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LETTER REPORT REGARDING RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION WORK PLAN ADDENDUM FOR SOLID WASTE MANAGEMENT UNITS 44 AND 45 NS MAYPORT FL

12/19/2006

TETRA TECH NUS

TETRA TECH NUS, INC.
8640 Philips Highway ● Suite 16 ● Jacksonville, Florida 32256
(904) 636.6125 ● FAX (904) 636.6165 ● www.tetratech.com

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Project Number 112G00436

Naval Facilities Engineering Command, Southeast
ATTN: Adrienne Wilson (Code EV4)
2155 Eagle Drive
North Charleston, South Carolina 29406

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

Subject: Resource Conservation and Recovery Act
Facility Investigation Work Plan Addendum
Solid Waste Management Units 44 and 45
Naval Station Mayport, Mayport, Florida

Dear Ms. Wilson:

Tetra Tech NUS, Inc. (TtNUS) is pleased to submit the Resource Conservation and Recovery Act Facility Investigation (RFI) Work Plan Addendum for Solid Waste Management Units (SWMUs) 44 and 45, the Wastewater Treatment Facility (WWTF) Clarifiers 1 and 2 and the WWTF Sludge Drying Beds, respectively at Naval Station (NAVSTA) Mayport, Florida. This report was prepared for the United States Navy (Navy), Naval Facilities Engineering Command Southeast (NAVFAC SE) under Contract Task Order (CTO) 0033 for the Comprehensive Long-term Environmental Action Navy (CLEAN) IV Contract Number N62467-04-D-0055. This Work Plan Addendum outlines the supplemental soil and groundwater sampling requirements for SWMUs 44 and 45. The objectives of the field activities outlined in this RFI Work Plan Addendum are as follows:

- Determine if contaminated soil and groundwater is present within and around SWMUs 44 and 45.
- If contaminated soil and groundwater are identified at SWMUs 44 and 45, delineate the extent of soil and groundwater contamination present in excess of Florida Department of Environmental Protection (FDEP) Soil Cleanup Target Levels (SCTLs) and Groundwater Cleanup Target Levels (GCTLs), respectively.

The data collected during field activities outlined in this work plan addendum will provide the basis for an RFI Addendum and a Corrective Measures Study for SWMUs 44 and 45.

SITE BACKGROUND

SWMUs 44 and 45 are located within the northeastern part of NAVSTA Mayport approximately 500 feet east of Mayport Turning Basin near the southern shore of the St. John's River (Figure 1). SWMU 44, the former location of WWTF Clarifiers 1 and 2, is located approximately 220 feet south of SWMU 45, the former location of the WWTF Sludge Drying Beds (Figure 2). The sections below describe the site characteristics of SWMUs 44 and 45 and provide a summary of the previous investigations and results. Additional historical information from previous investigations is presented in Attachment 1.

SWMU 44 – WWTF Clarifiers 1 and 2

SWMU 44 consists of the former locations of two of the three WWTF clarifiers. The SWMU is located within 500 feet east of Mayport Turning Basin on the northern boundary of SWMU 23. Clarifiers 1 and 2 were constructed in 1962, and each clarifier was a 40,500-gallon aboveground square concrete tank.

In 1987, the clarifiers were used to store and remove floating free-phase oil from firefighting training wastes. The free-phase oil was transported by gravity flow into a Group IV waste oil storage tank (SWMU 51-V) upon being manually skimmed from the surface. The piping used to transport the free-phase oil was cleaned and removed from service in 1999 (Attachment 2). The tanks were discharged into the Federally-Owned Wastewater Treatment Plant influent stream.

In 1989, oily stains were observed on the outside of Clarifiers 1 and 2 along hairline fractures.

