 5 ft

TYPE OF SAND PACK: NATURAL SAND FILL

DIAMETER OF HOLE IN BEDROCK: ~~4~~ N/A

ELEVATION / DEPTH BOTTOM OF SCREEN: 6 ft

ELEVATION / DEPTH BOTTOM OF SAND: 6 ft

ELEVATION/DEPTH BOTTOM OF HOLE: 6 ft

BACKFILL MATERIAL BELOW SAND: NATURAL SAND FILL

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 51	SITE LOCATION: NAVSTA Mayport	
WELL NO: MPT51-TW01S	SAMPLE ID: MPT51-GW-TW01S-021207	DATE: 2/ 12 /2007

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 1 ft to 6 ft	STATIC DEPTH TO WATER (ft): 4.88	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
0.20 Liters

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 5.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 5.5	PURGE INITIATED AT: 1122	PURGE ENDED AT: 1142	TOTAL VOLUME PURGED (Liters): 4.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (μS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1122	–	–	200	4.88	–	–	–	–	–	–	LT. BROWN
1127	1.0	1.0	200	5.01	7.56	17.93	12938	1.66	240	68.1	"
1132	1.0	2.0	200	5.01	7.59	17.82	13734	1.50	100	27.6	"
1137	1.0	3.0	200	5.01	7.59	17.74	14056	1.77	60	47.8	CLEAR
1142	1.0	4.0	200	5.01	7.59	17.75	14231	1.22	12	59.2	CLEAR
	SAMPLE	TIME		1145							

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ TERRY COTTENOIR	SAMPLER(S) SIGNATURES: Terry Cott	SAMPLING INITIATED AT: 1145	SAMPLING ENDED AT: 1155
PUMP OR TUBING DEPTH IN WELL (feet): 5.5	SAMPLE PUMP FLOW RATE (mL per minute): VT/200	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: _____ μm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	2	AG	1L	–	–	~~<2~~	8270 SIM	VT
	2	AG	1L	HCL	–	–	TRPH/FL-PRO	VT

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

TWO.

WELL NO.: MPT51 - ~~[illegible]~~

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

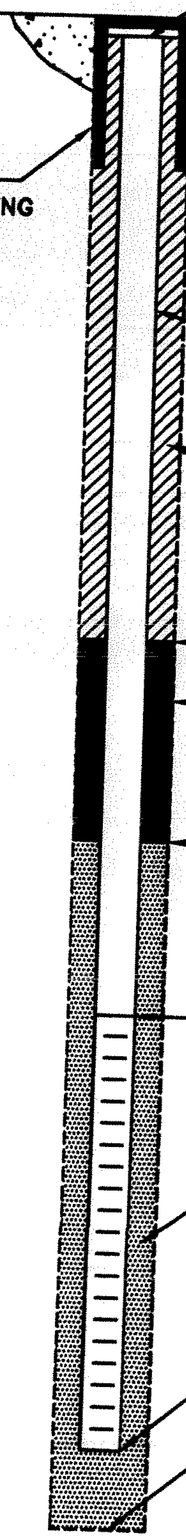
TEMPORARY WELL

PROJECT SWMU 51
PROJECT NO. 112G00436
DATE BEGUN 2/8/07
FIELD GEOLOGIST TERRY COTTENOIR
GROUND ELEVATION

LOCATION NAVSTA MAYPORT
BORING TW02S
DATE COMPLETED 2/8/07
DATUM

DRILLER GARY OAKES
DRILLING METHOD HAND AUGER
DEVELOPMENT METHOD N/A

ACAD:FORM_MWFM.dwg 07/20/99 INL



ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: NATURAL SAND FILL

TYPE OF PROTECTIVE CASING: NONE

I.D. OF PROTECTIVE CASING: NONE

DIAMETER OF HOLE: 4" INCH

TYPE OF RISER PIPE: ~~1"~~ SCH 40 PVC

RISER PIPE I.D.: 1 INCH

TYPE OF BACKFILL/SEAL: NATURAL SAND FILL

ELEVATION/DEPTH TOP OF SEAL: .0ft

TYPE OF SEAL: NATURAL SAND FILL

ELEVATION/DEPTH TOP OF SAND: .0ft

ELEVATION/DEPTH TOP OF SCREEN: 11 ft
TYPE OF SCREEN: SCH 40 PVC Factory Slotted
SLOT SIZE x LENGTH: 0.010 in x 5 ft

TYPE OF SAND PACK: NATURAL SAND FILL

DIAMETER OF HOLE IN BEDROCK: N/A

ELEVATION / DEPTH BOTTOM OF SCREEN: 16ft
ELEVATION / DEPTH BOTTOM OF SAND: 16ft
ELEVATION/DEPTH BOTTOM OF HOLE: 16ft
BACKFILL MATERIAL BELOW SAND: NATURAL SAND FILL

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 51	SITE LOCATION: NAVSTA Mayport	
WELL NO: MPT51-TW02S	SAMPLE ID: MPT51-GW-TW02S-021207	DATE: 2/ 12 /2007

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 1 ft to 6 ft	STATIC DEPTH TO WATER (ft): 4.89	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
0.26 Liters

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
_____ Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 5.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 5.5	PURGE INITIATED AT: 1200	PURGE ENDED AT: 1220	TOTAL VOLUME PURGED (Liters): 4.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (μS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1200	–	–	200	4.89	–	–	–	–	–	–	LT. BROWN
1205	1.0	1.0	200	5.00	8.05	18.31	7681	1.16	140	-73.0	"
1210	1.0	2.0	200	5.00	7.95	17.44	7250	0.76	45	-93.8	CLEAR
1215	1.0	3.0	200	5.00	7.90	17.47	7002	0.62	16	-98.5	"
1220	1.0	4.0	200	5.00	7.88	17.54	6982	0.59	8.2	-102.6	"
	SAMPLE	TIME		1222							

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ TERRY COTTENOIR	SAMPLER(S) SIGNATURES: Terry Cott	SAMPLING INITIATED AT: 1222	SAMPLING ENDED AT: 1232
PUMP OR TUBING DEPTH IN WELL (feet): 5.5	SAMPLE PUMP FLOW RATE (mL per minute): 200/VT	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: _____ μm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	2	AG	1L	–	–	–	8270 SIM	VT
	2	AG	1L	HCL	–	–	TRPH/FL-PRO	VT

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

11/27/06 112G00436 GW Sampling (SWMW6+7) CTO 83 US Navy

Personnel: Donald Hardison (DH) - FOL, Kara Wimble (KW) - TtNUS

Vehicles: OLD F250 LiftGate, Donalds POV

PPE: Level D

Weather: 60's, Overcast

Objective: continue groundwater sampling

0700 DH and KW at TtNUS office and loading equipment

0830 DH and KW leave for Mayport, KW will stop for ice and garbage bags

0910 DH and KW on site. Calibrating Instruments and sign in to IAP Hill Treatment Facility

The Following groundwater samples were collected

Well ID	Sample ID	Start Purge	End Purge	Sample Time	Analysis
08 MW 07S	MPT08-MW07S-112706	1035	1100	1105	TRPH, PAH, BTEX+MTBE, EDB
07 TW 03S	MPT07-TW03S-112706	1048	1127	1127	↓
*08 MW03S	MPT08-MW03S-112706	1150	1210	1215	↓
07 TW 06S	MPT07-TW06S-112706	1216	1238	1239	↓
08 RW01	MPT08-RW01-112706	1307	1327	1330	↓
07 TW 07S	MPT07-TW07S-112706	1351	1400	1403	↓
07 TW 05S	MPT07-TW05S-112706	1415	1435	1440	↓
06 TW 01S	MPT06-TW01S-112706	1543	1606	1608	↓

* MPT 08 MW03S was re sampled by mistake

1440 The LiftGate Truck is stuck and KW advises DH of the situation. DH attempts to get truck unstuck.

1500 DH calls and discusses situation with Shina Ballard, the Project Manager. ~~I~~ DH Shina will call for a tow truck.

1510 DH talks with tow company and will meet them to bring them to site

1540 DH and Auto Store Towing on site

1620 Auto Store Towing get Truck unstuck

1700 DH and KW leave site and stop for Ice and to Pack Samples into coolers

1800 DH and KW at Fed Ex and finishing packing coolers

1845 DH and KW leave Fed Ex. KW will go back to office and unload truck

[signature]

11/28/06 112600436 GW Sampling (SWMU 6+7) CTO 33 USNAVY

Personnel : Donald Hardison (DH) FOL - TTNUS

Vehicle : Donald's POV

Weather : 70's clear

Objective : continue GW sampling

PPE : Level D

0730 - DH at office and loading up equipment

0930 - DH on site and calibrating equipment, DH signing in at IAP Hill Facility

The Following ground water samples were collected

Well ID	Sample ID	Start Purge	End Purge	Sample Time	Analysis
07TW02S	MPT07-TW02S -112806	1035	1105	1110	TRPH, PAH, BTEX+MTBE, EDB
08MW16S	MPT08-MW16S - 112806	1205	1230	1235	↓
08MW15SR	MPT08 - MW15SR - 112806	1305	1330	1335	↓
07TW04S	MPT07-TW04S - 112806	1435	1500	1505	↓

1545 - DH leaves site and goes to convenience store to pack up coolers for sample shipment.

1630 - DH at Fed Ex to finish packing up coolers and shipping samples

1730 - DH Back at office and unloading equipment

DH

Don Hardison

11/29/06 112600436 GW Sampling (SWMU 6+7) CTO 33 US NAVY

Personnel : Donald Hardison (DH) FOL , Kara Wimble (KW) - TtNUS

Vehicles : OLD F250 Lift Gate , Donald's POV

PPE : Level D

Weather : 70's clear

Objective : continue GW sampling and collect water level measurements

0700 . DH and KW at TtNUS office and loading equipment

0830 : DH and KW leave office for Mayport. KW will stop for ice. DH will stop for batteries for LaMotte turbidity meter.

0930 . DH and KW on site. KW calibrating ^DH^ equipment. DH attempting to locate MPT-S-MW02S

1030 - DH unable to locate MPT-S-MW02S . Final 3 wells are in area that is locked. DH calls security to come unlock gate ~~so~~ ^DH^ to gain entry for sampling

1100 - Security lets DH and KW in gate and will have to lock it after entry. will have to call security back to get out.

The following gw samples were collected

Well ID	Sample ID	Start Purge	End Purge	Sample Time	Analysis
08MW17S	MPT08-MW17S-112906	1120	1140	1145	TRPH, PAH, BTEX+MTBE, EDB
08MW04S	MPT08-MW04S-112906	1120	1156	1158	↓
08MW18S	MPT08-MW18S-112906	1220	1240	1245	

* unable to locate well MPT-S-MW02S. is located adjacent to the river and is likely sedimented over.
* Water Levels were collected at the three wells b/c of limited access

1250 - DH calls security to let us out of area

1300 - DH and KW let out of area. ~~DH and KW begin~~ DH

1330 - DH and KW begin collecting water level measurements for remaining wells. Please see ground water level sheet for gw levels and collection times

1430 - DH and KW at convenience Store to pack up coolers for shipment

1530 - DH at FedEx to ship samples. KW back at office to unload Truck

[30]

Donald Hardison

11/30/06 112G00436 GPS collection for CTO33 US NAVY

Personnell : Donald Hardison (DH) FOL, John Wright (JW) - TtNUS
Vehicle : DH's POV
Weather : 70's Clear

Objective : Collect GPS readings for soil boring and monitoring wells at SWMU's, 6, 7, 8, 9, 10, 11 and 51

1100 - DH and JW leave office and stop at Lowes to get stakes

1200 - DH and JW at lunch

1230 - DH and JW sign into FISC area to collect GPS points

1240 - DH and JW attempt to locate MPT-S-MW02S using GPS data that has been stored in database.

1340 - DH and JW unable to locate MPT-S-MW02S
- DH and JW begin to collect GPS data for SWMU 51

1430 - DH and JW begin to collect GPS data for SWMU 11 and SWMU 8

1500 - DH and JW leave FISC area and sign into IAP Hill area
- DH and JW collect GPS data for SWMU 10 and continue collecting data for SWMU 8

1530 - DH and JW collecting GPS data for SWMU 9

1630 - DH and JW finished collecting GPS data for soil borings and monitoring wells at SWMU's 8, 9, 10, 11 and 51 and headed back to office

1715 - DH and JW back at office and downloading GPS data that has been collected for the day

DH

[signature]

12/1/06 112G00436 GPS for SWMU 6+7, Utility Locate CTO33 US Navy

Personnel - Donald Hardison (DH) FOL - TetraTech NUS

Vehicle - DH POV

Weather - 70's clear

Objective - Collect GPS data for SWMU 6 and 7 soil borings and monitoring well installations. Lay out points for soil borings and monitoring well installations for utility locates at SWMU 6, 7, 44 and 45

0800 - DH at office and loading equipment

0900 - DH leaves for Mayport

0945 - DH signs in at JAP Hill office
- DH begins collecting GPS data at SWMU 6 and 7

1100 - DH begins laying points for utility locates at SWMU 6+7

1300 - DH at SWMU 44 and 45 and signs in
- DH laying out points for utility locate at SWMU 44 and 45

~~1630~~ 1600 DH - DH finished locating points and headed back to office

1645 - DH back at office and downloading GPS data to forward to John Wright at Pittsburgh

DH

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Donald Hardison

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SMUS 647		SITE LOCATION: NAVSTA Mayport	
WELL NO: MPT-08-MW07S	SAMPLE ID: MPT08-MW07S-112706		DATE: ~~11/27~~ DH 11/27/06

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: 5.5 feet to 15.5 feet	STATIC DEPTH TO WATER (feet): 9.58	PURGE PUMP TYPE OR BAILER: Peristaltic

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
________ Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
________ Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.5	PURGING INITIATED AT: 1035	PURGING ENDED AT: 1100	TOTAL VOLUME PURGED (Liters): 7.5

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (lpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1035	–	–	0.3	9.58	–	–	–	–	–	cloudy	none
1045	3.0	3.0	0.3	9.63	6.61	25.14	1199	0.15	16.1	cloudy	none
1050	1.5	4.5	0.3	9.65	6.61	25.20	1190	0.07	16.9	cloudy	none
1100	3.0	7.5	0.3	9.71	6.62	25.23	1179	0.03	15.1	cloud	none

Sample Time - 1105

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Donald Hardison / TtNUS	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1105	SAMPLING ENDED AT: 1125
PUMP OR TUBING DEPTH IN WELL (feet): 10.5	SAMPLE PUMP FLOW RATE (mL per minute): 300	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	2	AG	~~AG~~ DH 1L	HCl	1 L	<2	FL PRO	
	2	AG	~~AG~~ DH 1L	None	1 L	–	PAHS	
	3	CG	~~CG~~ DH 40ml	HCl	40 ml	<2	BTEX + MTBE	
	2	CG	~~CG~~ DH 40ml	HCl	40 ml	<2	EDB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: Mayport		SITE LOCATION: SWMUs 6+7	
WELL NO: ~~FW~~ KW 07TW03S	SAMPLE ID: MPT07-TW03S-112706		DATE: 11/27/06

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 5 feet to 15 feet	STATIC DEPTH TO WATER (feet): 9.0	PURGE PUMP TYPE OR BAILER: peristaltic

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
0.96 Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
~~0.96~~ KW Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 9.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGING INITIATED AT: 1048	PURGING ENDED AT: 1127	TOTAL VOLUME PURGED (Liters): 7.4

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (lpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
~~1105~~	~~3.4~~ KW		~~0.2~~ KW		~~6.91~~	~~25.83~~	~~729~~ KW				
1108	4.0	4.0	0.2	9.04	6.92	25.87	730	5.0	0.45	clear	none
1111	~~4~~ .6	4.6	0.2	9.04	6.92	25.94	730	10.1	0.20	clear	none
1118 ~~4~~	0.6	5.2	0.2	9.04	6.92	26.00	730	22.4	0.00	clear	none
1119	1.0	6.2	0.2	9.04	6.92	26.15	734	18.4	0.15	clear	none
1122	0.6	6.8	0.2	9.04	6.92	26.26	733	15.4	0.55	clear	none
1125	0.6	7.4	0.2	9.04	6.92	26.34	732	12.6	1.00	"	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Kara F. Wimble	SAMPLER(S) SIGNATURES: Kara F. Wimble	SAMPLING INITIATED AT: 1127	SAMPLING ENDED AT: 1143
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE PUMP FLOW RATE (mL per minute): 200 ml	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
FIPRO	2	AG	1L	HCl	200	<2	FIPRO	
8310	2	AG	1L	None	200	–	8310-PAHs	
8260B	3	CG	40ml	HCl	120	<2	Btex+Mtbe	
8011	2	CG	40ml	HCl	80	<2	EDB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMUs 6+7		SITE LOCATION: NAVSTA Mayport	
WELL NO: MW03S	SAMPLE ID: MPT03-MW03S-112706		DATE: 11/27/06

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: 7.09 feet to 17.09 feet	STATIC DEPTH TO WATER (feet): 11.46	PURGE PUMP TYPE OR BAILER: Peristaltic

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)

____________ Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

____________ Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 12.09	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 12.09	PURGING INITIATED AT: 1150	PURGING ENDED AT: 1210	TOTAL VOLUME PURGED (Liters): 6.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (lpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1150	–	–	0.3	11.46	–	–	–	–	–	cloudy	Yes ~~[illegible]~~ PH
1200	3.0	3.0	0.3	11.61	6.68	24.61	1050	0.37	7.54	cloudy	Yes
1205	1.5	4.5	0.3	11.58	6.65	24.54	1034	0.29	6.79	cloudy	Yes
1210	1.5	6.0	0.3	11.55	6.64	24.56	1031	0.27	6.04	cloudy	Yes

Sample Time – 1215

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Donald Hoodison / TC NUS	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1215	SAMPLING ENDED AT: 1235
PUMP OR TUBING DEPTH IN WELL (feet): 12.09	SAMPLE PUMP FLOW RATE (mL per minute): 360	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	2	AG	1L	HCl		<2	FL-PRO	
	2	AG	1L	None		–	PAHs	
	3	CG	40ml	HCl		<2	BTEX + MTBE	
	2	CG	40ml	HCl		<2	EDB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: Mayport		SITE LOCATION: SWMUs 6+7	
WELL NO: TW06S	SAMPLE ID: MPT07-TW06S-112906		DATE: 11/27/06

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 5 feet to 15 feet	STATIC DEPTH TO WATER (feet): 8.12	PURGE PUMP TYPE OR BAILER: peristaltic

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable) 1.099 Liters

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) — Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~~13~~ 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~~13 14~~ 10	PURGING INITIATED AT: 1216	PURGING ENDED AT: 1238	TOTAL VOLUME PURGED (Liters): 4.4

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (lpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (μmhos/cm or μS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1230	2.8	2.8	0.2	7.90	6.95	25.64	967	1.9	1.1	clear	None
1233	~~3.4~~	3.4	0.2	7.90	6.94	25.75	969	1.5	1.6	clear	none
—	0.6	—	—	—	—	—	—	—	—	—	—
1236	0.6	4.0	0.2	7.90	6.94	25.83	970	3.2	1.0	clear	none

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Kara F. Wimble	SAMPLER(S) SIGNATURES: Kara F. Wimble	SAMPLING INITIATED AT: 1239	SAMPLING ENDED AT: 1254
PUMP OR TUBING DEPTH IN WELL (feet): ~~13~~ 10	SAMPLE PUMP FLOW RATE (mL per minute): 0.2	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ μm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
FlPro	2	AG	1L	HCl	200ml		FlPro/TRPH	
8310	2	AG	1L	None	200ml		PAHs -	
8260B	3	CG	40ml	HCl	120		BTEX+MTBE	
8011	2	CG	40ml	HCl	80		EDB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: Swmu 6 + 7	SITE LOCATION: NAVSTA Mayport
WELL NO: MPT08 - RW01	SAMPLE ID: MPT08-RW01-112706	DATE: 11/27/06

PURGING DATA

WELL DIAMETER (inches): 4"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: 7.1 feet to 17.1 feet	STATIC DEPTH TO WATER (feet): 14.54	PURGE PUMP TYPE OR BAILER: Peristaltic

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
_____________ Liters

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
_____________ Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 12.1	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 12.1	PURGING INITIATED AT: 1307	PURGING ENDED AT: 1327	TOTAL VOLUME PURGED (Liters): 6.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (lpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1307	–	–	0.3	14.54	–	–	–	–	–	cloudy	–
1317	3.0	3.0	0.3	14.65	6.99	23.78	812	1.24	8.34	cloudy	Yes
1322	1.5	4.5	0.3	14.71	6.96	23.77	812	0.71	7.42	cloudy	Yes
1327	1.5	6.0	0.3	14.68	6.95	23.70	809	0.49	9.42	cloudy	Yes

Sample Time 1330

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Donald Hardison / TtNUS	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1330	SAMPLING ENDED AT: 1355
PUMP OR TUBING DEPTH IN WELL (feet): 12.1	SAMPLE PUMP FLOW RATE (mL per minute): 300	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: _____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	2	AG	1L	HCl		<2	FI-PRO	
	2	AG	1L	None		–	PAHS	
	3	CG	40ml	HCl		<2	BTEX + MTBE	
	2	CG	40ml	HCl		<2	EDB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: NAS Mayport	SITE LOCATION: SWMUs 6+7
WELL NO: TW07S	SAMPLE ID: MPT07-TW07S-112706	DATE: 11/27/06

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 6.42	PURGE PUMP TYPE OR BAILER: peristaltic

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
1.35 Liters

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
/ Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGING INITIATED AT: 1351	PURGING ENDED AT: 1400	TOTAL VOLUME PURGED (Liters): 4.75

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (lpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1354	3.25	3.25	0.25	6.50	7.03	26.26	742	3.5	8.8	clear	HC
1357	0.75	4.00	0.25	6.50	7.03	26.37	730	2.2	7.5	clear	HC
1400	0.75	4.75	0.25	6.50	7.04	26.38	728	2.4	7.3	clear	HC

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Kara F. Wimble/TtNUS	SAMPLER(S) SIGNATURES: Kara F. Wimble	SAMPLING INITIATED AT: 1403	SAMPLING ENDED AT: ~~14~~ 1420 KW
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
FLPRO	2	AG	1L	HCl	200	<2 ~~7.04~~ KW	TRPH	
8310	2	AG	1L	None	200	7.04 KW	PAHs	
8260B	3	~~AG~~ KW CG	40ml	HCl	120	<2 ~~7.04~~ KW	BTEX + MTBE	
8011	2	CG	40ml	HCl	80	<2 ~~7.04~~ KW	EDB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 6+7		SITE LOCATION: NAVSTA Mayport	
WELL NO: MPT07-TW05S	SAMPLE ID: MPT07-TW05S-112706		DATE: 11/27/06

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: 4.7 feet to 14.7 feet	STATIC DEPTH TO WATER (feet): 7.12	PURGE PUMP TYPE OR BAILER: Peristaltic

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
____________Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
____________Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 9.7	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 9.7	PURGING INITIATED AT: 1415	PURGING ENDED AT: 1435	TOTAL VOLUME PURGED (Liters): 6.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (lpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1415	–	–	0.3	7.12	–	–	–	–	–	cloudy	–
1425	3.0	3.0	0.3	7.23	6.85	25.08	1048	1.70	3.02	cloudy	Yes
1430	1.5 ~~4.5~~ DPH	4.5	0.3	7.31	6.83	25.14	1048	0.48	2.48	cloudy	Yes
1435	1.5	6.0	0.3	7.35	6.82	25.15	1052	0.46	2.02	cloudy	Yes
				Sample Time - 1440							