RFI field activities were conducted at the Industrial Shipyard Area (SWMUs 1, 23, 24, 25, 44, and 45) by ABB Environmental Services (ABB-ES) in 1995 and 1996. Field activities included the collection of surface soil, subsurface soil, and groundwater samples at SWMU 44 (Tables 4-4, 4-5, 4-8, 4-9, 4-17, and 4-18 in Attachment 1). Figure 3 shows the soil sample results exceeding FDEP direct exposure residential SCTLs. Figure 4 depicts the historical groundwater results exceeding FDEP GCTLs.

The Navy made the decision to remove the clarifiers from the site, which were no longer in use. Between May and July 2003, Johnson Controls-Hill oversaw the demolition and removal of Clarifiers 1 and 2. Prior to demolition activities, rainwater was removed from the clarifiers. Upon demolition and removal of the clarifiers from the site, fill material was placed on site and the area of the former clarifiers was properly graded and seeded. Currently, the SWMU 44 location consists of a grass-covered surface.

Environmental samples collected during RFI field activities have not been sufficient for the delineation of contamination boundaries. No groundwater or soil samples have been collected at SWMU 44 since RFI field activities were concluded.

SWMU 45 – WWTF Sludge Drying Beds

SWMU 45 contained a secondary treatment facility that was constructed in 1972. The secondary treatment facility consisted of an activated sludge system and two sludge drying beds. Each 14,000 square foot sludge drying bed consisted of four cells constructed with concrete curbs and sand bottoms. The drying beds received digested sludge from Aerobic Digesters 1 and 2 and effluent that drained through the sand bottoms was routed to the influent pumping station. Dewatered sludge was disposed of in the on-site landfills and the sludge drying beds were cleaned quarterly.

In 1985, the sludge drying beds were replaced with a vacuum dewatering filter press. The dewatered sludge was disposed of offsite. The sludge drying beds were last used in 1985.

In 1995 and 1996, ABB-ES conducted RFI field activities at the Industrial Shipyard Area (SWMUs 1, 23, 24, 25, 44, and 45). Field activities included the collection of surface and subsurface soil samples and groundwater samples at SWMU 45 (Tables 4-4, 4-5, 4-8, 4-9, 4-17, and 4-18 in Attachment 1). Figure 5 shows the soil sample results exceeding FDEP direct exposure residential SCTLs. Figure 6 depicts the historical groundwater results exceeding FDEP GCTLs.

The Navy made the decision to remove the sludge drying beds (which were no longer in use) from the site. Between May and July 2003, Johnson Controls-Hill oversaw the demolition and removal of the sludge drying beds from the site. Prior to demolition activities, remaining sludge material was removed and properly disposed of through the Public Works Center Jacksonville. Clean fill material was placed on site and the area of the former drying beds was properly graded and seeded. Currently, the SWMU 45 location consists of a grass-covered surface.

In January 2004, TtNUS collected 15 surface soil samples (MPT-45-A1, -A2, -A3, -A4, -B1, -B2, -B3, -B4, -C1, -C2, -C3, -C4, -D3, -D4, and -E4) and 1 subsurface soil sample (MPT-45-E4-5') from the location of the former sludge drying beds (Figure 5). Among the samples collected during the 2004 event, analytical results exhibited concentrations of benzo(a)pyrene, arsenic, and total recoverable petroleum hydrocarbon (TRPH) in excess of FDEP Residential SCTLs. No groundwater samples have been collected at SWMU 45 since RFI field activities were concluded.

SAMPLING PROGRAM OBJECTIVES

The objectives of the sampling program detailed in this plan are as follows:

1. Delineate surface and subsurface soil contamination within and around the SWMUs in excess of FDEP residential direct exposure SCTLs. The data will be used to determine appropriate Land Use Control boundaries at the respective SWMUs.

2. Delineate (vertically and horizontally) TRPH contaminated soil within and around the SWMUs that have or have had light non-aqueous phase liquid present.

3. Evaluate the potential presence of groundwater contamination.

To accomplish this TtNUS will perform the following proposed sampling activities.

PROPOSED SITE ACTIVITIES

To support site assessment activities at SWMUs 44 and 45, TtNUS will install monitoring wells and collect soil and groundwater samples using the techniques discussed below. Samples will be submitted to a fixed-base laboratory for select analysis. Soil samples will be collected with a direct push technology (DPT) rig at approximately 15 locations (six at SWMU 44 and nine at SWMU 45). Soil sample locations are shown on Figures 7 and 8. TtNUS will install approximately eight monitoring wells (two at SWMU 44 and six at SWMU 45) using hollow-stem auguring (HSA). Upon installation, these wells will be developed. Groundwater samples will be collected from the eight new monitoring wells. Groundwater sample locations are shown on Figures 9 and 10. Field activities will be conducted during an approximate 20-day period. Prior to the field activities, mobilization activities will be conducted. Tasks associated with mobilization include:

- Field Coordination (i.e., coordinating for site access, obtaining field equipment and consumables, etc.)
- Subcontractor Procurement and Coordination (DPT subcontractor, drilling subcontractor for HSA, and fixed-base laboratory)
- Utility Clearance
- Project "Kick-off" and Health and Safety Daily "Tailgate" Meetings

Health and Safety

Field activities shall be completed in accordance with the Health and Safety Plan (HASP) for SWMUs 2, 3, 4, 5, 8, 9, 10, 11, 22, 44, 45, and 51 (dated August 2006). A copy of the HASP will be kept on site at all times during field activities. Additional copies are available upon request for both TtNUS field personnel and subcontractors.

Monitoring Well Installation

TtNUS will supervise the installation of eight monitoring wells. The monitoring wells will be installed using HSA at the locations depicted on Figures 9 and 10. Of the eight wells to be installed, two will be

completed to approximate depths of 35 feet below land surface (bls) as determined in the field. The remaining six wells will be completed to approximate depths of 15 feet bls as determined in the field and 2-inch-diameter, Schedule 40 polyvinyl chloride (PVC), flush-threaded casing with 10 feet of 0.01-inch factory-slotted PVC screen will be used. The well screens will be placed such that the screens bracket the water table. Once the screen and riser pipe are in place, the annulus of the boring will be backfilled with clean, 20/30 silica sand from the bottom of the borehole to 2 feet above the top of the screen. A fine-sand seal at least 2-feet thick will be installed on top of the 20/30 silica sand. The remainder of the annulus of the borehole will be grouted by pumping cement/bentonite slurry through a tremie pipe up to 2 feet bls.

Well Surface Completion

Each monitoring well surface completion will be flush mount. The riser pipe will be cut to approximately 3 inches bls using an inside pipe cutter and a v-notch will be cut into the north edge of the top of casing for surveying purposes. A protective steel casing will be flush-mount installed around each monitoring well. The flush-mount covers shall be a minimum 8-inch round security vault provided with a sealing gasket to reduce the amount of water infiltration. Each well will be fitted with a J-Plug and stainless steel lock. A 2-foot by 2-foot by 6-inch thick concrete pad will be constructed around each flush mount monitoring well. The flush mounted casings shall be completed 1 inch above existing grade and the apron tapered to be flush with existing grade at the edges such that water will run off of the apron. The protective casing shall be completed with a metal identification tag indicating the corresponding well identifier.

The tag specifications include:

- 4” x 4” x 0.032” stainless steel or aluminum
- 3/16” lettering
- 1/8” diameter mounting holes
- Black printed or stamped lettering

Well Development

The eight proposed monitoring wells will be developed in accordance with FDEP Standard Operating Procedure (SOP) 001/01 FS2200 to remove fine-grained sediments. The preferred method of development will be surging alternated with over pumping. Development equipment will be decontaminated before being placed in the well. Throughout the development procedure, discharge water color and volume shall be documented. Wells will be developed until the following criteria are achieved:

- Stabilization of the following parameters occurs
  - Temperature is constant for three consecutive readings
  - pH plus or minus 0.1 unit
  - Electrical conductivity plus or minus 10 percent of scale
  - Turbidity is below 10 Nephelometric Turbidity Units
- A minimum of five well volumes is removed from the monitoring well
- Accumulated sediment is removed from the well

The well development process will begin no sooner than 24 hours after well installation. Detergents, bleaches, soaps, or other such items will not be used to develop a well. Following development and after the water levels have been allowed to stabilize a minimum of 24 hours, the static water level will be measured and recorded. Data related to well development, including alternate development

methodologies and their justification, will be written on the well development sheet (Attachment 3) and in the field logbook. Development water will be containerized and disposed of according to the NAVSTA Mayport SOP for Investigative Derived Waste (IDW) (Attachment 4).

Groundwater Monitoring Well Sampling

Prior to collecting groundwater samples from the proposed monitoring wells, groundwater elevations will be measured and recorded on a groundwater level measurement sheet (Attachment 3). In addition to the proposed monitoring wells, groundwater elevations will be collected at several existing monitoring wells at SWMUs 44 and 45. At SWMU 44, groundwater elevations will be collected from existing monitoring wells MPT-44-MW01Z, -MW01I, -MW01S, -MW01D, and –TP04. At SWMU 45, groundwater elevations will be collected from existing monitoring wells MPT-45-MW01S, -MW01I, -MW01D, -TP01, -TP02, -TP03, and -MW02S. Expansive plugs from each monitoring well will be removed and each well will be allowed a minimum of 15 minutes to equilibrate prior to obtaining the measurement. Depth to potentiometric surface will be measured from the north side of the top of well casing to the nearest 0.01 foot with an oil/water interface probe. Free product thickness, if present, will also be recorded.

Groundwater samples will be collected from the eight proposed monitoring wells (MPT-44-MW04S and -MW05I; MPT-45-MW02I, -MW03S, -MW04S, -MW05S, -MW06S, and -MW07S). In addition, four groundwater samples will be collected from four existing monitoring wells. At SWMU 44, existing monitoring wells MPT-44-MW01S and MPT-44-MW01D will be sampled. At SWMU 45, existing monitoring wells MPT-45-MW02S and MPT-45-MW01I will be sampled. See Figures 9 and 10 for monitoring well locations. Groundwater sampling will be conducted in strict accordance with FDEP SOP 001/01 FS2200. During monitoring well purging, field measurements of pH, temperature, specific conductance, and dissolved oxygen will be recorded using a YSI 556 water quality multimeter, or equivalent, for each purge volume. Turbidity will be measured using a Lamotte 2020 Turbidimeter or equivalent. Stabilization protocol, as defined in FDEP SOP 001/01 FS2200, will be conducted for each parameter prior to sample collection. Teflon® and surgical-grade silicon tubing will be used for sample collection.

Groundwater samples to be analyzed for volatile organic compounds (VOCs) will be collected using the "straw method" and discharged into the appropriate sample bottles for analysis. Groundwater samples will be submitted to a certified laboratory for analyses of Priority Pollutant List (PPL) VOCs [plus tentatively identified compound (TIC) with gas chromatograph/mass spectrometer (GC/MS) peaks greater than 10 micrograms per liter (µg/L)] [United States Environmental Protection Agency (USEPA) 8260B]; PPL semivolatile organic compounds (SVOCs) (USEPA 8270C); arsenic, cadmium, chromium, and lead (USEPA 6010B); polychlorinated biphenyls (PCBs) (USEPA 8082); polycyclic aromatic hydrocarbons (PAHs) plus 1-methylnaphthalene and 2- methylnaphthalene (USEPA 8270C or 8310); and TRPH [Florida Petroleum Range Organics (FL-PRO)].