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Donald Hardison / TENUS	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1440	SAMPLING ENDED AT: 1505
PUMP OR TUBING DEPTH IN WELL (feet): 9.7	SAMPLE PUMP FLOW RATE (mL per minute): 300	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type: ______	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	2	AG	1L	HCl		<2	FL-PRO	
	2	AG	1L	None		–	PAHs	
	3	CG	40ml	HCl		<2	BTEX+MTBE	
	2	CG	40ml	HCl		<2	EDB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: Mayport		SITE LOCATION: SWMUs 6+7	
WELL NO: 064TW01S	SAMPLE ID: MPT06-TW01S-112706		DATE: 11/27/06

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 5 feet to 15 feet	STATIC DEPTH TO WATER (feet): 6.62	PURGE PUMP TYPE OR BAILER: peristaltic

WELL VOLUME PURGE: 1 **WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable) 1.34 Liters

EQUIPMENT VOLUME PURGE: 1 **EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) / Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGING INITIATED AT: 1543	PURGING ENDED AT: 1606	TOTAL VOLUME PURGED (Liters): 4.6

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (lpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (μmhos/cm or μS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1600	3.4	3.4	0.2	6.70	7.03	24.96	673	3.7	0.51	clear	sulfur
1603	~~0~~0.6	~~0.6~~	0.2	6.70	7.03	24.97	673	3.1	0.97	clear	sulfur
	~~0.6~~	4.0	~~0.2~~	~~6.70~~							
1606	0.6	4.6	0.2	~~673~~ 6.70	7.03	24.98	673	4.1	0.64	clear	sulfur

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Kara F. Wimble / TtNUS	SAMPLER(S) SIGNATURES: Kara J. Wimble	SAMPLING INITIATED AT: 1608	SAMPLING ENDED AT: 1628
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE PUMP FLOW RATE (mL per minute): 200	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ μm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
FLPRO	2	AG	1L	HCl	200ml	<2	TRPH	
8310	2	AG	1L	None	200ml	—	PAHs	
8260B	3	CG	40ml	HCl	120ml	<2	BTEX+MTBE	
8011	2	CG	40ml	HCl	80ml	<2	EDB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 6+7	SITE LOCATION: NAVSTA Mayport	
WELL NO: 07 TW 02S	SAMPLE ID: MPT07-TW02S-112806	DATE: 11/28/06

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: 5 feet to 15 feet	STATIC DEPTH TO WATER (feet): 8.31	PURGE PUMP TYPE OR BAILER: Peristaltic

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
__________Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
__________Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGING INITIATED AT: 1035	PURGING ENDED AT: 1105	TOTAL VOLUME PURGED (Liters): 9.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (lpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1035	–	–	0.3	8.31	–	–	–	–	–	cloudy	no
1045	3.0	3.0	0.3	8.41	7.66	26.14	343	2.79	2.09	clear	no
1050	1.5	4.5	0.3	8.54	7.68	26.10	344	2.14	1.84	clear	no
1100	3.0	7.5	0.3	8.55	7.67	26.07	344	0.91	1.04	clear	no
1105	1.5	9.0	0.3	8.51	7.66	26.13	348	0.44	1.01	clear	no
					Sample Time – 1110						

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: D. Hardison / TtNUS	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1110	SAMPLING ENDED AT: 1130
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE PUMP FLOW RATE (mL per minute): 300	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	2	AG	1L	HCl		<2	FLPRO	
	2	AG	1L	None		–	PAHs	
	3	CG	40ml	HCl		<2	BTEX + MTBE	
	2	CG	40ml	HCl		<2	EDB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 6+7		SITE LOCATION: NAVSTA Mayport	
WELL NO: 08 MW16S	SAMPLE ID: MPT08-MW16S-112806		DATE: 11/28/06

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: 5 feet to 15 feet	STATIC DEPTH TO WATER (feet): 8.21	PURGE PUMP TYPE OR BAILER: Peristaltic

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
_____________Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
_____________Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGING INITIATED AT: 1205	PURGING ENDED AT: 1230	TOTAL VOLUME PURGED (Liters): 7.5

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (lpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1205	–		0.3	8.21	–	–	–	–	–	cloudy	–
1215	3.0	3.0	0.3	8.40	6.72	25.53	1063	0.45	5.68	cloudy	Yes
1220	1.5	4.5	0.3	8.45	6.71	25.49	1051	0.32	4.31	cloudy	Yes
1230	3.0	7.5	0.3	8.51	6.70	25.50	1043	0.27	2.65	cloudy	Yes

Sample Time 1235

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Donald Hardison / TtNUS	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1235	SAMPLING ENDED AT: 1250
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE PUMP FLOW RATE (mL per minute): 300	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: _____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	2	AG	1L	HCl		<2	FL-PRO	
	2	AG	1L	None		—	PAHs	
	3	CG	40ml	HCl		<2	BTEX+MTBE	
	2	CG	40ml	HCl		<2	EDB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 6+7		SITE LOCATION: NAVSTA Mayport	
WELL NO: 08 MW15SR	SAMPLE ID: MPT08-MW15 SR-112806		DATE: 11/28/06

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: 30.5 feet to 35.5 feet	STATIC DEPTH TO WATER (feet): 10.0	PURGE PUMP TYPE OR BAILER: Peristaltic

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
_____ Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
_____ Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 33	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 33	PURGING INITIATED AT: 1305	PURGING ENDED AT: 1330	TOTAL VOLUME PURGED (Liters): 7.5

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (lpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1305	—	—	0.3	10.0	—	—	—	—	—	cloudy	—
1320	4.5	4.5	0.3	10.15	7.08	25.12	1728	0.19	35.6	cloudy	No
1325	1.5	6.0	0.3	10.28	7.17	25.07	1989	0.21	25.8	cloudy	No
1330	1.5	7.5	0.3	10.35	7.16	25.04	1995	0.24	19.6	cloudy	No

Sample Time - 1335

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: D. Hardison / TtNUS	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1335	SAMPLING ENDED AT: 1353
PUMP OR TUBING DEPTH IN WELL (feet): 33	SAMPLE PUMP FLOW RATE (mL per minute): 300	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	2	AG	1L	HCl		<2	FL-PRO	
	2	AG	1L	None		—	PAHs	
	3	CG	40ml	HCl		<2	BTEX + MTBE	
	2	CG	40ml	HCl		<2	EDB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; T = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: Swmu 6+7		SITE LOCATION: NAVSTA Mayport	
WELL NO: 07TW04S	SAMPLE ID: MPT07-TW04S-112806		DATE: 11/28/06

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: 8 feet to 18 feet	STATIC DEPTH TO WATER (feet): 9.53	PURGE PUMP TYPE OR BAILER: Peristaltic

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
_______ Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
_______ Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13	PURGING INITIATED AT: 1435	PURGING ENDED AT: 1500	TOTAL VOLUME PURGED (Liters): 7.5

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (lpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1435	–	–	0.3	9.53	–	–	–	–	–	cloudy	–
1445	3.0	3.0	0.3	9.64	6.70	26.82	1135	0.34	2.46	clear	Yes
1455	3.0	6.0	0.3	9.71	6.70	26.88	1123	0.20	1.09	clear	Yes
1500	3.0	7.5	0.3	9.70	6.70	26.84	1120	0.19	1.01	clear	Yes
				Sample Time - 1505							

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Donald Hardison / TtNUS	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1505	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet): 13	SAMPLE PUMP FLOW RATE (mL per minute): 300	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	2	AG	1L	HCl		<2	FL-PRO	
	2	AG	1L	None		–	PAHs	
	3	CG	40ml	HCl		<2	BTEX+MTBE	
	2	CG	40ml	HCl		<2	EDB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 6+7	SITE LOCATION: NAVSTA Mayport
WELL NO: 08MW17S	SAMPLE ID: MPT08-MW17S-112906 — DATE: 11/29/06

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: 5 feet to 15 feet	STATIC DEPTH TO WATER (feet): 9.14	PURGE PUMP TYPE OR BAILER: Peristaltic

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
4.7 Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGING INITIATED AT: 1120	PURGING ENDED AT: 1140	TOTAL VOLUME PURGED (Liters): 6.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (lpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1120	–	–	0.3	9.14	–	–	–	–	–	cloudy	–
1130	3.0	3.0	0.3	9.16	6.71	25.38	721	0.59	11.6	cloudy	none
1135	~~4~~ 1.5	4.5	0.3	9.17	6.71	25.31	717	0.40	19.7	cloudy	none
1140	1.5	6.0	0.3	9.16	6.71	25.29	715	0.38	18.9	cloudy	none

Sample Time 1145

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Donald Hardison / TtNUS	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1145	SAMPLING ENDED AT: 1200
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE PUMP FLOW RATE (mL per minute): 300	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	2	AG	1L	HCl		<2	FL-PRO	
	2	AG	1L	None		–	PAH	
	3	CG	40ml	HCl		<2	BTEX+MTBE	
	2	CG	40ml	HCl		<2	EDB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMUs 6+7	SITE LOCATION: NAS- Mayport
WELL NO: ~~MW~~ MPT08-MW04S	SAMPLE ID: MPT08-MW04S-112906	DATE: 11/29/06

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 5 feet to 15 feet	STATIC DEPTH TO WATER (feet): 10.14	PURGE PUMP TYPE OR BAILER: peristaltic

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
~~0.11~~ Liters 0.617 L

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
______ Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGING INITIATED AT: 1120	PURGING ENDED AT: 1056	TOTAL VOLUME PURGED (Liters): 10.8

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (lpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1120	—	—	0.3	10.14	—	—	—	—	—		
~~1138~~	KW									dirty	none
1143	6.9	6.9	0.3	10.24	6.68	26.12	793	4.3	6.83	clear	none
~~1148~~	~~1.5~~	~~7.4~~	~~0.3~~	KW							
~~1152~~	~~1.5~~	~~8.9~~	~~0.3~~	KW							
1151	2.4	9.3	0.3	10.14	6.69	26.14	794	24.8	5.58	clear	none
1156	1.5	10.8	0.3	10.16	6.69	26.14	794	23.9	6.07	clear	none

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Kara F. Wimble	SAMPLER(S) SIGNATURES: Kara F Wimble	SAMPLING INITIATED AT: 1058	SAMPLING ENDED AT: 1220
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE PUMP FLOW RATE (mL per minute): 300	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: — µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
FLPRO	2	AG	1L	HCl	200	<2	TRPH	
8310	2	AG	1L	None	200	—	PAHs	
8260B	3	CG	40ml	HCl	120	<2	BTEX+MTBE	
8011	2	CG	40ml	HCl	80	<2	EDB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 6+7		SITE LOCATION: NAVSTA Mayport	
WELL NO: 08 MW 18S	SAMPLE ID: MPT08-MW18S-112906		DATE: 11/29/06

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: 4.5 feet to 14.5 feet	STATIC DEPTH TO WATER (feet): 6.72	PURGE PUMP TYPE OR BAILER: Peristaltic

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
_____________ Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
_____________ Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 9.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 9.5	PURGING INITIATED AT: 1220	PURGING ENDED AT: 1240	TOTAL VOLUME PURGED (Liters): 6.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (lpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1220	—	—	0.3	6.72	—	—	—	—	—	cloudy	—
1230	3.0	3.0	0.3	6.75	6.92	25.59	559	0.49	3.34	clear	no
1235	1.5	4.5	0.3	6.74	6.93	25.61	552	0.51	1.72	clear	no
1240	1.5	6.0	0.3	6.78	6.95	25.64	543	0.34	1.88	clear	no

Sample Time - 1245

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: D. Hardison / TtNUS	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1245	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet): 9.5	SAMPLE PUMP FLOW RATE (mL per minute): 300	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	2	AG	1L	HCl		<2	FL-PRO	
	2	AG	1L	—		—	PAH	
	3	CG	40ml	HCl		<2	BTEX-MTBE	
	2	CG	40ml	HCl		<2	EDB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS, Inc.

Project Name: Mayport SWMU 6+7
Location: NAVSTA Mayport
Weather Conditions: 70s Clear
Tidally Influenced:

Project No.: 112600436
Personnel: D. Hardison, K. Wimble
Measuring Device: 100' Water Level Meter
Remarks:

Well ID	Date	Time	Total Depth (feet)*	Water Level (feet)*	Free Product (Yes/No)	Free Product Thickness (feet)*	Comments
08MW17S	11/29/06	1120	15	9.14			
08MW[illegible]S	11/29/06	1120	15	10.14			
08MW18S	11/29/06	1220	14.5	6.72			
07TW02S	11/29/06	1345	15	8.29			
08MW01S	11/29/06	1347	16.33	11.28			2-3 foot risers
06TW01S	11/29/06	1350	15	6.46			
08MW02S	11/29/06	1352	20.10	11.76			2-3 foot risers
08MW03S	11/29/06	1355	17.10	11.62			2-3 foot risers
07TW05S	11/29/06	1357	15	7.42			
08RW01	11/29/06	1358	16.58	4.58			
07TW06S	11/29/06	1400	15	7.96			
07TW07S	11/29/06	1401	15	6.58			
08MW07S	11/29/06	1402	15	9.33			
07TW03S	11/29/06	1404	15	9.04			
08MW06S	11/29/06	1408	15	9.54			
07TW04S	11/29/06	1412	18	9.78			
08MW16S	11/29/06	1417	15	8.03			
08MW15SR	11/29/06	1419	38	10.02			
07TW01S	11/29/06	1421	18	9.83			

* All measurements to the nearest 0.01 foot

INSTRUMENT CALIBRATION SHEET

PROJECT NAME : Mayport - SWMU 6+7

PROJECT NUMBER : 112G00436

CALIBRATION DATE	INSTRUMENT/MODEL	Serial #	STANDARDS USED	Lot #	EXP. DATE	PRE READING	FINAL READING	SIGNATURE + COMMENTS
11/27/06	YSI 556	06E1427AN		6255-17	9/19/07	1705	1531	Conductivity - 1409
				6044-09	2/20/08	4.29	4.00	pH 4.0
				6223-04	8/17/08	9.68	10.00	pH 10.0
				C164	10/07	~~10~~ x10	~~100.00~~	ORP - 240 mV
						215	240 mV	
						104.5	100.00	DO %
11/27/06	YSI 556	06K1082AJ		6255-17	9/19/07	1509	1509	Conductivity - 1409
				6044-09	2/20/08	4.37	4.00	pH 4.0
				6223-04	8/17/08	9.72	10.00	pH 10.0
				C164	10/07	207.0	240.00	ORP - 240 mV
						104.9	100.00	DO%
11/27/06	LaMotte Turbidity 2020	1139-1699		0286	—	0.00	0.00	0 NTU
						9.9	10.00	10 NTU
11/27/06	Lamotte Turbidity 2020	PN-ME11540		P676590		0.0	0.0	0 NTU
				Batch:	081606	9.99	10.00	10 NTU
				P674931	Feb 08			
				P676590				
				~~0286~~	-	0.0	0.0	0 NTU
11/28/06	Lamotte 2020	PN 26850		P674931	2/08	9.84	10.0	10 NTU
11/28/06	YSI 556	~~06E1427AN~~ 06K1082AJ		6255-17	9/19/07	1418	1409	Conductivity 1409
				6044-09	2/20/08	3.88	4.00	pH 4.0
				6223-04	8/17/08	10.02	10.00	pH 10.0
						102.1	100	DO%

INSTRUMENT CALIBRATION SHEET

PROJECT NAME : Mayport SWMU 6+7

PROJECT NUMBER : 112G00436

CALIBRATION DATE	INSTRUMENT/MODEL	Serial #	STANDARDS USED	Lot #	EXP. DATE	PRE READING	FINAL READING	SIGNATURE + COMMENTS
11/29/06	YSI 556	06K1082AT		–	–	98.4%	100%	DO%
			pH - 4.0	6094-09	2/20/08	4.18	4.00	pH 4.0
			pH - 10.0	6223-04	8/17/08	9.79	10.00	pH 10.00
				6255-17	9/19/07	1398	1409	cond - 1409 uS/cm
11/29/06	YSI 556	06E1427AN		6094-09	2/20/08	3.90	4.00	pH 4.00
				6223-04	8/17/08	10.01	10.00	pH 10.00
				6255-17	9/19/07	1547	1409	cond 1409
				–	–	99.5	103.9	DO%
11/29/06	LaMotte 2020	ME-11540	~~4771~~ PH	4771	~~0.00~~ PH	0.00	0.0	NTU 0.0
		P568485		P568485	6/07	9.88	10.00	NTU 10.0
11/29/06	LaMotte 2020			4771	–	0.0	0.0	NTU 0.0
				P568485	6/07	6.25	10.00	NTU 10.0

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 2493 | PAGE 1 OF 1

PROJECT NO: 112G00436	FACILITY: SWMU 6+7	PROJECT MANAGER Shina Ballard	PHONE NUMBER 904-636-6125	LABORATORY NAME AND CONTACT: Katahdin Analytical / Andrea Colby
SAMPLERS (SIGNATURE) Kara J. Wimble		FIELD OPERATIONS LEADER Donald Hardison	PHONE NUMBER 904-636-6125	ADDRESS 340 County Road
		CARRIER/WAYBILL NUMBER 1772-0315-7		CITY, STATE Westbrook, MA 04092-1901

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G, G, G, G
PRESERVATIVE USED: HCl, None, HCl, HCl

TYPE OF ANALYSIS: FLPRO, 8310, 8260B, 8011

DATE YEAR 2006	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	FLPRO	8310	8260B	8011					COMMENTS
11/27	1127	MPT07-TW035-112706				GW	G	9	2	2	3	2					Cool to 4°C
11/27	1239	MPT07-TW065-112706				GW	G	9	2	2	3	2					
11/27	1403	MPT07-TW075-112706				GW	G	9	2	2	3	2					
11/27	1608	MPT06-TW015-112706				GW	G	9	2	2	3	2					
11/27	NA	Trip blank				QC	G				2						

1. RELINQUISHED BY Kara J. Wimble	DATE 11/27/06	TIME 1807	1. RECEIVED BY	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 2516 | PAGE ____ OF ______

PROJECT NO: 112G00436	FACILITY: NAVSTA Mayport	PROJECT MANAGER: Shina Ballard	PHONE NUMBER: (904) 636-6125	LABORATORY NAME AND CONTACT: Katahdin Analytical / Andrea Colby
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER: Donald Hardison	PHONE NUMBER: (904) 636-6125	ADDRESS: 340 County Road
		CARRIER/WAYBILL NUMBER: 1772-0315-7		CITY, STATE: Westbrook, Me 04092-1901

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G, G, G, G
PRESERVATIVE USED: HCl, None, HCl, HCL
TYPE OF ANALYSIS: FL-PRO (TRPH), PAHs, BTEX + MTBE, EDB

DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	FL-PRO (TRPH)	PAHs	BTEX + MTBE	EDB					COMMENTS
11/27	1105	MPT08-MW07S-112706				GW	G		2	2	3	2					Cool to 4°C
↓	1215	MPT08-MW03S-112706				GW	G		2	2	3	2					↓
↓	1330	MPT08-RW01-112706				GW	G		2	2	3	2					↓
↓	1440	MPT0~~8~~7-TW05S-112706				GW	G		2	2	3	2					↓
↓	N/A	Trip Bank				QC	G				2						↓

1. RELINQUISHED BY	DATE 11/27/06	TIME 1807	1. RECEIVED BY	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY) 4/02R

FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 2521 | PAGE ___ OF ___

PROJECT NO: 112G00436	FACILITY: NAVSTA Mayport	PROJECT MANAGER: Shina Ballard	PHONE NUMBER: 904-636-6125	LABORATORY NAME AND CONTACT: Katahdin Analytical / Andrea Colby
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER: Donald Hardison	PHONE NUMBER: 904-636-6125	ADDRESS: 340 County Road
		CARRIER/WAYBILL NUMBER: 8427 1827 2747		CITY, STATE: Westbrook, Me 04092-1901

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G, G, G, G
PRESERVATIVE USED: HCl, None, HCl, HCl

TYPE OF ANALYSIS: Fl-PRO (TRPH); PAHs; BTEX + MTBE; EDB

DATE YEAR 2006	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	Fl-PRO (TRPH)	PAHs	BTEX + MTBE	EDB					COMMENTS
11/28	1010	MPT06-RB01-112806				GW	G		2	2	3	2					Ice to 4°C
	1110	MPT07-TW02S-112806				GW	G		2	2	3	2					
	1235	MPT08-MW16S-112806				GW	G		2	2	3	2					
	1335	MPT08-MW15SR-112806				GW	G		2	2	3	2					
	1505	MPT07-TW04S-112806				GW	G		2	2	3	2					
	N/A	TRIP BLANK				QC	G				2						

1. RELINQUISHED BY	DATE 11/28/06	TIME 1700	1. RECEIVED BY	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 2519 | PAGE 1 OF 1

PROJECT NO: 112G00436	FACILITY: Mayport-SWMUs 6/7	PROJECT MANAGER: Shina Ballard	PHONE NUMBER: 904-636-6125	LABORATORY NAME AND CONTACT: Katahdin Analytical / Andrea Colby
SAMPLERS (SIGNATURE): Kevin S. Wamble; [signature]		FIELD OPERATIONS LEADER: Donald Hardison	PHONE NUMBER: 904-636-6125	ADDRESS: 340 County Road
		CARRIER/WAYBILL NUMBER: 8427-1827-2769		CITY, STATE: West brook, Me 04092-1901

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G, G, G, G
PRESERVATIVE USED: HCl, None, HCl, HCl
TYPE OF ANALYSIS: FLPRO, 8310-PAHs, 8260B-BTEX/MTBE, 8011

DATE YEAR 2006	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	FLPRO	8310-PAHs	8260B-BTEX/MTBE	8011					COMMENTS
11/29	0800	MPT06-RB02-112906				GW	G	9	2	2	3	2					Cool to 4°C
11/29	1150	MPT08-MW04S-112906				GW	G	9	2	2	3	2					
11/29	1145	MPT08-MW17S-112906				GW	G	9	2	2	3	2					
11/29	1245	MPT08-MW18S-112906				GW	G	9	2	2	3	2					
11/29	N/A	Trip Blank				QC	G				2						

1. RELINQUISHED BY [signature]	DATE 11/29/06	TIME 1530	1. RECEIVED BY	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME
COMMENTS					

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

Tetra Tech NUS, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name:	SWMU 6,7,8,9,10,11,51	**Project No.:**	112G00436
Location:	NAVSTA Mayport	**Personnel:**	D. Hardison
Weather Conditions:	70s, Sunny	**Measuring Device:**	Heron 100ft Skinny Dipper
Tidally Influenced:	Yes ___ No ___	**Remarks:**	

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
MPT51-TW04S	5/1/08	1135			4.41			
MPT08-MW18S		1137						well clogged @ 5.8
MPT08-MW04S		1141			9.93			
MPT08 MW17S		1142			9.10			
MPT51-TW03S		1145			3.15			
MPT51-TW01S		1151			5.91			
MPT51-TW02S		1152						well clogged @ 4.0
MPT09-MW02		1157			12.18			
MPT09-MW03		1158			10.49			
MPT09-MW01		1203			11.62			
MPT08-MW12S		1204			11.24			
MPT11 MW05S		1205			10.22			
MPT08 MW13S		1208			10.57			
MPT08 MW13I		1209			10.74			
MPT5 MW03		1210			10.38			
MPT51 MW03S		1211			10.82			
MPT51 MW02S		1212			10.53			
MPT51 MW01S		1215			10.54			
MPT08 MW15SR		1216			10.62			
MPT51 MW06S		1220			8.05			
MPT51 MW05S		1221			9.40			
MPT51 MW04S		1223			9.43			
MPT08 MW16S		1225			8.66			
TW MPT07 TW04S		1230			10.33			
MPT08 MW06S		1235			8.11			

* All measurements to the nearest 0.01 foot

Tetra Tech NUS, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: Swmu 6,7,8,9,10,11, 51 **Project No.:** 112G00436
Location: NAVSTA Mayport **Personnel:** D. Hardison
Weather Conditions: 90s, Sunny **Measuring Device:** Heron 100 ft. Skinny Dipper
Tidally Influenced: Yes ____ No ____ **Remarks:**