Sampling data for each well will be recorded on the appropriate FDEP groundwater sample log sheet (Attachment 3) and in the field logbook. Groundwater sampling activities are summarized on Table 1. Purge water collected during the investigation will be containerized in 55-gallon drums and properly labeled.

Soil Sampling

Soil samples will be collected from the six locations depicted on Figure 7 and the nine locations depicted on Figure 8. At SWMUs 44 and 45, elevated contaminant of concern concentrations have been observed in past surface soil samples (Figures 1-1 and 1-3 in Attachment 1). Because of previously observed soil impacts, two samples will be collected from each location; one surface sample and one subsurface sample. The first 4 feet of each boring will be hand augered or post-holed by the DPT subcontractor, if possible, to clear for underground utilities. It should be noted that hand auguring has been attempted at SWMU 45 in the past. However, it was difficult to get through the various layers of coquina shells at the

TABLE 1
SUMMARY OF SAMPLING ACTIVITIES
SWMUs 44 and 45

Sample Type	Aqueous Samples	Soil Samples	Trip Blanks[1]	Rinsate Blanks[2, 3]	Field Blanks	Total Soil Samples	Total Aqueous Samples	Parameter	Analysis Method
Soil Samples	--	30	3	0	1	31	--	PPL VOCs (plus TIC with GC/MS peaks greater than 10 µg/L)	SW-846 260B
			--	0	1	31	--	PPL SVOCs (plus TIC with GC/MS Peaks greater than 10 µg/L)	SW-846 270C
			--	0	1	31	--	Arsenic, Cadmium, Chromium, and Lead	SW-846 010B
			--	0	1	31	--	PAHs (plus 1-Methylnaphthalene and 2-Methylnaphthalene)	SW-846 270C or 8310
			--	0	1	31	--	TRPHs	FDEP FL-PRO
			--	0	1	31	--	PCBs	SW-846 8082
Groundwater Samples (Monitoring Wells)	12	--	3	2	1	--	18	PPL VOCs (plus TIC with GC/MS peaks greater than 10 µg/L)	SW-846 260B
			--	2	1	--	15	PPL SVOCs	SW-846 270C
			--	2	1	--	15	Arsenic, Cadmium, Chromium, and Lead	SW-846 010B
			--	2	1	--	15	PAHs (plus 1-Methylnaphthalene and 2-Methylnaphthalene)	SW-846 270C or 8310
			--	2	1	--	15	TRPHs	FDEP FL-PRO
			--	2	1	--	15	PCBs	SW-846 8082

1 = One trip blank will be included with each cooler containing VOCs. Trip blanks for the VOCs are included in the total number of aqueous samples.
2 = Pre- and post-equipment rinsate blanks will be collected. In accordance with FDEP SOP FQ 1000, FQ1230, pre-cleaned and field-cleaned rinsate blanks will be collected for any equipment used in the collection of samples that is not certified pre-cleaned (i.e., 5% of the reported test matrix combination).
3 = The two rinsate blanks listed will be aqueous samples collected for soil and groundwater samples at SWMUs 44 and 45.

shells at the site. Therefore, the subcontractor may have to use alternative methods for clearance of underground utilities at SWMUs 44 and 45.

Subsurface soil will be collected using a stainless steel Macro-Core® soil sampler (4-foot section) beginning at 4 feet bls and continuing in 4-foot vertical intervals until the water table is encountered. Historical groundwater date indicates that the water table at SWMUs 44 and 45 is encountered at approximately 4.5 to 9 feet bls. A closed-piston sampling method will be used to avoid cross contamination between collection intervals. Samples will be collected every 2 feet (2, 4, 6, 8, etc.) until the water table is reached. Each sample will be screened for the presence of hydrocarbon contamination using an organic vapor analyzer (OVA) equipped with a flame ionization detector (FID). FID screening will be performed for each sample interval in accordance with the headspace screening method described in Chapter 62-770.200(2) Florida Administrative Code. The subsurface sample exhibiting the highest OVA reading at each location will be collected for laboratory analysis. If no evidence of contamination is observed, an unsaturated soil sample will be collected directly above the water table. The Macro-Core® soil sampler will be decontaminated in between each sample collection. Decontamination will be conducted in accordance to FDEP SOP FC1000.