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
MPT 10 MW 01S	5/1/08	1319			7.69			
MPT 08 MW 22S		1321			7.80			
MPT 08 MW 08S		1329			10.15			
MPT 08 MW 09S		1330			9.94			
MPT 09 MW 05S		1331			8.15			
MPT 09 MW 06S		1334			8.17			
MPT 08 MW 21S		1336			8.03			
MPT 09 MW 04S		1338			8.38			
MPT 08 MW 07S								well filled in
TOO ~~MPT MW 04~~		~~1343~~			~~9.56~~			
MPT 08 MW 01S		1348		16.00	10.43			
MPT MW								
MPT MW								

* All measurements to the nearest 0.01 foot

Page ____ of ____

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 51	SITE LOCATION: NAVSTA Mayport
WELL NO: MPT-51-MW01S	SAMPLE ID: MPT-51-MW01S-20080827 — DATE: 8/27/2008

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 3-13	STATIC DEPTH TO WATER (ft): 9.37	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY 1.38 gal
only fill out if applicable) 5.3 Liters

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13	PURGE INITIATED AT: 1125	PURGE ENDED AT: 1146	TOTAL VOLUME PURGED (Liters): 10.5

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1125	–	–	500	9.37	–	–	–	–	–	–	cloudy
1136	5.5	5.5	500	9.53	7.21	28.11	749	0.60	3.57	-122.4	cloudy
1141	2.5	8.0	500	9.54	7.24	28.10	746	0.55	1.5	-132.9	cloudy
1146	2.5	10.5	500	9.55	7.20	28.05	743	0.52	0.3	-134.5	Clear

Sample Time 1148

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ D. Hardison	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1148	SAMPLING ENDED AT: 1202
PUMP OR TUBING DEPTH IN WELL (feet): 13	SAMPLE PUMP FLOW RATE (mL per minute): 500 Straw	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	3		40ml	HCL	40ml	<2	PPL VOCs	
	2		1L	–	1L	–	PPL SVOCs	
	2		500ml	HNO_3	500ml	<2	As, Cd, Cr, Pb	
	2		1L	–	1L	–	PCBs	

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: **SWMU** 51		SITE LOCATION: **NAVSTA Mayport**
WELL NO: MPT-51-MW02S	SAMPLE ID: MPT-51-MW02S-20080827	DATE: 8/ 27 /2008

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 8 - 18	STATIC DEPTH TO WATER (ft): 9.49	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
(19 - 9.49) X 0.016 = 1.36
5.15 Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
~~5.15~~84 Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13	PURGE INITIATED AT: 1226	PURGE ENDED AT: 1247	TOTAL VOLUME PURGED (Liters): 10.5

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (^{o}C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1226	~	-	500	9.49	—	-	-	-	-	-	cloudy partic. odors
1237	5.5	5.5	500	9.63	7.11	28.56	885	0.59	2.49	-63.0	cloudy
1242	2.5	8.0	500	9.63	7.07	28.63	886	0.52	1.87	-62.3	clear
1247	2.5	10.5	500	9.63	7.05	28.65	885	0.49	0.90	-67.6	clear

Sample Time 1250

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ D. Hardison	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1250	SAMPLING ENDED AT: 1310
PUMP OR TUBING DEPTH IN WELL (feet): 13	SAMPLE PUMP FLOW RATE (mL per minute): Straw Straw	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	3		40ml	HCL		<2	PPL VOCs	
	2		1L	—		-	PPL SVOCs	
	2		500ml	HNO3		<2	As, Cd, Cr, Pb	
	2		1 L	—		—	PCBs	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: **SWMU** 51		SITE LOCATION: **NAVSTA Mayport**	
WELL NO: MPT 51-MW-03	SAMPLE ID: MPT-51-MW03S-20080827		DATE: 8/ 27 /2008

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 3-13	STATIC DEPTH TO WATER (ft): 9.83	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable) 4.95 Liters (13-9.83) x 0.16 = 1.31

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13	PURGE INITIATED AT: 1323	PURGE ENDED AT: 1343	TOTAL VOLUME PURGED (Liters): 10

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1323	–	–	500	9.83	–	–	–	–	–	–	Cloudy
1333	5.0	5.0	500	9.95	7.34	28.13	629	0.97	0	-107.5	clear
1338	2.5	7.5	500	9.96	7.34	28.08	628	0.66	0	-113.6	clear
1343	2.5	10.0	500	9.96	7.35	28.09	627	0.65	0	-112.7	clear

Sample Time 1350

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ D Hardison	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1350	SAMPLING ENDED AT: 1405
PUMP OR TUBING DEPTH IN WELL (feet): 13	SAMPLE PUMP FLOW RATE (mL per minute): 500 / SM	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	3		40ml	HCl		<2	PPL VOCs	
	2		1L	–		–	PPL SVOCs	
	2		500ml	HNO3		<2	As, Cd, Cr, Pb	
	2		1L	–		–	PCBs	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: **SWMU** 8		SITE LOCATION: **NAVSTA Mayport**	
WELL NO: MPT-08-MW15SR	SAMPLE ID: MPT-08-MW15SR-20080827		DATE: 8/ 27 /2008

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 31-36	STATIC DEPTH TO WATER (ft): 9.49	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable) Screen 3 Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) 1.2 Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 33	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 33	PURGE INITIATED AT: 1411	PURGE ENDED AT: 1442	TOTAL VOLUME PURGED (Liters): 15.5

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1411	–	–	500	9.49	–	–	–	–	–	–	cloudy
1421	5	5	500	9.58	7.20	26.60	319	1.37	74.57	-134.6	cloudy
1426	2.5	~~10~~ 7.5	500	9.59	7.99	26.78	791	0.95	247.0	-233.7	cloudy
1431	2.5	10	500	9.61	8.07	26.81	895	0.78	399.6	-281.9	cloudy
1436	2.5	12.5	500	9.60	8.10	27.08	1096	0.62	358.2	-298.5	cloudy
1442	3.0	15.5	500	9.60	8.11	27.01	1124	0.59	365.5	-308.9	cloudy
				Sample Time			1445				

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ D Hardison	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1445	SAMPLING ENDED AT: 1505
PUMP OR TUBING DEPTH IN WELL (feet): 33	SAMPLE PUMP FLOW RATE (mL per minute): 500/SM	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:		DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	3		40ml	HCl		<2	PPL VOCs	
	2		1L	–		–	PPL SVOCs	
	2		500ml	HNO3		<2	As, Cd, Cr Pb	
	2		1L	–		–	PCBs	

REMARKS: Purged >5 screen volumes

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 8	SITE LOCATION: NAVSTA Mayport
WELL NO: MPT-08-MW095	SAMPLE ID: MPT-08-MW095-20080827 DATE: 8/ 27 /2008

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 2-12	STATIC DEPTH TO WATER (ft): 5.98	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable) 3.65 Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 7	PURGE INITIATED AT: 1534	PURGE ENDED AT: 1559	TOTAL VOLUME PURGED (Liters): 12.5

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (^{o}C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1534	-	-	500	5.98	-	-	-	-	-	-	cloudy
1544	5	5	500	6.10	7.78	27.16	381	4.68	0	-93.1	clear
1549	2.5	7.5	500	6.11	7.83	27.56	386	4.38	0	-95.7	clear
1554	2.5	10	500	6.11	7.82	27.67	392	4.41	0	-96.4	clear
1559	2.5	12.5	500	6.10	7.81	27.59	385	4.39	0	-97.6	clear
Sample Time				1600 ~~1615~~							

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ D. Hardison	SAMPLER(S) SIGNATURES: [signatures]	SAMPLING INITIATED AT: 1600	SAMPLING ENDED AT: 1615
PUMP OR TUBING DEPTH IN WELL (feet): 7	SAMPLE PUMP FLOW RATE (mL per minute): 500	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	3		40ml		HCl		Appendix IX VOCs	
	2		1L		-		Appendix IX SVOC	
	2		500ml		HNO3		Appendix IX Metals	
	2		500ml		Zn Ac + NaOH		Sulfide	
	2		250ml		NaOH		Cyanide	
	2		1L		-		PCBs	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: **SWMU** 8		SITE LOCATION: **NAVSTA Mayport**	
WELL NO: MPT-08-MW16S	SAMPLE ID: MPT-08-MW16S-20080828		DATE: 8/ 28 /2008

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 5-15	STATIC DEPTH TO WATER (ft): 6.85	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable) 4.94 Liters

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGE INITIATED AT: 0800	PURGE ENDED AT: 0820	TOTAL VOLUME PURGED (Liters): 10

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
0800	–	–	500	6.85	–	–	–	–	–	–	–
0810	5	5	500	6.97	7.30	26.43	780	1.07	12.37	-140.8	cloudy
0815	2.5	7.5	500	6.98	7.29	26.46	778	0.94	11.78	-140.6	cloudy
0820	2.5	10.0	500	6.98	7.27	26.52	776	0.63	10.94	-139.9	cloudy

Sample Time 0823

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ D. Hardison	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 0823	SAMPLING ENDED AT: 0843
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE PUMP FLOW RATE (mL per minute): 500ml/sec	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	3		40ml	HCL	–	<2	PPL VOC	
	2		1L	–	–	–	PPL SVOC	
	2		500ml	HNO3	–	<2	As, Cd, Cr, As	
	2		1L	–	–	–	PCBS	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 11		SITE LOCATION: NAVSTA Mayport	
WELL NO: MPT-11-MW05S	SAMPLE ID: MPT-11-MW05S-20080828		DATE: 8/ 28 /2008

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 8-18	STATIC DEPTH TO WATER (ft): 8.42	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
5.8 Liters

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13	PURGE INITIATED AT: 0858	PURGE ENDED AT: 0920	TOTAL VOLUME PURGED (Liters): 11

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (^{o}C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
0858	–	–	500	8.42	–	–	–	–	–	–	–
0910	6	6	500	8.54	7.91	26.90	312	2.30	0	-96.9	clear
0915	2.5	8.5	500	8.55	7.90	26.85	312	2.29	0	-99.6	clear
0920	2.5	11	500	5.55	7.90	26.90	311	2.30	0	-100.2	clear
				Sample Time			0922				

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ D. Hardison	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 0922	SAMPLING ENDED AT: 0940
PUMP OR TUBING DEPTH IN WELL (feet): 13	SAMPLE PUMP FLOW RATE (mL per minute): 500ml/SM	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	3		40ml	HCl		<2	PPL VOC	
	2		1L	–		–	PPL SVOC	
	2		500ml	HNO_3		<2	As, Cd, Cr, As	
	2		1L	–		–	PCBs	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: **SWMU**		SITE LOCATION: **NAVSTA Mayport**	
WELL NO: MPT-08-MW12S	SAMPLE ID: MPT-08-MW12S-20080828		DATE: 8/28/2008

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 8.5-13.5	STATIC DEPTH TO WATER (ft): 9.54	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
5.12 Liters

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.5	PURGE INITIATED AT: 0952	PURGE ENDED AT: 1013	TOTAL VOLUME PURGED (Liters): 10.5

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
0952	–	–	500	9.54	–	–	–	–	–	–	cloudy
1003	5.5	5.5	500	9.67	7.52	26.59	485	1.21	7.07	-37.0	cloudy
1008	2.5	8	500	9.67	7.52	26.63	481	1.01	7.52	-45.0	cloudy
1013	2.5	10.5	500	9.68	7.53	26.61	479	1.09	0.01	-50.9	clear

Sample Time 1015

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ D. Hardison	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1015	SAMPLING ENDED AT: 1035
PUMP OR TUBING DEPTH IN WELL (feet): 13.5	SAMPLE PUMP FLOW RATE (mL per minute): 500/SM	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	3		40 ml	HCl		<2	PPL VOC	
	2		1L	–		–	PPL SVOC	
	2		500ml	HNO3		<2	As, Cd, Cr, Pb	
	2		1L	–		–	PCBs	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: **SWMU** 51	SITE LOCATION: **NAVSTA Mayport**	
WELL NO: MPT-51-MW07S	SAMPLE ID: MPT-51-MW07S-20080828	DATE: 8/ 28 /2008

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 8-18	STATIC DEPTH TO WATER (ft): 8.46	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
5.78 Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13	PURGE INITIATED AT: 1052	PURGE ENDED AT: NM	TOTAL VOLUME PURGED (Liters): 11

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (^{o}C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1052	–	–	500	8.46	–	–	–	–	–	–	cloudy
1104	6	6	500	8.59	7.29	28.25	787	0.37	19.09	-138.5	cloudy
1109	2.5	8.5	500	8.61	7.29	28.18	769	0.31	19.35	-145.2	cloudy
1114	2.5	11	500	8.60	7.27	28.18	769	0.28	18.57	-143.7	cloudy
				Sample Time 1117							

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ D. Hardison	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1117	SAMPLING ENDED AT: 1137
PUMP OR TUBING DEPTH IN WELL (feet): 13	SAMPLE PUMP FLOW RATE (mL per minute): 500/SM	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	3		40 ml	HCl		<2	PPL VOC	
	2		1 L	–		–	PPL SVOC	
	2		500ml	HNO_3		<2	As, Cd, Cr, Pb	
	2		1L	–		–	PCB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 8	SITE LOCATION: NAVSTA Mayport
WELL NO: MPT-08-MW04S	SAMPLE ID: MPT-08-MW04S-20080828 — DATE: 8/ 28 /2008

PURGING DATA

11.9 ft 1/14/93

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 5-15	STATIC DEPTH TO WATER (ft): 8.79	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable) 3.76 Liters

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGE INITIATED AT: 1317	PURGE ENDED AT: 1342	TOTAL VOLUME PURGED (Liters): 12.5

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1317	–	–	500	8.79	–	–	–	–	–	–	Brown
1327	5	5	500	8.93	7.07	28.10	799	1.29	27.53	-82.9	Brown
1332	2.5	7.5	500	8.97	7.05	27.18	757	0.77	15.34	-115.8	Brown
1337	2.5	10.0	500	8.96	7.07	27.24	750	0.68	13.51	-118.0	Brown
1342	2.5	12.5	500	8.96	7.08	27.20	744	0.60	10.01	-125.4	Brown

Sample Time - 1343

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ D. Hardison	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1343	SAMPLING ENDED AT: 1500
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE PUMP FLOW RATE (mL per minute): 500	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	3		40ml	HCl		<2	PPL VOC	
	2		1L	–		–	PPL SVOC	
	2		500ml	HNO_3		<2	As, Cd, Cr, Pb	
	2		1L	–		–	PCB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: **SWMU**		SITE LOCATION: **NAVSTA Mayport**	
WELL NO: MPT-08-MW17S	SAMPLE ID: MPT-08-MW17S-20080828		DATE: 8/ 28 /2008

PURGING DATA

10.89 7/22/94

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 5-15	STATIC DEPTH TO WATER (ft): 8.09	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
4.18 Liters

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGE INITIATED AT: 1414	PURGE ENDED AT: 1434	TOTAL VOLUME PURGED (Liters): 10

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1414	-	-	500	8.09	-	-	-	-	-	-	cloudy
1424	5	5	500	8.27	7.45	26.92	526	0.86	0	-126.6	clear
1429	2.5	7.5	500	8.27	7.47	26.93	518	0.72	0	-132.4	clear
1434	2.5	10	500	8.26	7.46	26.89	515	0.67	0	-135.3	clear

Sample Time 1435

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ D. Hardison	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1435	SAMPLING ENDED AT: 1455
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE PUMP FLOW RATE (mL per minute): .5M	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:		DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	3		40ml	HCl		<2	PPL VOC	
	2		1L	-		-	PPL SVOC	
	2		500ml	HNO_3		<2	As, Cd, Cr, Pb	
	2		1L	-		-	PCB	

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU	SITE LOCATION: NAVSTA Mayport	
WELL NO: MPT-08-MW18S	SAMPLE ID: MPT-08-MW18S-20080828	DATE: 8/28/2008

PURGING DATA

7/22/94 8.80 ft

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 4.5-14.5	STATIC DEPTH TO WATER (ft): 5.43	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
5.49 Liters

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 7.5	PURGE INITIATED AT: 1508	PURGE ENDED AT: 1528	TOTAL VOLUME PURGED (Liters): 10.5

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1508	–	–	500	5.43	–	–	–	–	–	–	Cloudy
1518	5.5	5.5	500	5.59	7.67	26.84	375	1.42	0	-135	clear
1523	2.5	8.0	500	5.58	7.65	26.88	377	1.35	0	-131.8	clear
1528	2.5	10.5	500	5.58	7.66	26.87	381	1.20	0	-129.6	clear

Sample Time 1530

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ D. Hendrickson	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1530	SAMPLING ENDED AT: 1550
PUMP OR TUBING DEPTH IN WELL (feet): 7.5	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	3		40ml	HCL		<2	PPL VOC	
	2		1L	–		–	PPL SVOC	
	2		500ml	HNO_3		<2	As, Cd, Cr, Pb	
	2		1L	–		–	PCB	

REMARKS: Something clogging screen could no push tubing past ~7.5'

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS, Inc.

DOCUMENTATION OF FIELD CALIBRATION

PROJECT NAME : SWMU

SITE NAME: NAVSTA Mayport

PROJECT No.: 112G00436

INSTRUMENT NAME/MODEL:

MANUFACTURER:

SERIAL NUMBER:

Date of Calibration	Instrument Name and Model	Instrument I.D. Number	Person Performing Calibration	Instrument Settings		Instrument Readings		Calibration Standard (Lot No.)	Remarks and Comments
				Pre-calibration	Post-calibration	Pre-calibration	Post-calibration		
8/27/08	YSI 556MPS	07D100941	DH	Cond.	1.413mS/cm	1.238	1.413	6126	
				pH	4.01	4.02	4.01	–	
				pH	10.0	10.02	10.0	–	
				ORP	240	233	240	–	
				DO	760mmHg	87%	100%	–	
8/27/08	Micro+TW 2000	200704133	DH		1000 NTU	–	1000	70516	
					10 NTU	–	10	70514	
					0.2 NTU	–	0.2	70511	
8/28/08	YSI 556 MPS	07D100941	DH	Cond.	1.413mS/cm	1.464	1.413	6126	
				pH	4.01	4.04	4.01	–	
				pH	10.0	10.07	10.0	–	
				ORP	240mV	230.1	240	–	
				DO	760mmHg	93%	100%	–	
8/28/08	Micro+TW 2000	200704133	DH		1000 NTU	–	1000	70516	
					10 NTU	–	10	70514	
					0.2 NTU	–	0.2	70511	

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 51		SITE LOCATION: NAVSTA Mayport
WELL NO: MPT51-TW01S	SAMPLE ID: MPT51-GW-TW01S-021207	DATE: 2/ 12 /2007

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 1 ft to 6 ft	STATIC DEPTH TO WATER (ft): 4.88	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
0.20 Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 5.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 5.5	PURGE INITIATED AT: 1122	PURGE ENDED AT: 1142	TOTAL VOLUME PURGED (Liters): 4.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1122	–	–	200	4.88	–	–	–	–	–	–	LT. BROWN
1127	1.0	1.0	200	5.01	7.56	17.93	12938	1.66	240	68.1	"
1132	1.0	2.0	200	5.01	7.59	17.82	13734	1.50	200	27.6	"
1137	1.0	3.0	200	5.01	7.59	17.74	14056	1.27	60	47.8	CLEAR
1142	1.0	4.0	200	5.01	7.59	17.75	14231	1.22	12	55.2	CLEAR
	SAMPLE TIME			1145							

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ TERRY COTTENOIR	SAMPLER(S) SIGNATURES: Terry Cott	SAMPLING INITIATED AT: 1145	SAMPLING ENDED AT: 1155
PUMP OR TUBING DEPTH IN WELL (feet): 5.5	SAMPLE PUMP FLOW RATE (mL per minute): VT/200	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	2	AG	1L	–	–	~~<2~~	8270 SIM	VT
	2	AG	1L	HCL	–	–	TRPH/FL-PRO	VT

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 51		SITE LOCATION: NAVSTA Mayport	
WELL NO: MPT51-TW02S	SAMPLE ID: MPT51-GW-TW02S-021207		DATE: 2/ 12 / 2007

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 1ft to 6ft	STATIC DEPTH TO WATER (ft): 4.89	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
0.26 Liters

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
______ Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 5.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 5.5	PURGE INITIATED AT: 1200	PURGE ENDED AT: 1220	TOTAL VOLUME PURGED (Liters): 4.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1200	–	–	200	4.89	–	–	–	–	–	–	LT. BROWN
1205	1.0	1.0	200	5.00	8.05	18.31	7681	1.16	140	-73.0	"
1210	1.0	2.0	200	5.00	7.95	17.44	7250	0.76	45	-93.8	CLEAR
1215	1.0	3.0	200	5.00	7.90	17.47	7002	0.62	16	-98.5	"
1220	1.0	4.0	200	5.00	7.88	17.54	6982	0.59	8.2	-102.6	"
	SAMPLE	TIME		1222							

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ Terry Cottenoir	SAMPLER(S) SIGNATURES: Terry Cott	SAMPLING INITIATED AT: 1222	SAMPLING ENDED AT: 1232
PUMP OR TUBING DEPTH IN WELL (feet): 5.5	SAMPLE PUMP FLOW RATE (mL per minute): 200/VT	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: _____ µm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	2	AG	1L	–	–	–	8270 SIM	VT
	2	AG	1L	HCL	–	–	TRPH/FL-PRO	VT

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 8		SITE LOCATION: NAVSTA Mayport	
WELL NO: 8MW21S	SAMPLE ID: MPT08-GW-MW21S-110606		DATE: 11/ 06 / 2006

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (ft): 8.50	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
4.0 Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGE INITIATED AT: 1402	PURGE ENDED AT:	TOTAL VOLUME PURGED (Liters):

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1402	—	—	300	8.50	—	—	—	—	—	—	
1405	1.5	1.5	300	8.57	7.41	25.97	569	1.31	14	-112.6	clear
1410	1.5	3.0	300	8.57	7.37	25.65	562	0.45	9.2	-106.4	clear
1415	1.5	4.5	300	8.58	7.37	25.59	559	0.33	5.6	-92.2	clear
1420	1.5	6.0	300	8.58	7.37	25.56	557	0.29	5.0	-111.8	clear

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ Jonathan Foster	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1425	SAMPLING ENDED AT: 1439
PUMP OR TUBING DEPTH IN WELL (feet): 10.0	SAMPLE PUMP FLOW RATE (mL per minute): 300	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: **SWMU** 8		SITE LOCATION: **NAVSTA Mayport**	
WELL NO: 8 MW 22S	SAMPLE ID: MPT08-GW-MW22S-110606		DATE: 11/ 06 /2006

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (ft): 8.45	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
4.3 Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGE INITIATED AT: 1215	PURGE ENDED AT:	TOTAL VOLUME PURGED (Liters):

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1215	—	—	200	8.45	—	—	—	—	—	—	—
1220	1.0	1.0	200	8.51	7.52	25.04	681	0.45	16	-117.0	clear
1225	1.0	2.0	200	8.50	7.50	25.05	667	0.35	9.1	-124.6	clear
1230	1.0	3.0	200	8.50	7.48	25.06	654	0.46	4.2	-120.6	clear
1235	1.0	4.0	200	8.50	7.47	25.09	648	0.50	1.9	-119.3	clear
1240	1.0	5.0	200	8.50	7.46	25.11	646	0.48	0.80	-117.7	clear

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ Jonathan Foster	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1245	SAMPLING ENDED AT: 1300
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute): 200	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:

MATERIAL CODES: AG = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: **SWMU** 09	SITE LOCATION: **NAVSTA Mayport**
WELL NO: 09 MW06S	SAMPLE ID: MPT09-~~[illegible]~~-GW-MW06S-110706 DATE: 11/ 07 /2006

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 5-15 ft	STATIC DEPTH TO WATER (ft): 9.94	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
3.5 Liters

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
________ Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGE INITIATED AT:	PURGE ENDED AT:	TOTAL VOLUME PURGED (Liters):

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (^{o}C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
0905	—	—	200	9.94	—	—	—	—	—	—	—
0915	2.0	2.0	200	10.1	6.97	25.76	759	0.96	14	-10.8	clear
0920	1.0	3.0	200	10.1	6.96	25.81	787	0.69	1.4	-47.6	clear
0940	4.0	7.0	200	10.1	6.96	25.82	799	0.53	1.2	-92.3	clear
0945	1.0	8.0	200	10.1	6.96	25.82	801	0.50	1.4	-93.4	clear
0950	1.0	9.0	200	10.1	6.96	25.83	801	0.50	1.0	-95.3	clear

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ Jonathan Foster	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 0955	SAMPLING ENDED AT: 1010
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type: ________	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 09 | SITE LOCATION: NAVSTA Mayport

WELL NO: 09 MW04S | SAMPLE ID: MPT09-GW-MW04S-110706 | DATE: 11/07/2006

PURGING DATA

WELL DIAMETER (in): 2 | TUBING DIAMETER (inches): 3/16 | WELL SCREEN INTERVAL DEPTH: 5 - 15 | STATIC DEPTH TO WATER (ft): 8.70 | PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)

4.0 Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10.0 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.0 | PURGE INITIATED AT: 1048 | PURGE ENDED AT: 1108 | TOTAL VOLUME PURGED (Liters): 4.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1048	—	—	200	8.70	—	—	—	—	—	—	—
1053	1.0	1.0	200	8.75	7.11	26.48	673	0.71	3.5	-61.8	clear
1058	1.0	2.0	200	8.75	7.10	26.53	681	0.58	1.2	-61.6	clear
1103	1.0	3.0	200	8.77	7.10	26.53	681	0.51	0.65	-67.8	clear
1108	1.0	4.0	200	8.80	7.11	26.53	682	0.44	0.00	-74.0	clear

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ Jonathan Foster | SAMPLER(S) SIGNATURES: | SAMPLING INITIATED AT: 1110 | SAMPLING ENDED AT: 1125

PUMP OR TUBING DEPTH IN WELL (feet): 10 | SAMPLE PUMP FLOW RATE (mL per minute): 200 | TUBING MATERIAL CODE: Teflon

FIELD DECONTAMINATION: Y N | FIELD-FILTERED: Y N | FILTER SIZE: ____ µm | Filtration Equipment Type: | DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:

MATERIAL CODES: AG = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: **SWMU**		SITE LOCATION: **NAVSTA Mayport**	
WELL NO: 09 MW055	SAMPLE ID: MPT09-GW-MW055-110706		DATE: 11/ 07 /2006

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 5 - 15	STATIC DEPTH TO WATER (ft): 8.53	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable
4.0 Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGE INITIATED AT: 1144	PURGE ENDED AT: 1204	TOTAL VOLUME PURGED (Liters): 4.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (^{o}C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1144	—	—	200	8.53	—	—	—	—	—	—	—
1149	1.0	1.0	200	8.69	7.37	26.29	853	1.04	1.7	-102.2	clear
1154	1.0	2.0	200	8.70	7.37	26.38	857	0.84	0.00	-107.2	clear
1159	1.0	3.0	200	8.70	7.36	26.38	861	0.73	0.00	-108.5	clear
1204	1.0	4.0	200	8.70	7.36	26.33	862	0.69	0.00	-108.7	clear

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ Jonathan Foster	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1207	SAMPLING ENDED AT: 1230
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE PUMP FLOW RATE (mL per minute): 200	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	3	CG	40 ml	HCl				
	2	AG	1 L	none				
	2	AG	1 L	none				
	1							
	1							
	1							

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 09		SITE LOCATION: NAVSTA Mayport	
WELL NO: 09 MW06S	SAMPLE ID: MPT09-GW-MW06S-110606		DATE: 11/ 06 /2006

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (ft):	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
4.0 Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGE INITIATED AT: 1504	PURGE ENDED AT:	TOTAL VOLUME PURGED (Liters):

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1504	—	—	300	8.55	—	—	—	—	—	—	—
1509	1.5	1.5	300	8.59	7.43	26.51	635	0.69	18	-67.7	clear
1514	~~3.0~~ 1.5	3.0	300	8.61	7.35	26.38	629	0.43	11	-81.4	clear
1519	1.5	4.5	300	8.62	7.34	26.38	629	0.36	8.3	-97.7	clear
1524	1.5	6.0	300	8.62	7.33	26.37	631	0.38	7.0	-100.3	clear
1529	1.5	7.5	300	8.62	7.33	26.36	633	0.40	3.8	-104.2	clear

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ Jonathan Foster	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1533	SAMPLING ENDED AT: 1553
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE PUMP FLOW RATE (mL per minute): 300	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
	2		1 L	none				
	2		1 L	none				
	3							
	1							
	1							
	1							

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: **SWMU** 10		SITE LOCATION: **NAVSTA Mayport**	
WELL NO: 10 MW01S	SAMPLE ID: MPT10-GW-MW01S-110606		DATE: 11/ 06 /2006

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: - 15.00	STATIC DEPTH TO WATER (ft): 8.32	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
4.3 Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.0	PURGE INITIATED AT: 1010	PURGE ENDED AT: 1045	TOTAL VOLUME PURGED (Liters): 7.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1010	—	—	200	8.32	—	—	—	—	—	—	—
1015	1.0	1.0	200	8.39	7.69	23.60	750	0.61	13	-104.8	clear
1020	~~2.0~~ 1.0	2.0	200	8.40	7.66	23.64	734	0.46	20	-100.2	clear
1025	1.0	3.0	200	8.40	7.63	23.64	724	0.40	13	-102.5	clear
1030	1.0	4.0	200	8.40	7.62	23.65	721	0.38	7.40	-100.4	clear
1035	1.0	5.0	200	8.40	7.61	23.65	718	0.34	3.8	-103.7	clear
1040	1.0	6.0	200	8.40	7.60	23.65	713	0.31	2.0	-102.4	clear
1045	1.0	7.0	200	8.40	7.59	23.65	711	0.29	1.2	-97.5	clear

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ Jonathan Foster	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1050	SAMPLING ENDED AT: 1100
PUMP OR TUBING DEPTH IN WELL (feet): 10.0	SAMPLE PUMP FLOW RATE (mL per minute): 200	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: _____ µm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; O = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: **SWMU** 11		SITE LOCATION: **NAVSTA Mayport**	
WELL NO: 11 MW05S	SAMPLE ID: MPT11-GW-MW05S-110706		DATE: 11/ 07 / 2006

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 5 - 15	STATIC DEPTH TO WATER (ft): 9.70	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
3.4 Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
_____ Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGE INITIATED AT: 1347	PURGE ENDED AT:	TOTAL VOLUME PURGED (Liters):

	TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
	1347	—	—	200	9.70	—	—	—	—	—	—	—
1352	1352	1.0	1.0	200	9.76	7.37	26.22	523	0.86	14	-101.1	clear
1357	1357	1.0	2.0	200	9.77	7.31	26.30	526	0.30	6.2	-114.2	clear
	1402	1.0	3.0	200	9.77	7.30	26.25	527	0.28	2.4	-122.8	clear
	1407	1.0	4.0	200	9.77	7.30	26.26	527	0.27	1.1	-125.8	clear

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1410	SAMPLING ENDED AT: 1430
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: _____ µm Filtration Equipment Type:		DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 11 8AB	SITE LOCATION: NAVSTA Mayport
WELL NO: MW12S	SAMPLE ID: MPT08-GW-MW12S-110806 — DATE: 11/ 08 / 2006

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 5-15	STATIC DEPTH TO WATER (ft): 10.7	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
3.1 Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.0	PURGE INITIATED AT: 1240	PURGE ENDED AT: 1300	TOTAL VOLUME PURGED (Liters): 4.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (^oC)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1240			200	10.7							
1250	2.0	2.0	200	10.7	7.36	25.62	437	0.30	0	-120.0	clear
1255	1.0	3.0	200	10.7	7.36	25.66	435	0.20	0	-123.1	clear
1300	1.0	4.0	200	10.7	7.36	25.76	434	0.19	0	-124.0	clear

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ Jonathan Foster	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1305	SAMPLING ENDED AT: 1325
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE ~~PUMP~~ FLOW RATE (mL per minute): 200	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N; Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; T = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 51		SITE LOCATION: NAVSTA Mayport	
WELL NO: 51 MW01S	SAMPLE ID: MPT51-GW-MW01S-110806		DATE: 11 / 08 / 2006

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 5-15	STATIC DEPTH TO WATER (ft): 10.0	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable) 3.1 Liters

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) ______ Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGE INITIATED AT: 0904	PURGE ENDED AT: 0924	TOTAL VOLUME PURGED (Liters): 4.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
0904	—	—	200	10.0	—	—	—	—	—	—	—
0914	2.0	2.0	200	10.03	6.79	27.43	1079	0.57	4.2	119.2	clear
0919	~~3.0~~ 1.0	3.0	200	10.03	6.79	27.45	1068	0.47	2.3	99.3	clear
0924	1.0	4.0	200	10.03	6.80	27.39	1057	0.41	2.0	76.4	clear

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ Jonathan Foster	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 0930	SAMPLING ENDED AT: 0950
PUMP OR TUBING DEPTH IN WELL (feet): 10.0	SAMPLE PUMP FLOW RATE (mL per minute): 200	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: _____ µm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 51		SITE LOCATION: NAVSTA Mayport	
WELL NO: 51 MW02S	SAMPLE ID: MPT51-GW-MW02S-110806		DATE: 11/ 08 /2006

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 5-15	STATIC DEPTH TO WATER (ft): 9.77	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable) 3.4 Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) ______ Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGE INITIATED AT: 1012	PURGE ENDED AT: 1032	TOTAL VOLUME PURGED (Liters): 4.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1012	\	\	200	9.77	\	\	\	\	\	\	\
1022	2.0	2.0	200	9.77	6.60	27.58	1243	1.45	5.5	-108.5	clear
1027	1.0	3.0	200	9.77	6.59	27.39	1236	0.78	2.4	-107.3	clear
1032	1.0	4.0	200	9.77	6.59	27.39	1232	0.66	0.50	-106.5	clear

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ Jonathan Foster	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1035	SAMPLING ENDED AT: 1055
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE PUMP FLOW RATE (mL per minute): 200	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; O = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 51		SITE LOCATION: NAVSTA Mayport	
WELL NO: 51 MW03S	SAMPLE ID: MPT51-GW-MW03S-110806		DATE: 11/ 08 /2006

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 5 - 15	STATIC DEPTH TO WATER (ft): 9.84	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
3.4 Liters

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGE INITIATED AT: 1120	PURGE ENDED AT: 1145	TOTAL VOLUME PURGED (Liters): 5.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1120	—	—	200	9.84	—	—	—	—	—	—	—
1130	2.0	2.0	200	9.87	6.74	27.77	1040	0.56	11	-105.2	clear
1135	~~3.0~~ 1.0	3.0	200	9.90	6.74	27.67	1038	0.47	2.6	-105.8	clear
1140	1.0	4.0	200	9.90	6.73	27.52	1032	0.43	0.0	-108.1	clear
1145	1.0	5.0	200	9.90	6.74	27.52	1028	0.39	0	-108.1	clear

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ Jonathan Foster	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1150	SAMPLING ENDED AT: 1210
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE PUMP FLOW RATE (mL per minute): 200	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:

MATERIAL CODES: AG = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME: SWMU 07		SITE LOCATION: NAVSTA Mayport
WELL NO: 07TW015	SAMPLE ID: MPT07-GW-~~TW015~~ TW015-110806	DATE: 11/08/2006

PURGING DATA

WELL DIAMETER (in): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 5-15	STATIC DEPTH TO WATER (ft): 9.56	PURGE PUMP TYPE OR BAILER: Peristaltic Pump

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
3.4 Liters

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
Liters

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGE INITIATED AT: 1404	PURGE ENDED AT: 1424	TOTAL VOLUME PURGED (Liters): 4.0

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (mlpm)	DEPTH TO WATER (ft)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	ORP (mV)	COLOR
1404	—	—	200	9.56	—	—	—	—	—	—	—
1414	2.0	2.0	200	9.60	6.77	25.68	961	0.46	0.85	-64.6	clear
1419	1.0	3.0	200	9.60	6.77	25.79	962	0.40	0.50	-64.9	clear
1424	1.0	4.0	200	9.60	6.77	25.85	961	0.36	0	-63.0	clear

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TtNUS/ Jonathan Foster	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1429	SAMPLING ENDED AT: 1449
PUMP OR TUBING DEPTH IN WELL (feet): 10.0	SAMPLE PUMP FLOW RATE (mL per minute): 200	TUBING MATERIAL CODE: Teflon	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:		DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

Florida Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME: SWMU 6/7		SITE LOCATION: NS Mayport	
WELL NO: MPT-08-MW06S	SAMPLE ID: ~~MPT-6/7-6-4~~ MPT-08-MW06S 111306 ~~2006~~ TTL3		DATE: 11-13-06

PURGING DATA

WELL DIAMETER (in): 2	TOTAL WELL DEPTH (ft): 15	STATIC DEPTH TO WATER (ft): 8.52	WELL CAPACITY (gal/ft): 0.16
1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY = (15 – 8.52) X 0.16 = 1.04 x 3.78 = 3.9L			
PURGE METHOD: peristaltic	PURGE INITIATED AT: 1140	PURGE ENDED AT: 1154	TOTAL VOL. PURGED (~~gal~~ L): 7.0

TIME	VOLUME PURGED (~~gal~~ L)	CUMUL. VOLUME PURGED (~~gal~~ L)	PURGE RATE (~~gpm~~ mL/m)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
1148	4.0	4.0	500	8.89	7.36	25.67	0.640	0.79	1.3	clear	none
1151	1.5	5.5	500	8.89	7.36	25.68	0.642	0.79	1.3	"	"
1154	1.5	7.0	500	8.89	7.36	25.76	0.643	0.77	1.1	"	"

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Wes Harden / TtNUS ~~Wes Harden / Tt~~	SAMPLER(S) SIGNATURE(S): [signature]	
SAMPLING METHOD(S): pp, sm	SAMPLING INITIATED AT: 1156	SAMPLING ENDED AT: 1206
FIELD DECONTAMINATION: Y N (N circled)	FIELD-FILTERED: Y N (N circled)	DUPLICATE: Y N (N circled)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
1	AG	1L	H_2SO_4	—	<2	FL PRO
1	AG	1L	NP	—	—	PAHs
3	CG	40mL	HCl	—	<2	~~VOCs~~ BTEX +MTBE
2	CG	40mL	HCl	—	<2	EDB

REMARKS:

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

Florida Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME: SWMU 617	SITE LOCATION: NS Mayport	
WELL NO: MPT-08-MW03S	SAMPLE ID: MPT-08-MW03S-111306	DATE: 11-13-06

PURGING DATA

WELL DIAMETER (in): 2	TOTAL WELL DEPTH (ft): 15.00	STATIC DEPTH TO WATER (ft): 11.97	WELL CAPACITY (gal/ft): .16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =
= (11.97 – 15) X .16 = .48 × 3.78 = 1.8 L

PURGE METHOD: PP	PURGE INITIATED AT: 1305	PURGE ENDED AT: 1333	TOTAL VOL. ~~(gal)~~ L PURGED: 2.8

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE ~~(gpm)~~ mLPm	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
1324	1.9	1.9	100	12.15	6.68	26.55	1.420	0.47	5.6	clear	none
1327	~~2.2~~ 0.3	2.2	100	12.15	6.69	26.26	1.411	0.44	5.4	"	"
1330	~~2.5~~ 0.3	2.5	100	12.15	6.69	26.46	1.410	0.40	5.1	"	"
1333	0.3	2.8	100	12.15	6.69	26.28	1.407	0.38	4.8	"	"

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Wes Harden / TtNUS	SAMPLER(S) SIGNATURE(S): [signature]	
SAMPLING METHOD(S): PP, SM	SAMPLING INITIATED AT: 1335	SAMPLING ENDED AT: 1345
FIELD DECONTAMINATION: Y N (N circled)	FIELD-FILTERED: Y N (N circled)	DUPLICATE: Y N (N circled)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
1	AG	1L	H_2SO_4	—	<2	FL-PRO
1	AG	1L	—	—	—	PAHs
3	CG	40mL	HCl	—	<2	BTEX + MTBE
2	CG	40mL	HCl	—	<2	EDB

REMARKS:

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

Florida Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME: SWMU 6/7	SITE LOCATION: NS Mayport	
WELL NO: MPT-08-MW02S	SAMPLE ID: MPT-08-MW02S-111306	DATE: 11-13-06

PURGING DATA

WELL DIAMETER (in): 2	TOTAL WELL DEPTH (ft): 17	STATIC DEPTH TO WATER (ft): 11.99	WELL CAPACITY (gal/ft): 0.16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY = (17 – 11.99) X 0.16 = ~~3.0~~ .80 x 3.78 = 3.0 L

PURGE METHOD: PP	PURGE INITIATED AT: 1420	PURGE ENDED AT: 1438	TOTAL VOL. PURGED (~~gal~~ L): 4.5

TIME	VOLUME PURGED (~~gal~~ L)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (~~gpm~~ mL/m)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
1432	~~12.0~~ 3.0	3.0	250	12.06	6.82	26.45	1.271	0.52	4.3	Clear	none
1435	~~3.75~~.75	3.75	250	12.06	6.80	26.62	1.273	0.43	2.5	"	"
1438	~~4.5~~.75	4.5	250	12.06	6.79	26.44	1.270	0.41		"	"

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Wes Harden/TtNUS	SAMPLER(S) SIGNATURE(S): [signature]	
SAMPLING METHOD(S): PP, SM	SAMPLING INITIATED AT: 1440	SAMPLING ENDED AT: 1450
FIELD DECONTAMINATION: Y N (N circled)	FIELD-FILTERED: Y N (N circled)	DUPLICATE: Y N (N circled)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
1	AG	1L	H_2SO_4	–	<2	FL-PRO
1	AG	1L	NP	–	–	PAHs
3	CG	40mL	HCl	–	<2	BTEX + MTBE
2	CG	40mL	HCl	–	<2	EDB

REMARKS:
on sock in well on arrival. Replaced after sampling

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

Florida Department of Environmental Protection
GROUNDWATER SAMPLING LOG

SITE NAME: SWMU 67	SITE LOCATION: NS Mayport	
WELL NO: MPT-08-MW01S	SAMPLE ID: MPT-08-MW01S-111306	DATE: 11-13-06

PURGING DATA

WELL DIAMETER (in): 2	TOTAL WELL DEPTH (ft): 16	STATIC DEPTH TO WATER (ft): 11.09	WELL CAPACITY (gal/ft): 0.16

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH – DEPTH TO WATER) X WELL CAPACITY =
= (16 – 11.09) X 0.16 = .79 x3.78 = 3.0

PURGE METHOD: PP	PURGE INITIATED AT: 1500	PURGE ENDED AT: 1512	TOTAL VOL. PURGED (~~gal~~ L): 6.0

TIME	VOLUME PURGED (gal)	CUMUL. VOLUME PURGED (gal)	PURGE RATE (~~gpm~~ mLpm)	DEPTH TO WATER (ft)	pH	TEMP. (°C)	COND. (µmhos)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
1506	3.0	3.0	500	11.54	7.58	26.70	0.696	0.58	4.1	clear	none
1509	1.5	4.5	500	11.54	7.57	26.73	0.696	0.56	3.5	"	"
1512	1.5	6.0	500	11.54	7.58	26.74	0.696	0.55	2.9	"	"

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Wes Harden / TtNUS	SAMPLER(S) SIGNATURE(S): [signature]	
SAMPLING METHOD(S): PP, SM	SAMPLING INITIATED AT: 1514	SAMPLING ENDED AT: 1524
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N)	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD
NO.	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH	
3	CG	40mL	HCl	–	<2	BTEX+MTBE
2	CG	40mL	HCl	–	<2	EDB
1	AG	1L	H_2SO_4	–	<2	FL-PRO
1	AG	1L	NP		–	PAHs

REMARKS:

MATERIAL CODES: AG = AMBER GLASS; CG = CLEAR GLASS; PE = POLYETHYLENE; O = OTHER (SPECIFY)

NOTE: The above do not constitute all of the information required by Chapter 62-160, F.A.C.

Tetra Tech NUS, Inc.

DOCUMENTATION OF FIELD CALIBRATION

PROJECT NAME : SWMU51

SITE NAME: MPT - 51

PROJECT No.: ~~112g00538~~ 112G00436

INSTRUMENT NAME/MODEL:

MANUFACTURER:

SERIAL NUMBER:

Date of Calibration	Instrument Name and Model	Instrument I.D. Number	Person Performing Calibration	Instrument Settings Pre-calibration	Instrument Settings Post-calibration	Instrument Readings Pre-calibration	Instrument Readings Post-calibration	Calibration Standard (Lot No.)	Remarks and Comments
2/19/08	YSI 556	07D100941	KW	pH	4.0	4.05	4.00	5762	6-8-2008
					7.0	6.99	7.00	5842	7-31-08
				conductivity	1000	980	1000	5898	8-24-08
				ORP	240	231.4	240.0	G1748	1-2012
				DO	100	138.6	100.0	—	—
~~Micro~~ 2/19/08	MicroTPW	200704133	KW	Turbidity	1000	—	1000	70516	Nov 08
					10.0	—	10.0	70514	Nov 08
					.02	—	.02	70511	Nov 08

ATTACHMENT G

DEP-SOP-001/01
FS 2200 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

~~Close~~ other one

2.58' Casing

FACILITY NAME: ~~Pine Ridge C&D/Closed Class III Landfill~~ NAVSTA MAYPORT		FACILITY LOCATION: ~~SWMU 51~~ SWMU 51	
MONITORING_SITE_NUM:	WACS_WELL: MPT-51-TW04S		DATE: 2/19/08

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: 5 feet to 10 feet	STATIC DEPTH TO WATER (feet): 4.59	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (10 feet – 4.59 = 5.41 x .04 = .2164 feet) X 3.785 gallons/foot = .82 L ~~gallons~~

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8	PURGING INITIATED AT: 1108	PURGING ENDED AT: 1123	TOTAL VOLUME PURGED (~~gallons~~): 4.5L

TIME	VOLUME PURGED (~~gallons~~) L	CUMUL. VOLUME PURGED (~~gallons~~) L	PURGE RATE (~~gpm~~) mL/min	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (μmhos/cm or μS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1108	—	—	300	4.59	—	—	—	—	—	—	—
1113	1.5	1.5	300	4.71	7.41	16.71	22436	2.58	68.60	Cloudy	—
1118	1.5	3.0	300	4.72	7.36	16.73	22458	1.44	8.75	clear	—
1123	1.5	4.5	300	4.72	7.36	16.72	22433	1.16	3.95	clear	—
1125	SAMPLE TIME										

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Kevin Welchert / TTNUS	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1125	SAMPLING ENDED AT: 1132
PUMP OR TUBING DEPTH IN WELL (feet): 8	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ μm	DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
TW04S	2	G	1L (x2)	H_2SO_4	1000 per		TRPH	

REMARKS: CONDUCTIVITY HIGH DUE TO SALT WATER

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

ATTACHMENT G

CLOSEST TO RIVER

DEP-SOP-001/01
FS 2200 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

2.94' Casing out top

FACILITY NAME: ~~Pine Ridge C&D/Closed Class III Landfill~~ NAVSTA-MAYPORT		FACILITY LOCATION: SWMU 51
MONITORING_SITE_NUM:	WACS_WELL: MPT-51-TW03S	DATE: 2/19/08

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: 5 feet to 10 feet	STATIC DEPTH TO WATER (feet): 3.19	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (10 feet – 3.19 feet) X 6.81 X .04 X 3.785 gallons/foot = 1.03 L ~~gallons~~

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8	PURGING INITIATED AT: 1027	PURGING ENDED AT: 1042	TOTAL VOLUME PURGED (~~gallons~~): 4.5L