Soil sampling procedures will be conducted in accordance with FDEP SOPs 001/01: FS3000: Soil Sampling and FS1000: General Sampling Procedures. Equipment rinsate and/or field blank samples will also be collected. A summary of soil sampling activities is provided in Table 1. A copy of the soil boring and soil sampling logs are provided in Attachment 3. Soil displaced during each boring will be backfilled back in the boring from which it was collected.

Each DPT soil sample location will be surveyed with a Trimble global positioning system (GPS) unit (or equivalent) that is capable of achieving an accuracy of less than 1 meter. It is anticipated that a Trimble GPS unit will be kept on site for the duration of the project. Horizontal datum should be surveyed in feet relative to the Florida State Plane Coordinate System, Florida State Plane North (North American Datum 1983). Following completion of the field sampling event, all survey data shall be entered into the environmental geographic information system database for NAVSTA Mayport.

Decontamination

The equipment involved in field sampling activities will be decontaminated prior to and during sampling activities in accordance to FDEP SOP FC1000: Cleaning/Field Decontamination Procedures. Non-disposable equipment used for collecting samples will be decontaminated prior to beginning field sampling and between sample locations.

Additional Soil and Groundwater Delineation

If laboratory results indicate that additional samples are required to complete the delineation of the extent of soil and/or groundwater contamination, a second field sampling event will be conducted. The media (soil or groundwater), number, and locations of samples will be determined after reviewing the first event results. Any additional sampling will follow the protocol outlined in this work plan.

Soil Sampling Identification System

Each sample will be assigned a unique codified sample identification number. The unique nomenclature established for this sampling event is as follows:

1		2		3		4
MPTXX	-	EEXX	-	XX	-	MMDDYY

Sample Nomenclature for soil samples:

- MPTXX = NAVSTA Mayport, SWMU 44 (MPT44) or SWMU 45 (MPT45)
- EEXX = SS for surface soil samples collected sequentially beginning with 'SS01' and SB for subsurface soil samples collected sequentially beginning with 'SB01'
- XX = Depth of the top of interval at which sample was collected (feet bls)
- MMDDYY = Month, day, and year of sample collection

Examples of the above are:

A soil sample collected on November 21, 2006, from SB05 at SWMU 44 at 8 feet bls would be represented by MPT44-SB05-08-112106.

Groundwater Sampling Identification System

Each sample will be assigned a unique codified sample identification number. The unique nomenclature established for this sampling event is as follows:

1		2		3		4
MPTXX	-	GW	-	MWXXX	-	MMDDYY

Sample Nomenclature for groundwater samples:

- MPTXX = NAVSTA Mayport, SWMU 44 (MPT44) or SWMU 45 (MPT45)
- GW = Represents a groundwater sample
- MWXXX = Monitoring well sample was collected from
- MMDDYY = Month, day, and year of sample collection

Examples of the above are:

A groundwater sample collected from monitoring well MW06S at SWMU 44 on November 21, 2006, would be represented by MPT44-GW-MW06S-112106 (no sample depth required).

Sample Custody, Packaging, and Shipping

Custody of samples must be maintained and documented at all times. Chain-of-custody begins with the collection of the samples in the field. FDEP SOP 001/01 FS 1000 and TtNUS SOP SA-6.3 provide a description of the chain-of-custody procedures to be followed.

Samples will be packaged and shipped in accordance with FDEP SOP 001/01 FS1000: General Sampling and applicable sections of FS2200 and FS3000. The Field Operations Leader (FOL) will be responsible for completion of the following forms when samples are collected for shipping:

1. Sample labels
2. Chain-of-custody labels
3. Appropriate labels applied to shipping coolers
4. Chain-of Custody forms
5. Federal Express air bills

FS1000 also addresses the topics of containers, holding times, and sample preservations.