TIME	VOLUME PURGED (~~gallons~~) L	CUMUL. VOLUME PURGED (~~gallons~~) L	ml/m PURGE RATE (~~gpm~~)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1027	—	—	300	3.19	—	—	—	—	—	—	—
1032	1.5	1.5L	300	3.33	6.54	16.68	36858	1.18	52.90	~~Clearish~~ cloudy	*
1037	1.5	3.0L	300	3.35	6.73	16.87	40369	.85	44.23	~~Clear~~ Cloudy	*
1042	1.5	4.5L	300	3.37	6.92	16.92	41281	.65	68.68	Cloudy	*
1044	SAMPLE	TIME									

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Kevin Weichert / TTNUS	SAMPLER(S) SIGNATURES: K. Weichert	SAMPLING INITIATED AT: 1044	SAMPLING ENDED AT: 1056
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N (Y circled)	FIELD-FILTERED: Y N (N circled) FILTER SIZE: ____ µm Filtration Equipment Type:		DUPLICATE: Y N (N circled)

SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
TW03S	2	G~~AG~~	1L(X2)	H_2SO_4	1000 per		TRPH	

REMARKS: *ever so slight hint of Petroleum?, - unsure Conductivity high due to salt water.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 1, 2004

TETRA TECH NUS, INC. CHAIN OF CUSTODY NUMBER 26260 PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
CTO33	NAVSTA: MAYPORT SWMU51	Shina Ballard	904-730-4669	Katahdin - Andrea Colby
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
112G00436-05100		Shina Ballard	904-730-4669	600 Technology Way
		CARRIER/WAYBILL NUMBER		CITY, STATE
		Fed Ex - 842718344268		Scarborough, ME 04074

yes

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☒ ~~14 day~~

CONTAINER TYPE PLASTIC (P) or GLASS (G): G

PRESERVATIVE USED: H2SO4

TYPE OF ANALYSIS: TRPH (FL-PRO)

DATE YEAR 2008	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAP (G) COMP (C)	No. OF CONTAINERS	TRPH (FL-PRO)							COMMENTS
2/19	1044	MPT-51-TW03S				GW	G	2	X							cool to 4°C
2/19	1125	MPT-51-TW04S				GW	G	2	X							cool to 4°C
																112G00436
																Task# 05100
																PO# 1011981

1. RELINQUISHED BY	DATE 2/19/08	TIME 1520	1. RECEIVED BY	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

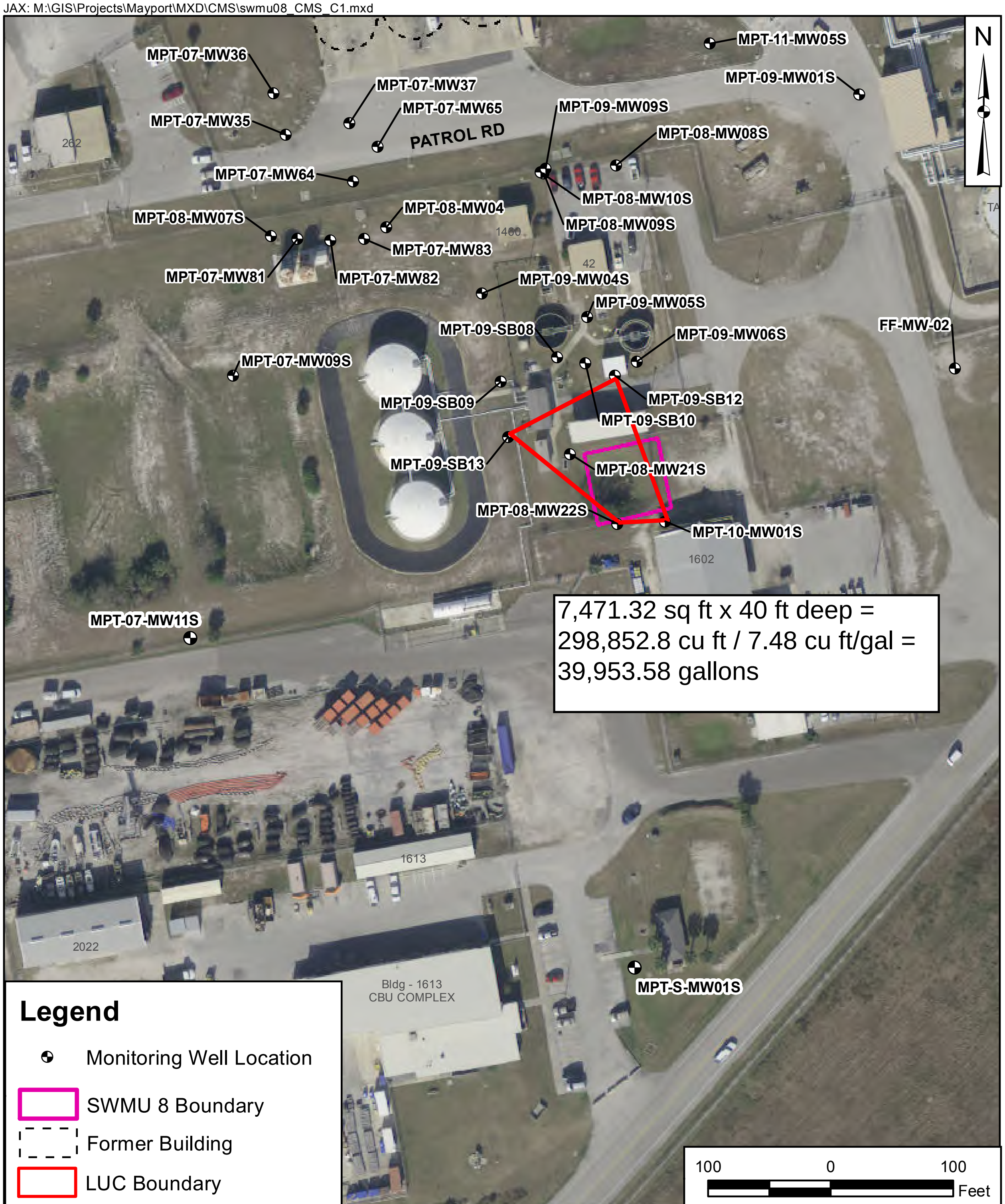
DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

APPENDIX C

CORRECTIVE MEASURES COST CALCULATIONS

JAX: M:\GIS\Projects\Mayport\MXD\CMS\swmu08_CMS_C1.mxd



DRAWN BY K. MOORE 01/13/11		GROUNDWATER EXCEEDANCE TAG MAP	CONTRACT NUMBER CTO 033	
CHECKED BY DATE D.FEARS 03/07/13		SWMU 8 - OWTP PERCOLATION POND	OWNER NUMBER —	
REVISED BY DATE J.MADDEN 03/07/13		NAVAL STATION MAYPORT	APPROVED BY DATE — —	
SCALE AS NOTED	NAVFAC	JACKSONVILLE, FLORIDA	FIGURE NO. FIGURE C-1	REV 0

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 8
GROUNDWATER ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
CAPITAL COSTS

Cost Item	Quantity	Unit	Unit Cost				Extended Cost				Subtotal
			Subcontract	Material	Labor	Equipment	Subcontract	Material	Labor	Equipment	
1 PROJECT PLANNING											
1.1 Prepare Corrective Measures Implementation Plan	40	hours			$44.65		$0	$0	$1,786	$0	$1,786
1.2 Project Scheduling and Procurement	8	hours			$44.65		$0	$0	$357	$0	$357
2 LAND USE CONTROLS											
2.1 Site Survey (2-man crew)	3	days	$1,083.00				$3,249	$0	$0	$0	$3,249
2.2 Prepare Land Use Plan	100	hours			$44.65		$0	$0	$4,465	$0	$4,465
2.3 Modify Master Plan and Prepare Deed Restrictions	80	hours			$44.65		$0	$0	$3,572	$0	$3,572
Subtotal Direct Capital Costs less Subcontract							**$3,249**	**$0**	**$10,180**	**$0**	**$10,180**
Local Area Adjustment								123%	88%	123%	
								$0	$8,959	$0	$8,959
Overhead on Labor Cost @ 30%									$2,688		$2,688
G & A on Labor Cost @ 10%									$896		$896
G & A on Material Cost @ 10%								$0		$0	$0
Total Direct Capital Cost								**$0**	**$12,542**	**$0**	**$12,542**
Indirects on Total Direct Labor Cost @ 75%									$9,407		$9,407
Profit on Total Direct Cost @ 10%									$1,254		$1,254
Subtotal											**$23,203**
Health & Safety Monitoring @ 3%	(Includes Subcontractor cost)										$696.08
Health & Safety Training, Site-specific Training											$696.08
Total Field Cost											**$24,595**
Subtotal Subcontractor Cost							$3,249				$3,249
G & A on Subcontract Cost @ 10%							$325				$325
Profit on Subcontractor Cost @ 5%							$162				$162
Subcontractor Cost											**$3,736**
Contingency on Total Field and Subcontractor Costs @ 10%											$2,833
Engineering on Total Field and Subcontractor Costs @ 5%											$1,417
TOTAL CAPITAL COST											**$32,581**

Assumptions: Existing monitoirng wells would be monitored. Land use controls would be implemented.

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 8
GROUNDWATER ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
OPERATION AND MAINTENANCE COSTS PER YEAR

Item	Quantity	Unit	Unit Cost	Subtotal Cost	Notes
1 Energy - Electric		kWh	$0.06	$0	
2 Maintenance/Repair of Monitoring Wells	1	ls	$1,000.00	$1,000	
3 Sampling of Wells	4	event	$800.00	$3,200	1 visit per quarter - 2 samplers, 1 day
4 Analysis of GW Samples (3 wells + 1 QA/QC)	16	ea	$50.00	$800	(iron only)
5 Quarterly Reports	4	ea	$4,000.00	$16,000	
Total Cost for One Year of Operation (for years 1-5)				$21,000	

Item	Quantity	Unit	Unit Cost	Subtotal Cost	Notes
1 Energy - Electric		kWh	$0.06	$0	
2 Maintenance/Repair of Monitoring Wells	1	ls	$1,000.00	$1,000	
3 Sampling of Wells	2	event	$800.00	$1,600	1 visit per six months - 2 samplers, 1 day
4 Analysis of GW Samples (3 wells + 1 QA/QC)	8	ea	$50.00	$400	(iron only)
5 Semi-annual Reports	2	ea	$4,000.00	$8,000	
Total Cost for One Year of Operation (for years 6-30, semiannual sampling)				$11,000	

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 8
GROUNDWATER ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
ANNUAL COSTS

Cost Item	Quantity	Unit	Unit Cost[1]	Total Cost
1 PERIODIC REVIEW				
1.1 Site Review Meeting (2 persons for 2 days)				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	16	hours	$52.04	$833
ODCs (travel, etc.)	1	ls	$800.00	$800
1.2 Review Report				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	32	hours	$52.04	$1,665
ODCs (photocopies, telephone, etc.)	1	ls	$100.00	$100
Subtotal Review Cost				$5,830
G&A and Profit @ 15%				$874
Subtotal Review Cost				$6,704
Total for Review Cost				**$6,704**
2 LAND USE CONTROL MONITORING (FOR 30-YEAR PERIOD)				
2.1 Quarterly Site Inspections				
Project Manager (2 hours for each inspection)	8	hours	$76.00	$608
2.2 Annual Review and Report				
Project Manager	12	hours	$76.00	$912
Staff Engineer	12	hours	$52.04	$624
ODCs (photocopies, telephone, etc.)	1	ls	$100.00	$100
Subtotal Land Use Control Monitoring				$2,244
G&A and Profit @ 15%				$337
Subtotal				$2,581
Total Land Use Control Monitoring Cost				**$2,581**

[1] Includes overhead on professional labor @ 100%.

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 8
GROUNDWATER ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
PRESENT WORTH ANALYSIS

Year	Capital Cost	Operation and Maintenance Cost	Annual Cost	Total Yearly Cost	Present Worth Factor (I = 7%)	Present Worth
0	$32,580.91			$32,581	1.000	$32,581
1		$21,000	$2,581	$23,581	0.935	$22,048
2		$21,000	$2,581	$23,581	0.873	$20,586
3		$21,000	$2,581	$23,581	0.816	$19,242
4		$21,000	$2,581	$23,581	0.763	$17,992
5		$21,000	$9,286	$30,286	0.713	$21,594
6		$11,000	$2,581	$13,581	0.666	$9,045
7		$11,000	$2,581	$13,581	0.623	$8,461
8		$11,000	$2,581	$13,581	0.582	$7,904
9		$11,000	$2,581	$13,581	0.544	$7,388
10		$11,000	$9,286	$20,286	0.508	$10,305
11		$11,000	$2,581	$13,581	0.475	$6,451
12		$11,000	$2,581	$13,581	0.444	$6,030
13		$11,000	$2,581	$13,581	0.415	$5,636
14		$11,000	$2,581	$13,581	0.388	$5,269
15		$11,000	$9,286	$20,286	0.362	$7,344
16		$11,000	$2,581	$13,581	0.339	$4,604
17		$11,000	$2,581	$13,581	0.317	$4,305
18		$11,000	$2,581	$13,581	0.296	$4,020
19		$11,000	$2,581	$13,581	0.277	$3,762
20		$11,000	$9,286	$20,286	0.258	$5,234
21		$11,000	$2,581	$13,581	0.242	$3,287
22		$11,000	$2,581	$13,581	0.226	$3,069
23		$11,000	$2,581	$13,581	0.211	$2,866
24		$11,000	$2,581	$13,581	0.197	$2,675
25		$11,000	$9,286	$20,286	0.184	$3,733
26		$11,000	$2,581	$13,581	0.172	$2,336
27		$11,000	$2,581	$13,581	0.161	$2,187
28		$11,000	$2,581	$13,581	0.150	$2,037
29		$11,000	$2,581	$13,581	0.141	$1,915
30		$11,000	$9,286	$20,286	0.131	$2,657
					TOTAL PRESENT WORTH	**$256,564**

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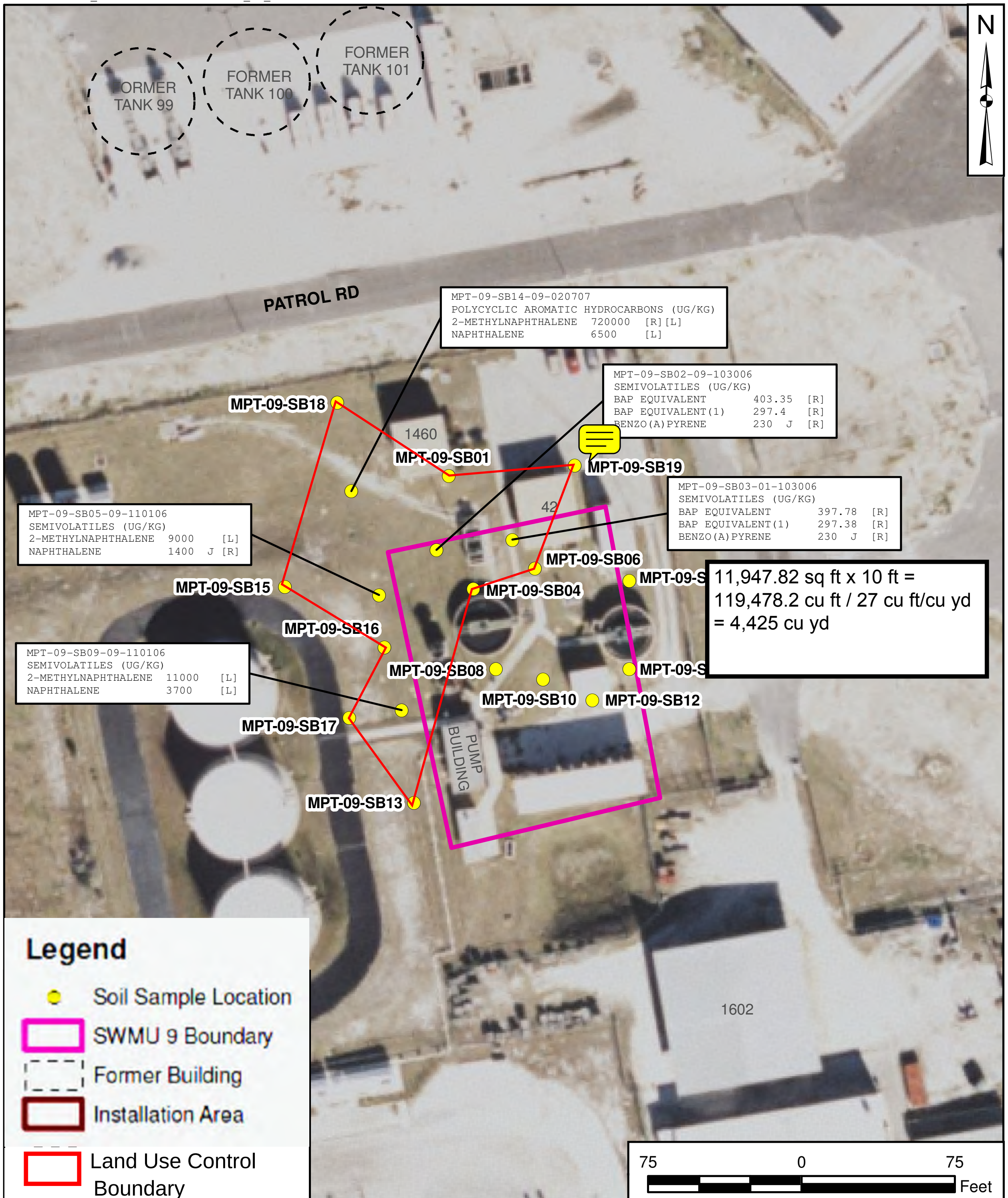

DRAWN BY T. WHEATON / DATE 06/29/10		SOIL SAMPLE EXCEEDANCE TAG MAP SWMU 9 - OILY WASTE TREATMENT PLANT NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 0033
CHECKED BY B. MARSHALL / DATE 3/04/11	NAVFAC		OWNER NUMBER __
REVISED BY __ / DATE __			APPROVED BY __ / DATE __
SCALE AS NOTED			FIGURE NO. FIGURE C-2 / REV 0

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 9
SOIL ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
CAPITAL COSTS

Cost Item	Quantity	Unit	Unit Cost				Extended Cost				Subtotal
			Subcontract	Material	Labor	Equipment	Subcontract	Material	Labor	Equipment	
1 PROJECT PLANNING											
1.1 Prepare Corrective Measures Implementation Plan	40	hours			$44.65		$0	$0	$1,786	$0	$1,786
1.2 Project Scheduling and Procurement	8	hours			$44.65		$0	$0	$357	$0	$357
2 LAND USE CONTROLS							$0				
2.1 Site Survey (2-man crew)	3	days	$1,083.00				$3,249	$0	$0	$0	$3,249
2.2 Prepare Land Use Plan	100	hours			$44.65		$0	$0	$4,465	$0	$4,465
2.3 Modify Master Plan and Prepare Deed Restrictions	80	hours			$44.65		$0	$0	$3,572	$0	$3,572
3 PROFESSIONAL SERVICES											
3.1 Drawings Prep. And Engineering Oversight	40	hours			$44.65		$0	$0	$1,786	$0	$1,786
Subtotal Direct Capital Costs less Subcontract							**$3,249**	**$0**	**$11,966**	**$0**	**$11,966**
Local Area Adjustment								123%	88%	123%	
								$0	$10,530	$0	$10,530
Overhead on Labor Cost @ 30%									$3,159		$3,159
G & A on Labor Cost @ 10%									$1,053		$1,053
G & A on Material Cost @ 10%								$0		$0	$0
Total Direct Capital Cost								**$0**	**$14,742**	**$0**	**$14,742**
Indirects on Total Direct Labor Cost @ 75%									$11,057		$11,057
Profit on Total Direct Cost @ 10%									$1,474		$1,474
Subtotal											**$27,273**
Health & Safety Monitoring @ 3% (Includes Subcontractor cost)											$818.20
Health & Safety Training, Site-specific Training											$818.20
Total Field Cost											**$28,910**
Subtotal Subcontractor Cost							$3,249				$3,249
G & A on Subcontract Cost @ 10%							$325				$325
Profit on Subcontractor Cost @ 5%							$162				$162
Subcontractor Cost											**$3,736**
Contingency on Total Field and Subcontractor Costs @ 10%											$3,265
Engineering on Total Field and Subcontractor Costs @ 5%											$1,632
TOTAL CAPITAL COST											**$37,543**

Assumptions: Existing cover would not be maintained. No additional sampling would be performed. Groundwater monitoring would be conducted as part of groundwater alternative.

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 9
SOIL ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
ANNUAL COSTS

Cost Item	Quantity	Unit	Unit Cost[1]	Total Cost
1 PERIODIC REVIEW				
1.1 Site Review Meeting (2 persons for 2 days)				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	16	hours	$52.04	$833
ODCs (travel, etc.)	1	ls	$800.00	$800
1.2 Review Report				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	32	hours	$52.04	$1,665
ODCs (photocopies, telephone, etc.)	1	ls	$100.00	$100
Subtotal Review Cost				$5,830
G&A and Profit @ 15%				$874
Subtotal Review Cost				$6,704
Total for Review Cost				**$6,704**
2 LAND USE CONTROL MONITORING (FOR 30-YEAR PERIOD)				
2.1 Quarterly Site Inspections				
Project Manager (2 hours for each inspection)	8	hours	$76.00	$608
2.2 Annual Review and Report				
Project Manager	12	hours	$76.00	$912
Staff Engineer	12	hours	$52.04	$624
ODCs (photocopies, telephone, etc.)	1	ls	$100.00	$100
Subtotal Land Use Control Monitoring				$2,244
G&A and Profit @ 15%				$337
Subtotal				$2,581
Total Land Use Control Monitoring Cost				**$2,581**

[1] Includes overhead on professional labor @ 100%.

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 9
SOIL ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
PRESENT WORTH ANALYSIS

Year	Capital Cost	Operation and Maintenance Cost	Annual Cost	Total Yearly Cost	Present Worth Factor (I = 7%)	Present Worth
0	$37,543			$37,543	1.000	$37,543
1		$0	$2,581	$2,581	0.935	$2,413
2		$0	$2,581	$2,581	0.873	$2,253
3		$0	$2,581	$2,581	0.816	$2,106
4		$0	$2,581	$2,581	0.763	$1,969
5		$0	$9,286	$9,286	0.713	$6,621
6		$0	$2,581	$2,581	0.666	$1,719
7		$0	$2,581	$2,581	0.623	$1,608
8		$0	$2,581	$2,581	0.582	$1,502
9		$0	$2,581	$2,581	0.544	$1,404
10		$0	$9,286	$9,286	0.508	$4,717
11		$0	$2,581	$2,581	0.475	$1,226
12		$0	$2,581	$2,581	0.444	$1,146
13		$0	$2,581	$2,581	0.415	$1,071
14		$0	$2,581	$2,581	0.388	$1,001
15		$0	$9,286	$9,286	0.362	$3,362
16		$0	$2,581	$2,581	0.339	$875
17		$0	$2,581	$2,581	0.317	$818
18		$0	$2,581	$2,581	0.296	$764
19		$0	$2,581	$2,581	0.277	$715
20		$0	$9,286	$9,286	0.258	$2,396
21		$0	$2,581	$2,581	0.242	$625
22		$0	$2,581	$2,581	0.226	$583
23		$0	$2,581	$2,581	0.211	$545
24		$0	$2,581	$2,581	0.197	$508
25		$0	$9,286	$9,286	0.184	$1,709
26		$0	$2,581	$2,581	0.172	$444
27		$0	$2,581	$2,581	0.161	$416
28		$0	$2,581	$2,581	0.150	$387
29		$0	$2,581	$2,581	0.141	$364
30		$0	$9,286	$9,286	0.131	$1,216
					TOTAL PRESENT WORTH	**$84,027**

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 9
SOIL ALTERNATIVE 3: LAND USE CONTROLS, EXCAVATION, OFF-SITE DISPOSAL
CAPITAL COSTS

Cost Item	Quantity	Unit	Unit Cost				Extended Cost				Subtotal
			Subcontract	Material	Labor	Equipment	Subcontract	Material	Labor	Equipment	
1 PROJECT PLANNING											
1.1 Prepare Corrective Measures Implementation Plan	200	hours			$44.65		$0	$0	$8,930	$0	$8,930
1.2 Project Scheduling and Procurement	40	hours			$44.65		$0	$0	$1,786	$0	$1,786
2 MOBILIZATION/DEMOBILIZATION											
2.1 Equipment Mob/Demob (Exc. & Dozier)	2	each			$200.00	$250.00	$0	$0	$400	$500	$900
2.2 Mobilize/Demobilize Personnel (2 person)	2	each		$375.00	$300.00		$0	$750	$600	$0	$1,350
2.3 Portable Toilet	1	month	$74.18				$74	$0	$0	$0	$74
2.4 Storage Trailer (28' x 10')	1	month	$98.33				$98	$0	$0	$0	$98
3 DECONTAMINATION											
3.1 Tempoary Decon Pad	2	ls		$450.00	$400.00	$155.00	$0	$900	$800	$310	$2,010
3.2 Decon Water Disposal	10	drums	$125.00				$1,250	$0	$0	$0	$1,250
3.3 Decon Water Storage Drums	10	each		$45.00			$0	$450	$0	$0	$450
3.4 PPE (2 p x 6 days x 2 weeks)	10	m-day		$30.00			$0	$300	$0	$0	$300
3.5 Decontaminate Equipment (i.e., pressure washer)	4	each			$134.45	$50.00	$0	$0	$538	$200	$738
4 SITE PREPARATION											
4.1 Erosion Control Fencing	600	lf		$0.23	$1.17		$0	$138	$702	$0	$840
4.2 Collect/Analyze Delineation Samples (SVOCs, metals, etc.)	10	each	$370.00	$10.00	23.52		$3,700	$100	$235	$0	$4,035
4.3 Construction Surveys (2-man crew)	10	days	$648.36				$6,484	$0	$0	$0	$6,484
4.4 Utility Location and Site Delineation/Layout	24	hours			$44.65		$0	$0	$1,072	$0	$1,072
5 EXCAVATION/BACKFILL											
5.1 Excavate/Load contaminated Soil (1.0 cy Hyd. Excavator)	4425	cy			$1.27	$2.23	$0	$0	$5,620	$9,868	$15,488
5.2 Standby, Crawler Mounted 1.0 CY Hydraulic Excavator	48	hours				$20.50	$0	$0	$0	$984	$984
5.3 Health & Safety Monitoring with OVA during Excavation	10	days			$188.16	$100.00	$0	$0	$1,882	$1,000	$2,882
5.4 Collect/Analyze Confirmatory Samples	15	each	$370.00	$10.00	$23.52		$5,550	$150	$353	$0	$6,053
5.5 Import (Offsite) Place, Compact Clean Fill Material	3000	cy		$7.82	$0.85	$1.81	$0	$23,460	$2,550	$5,430	$31,440
6 OFF-SITE TRANSPORTATION DISPOSAL											
6.1 Waste Profile	3	ls	$750.00				$2,250	$0	$0	$0	$2,250
6.2 Transport and Dispose of Soil (non-hazardous) in Landfill	6195	tons	$175.00				$1,084,125	$0	$0	$0	$1,084,125
6.3 Prepare Shipment Manifests	40	hours			$44.65		$0	$0	$1,786	$0	$1,786
7 SITE RESTORATION											
7.1 Import Vegetative Cover Material (backfill and topsoil)	1425	cy		$15.00			$0	$21,375	$0	$0	$21,375
7.2 Place/Grade Topsoil (6")	5	days			$227.20	$435.00	$0	$0	$1,136	$2,175	$3,311
7.3 Sod Disturbed Area	0.5	acre	$20,859.00				$10,430	$0	$0	$0	$10,430
8 POST-REMEDIATION MONITORING (include in GW)											
9 PROFESSIONAL SERVICES											
9.1 Drawings Prep. And Engineering Oversight	80	hours			$44.65		$0	$0	$3,572	$0	$3,572

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 9
SOIL ATLERNATIVE 4: LAND USE CONTROLS, EXCAVATION, OFF-SITE DISPOSAL
CAPITAL COSTS

Cost Item	Quantity	Unit	Unit Cost				Extended Cost				Subtotal
			Subcontract	Material	Labor	Equipment	Subcontract	Material	Labor	Equipment	
Subtotal Direct Capital Costs less Subcontract							**$1,113,961**	**$47,623**	**$31,961**	**$20,467**	**$100,051**
Local Area Adjustment								123%	88%	123%	
								$58,576	$28,125	$25,174	$111,876
Overhead on Labor Cost @ 30%									$8,438		$8,438
G & A on Labor Cost @ 10%									$2,813		$2,813
G & A on Material Cost @ 10%								$5,857.63		$2,517.41	$8,375
Total Direct Capital Cost								**$64,434**	**$39,376**	**$27,692**	**$131,501**
Indirects on Total Direct Labor Cost @ 75%									$29,532		$29,532
Profit on Total Direct Cost @ 10%									$3,938		$3,938
Subtotal											**$164,970**
Health & Safety Monitoring @ 3% (Includes Subcontractor cost)											$4,949.11
Health & Safety Training, Site-specific Training											$4,949.11
Total Field Cost											**$174,869**
Subtotal Subcontractor Cost							$1,113,961				$1,113,961
G & A on Subcontract Cost @ 10%							$111,396				$111,396
Profit on Subcontractor Cost @ 5%							$55,698				$55,698
Subcontractor Cost											**$1,281,055**
Contingency on Total Field and Subcontractor Costs @ 10%											$145,592
Engineering on Total Field and Subcontractor Costs @ 5%											$72,796
TOTAL CAPITAL COST											**$1,674,312**

Assumptions: The contaminated areas would be excavated, and the soil would be disposed of in TSD Facilities. Sampling would be performed to delineate the contaminated areas. No long-term groundwater monitoring would be needed.

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 9
SOIL ALTERNATIVE 3: LAND USE CONTROLS, EXCAVATION, OFF-SITE DISPOSAL
POST-REMEDIATION MONITORING COSTS PER YEAR

Item	Quantity	Unit	Unit Cost	Subtotal Cost	Notes
1 Energy - Electric		kWh	$0.06	$0	
2 Maintenance/Repair of Monitoring Wells	1	ls	$1,000.00	$1,000	
3 Sampling of Wells	4	qtr	$1,950.00	$7,800	1 visit per quarter - 2 samplers, 2 days
4 Analysis of GW Samples (2 wells + 2 QA/QC)	40	ea	$400.00	$16,000	(organics, metals, misc, parameters)
5 Quarterly Reports	4	ea	$4,000.00	$16,000	
Total Cost for One Year of Operation				$40,800	

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 9
SOIL ALTERNATIVE 3: LAND USE CONTROLS, EXCAVATION, OFF-SITE DISPOSAL
ANNUAL COSTS

Cost Item	Quantity	Unit	Unit Cost[1]	Total Cost
1 ONE YEAR SITE REVIEW				
1.1 Site Review Meeting (2 persons for 2 days)				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	16	hours	$52.04	$833
ODCs (travel, etc.)	1	ls	$800.00	$800
1.2 Review Report				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	32	hours	$52.04	$1,665
ODCs (photocopies, telephone, etc.)	1	ls	$100.00	$100
Subtotal Review Cost				$5,830
G&A and Profit @ 15%				$874
Subtotal Review Cost				$6,704
Contingency @ 10%				$670
Total for Review Cost				**$7,375**

[1] Includes overhead on professional labor @ 100%.

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 9
SOIL ALTERNATIVE 3: LAND USE CONTROLS, EXCAVATION, OFF-SITE DISPOSAL
PRESENT WORTH ANALYSIS

Year	Capital Cost	Operation and Maintenance Cost	Annual Cost	Total Yearly Cost	Present Worth Factor (I = 7%)	Present Worth
0	$1,674,312			$1,674,312	1.000	$1,674,312
1		$40,800		$40,800	0.935	$38,148
2		$7,375		$7,375	0.873	$6,438
					TOTAL PRESENT WORTH	**$1,718,898**

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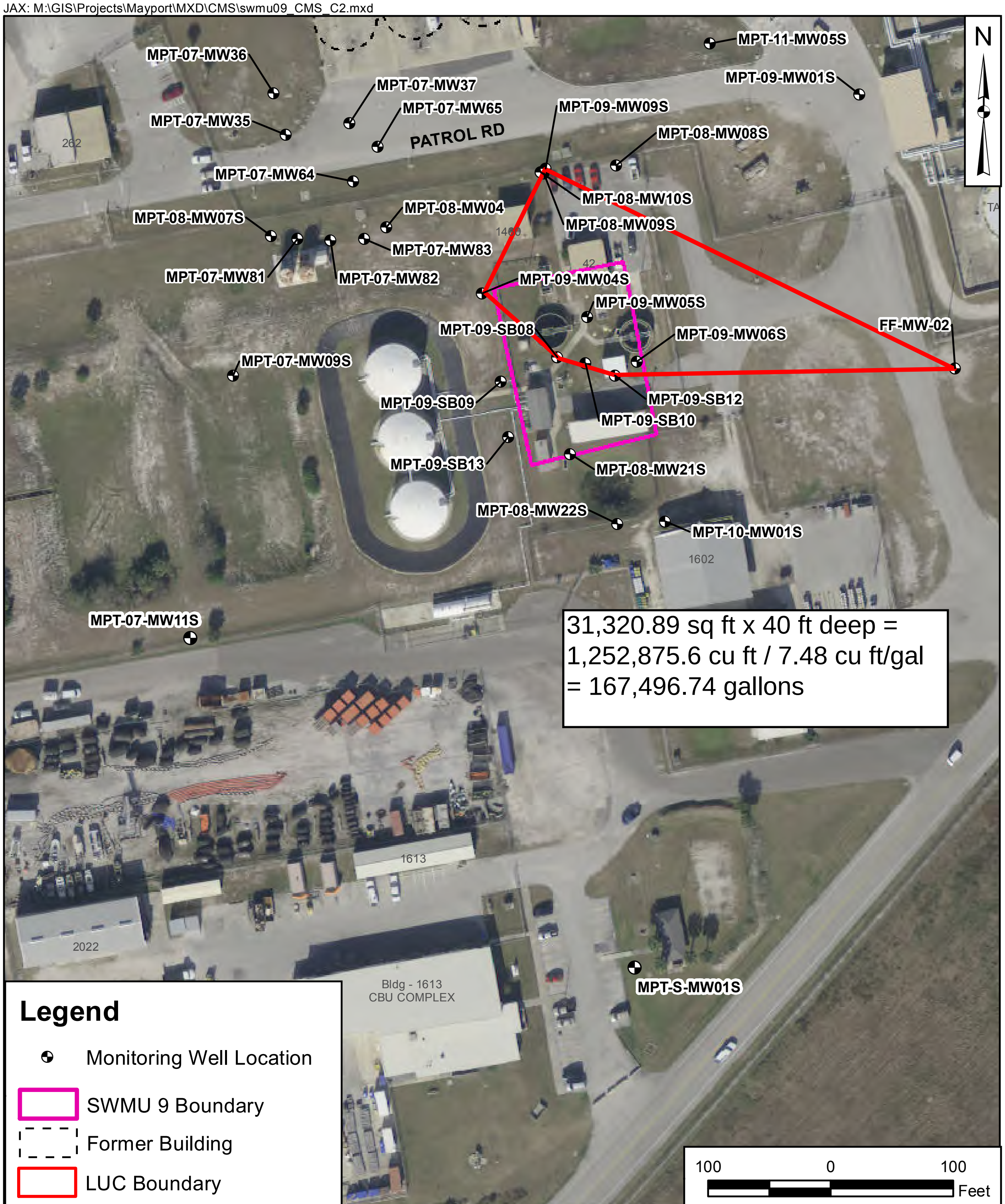

DRAWN BY K. MOORE 01/13/11	NAVFAC	GROUNDWATER EXCEEDANCE TAG MAP SWMU 9 - OILY WASTEWATER TREATMENT PLANT NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 033
CHECKED BY DATE D.FEARS 03/07/13			OWNER NUMBER —
REVISED BY DATE J.MADDEN 03/07/13			APPROVED BY DATE — —
SCALE AS NOTED			FIGURE NO. FIGURE C-2 A | REV 0

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 9
GROUNDWATER ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
CAPITAL COSTS

Cost Item	Quantity	Unit	Unit Cost				Extended Cost				Subtotal
			Subcontract	Material	Labor	Equipment	Subcontract	Material	Labor	Equipment	
1 PROJECT PLANNING											
1.1 Prepare Corrective Measures Implementation Plan	40	hours			$44.65		$0	$0	$1,786	$0	$1,786
1.2 Project Scheduling and Procurement	8	hours			$44.65		$0	$0	$357	$0	$357
2 LAND USE CONTROLS											
2.1 Site Survey (2-man crew)	3	days	$1,083.00				$3,249	$0	$0	$0	$3,249
2.2 Prepare Land Use Plan	100	hours			$44.65		$0	$0	$4,465	$0	$4,465
2.3 Modify Master Plan and Prepare Deed Restrictions	80	hours			$44.65		$0	$0	$3,572	$0	$3,572
Subtotal Direct Capital Costs less Subcontract							**$3,249**	**$0**	**$10,180**	**$0**	**$10,180**
Local Area Adjustment								123%	88%	123%	
								$0	$8,959	$0	$8,959
Overhead on Labor Cost @ 30%									$2,688		$2,688
G & A on Labor Cost @ 10%									$896		$896
G & A on Material Cost @ 10%								$0		$0	$0
Total Direct Capital Cost								**$0**	**$12,542**	**$0**	**$12,542**
Indirects on Total Direct Labor Cost @ 75%									$9,407		$9,407
Profit on Total Direct Cost @ 10%									$1,254		$1,254
Subtotal											**$23,203**
Health & Safety Monitoring @ 3% (Includes Subcontractor cost)											$696.08
Health & Safety Training, Site-specific Training											$696.08
Total Field Cost											**$24,595**
Subtotal Subcontractor Cost							$3,249				$3,249
G & A on Subcontract Cost @ 10%							$325				$325
Profit on Subcontractor Cost @ 5%							$162				$162
Subcontractor Cost											**$3,736**
Contingency on Total Field and Subcontractor Costs @ 10%											$2,833
Engineering on Total Field and Subcontractor Costs @ 5%											$1,417
TOTAL CAPITAL COST											**$32,581**

Assumptions: Existing monitoirng wells would be monitored. Land use controls would be implemented.

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 9
GROUNDWATER ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
OPERATION AND MAINTENANCE COSTS PER YEAR

Item	Quantity	Unit	Unit Cost	Subtotal Cost	Notes
1 Energy - Electric		kWh	$0.06	$0	
2 Maintenance/Repair of Monitoring Wells	1	ls	$1,000.00	$1,000	
3 Sampling of Wells	4	qtr	$1,600.00	$6,400	1 visit per quarter - 2 samplers, 2 days
4 Analysis of GW Samples (5 wells + 1 QA/QC)	24	ea	$200.00	$4,800	(TPH, iron & manganese)
5 Quarterly Reports	4	ea	$4,000.00	$16,000	
Total Cost for One Year of Operation (for years 1-5)				$28,200	

Item	Quantity	Unit	Unit Cost	Subtotal Cost	Notes
1 Energy - Electric		kWh	$0.06	$0	
2 Maintenance/Repair of Monitoring Wells	1	ls	$1,000.00	$1,000	
3 Sampling of Wells	2	qtr	$1,600.00	$3,200	1 visit per six months - 2 samplers, 2 days
4 Analysis of GW Samples (5 wells + 1 QA/QC)	12	ea	$200.00	$2,400	(TPH, iron & manganese)
5 Quarterly Reports	2	ea	$4,000.00	$8,000	
Total Cost for One Year of Operation (for years 6-30, semiannual sampling)				$14,600	

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 9
GROUNDWATER ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
ANNUAL COSTS

Cost Item	Quantity	Unit	Unit Cost[1]	Total Cost
1 FIVE YEAR REVIEW				
1.1 Site Review Meeting (2 persons for 2 days)				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	16	hours	$52.04	$833
ODCs (travel, etc.)	1	ls	$800.00	$800
1.2 Review Report				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	32	hours	$52.04	$1,665
ODCs (photocopies, telephone, etc.)	1	ls	$100.00	$100
Subtotal Review Cost				$5,830
G&A and Profit @ 15%				$874
Subtotal Review Cost				$6,704
Total for Review Cost				**$6,704**
2 LAND USE CONTROL MONITORING (FOR 30-YEAR PERIOD)				
2.1 Quarterly Site Inspections				
Project Manager (2 hours for each inspection)	8	hours	$76.00	$608
2.2 Annual Review and Report				
Project Manager	12	hours	$76.00	$912
Staff Engineer	12	hours	$52.04	$624
ODCs (photocopies, telephone, etc.)	1	ls	$100.00	$100
Subtotal Land Use Control Monitoring				$2,244
G&A and Profit @ 15%				$337
Subtotal				$2,581
Total Land Use Control Monitoring Cost				**$2,581**

[1] Includes overhead on professional labor @ 100%.

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 9
GROUNDWATER ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
PRESENT WORTH ANALYSIS

Year	Capital Cost	Operation and Maintenance Cost	Annual Cost	Total Yearly Cost	Present Worth Factor (I = 7%)	Present Worth
0	$32,580.91			$32,581	1.000	$32,581
1		$28,200	$2,581	$30,781	0.935	$28,780
2		$28,200	$2,581	$30,781	0.873	$26,872
3		$28,200	$2,581	$30,781	0.816	$25,117
4		$28,200	$2,581	$30,781	0.763	$23,486
5		$28,200	$9,286	$37,486	0.713	$26,728
6		$14,600	$2,581	$17,181	0.666	$11,443
7		$14,600	$2,581	$17,181	0.623	$10,704
8		$14,600	$2,581	$17,181	0.582	$9,999
9		$14,600	$2,581	$17,181	0.544	$9,346
10		$14,600	$9,286	$23,886	0.508	$12,134
11		$14,600	$2,581	$17,181	0.475	$8,161
12		$14,600	$2,581	$17,181	0.444	$7,628
13		$14,600	$2,581	$17,181	0.415	$7,130
14		$14,600	$2,581	$17,181	0.388	$6,666
15		$14,600	$9,286	$23,886	0.362	$8,647
16		$14,600	$2,581	$17,181	0.339	$5,824
17		$14,600	$2,581	$17,181	0.317	$5,446
18		$14,600	$2,581	$17,181	0.296	$5,086
19		$14,600	$2,581	$17,181	0.277	$4,759
20		$14,600	$9,286	$23,886	0.258	$6,163
21		$14,600	$2,581	$17,181	0.242	$4,158
22		$14,600	$2,581	$17,181	0.226	$3,883
23		$14,600	$2,581	$17,181	0.211	$3,625
24		$14,600	$2,581	$17,181	0.197	$3,385
25		$14,600	$9,286	$23,886	0.184	$4,395
26		$14,600	$2,581	$17,181	0.172	$2,955
27		$14,600	$2,581	$17,181	0.161	$2,766
28		$14,600	$2,581	$17,181	0.150	$2,577
29		$14,600	$2,581	$17,181	0.141	$2,423
30		$14,600	$9,286	$23,886	0.131	$3,129
					TOTAL PRESENT WORTH	**$315,996**

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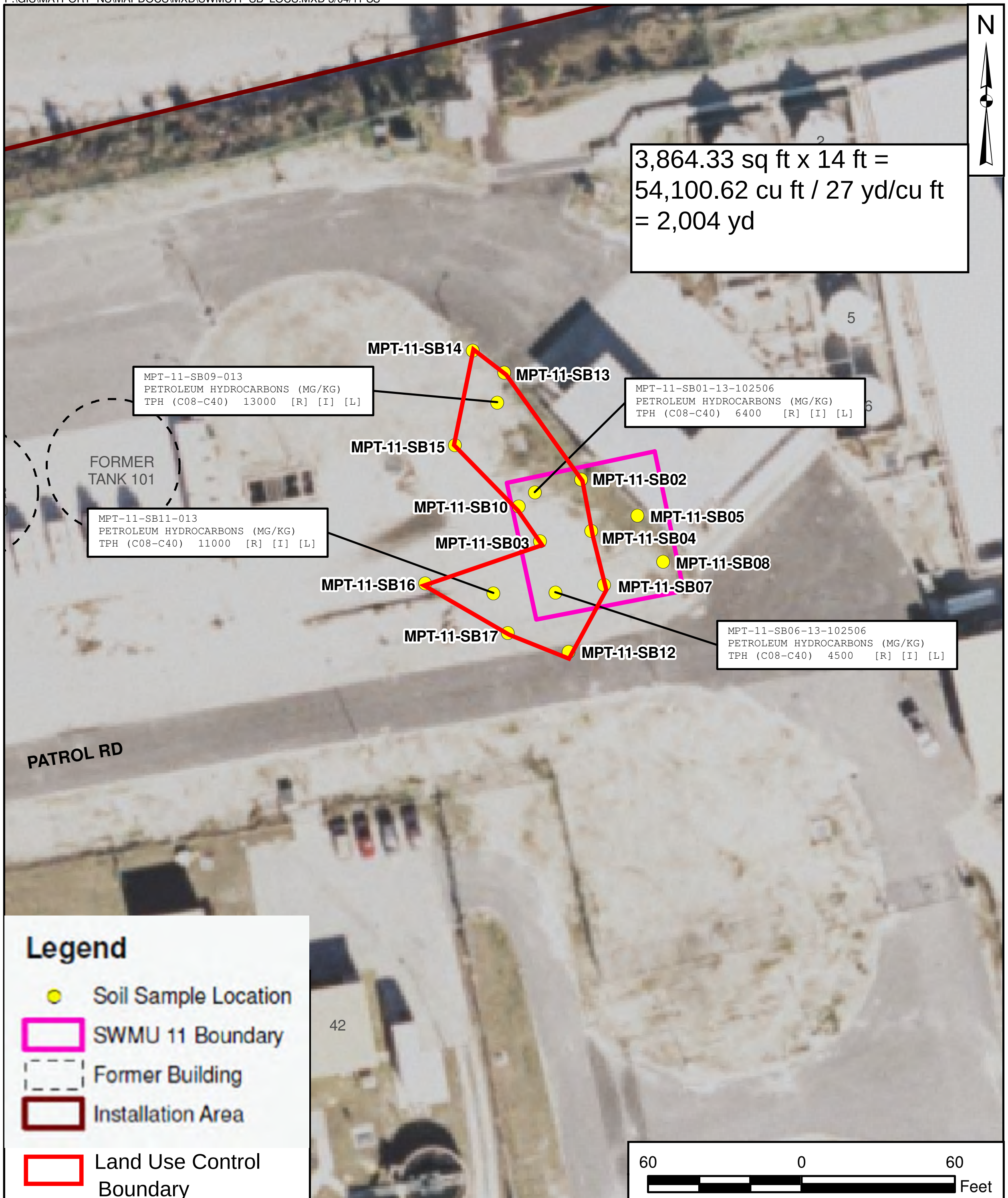

DRAWN BY K. MOORE — DATE 1/12/11	NAVFAC	SOIL SAMPLE EXCEEDANCE TAG MAP SWMU 11 - FUEL SPILL AREA NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 0033
CHECKED BY D. FEARS — DATE 3/6/13			OWNER NUMBER __
REVISED BY __ — DATE __			APPROVED BY __ — DATE __
SCALE AS NOTED			FIGURE NO. FIGURE C-3 — REV 0

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 11
SOIL ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
CAPITAL COSTS

Cost Item	Quantity	Unit	Unit Cost				Extended Cost				Subtotal
			Subcontract	Material	Labor	Equipment	Subcontract	Material	Labor	Equipment	
1 PROJECT PLANNING											
1.1 Prepare Corrective Measures Implementation Plan	40	hours			$44.65		$0	$0	$1,786	$0	$1,786
1.2 Project Scheduling and Procurement	8	hours			$44.65		$0	$0	$357	$0	$357
2 LAND USE CONTROLS							$0				
2.1 Site Survey (2-man crew)	3	days	$1,083.00				$3,249	$0	$0	$0	$3,249
2.2 Prepare Land Use Plan	100	hours			$44.65		$0	$0	$4,465	$0	$4,465
2.3 Modify Master Plan and Prepare Deed Restrictions	80	hours			$44.65		$0	$0	$3,572	$0	$3,572
3 PROFESSIONAL SERVICES											
3.1 Drawings Prep. And Engineering Oversight	40	hours			$44.65		$0	$0	$1,786	$0	$1,786
Subtotal Direct Capital Costs less Subcontract							**$3,249**	**$0**	**$11,966**	**$0**	**$11,966**
Local Area Adjustment								123%	88%	123%	
								$0	$10,530	$0	$10,530
Overhead on Labor Cost @ 30%									$3,159		$3,159
G & A on Labor Cost @ 10%									$1,053		$1,053
G & A on Material Cost @ 10%								$0		$0	$0
Total Direct Capital Cost								**$0**	**$14,742**	**$0**	**$14,742**
Indirects on Total Direct Labor Cost @ 75%									$11,057		$11,057
Profit on Total Direct Cost @ 10%									$1,474		$1,474
Subtotal											**$27,273**
Health & Safety Monitoring @ 3%	(Includes Subcontractor cost)										$818.20
Health & Safety Training, Site-specific Training											$818.20
Total Field Cost											**$28,910**
Subtotal Subcontractor Cost							$3,249				$3,249
G & A on Subcontract Cost @ 10%							$325				$325
Profit on Subcontractor Cost @ 5%							$162				$162
Subcontractor Cost											**$3,736**
Contingency on Total Field and Subcontractor Costs @ 10%											$3,265
Engineering on Total Field and Subcontractor Costs @ 5%											$1,632
TOTAL CAPITAL COST											**$37,543**

Assumptions: Existing cover would not be maintained. No additional sampling would be performed. Groundwater monitoring would be conducted as part of groundwater alternative.

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 11
SOIL ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
ANNUAL COSTS

Cost Item	Quantity	Unit	Unit Cost[1]	Total Cost
1 FIVE YEAR REVIEW				
1.1 Site Review Meeting (2 persons for 2 days)				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	16	hours	$52.04	$833
ODCs (travel, etc.)	1	ls	$800.00	$800
1.2 Review Report				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	32	hours	$52.04	$1,665
ODCs (photocopies, telephone, etc.)	1	ls	$100.00	$100
Subtotal Review Cost				$5,830
G&A and Profit @ 15%				$874
Subtotal Review Cost				$6,704
Total for Review Cost				**$6,704**
2 LAND USE CONTROL MONITORING (FOR 30-YEAR PERIOD)				
2.1 Quarterly Site Inspections				
Project Manager (2 hours for each inspection)	8	hours	$76.00	$608
2.2 Annual Review and Report				
Project Manager	12	hours	$76.00	$912
Staff Engineer	12	hours	$52.04	$624
ODCs (photocopies, telephone, etc.)	1	ls	$100.00	$100
Subtotal Land Use Control Monitoring				$2,244
G&A and Profit @ 15%				$337
Subtotal				$2,581
Total Land Use Control Monitoring Cost				**$2,581**

[1] Includes overhead on professional labor @ 100%.

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 11
SOIL ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
PRESENT WORTH ANALYSIS

Year	Capital Cost	Operation and Maintenance Cost	Annual Cost	Total Yearly Cost	Present Worth Factor (I = 7%)	Present Worth
0	$37,543			$37,543	1.000	$37,543
1		$0	$2,581	$2,581	0.935	$2,413
2		$0	$2,581	$2,581	0.873	$2,253
3		$0	$2,581	$2,581	0.816	$2,106
4		$0	$2,581	$2,581	0.763	$1,969
5		$0	$9,286	$9,286	0.713	$6,621
6		$0	$2,581	$2,581	0.666	$1,719
7		$0	$2,581	$2,581	0.623	$1,608
8		$0	$2,581	$2,581	0.582	$1,502
9		$0	$2,581	$2,581	0.544	$1,404
10		$0	$9,286	$9,286	0.508	$4,717
11		$0	$2,581	$2,581	0.475	$1,226
12		$0	$2,581	$2,581	0.444	$1,146
13		$0	$2,581	$2,581	0.415	$1,071
14		$0	$2,581	$2,581	0.388	$1,001
15		$0	$9,286	$9,286	0.362	$3,362
16		$0	$2,581	$2,581	0.339	$875
17		$0	$2,581	$2,581	0.317	$818
18		$0	$2,581	$2,581	0.296	$764
19		$0	$2,581	$2,581	0.277	$715
20		$0	$9,286	$9,286	0.258	$2,396
21		$0	$2,581	$2,581	0.242	$625
22		$0	$2,581	$2,581	0.226	$583
23		$0	$2,581	$2,581	0.211	$545
24		$0	$2,581	$2,581	0.197	$508
25		$0	$9,286	$9,286	0.184	$1,709
26		$0	$2,581	$2,581	0.172	$444
27		$0	$2,581	$2,581	0.161	$416
28		$0	$2,581	$2,581	0.150	$387
29		$0	$2,581	$2,581	0.141	$364
30		$0	$9,286	$9,286	0.131	$1,216
					TOTAL PRESENT WORTH	**$84,027**

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 11
SOIL ALTERNATIVE 3: LAND USE CONTROLS, EXCAVATION, OFF-SITE DISPOSAL
CAPITAL COSTS

Cost Item	Quantity	Unit	Unit Cost				Extended Cost				Subtotal
			Subcontract	Material	Labor	Equipment	Subcontract	Material	Labor	Equipment	
1 PROJECT PLANNING											
1.1 Prepare Corrective Measures Implementation Plan	200	hours			$44.65		$0	$0	$8,930	$0	$8,930
1.2 Project Scheduling and Procurement	40	hours			$44.65		$0	$0	$1,786	$0	$1,786
2 MOBILIZATION/DEMOBILIZATION											
2.1 Equipment Mob/Demob (Exc. & Dozier)	2	each			$200.00	$250.00	$0	$0	$400	$500	$900
2.2 Mobilize/Demobilize Personnel (2 person)	2	each		$375.00	$300.00		$0	$750	$600	$0	$1,350
2.3 Portable Toilet	1	month	$74.18				$74	$0	$0	$0	$74
2.4 Storage Trailer (28' x 10')	1	month	$98.33				$98	$0	$0	$0	$98
3 DECONTAMINATION											
3.1 Tempoary Decon Pad	2	ls		$450.00	$400.00	$155.00	$0	$900	$800	$310	$2,010
3.2 Decon Water Disposal	10	drums	$125.00				$1,250	$0	$0	$0	$1,250
3.3 Decon Water Storage Drums	10	each		$45.00			$0	$450	$0	$0	$450
3.4 PPE (2 p x 6 days x 2 weeks)	10	m-day		$30.00			$0	$300	$0	$0	$300
3.5 Decontaminate Equipment (i.e., pressure washer)	4	each			$134.45	$50.00	$0	$0	$538	$200	$738
4 SITE PREPARATION											
4.1 Erosion Control Fencing	600	lf		$0.23	$1.17		$0	$138	$702	$0	$840
4.2 Collect/Analyze Delineation Samples (SVOCs, metals, etc.)	10	each	$370.00	$10.00	23.52		$3,700	$100	$235	$0	$4,035
4.3 Construction Surveys (2-man crew)	5	days	$648.36				$3,242	$0	$0	$0	$3,242
4.4 Utility Location and Site Delineation/Layout	24	hours			$44.65		$0	$0	$1,072	$0	$1,072
5 EXCAVATION/BACKFILL											
5.1 Excavate/Load contaminated Soil (1.0 cy Hyd. Excavator)	2000	cy			$1.27	$2.23	$0	$0	$2,540	$4,460	$7,000
5.2 Standby, Crawler Mounted 1.0 CY Hydraulic Excavator	24	hours				$20.50	$0	$0	$0	$492	$492
5.3 Health & Safety Monitoring with OVA during Excavation	5	days			$188.16	$100.00	$0	$0	$941	$500	$1,441
5.4 Collect/Analyze Confirmatory Samples	15	each	$370.00	$10.00	$23.52		$5,550	$150	$353	$0	$6,053
5.5 Import (Offsite) Place, Compact Clean Fill Material	2000	cy		$7.82	$0.85	$1.81	$0	$15,640	$1,700	$3,620	$20,960
6 OFF-SITE TRANSPORTATION DISPOSAL											
6.1 Waste Profile	3	ls	$750.00				$2,250	$0	$0	$0	$2,250
6.2 Transport and Dispose of Soil (hazardous) in Landfill	2738	tons	$175.00				$479,220	$0	$0	$0	$479,220
6.3 Prepare Shipment Manifests	40	hours			$44.65		$0	$0	$1,786	$0	$1,786
7 SITE RESTORATION											
7.1 Import Vegetative Cover Material (backfill and topsoil)	2000	cy		$15.00			$0	$30,000	$0	$0	$30,000
7.2 Place/Grade Topsoil (6")	3	days			$227.20	$435.00	$0	$0	$682	$1,305	$1,987
7.3 Sod Disturbed Area	0.5	acre	$20,859.00				$10,430	$0	$0	$0	$10,430
8 LAND USE CONTROLS											
8.1 Site Survey (2-man crew)	2	days	$1,083.33				$2,167	$0	$0	$0	$2,167
8.2 Prepare Land Use Plan	100	hours			$44.65		$0	$0	$4,465	$0	$4,465
.3 Modify Master Plan and Prepare Deed Restrictions	80	hours			$44.65		$0	$0	$3,572	$0	$3,572
9 PROFESSIONAL SERVICES											
9.1 Drawings Prep. And Engineering Oversight	80	hours			$44.65		$0	$0	$3,572	$0	$3,572

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 11
SOIL ATLERNATIVE 4: LAND USE CONTROLS, EXCAVATION, OFF-SITE DISPOSAL
CAPITAL COSTS

Cost Item	Quantity	Unit	Unit Cost				Extended Cost				Subtotal
			Subcontract	Material	Labor	Equipment	Subcontract	Material	Labor	Equipment	
Subtotal Direct Capital Costs less Subcontract							**$507,980**	**$48,428**	**$34,673**	**$11,387**	**$94,488**
Local Area Adjustment								123%	88%	123%	
								$59,566	$30,512	$14,006	$104,085
Overhead on Labor Cost @ 30%									$9,154		$9,154
G & A on Labor Cost @ 10%									$3,051		$3,051
G & A on Material Cost @ 10%								$5,956.64		$1,400.60	$7,357
Total Direct Capital Cost								**$65,523**	**$42,717**	**$15,407**	**$123,647**
Indirects on Total Direct Labor Cost @ 75%									$32,038		$32,038
Profit on Total Direct Cost @ 10%									$4,272		$4,272
Subtotal											**$159,956**
Health & Safety Monitoring @ 3%	(Includes Subcontractor cost)										$4,798.68
Health & Safety Training, Site-specific Training											$4,798.68
Total Field Cost											**$169,553**
Subtotal Subcontractor Cost							$507,980				$507,980
G & A on Subcontract Cost @ 10%							$50,798				$50,798
Profit on Subcontractor Cost @ 5%							$25,399				$25,399
Subcontractor Cost											**$584,178**
Contingency on Total Field and Subcontractor Costs @ 10%											$75,373
Engineering on Total Field and Subcontractor Costs @ 5%											$37,687
TOTAL CAPITAL COST											**$866,790**

Assumptions: The contaminated areas would be excavated, and the soil would be disposed of in TSD Facilities. Sampling would be performed to delineate the contaminated areas. No long-term groundwater monitoring would be needed.

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 11
SOIL ALTERNATIVE 3: LAND USE CONTROLS, EXCAVATION, OFF-SITE DISPOSAL
POST-REMEDIATION MONITORING COSTS PER YEAR

Item	Quantity	Unit	Unit Cost	Subtotal Cost	Notes
1 Energy - Electric		kWh	$0.06	$0	
2 Maintenance/Repair of Monitoring Wells	1	ls	$1,000.00	$1,000	
3 Sampling of Wells	4	qtr	$1,950.00	$7,800	1 visit per quarter - 2 samplers, 2 days
4 Analysis of GW Samples (2 wells + 2 QA/QC)	40	ea	$400.00	$16,000	(organics, metals, misc, parameters)
5 Quarterly Reports	4	ea	$4,000.00	$16,000	
Total Cost for One Year of Operation				$40,800	

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 11
SOIL ALTERNATIVE 3: LAND USE CONTROLS, EXCAVATION, OFF-SITE DISPOSAL
ANNUAL COSTS

Cost Item	Quantity	Unit	Unit Cost[1]	Total Cost
1 ONE YEAR SITE REVIEW				
1.1 Site Review Meeting (2 persons for 2 days)				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	16	hours	$52.04	$833
ODCs (travel, etc.)	1	ls	$800.00	$800
1.2 Review Report				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	32	hours	$52.04	$1,665
ODCs (photocopies, telephone, etc.)	1	ls	$100.00	$100
Subtotal Review Cost				$5,830
G&A and Profit @ 15%				$874
Subtotal Review Cost				$6,704
Contingency @ 10%				$670
Total for Review Cost				**$7,375**

[1] Includes overhead on professional labor @ 100%.

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 11
SOIL ALTERNATIVE 3: LAND USE CONTROLS, EXCAVATION, OFF-SITE DISPOSAL
PRESENT WORTH ANALYSIS

Year	Capital Cost	Operation and Maintenance Cost	Annual Cost	Total Yearly Cost	Present Worth Factor (I = 7%)	Present Worth
0	$866,790			$866,790	1.000	$866,790
1		$40,800		$40,800	0.935	$38,148
2		$7,375		$7,375	0.873	$6,438

TOTAL PRESENT WORTH **$911,377**

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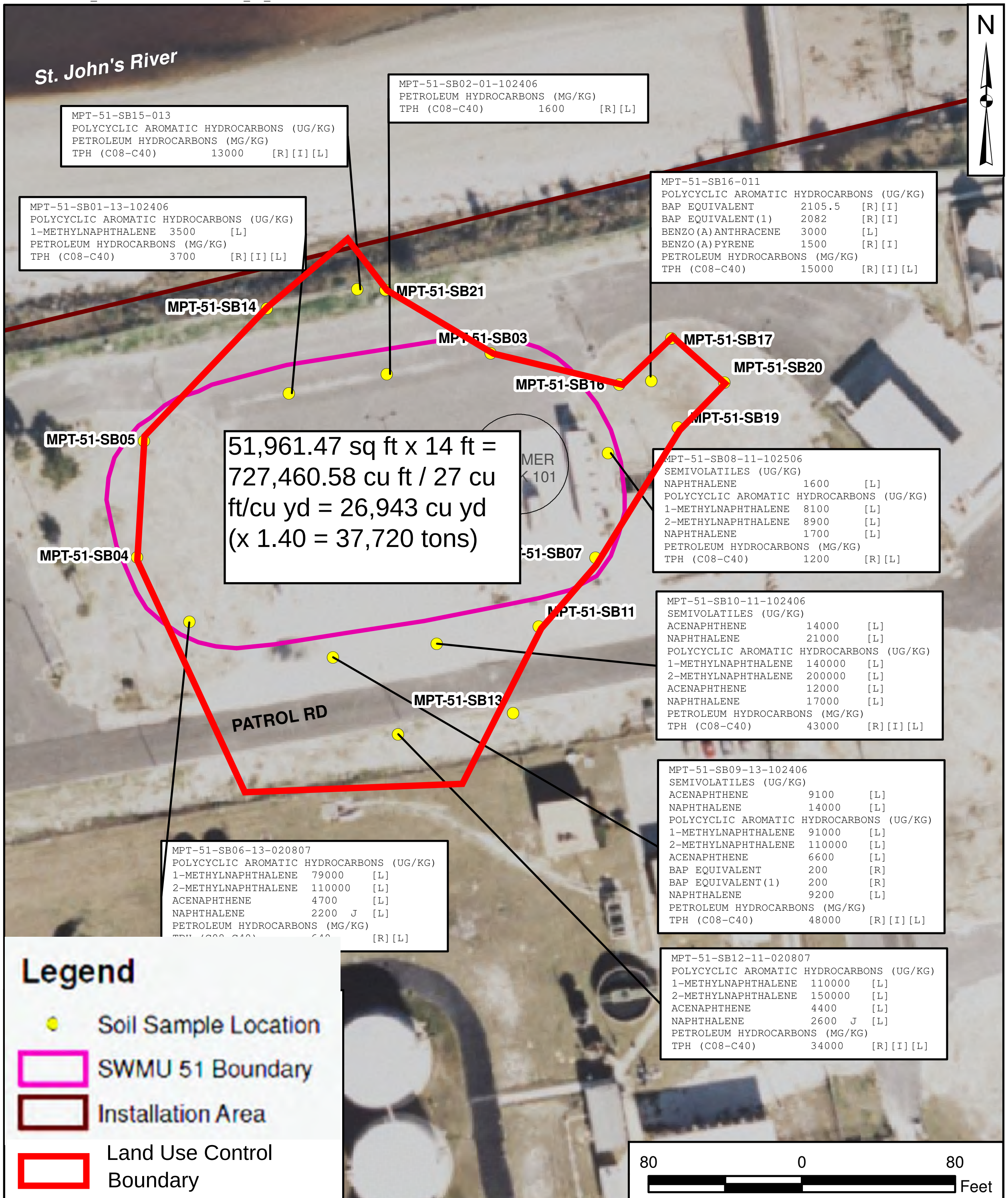

DRAWN BY K. MOORE DATE 1/12/11	NAVFAC	SOIL SAMPLE EXCEEDANCE TAG MAP SWMU 51 - WASTE OIL TANKS NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 0033
CHECKED BY D. FEARS DATE 3/6/13			OWNER NUMBER —
REVISED BY — DATE —			APPROVED BY — DATE —
SCALE AS NOTED			FIGURE NO. FIGURE C-4 REV 0

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 51
SOIL ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
CAPITAL COSTS

Cost Item	Quantity	Unit	Unit Cost				Extended Cost				Subtotal
			Subcontract	Material	Labor	Equipment	Subcontract	Material	Labor	Equipment	
1 PROJECT PLANNING											
1.1 Prepare Corrective Measures Implementation Plan	40	hours			$44.65		$0	$0	$1,786	$0	$1,786
1.2 Project Scheduling and Procurement	8	hours			$44.65		$0	$0	$357	$0	$357
2 LAND USE CONTROLS							$0				
2.1 Site Survey (2-man crew)	3	days	$1,083.00				$3,249	$0	$0	$0	$3,249
2.2 Prepare Land Use Plan	100	hours			$44.65		$0	$0	$4,465	$0	$4,465
2.3 Modify Master Plan and Prepare Deed Restrictions	80	hours			$44.65		$0	$0	$3,572	$0	$3,572
3 PROFESSIONAL SERVICES											
3.1 Drawings Prep. And Engineering Oversight	40	hours			$44.65		$0	$0	$1,786	$0	$1,786
Subtotal Direct Capital Costs less Subcontract							**$3,249**	**$0**	**$11,966**	**$0**	**$11,966**
Local Area Adjustment								123%	88%	123%	
								$0	$10,530	$0	$10,530
Overhead on Labor Cost @ 30%									$3,159		$3,159
G & A on Labor Cost @ 10%									$1,053		$1,053
G & A on Material Cost @ 10%								$0		$0	$0
Total Direct Capital Cost								**$0**	**$14,742**	**$0**	**$14,742**
Indirects on Total Direct Labor Cost @ 75%									$11,057		$11,057
Profit on Total Direct Cost @ 10%									$1,474		$1,474
Subtotal											**$27,273**
Health & Safety Monitoring @ 3% (Includes Subcontractor cost)											$818.20
Health & Safety Training, Site-specific Training											$818.20
Total Field Cost											**$28,910**
Subtotal Subcontractor Cost							$3,249				$3,249
G & A on Subcontract Cost @ 10%							$325				$325
Profit on Subcontractor Cost @ 5%							$162				$162
Subcontractor Cost											**$3,736**
Contingency on Total Field and Subcontractor Costs @ 10%											$3,265
Engineering on Total Field and Subcontractor Costs @ 5%											$1,632
TOTAL CAPITAL COST											**$37,543**

Assumptions: Existing cover would not be maintained. No additional sampling would be performed. Groundwater monitoring would be conducted as part of groundwater alternative.

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 51
SOIL ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
OPERATION AND MAINTENANCE COSTS PER YEAR

Item	Quantity	Unit	Unit Cost	Subtotal Cost	Notes
1 Energy - Electric		kWh	$0.06	$0	
2 Maintenance of Existing Cover	0	cap	$1,000.00	$0	
3 Carbon Unit Changeout/Regeneration of Spent Carbon		pound	$3.00	$0	once a year
4 Labor, Mobilization/Demobilization, Per Diem, Supplies		wk	$925.00	$0	1 visit per week - 1 day
5 Labor, Mobilization/Demobilization, Per Diem, Supplies		mo	$1,950.00	$0	1 visit per quarter - 2 laborers, 2 days
6 Analysis of Off-gas Samples		ea	$250.00	$0	1 per month, VOCs
7 Quarterly Reports		ea	$4,000.00	$0	
Total Cost for One Year of Operation				$0	

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 51
SOIL ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
ANNUAL COSTS

Cost Item	Quantity	Unit	Unit Cost[1]	Total Cost
1 FIVE YEAR REVIEW				
1.1 Site Review Meeting (2 persons for 2 days)				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	16	hours	$52.04	$833
ODCs (travel, etc.)	1	ls	$800.00	$800
1.2 Review Report				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	32	hours	$52.04	$1,665
ODCs (photocopies, telephone, etc.)	1	ls	$100.00	$100
Subtotal Review Cost				$5,830
G&A and Profit @ 15%				$874
Subtotal Review Cost				$6,704
Total for Review Cost				**$6,704**
2 LAND USE CONTROL MONITORING (FOR 30-YEAR PERIOD)				
2.1 Quarterly Site Inspections				
Project Manager (2 hours for each inspection)	8	hours	$76.00	$608
2.2 Annual Review and Report				
Project Manager	12	hours	$76.00	$912
Staff Engineer	12	hours	$52.04	$624
ODCs (photocopies, telephone, etc.)	1	ls	$100.00	$100
Subtotal Land Use Control Monitoring				$2,244
G&A and Profit @ 15%				$337
Subtotal				$2,581
Total Land Use Control Monitoring Cost				**$2,581**

[1] Includes overhead on professional labor @ 100%.

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 51
SOIL ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
PRESENT WORTH ANALYSIS

Year	Capital Cost	Operation and Maintenance Cost	Annual Cost	Total Yearly Cost	Present Worth Factor (I = 7%)	Present Worth
0	$37,543			$37,543	1.000	$37,543
1		$0	$2,581	$2,581	0.935	$2,413
2		$0	$2,581	$2,581	0.873	$2,253
3		$0	$2,581	$2,581	0.816	$2,106
4		$0	$2,581	$2,581	0.763	$1,969
5		$0	$9,286	$9,286	0.713	$6,621
6		$0	$2,581	$2,581	0.666	$1,719
7		$0	$2,581	$2,581	0.623	$1,608
8		$0	$2,581	$2,581	0.582	$1,502
9		$0	$2,581	$2,581	0.544	$1,404
10		$0	$9,286	$9,286	0.508	$4,717
11		$0	$2,581	$2,581	0.475	$1,226
12		$0	$2,581	$2,581	0.444	$1,146
13		$0	$2,581	$2,581	0.415	$1,071
14		$0	$2,581	$2,581	0.388	$1,001
15		$0	$9,286	$9,286	0.362	$3,362
16		$0	$2,581	$2,581	0.339	$875
17		$0	$2,581	$2,581	0.317	$818
18		$0	$2,581	$2,581	0.296	$764
19		$0	$2,581	$2,581	0.277	$715
20		$0	$9,286	$9,286	0.258	$2,396
21		$0	$2,581	$2,581	0.242	$625
22		$0	$2,581	$2,581	0.226	$583
23		$0	$2,581	$2,581	0.211	$545
24		$0	$2,581	$2,581	0.197	$508
25		$0	$9,286	$9,286	0.184	$1,709
26		$0	$2,581	$2,581	0.172	$444
27		$0	$2,581	$2,581	0.161	$416
28		$0	$2,581	$2,581	0.150	$387
29		$0	$2,581	$2,581	0.141	$364
30		$0	$9,286	$9,286	0.131	$1,216
					TOTAL PRESENT WORTH	**$84,027**

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 51
SOIL ALTERNATIVE 3: LAND USE CONTROLS, EXCAVATION, OFF-SITE DISPOSAL
CAPITAL COSTS

Cost Item	Quantity	Unit	Unit Cost				Extended Cost				Subtotal
			Subcontract	Material	Labor	Equipment	Subcontract	Material	Labor	Equipment	
1 PROJECT PLANNING											
1.1 Prepare Corrective Measures Implementation Plan	400	hours			$44.65		$0	$0	$17,860	$0	$17,860
1.2 Project Scheduling and Procurement	80	hours			$44.65		$0	$0	$3,572	$0	$3,572
2 MOBILIZATION/DEMOBILIZATION											
2.1 Equipment Mob/Demob (Exc. & Dozier)	6	each			$200.00	$250.00	$0	$0	$1,200	$1,500	$2,700
2.2 Mobilize/Demobilize Personnel (2 person)	6	each		$375.00	$300.00		$0	$2,250	$1,800	$0	$4,050
2.3 Portable Toilet	2	month	$74.18				$148	$0	$0	$0	$148
2.4 Storage Trailer (28' x 10')	2	month	$98.33				$197	$0	$0	$0	$197
3 DECONTAMINATION											
3.1 Tempoary Decon Pad	4	ls		$450.00	$400.00	$155.00	$0	$1,800	$1,600	$620	$4,020
3.2 Decon Water Disposal	30	drums	$125.00				$3,750	$0	$0	$0	$3,750
3.3 Decon Water Storage Drums	30	each		$45.00			$0	$1,350	$0	$0	$1,350
3.4 PPE (2 p x 6 days x 2 weeks)	30	m-day		$30.00			$0	$900	$0	$0	$900
3.5 Decontaminate Equipment (i.e., pressure washer)	8	each			$134.45	$50.00	$0	$0	$1,076	$400	$1,476
4 SITE PREPARATION											
4.1 Erosion Control Fencing	1250	lf		$0.23	$1.17		$0	$288	$1,463	$0	$1,750
4.2 Collect/Analyze Delineation Samples (SVOCs, metals, etc.)	30	each	$370.00	$10.00	23.52		$11,100	$300	$706	$0	$12,106
4.3 Construction Surveys (2-man crew)	15	days	$648.36				$9,725	$0	$0	$0	$9,725
4.4 Utility Location and Site Delineation/Layout	24	hours			$44.65		$0	$0	$1,072	$0	$1,072
5 EXCAVATION/BACKFILL											
5.1 Excavate/Load contaminated Soil (1.0 cy Hyd. Excavator)	26943	cy			$1.27	$2.23	$0	$0	$34,218	$60,083	$94,301
5.2 Standby, Crawler Mounted 1.0 CY Hydraulic Excavator	40	hours				$20.50	$0	$0	$0	$820	$820
5.3 Health & Safety Monitoring with OVA during Excavation	30	days			$188.16	$100.00	$0	$0	$5,645	$3,000	$8,645
5.4 Collect/Analyze Confirmatory Samples	30	each	$370.00	$10.00	$23.52		$11,100	$300	$706	$0	$12,106
5.5 Import (Offsite) Place, Compact Clean Fill Material	23000	cy		$7.82	$0.85	$1.81	$0	$179,860	$19,550	$41,630	$241,040
6 OFF-SITE TRANSPORTATION DISPOSAL											
6.1 Waste Profile	10	ls	$750.00				$7,500	$0	$0	$0	$7,500
6.2 Transport and Dispose of Soil (non-hazardous) in Landfill	37720	tons	$175.00				$6,601,035	$0	$0	$0	$6,601,035
6.3 Prepare Shipment Manifests	40	hours			$44.65		$0	$0	$1,786	$0	$1,786
7 SITE RESTORATION											
7.1 Import Vegetative Cover Material (backfill and topsoil)	1000	cy		$15.00			$0	$15,000	$0	$0	$15,000
7.2 Place/Grade Topsoil (6")	10	days			$227.20	$435.00	$0	$0	$2,272	$4,350	$6,622
7.3 Sod Disturbed Area	0.2	acre	$10,000.00				$2,000	$0	$0	$0	$2,000
7 SITE RESTORATION											
7.1 Restore Concrete (3000 psi)	140	cy		$80.00			$0	$11,200	$0	$0	$11,200
7.2 Restore Asphalt	120	cy		$60.00			$0	$7,200	$0	$0	$7,200
7.3 Place/Grade Asphalt /Concrete	15	days			$227.20	$435.00	$0	$0	$3,408	$6,525	$9,933
7.4 Subcontract Asphalt and Concrete	0.8	acre	$60,000.00				$48,000	$0	$0	$0	$48,000
8 LAND USE CONTROLS											
8.1 Site Survey (2-man crew)	2	days	$1,083.33				$2,167	$0	$0	$0	$2,167
8.2 Prepare Land Use Plan	100	hours			$44.65		$0	$0	$4,465	$0	$4,465
.3 Modify Master Plan and Prepare Deed Restrictions	80	hours			$44.65		$0	$0	$3,572	$0	$3,572
9 PROFESSIONAL SERVICES											
9.1 Drawings Prep. And Engineering Oversight	80	hours			$44.65		$0	$0	$3,572	$0	$3,572

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 51
SOIL ATLERNATIVE 4: LAND USE CONTROLS, EXCAVATION, OFF-SITE DISPOSAL
CAPITAL COSTS

Cost Item	Quantity	Unit	Unit Cost				Extended Cost				Subtotal
			Subcontract	Material	Labor	Equipment	Subcontract	Material	Labor	Equipment	
Subtotal Direct Capital Costs less Subcontract							**$6,696,722**	**$220,448**	**$109,540**	**$118,928**	**$448,916**
Local Area Adjustment								123%	88%	123%	
								$271,150	$96,395	$146,281	$513,827
Overhead on Labor Cost @ 30%									$28,919		$28,919
G & A on Labor Cost @ 10%									$9,640		$9,640
G & A on Material Cost @ 10%								$27,115.04		$14,628.13	$41,743
Total Direct Capital Cost								**$298,265**	**$134,954**	**$160,909**	**$594,129**
Indirects on Total Direct Labor Cost @ 75%									$101,215		$101,215
Profit on Total Direct Cost @ 10%									$13,495		$13,495
Subtotal											**$708,839**
Health & Safety Monitoring @ 3% (Includes Subcontractor cost)											$21,265.18
Health & Safety Training, Site-specific Training											$21,265.18
Total Field Cost											**$751,370**
Subtotal Subcontractor Cost							$6,696,722				$6,696,722
G & A on Subcontract Cost @ 10%							$669,672				$669,672
Profit on Subcontractor Cost @ 5%							$334,836				$334,836
Subcontractor Cost											**$7,701,230**
Contingency on Total Field and Subcontractor Costs @ 10%											$845,260
Engineering on Total Field and Subcontractor Costs @ 5%											$422,630
TOTAL CAPITAL COST											**$9,720,490**

Assumptions: The contaminated areas would be excavated, and the soil would be disposed of in TSD Facilities. Sampling would be performed to delineate the contaminated areas. No long-term groundwater monitoring would be needed.

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 51
SOIL ALTERNATIVE 3: LAND USE CONTROLS, EXCAVATION, OFF-SITE DISPOSAL
OPERATION AND MAINTENANCE COSTS PER YEAR

Item	Quantity	Unit	Unit Cost	Subtotal Cost	Notes
1 Energy - Electric	0	kWh	$0.06	$0	
2 Maintenance	0	cap	$1,000.00	$0	5% of installation cost
3 Carbon Unit Changeout/Regeneration of Spent Carbon	0	pound	$3.00	$0	once a year
4 Labor, Mobilization/Demobilization, Per Diem, Supplies	0	wk	$925.00	$0	1 visit per week - 1 day
5 Labor, Mobilization/Demobilization, Per Diem, Supplies	0	mo	$1,950.00	$0	1 visit per quarter - 2 laborers, 2 days
6 Analysis of Off-gas Samples	0	ea	$250.00	$0	1 per month, VOCs
7 Quarterly Reports	0	ea	$4,000.00	$0	
Total Cost for One Year of Operation				$0	

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 51
SOIL ALTERNATIVE 3: LAND USE CONTROLS, EXCAVATION, OFF-SITE DISPOSAL
ANNUAL COSTS

Cost Item	Quantity	Unit	Unit Cost[1]	Total Cost
1 TWO YEAR SITE REVIEW				
1.1 Site Review Meeting (2 persons for 2 days)				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	16	hours	$52.04	$833
ODCs (travel, etc.)	1	ls	$800.00	$800
1.2 Review Report				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	32	hours	$52.04	$1,665
ODCs (photocopies, telephone, etc.)	1	ls	$100.00	$100
Subtotal Review Cost				$5,830
G&A and Profit @ 15%				$874
Subtotal Review Cost				$6,704
Contingency @ 10%				$670
Total for Review Cost				**$7,375**
2 LAND USE CONTROL MONITORING (FOR 2-YEAR PERIOD)				
2.1 Quarterly Site Inspections				
Project Manager (2 hours for each inspection)	8	hours	$76.00	$608
2.2 Annual Review and Report				
Project Manager	12	hours	$76.00	$912
Staff Engineer	12	hours	$52.04	$624
ODCs (photocopies, telephone, etc.)	1	ls	$100.00	$100
Subtotal Land Use Control Monitoring				$2,244
G&A and Profit @ 15%				$337
Subtotal				$2,581
Contingency @ 10%				$258
Total Land Use Control Monitoring Cost				**$2,839**

[1] Includes overhead on professional labor @ 100%.

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 51
SOIL ALTERNATIVE 3: LAND USE CONTROLS, EXCAVATION, OFF-SITE DISPOSAL
PRESENT WORTH ANALYSIS

Year	Capital Cost	Operation and Maintenance Cost	Annual Cost	Total Yearly Cost	Present Worth Factor (I = 7%)	Present Worth
0	$9,720,490			$9,720,490	1.000	$9,720,490
1		$0	$2,839	$2,839	0.935	$2,654
2		$0	$2,839	$2,839	0.873	$2,478
3		$0	$0	$0	0.816	$0
4		$0	$0	$0	0.763	$0
5		$0	$0	$0	0.713	$0
6		$0	$0	$0	0.666	$0
7		$0	$0	$0	0.623	$0
8		$0	$0	$0	0.582	$0
9		$0	$0	$0	0.544	$0
10		$0	$0	$0	0.508	$0
11		$0	$0	$0	0.475	$0
12		$0	$0	$0	0.444	$0
13		$0	$0	$0	0.415	$0
14		$0	$0	$0	0.388	$0
15		$0	$0	$0	0.362	$0
16		$0	$0	$0	0.339	$0
17		$0	$0	$0	0.317	$0
18		$0	$0	$0	0.296	$0
19		$0	$0	$0	0.277	$0
20		$0	$0	$0	0.258	$0
21		$0	$0	$0	0.242	$0
22		$0	$0	$0	0.226	$0
23		$0	$0	$0	0.211	$0
24		$0	$0	$0	0.197	$0
25		$0	$0	$0	0.184	$0
26		$0	$0	$0	0.172	$0
27		$0	$0	$0	0.161	$0
28		$0	$0	$0	0.150	$0
29		$0	$0	$0	0.141	$0
30		$0	$0	$0	0.131	$0

TOTAL PRESENT WORTH **$9,725,623**

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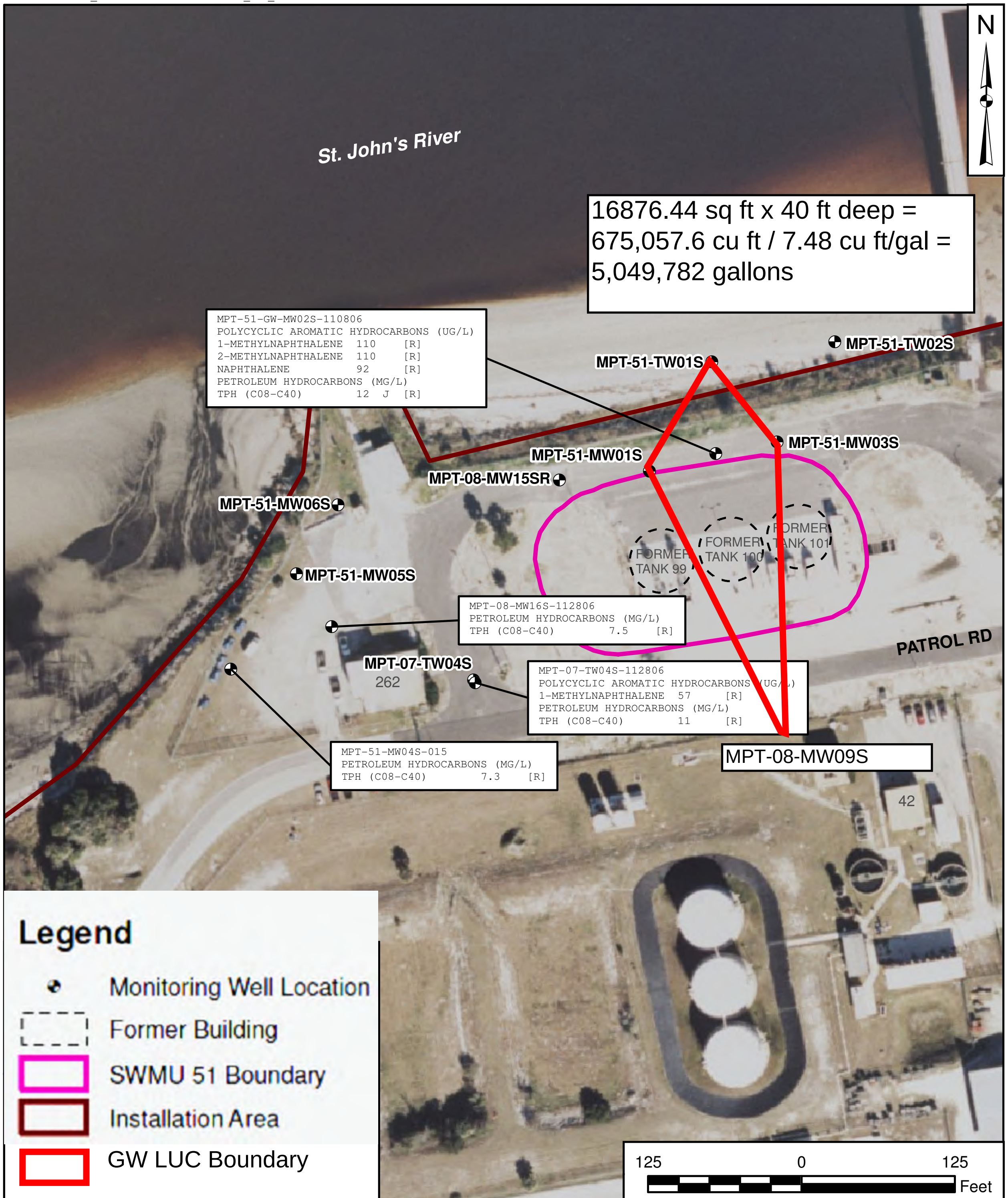

DRAWN BY K. MOORE	DATE 1/13/11	NAVFAC	GROUNDWATER EXCEEDANCE TAG MAP SWMU 51 - WASTE OIL TANKS NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 033
CHECKED BY D. FEARS	DATE 3/6/13			OWNER NUMBER __
REVISED BY __	DATE __			APPROVED BY __ DATE __
SCALE AS NOTED				FIGURE NO. FIGURE C-4A REV 0

U.S. NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA
SWMU 51
GROUNDWATER ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
CAPITAL COSTS

Cost Item	Quantity	Unit	Unit Cost				Extended Cost				Subtotal
			Subcontract	Material	Labor	Equipment	Subcontract	Material	Labor	Equipment	
1 PROJECT PLANNING											
1.1 Prepare Corrective Measures Implementation Plan	40	hours			$44.65		$0	$0	$1,786	$0	$1,786
1.2 Project Scheduling and Procurement	8	hours			$44.65		$0	$0	$357	$0	$357
2 LAND USE CONTROLS											
2.1 Site Survey (2-man crew)	3	days	$1,083.00				$3,249	$0	$0	$0	$3,249
2.2 Prepare Land Use Plan	100	hours			$44.65		$0	$0	$4,465	$0	$4,465
2.3 Modify Master Plan and Prepare Deed Restrictions	80	hours			$44.65		$0	$0	$3,572	$0	$3,572
Subtotal Direct Capital Costs less Subcontract							**$3,249**	**$0**	**$10,180**	**$0**	**$10,180**
Local Area Adjustment								123%	88%	123%	
								$0	$8,959	$0	$8,959
Overhead on Labor Cost @ 30%									$2,688		$2,688
G & A on Labor Cost @ 10%									$896		$896
G & A on Material Cost @ 10%								$0		$0	$0
Total Direct Capital Cost								**$0**	**$12,542**	**$0**	**$12,542**
Indirects on Total Direct Labor Cost @ 75%									$9,407		$9,407
Profit on Total Direct Cost @ 10%									$1,254		$1,254
Subtotal											**$23,203**
Health & Safety Monitoring @ 3%	(Includes Subcontractor cost)										$696.08
Health & Safety Training, Site-specific Training											$696.08
Total Field Cost											**$24,595**
Subtotal Subcontractor Cost							$3,249				$3,249
G & A on Subcontract Cost @ 10%							$325				$325
Profit on Subcontractor Cost @ 5%							$162				$162
Subcontractor Cost											**$3,736**
Contingency on Total Field and Subcontractor Costs @ 10%											$2,833
Engineering on Total Field and Subcontractor Costs @ 5%											$1,417
TOTAL CAPITAL COST											**$32,581**

Assumptions: Existing monitoirng wells would be monitored. Land use controls would be implemented.

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GROUNDWATER ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
OPERATION AND MAINTENANCE COSTS PER YEAR

Item	Quantity	Unit	Unit Cost	Subtotal Cost	Notes
1 Energy - Electric		kWh	$0.06	$0	
2 Maintenance/Repair of Monitoring Wells	1	ls	$1,000.00	$1,000	
3 Sampling of Wells	4	event	$1,600.00	$6,400	1 visit per quarter - 2 laborers, 2 days
4 Analysis of GW Samples (14 wells + 2 QA/QC)	64	ea	$400.00	$25,600	(PAHs & TPH)
5 Quarterly Reports	4	ea	$4,000.00	$16,000	
Total Cost for One Year of Operation (for years 1-5)				$49,000	

Item	Quantity	Unit	Unit Cost	Subtotal Cost	Notes
1 Energy - Electric		kWh	$0.06	$0	
2 Maintenance/Repair of Monitoring Wells	1	ls	$1,000.00	$1,000	
3 Sampling of Wells	2	event	$1,600.00	$3,200	2 visits per year - 2 laborers, 2 days
4 Analysis of GW Samples (14 wells + 2 QA/QC)	32	ea	$400.00	$12,800	(PAHs & TPH)
5 Quarterly Reports	2	ea	$4,000.00	$8,000	
Total Cost for One Year of Operation (for years 6-30, semiannual sampling)				$25,000	

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GROUNDWATER ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
ANNUAL COSTS

Cost Item	Quantity	Unit	Unit Cost[1]	Total Cost
1 PERIODIC REVIEW				
1.1 Site Review Meeting (2 persons for 2 days)				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	16	hours	$52.04	$833
ODCs (travel, etc.)	1	ls	$800.00	$800
1.2 Review Report				
Project Manager	16	hours	$76.00	$1,216
Staff Engineer	32	hours	$52.04	$1,665
ODCs (photocopies, telephone, etc.)	1	ls	$100.00	$100
Subtotal Review Cost				$5,830
G&A and Profit @ 15%				$874
Subtotal Review Cost				$6,704
Total for Review Cost				**$6,704**
2 LAND USE CONTROL MONITORING (FOR 30-YEAR PERIOD)				
2.1 Quarterly Site Inspections				
Project Manager (2 hours for each inspection)	8	hours	$76.00	$608
2.2 Annual Review and Report				
Project Manager	12	hours	$76.00	$912
Staff Engineer	12	hours	$52.04	$624
ODCs (photocopies, telephone, etc.)	1	ls	$100.00	$100
Subtotal Land Use Control Monitoring				$2,244
G&A and Profit @ 15%				$337
Subtotal				$2,581
Total Land Use Control Monitoring Cost				**$2,581**

[1] Includes overhead on professional labor @ 100%.

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GROUNDWATER ALTERNATIVE 2: LAND USE CONTROLS, MONITORING
PRESENT WORTH ANALYSIS

Year	Capital Cost	Operation and Maintenance Cost	Annual Cost	Total Yearly Cost	Present Worth Factor (I = 7%)	Present Worth
0	$32,580.91			$32,581	1.000	$32,581
1		$49,000	$2,581	$51,581	0.935	$48,228
2		$49,000	$2,581	$51,581	0.873	$45,030
3		$49,000	$2,581	$51,581	0.816	$42,090
4		$49,000	$2,581	$51,581	0.763	$39,356
5		$49,000	$9,286	$58,286	0.713	$41,558
6		$25,000	$2,581	$27,581	0.666	$18,369
7		$25,000	$2,581	$27,581	0.623	$17,183
8		$25,000	$2,581	$27,581	0.582	$16,052
9		$25,000	$2,581	$27,581	0.544	$15,004
10		$25,000	$9,286	$34,286	0.508	$17,417
11		$25,000	$2,581	$27,581	0.475	$13,101
12		$25,000	$2,581	$27,581	0.444	$12,246
13		$25,000	$2,581	$27,581	0.415	$11,446
14		$25,000	$2,581	$27,581	0.388	$10,701
15		$25,000	$9,286	$34,286	0.362	$12,412
16		$25,000	$2,581	$27,581	0.339	$9,350
17		$25,000	$2,581	$27,581	0.317	$8,743
18		$25,000	$2,581	$27,581	0.296	$8,164
19		$25,000	$2,581	$27,581	0.277	$7,640
20		$25,000	$9,286	$34,286	0.258	$8,846
21		$25,000	$2,581	$27,581	0.242	$6,675
22		$25,000	$2,581	$27,581	0.226	$6,233
23		$25,000	$2,581	$27,581	0.211	$5,820
24		$25,000	$2,581	$27,581	0.197	$5,433
25		$25,000	$9,286	$34,286	0.184	$6,309
26		$25,000	$2,581	$27,581	0.172	$4,744
27		$25,000	$2,581	$27,581	0.161	$4,441
28		$25,000	$2,581	$27,581	0.150	$4,137
29		$25,000	$2,581	$27,581	0.141	$3,889
30		$25,000	$9,286	$34,286	0.131	$4,491
					TOTAL PRESENT WORTH	**$487,690**