Quality Control Samples

Quality control samples will be collected during the soil and groundwater assessment event in general accordance to FDEP SOP 001/01 FQ1000: Field Quality Control Requirements. In general, rinsate blanks will be collected on any sampling equipment (hand auger, DPT soil sampler, and vacuum trap bottles, etc.) that is brought to the field and is not certified clean or that is field cleaned between samples. This will be done to document that they were clean when brought to the site and that no cross contamination is occurring between samples. At a minimum, blanks will be collected at 5 percent for each analysis to be performed. In addition, one trip blank sample will accompany each cooler containing VOC samples.

Equipment Calibration

The field instruments including the OVA-FID, YSI 556 Water Quality Multimeter, and Lamotte 2020 Turbidity Meter will be calibrated daily and/or according to FDEP SOPs FT1000: General Field Testing and Measurement. Specific FDEP SOPs to be consulted for each parameter are provided in Table 2 listed below.

TABLE 2
SOP REFERENCES FOR SELECT FIELD PARAMETERS
SWMUs 44 and 45

Parameter	FDEP SOP Title	FDEP SOP Number
pH	Field Measurement of Hydrogen Ion Activity (pH)	FT1100
Specific Conductance	Field Measurement of Specific Conductance	FT1200
Temperature	Field Measurement of Temperature	FT1400
Dissolved Oxygen	Field Measurement of Dissolved Oxygen	FT1500
Turbidity	Field Measurement of Turbidity	FT1600

Calibration will be documented on an Equipment Calibration Log. During calibration, an appropriate maintenance check will be performed on each piece of equipment. If damaged or defective parts are identified during the maintenance check and it is determined that the damage could have an impact on the instrument's performance, the instrument will be removed from service until defective parts are repaired or replaced. A copy of the Equipment Calibration Log is included in Attachment 3.

Record Keeping

In addition to chain-of-custody records associated with sample handling, packaging, and shipping, certain standard forms will be completed for sample description and documentation. These shall include sample log sheets (for soil and groundwater samples), daily activities record, and logbooks.

The FOL will maintain a bound/weatherproof field notebook. The FOL, or designee, will record pertinent information related to sampling or field activities. This information may include sampling time, weather conditions, unusual events (e.g., well tampering), field measurements, site visitors, descriptions of photographs, etc. At the completion of field activities, the FOL shall submit to the TtNUS Task Order Manager all field records, data, field notebooks, logbooks, chain-of-custody receipts, sample log sheets, daily logs, etc.

IDW Management

IDW generated during RFI field activities will be containerized in drums and stored on site until analysis of the media has been reviewed and appropriate decisions for the disposal of the waste can be made by the base environmental coordinator. Purge water, decontamination water, and soil cuttings will be collected and containerized in Department of Transportation approved (Specification 17C) 55-gallon drums. Each drum will be sealed, labeled and transported to a pre-designated staging area (behind Building 1613) located within NAVSTA Mayport pending groundwater analytical results. Soil remaining from DPT

borings will be backfilled into the borehole from which it was collected. A temporary waste staging area will be established at the site to temporarily store IDW generated during the sampling activities until it can be transported to Building 1613. IDW generated from field activities at SWMUs 44 and 45 will be managed in accordance with procedures described in the NAVSTA Mayport SOP for IDW Waste (Attachment 4).

Weekly IDW inspections will occur for IDW temporarily stored on site to ensure that IDW is properly secured and labeled, that IDW drums are not compromised, and that IDW is removed from the site in a timely manner. A Weekly Investigative Derived Waste Checklist for NAVSTA Mayport (Attachment 4) will be completed during these IDW inspections and submitted to Diane Racine (NAVSTA Mayport Environmental Department). It is intended that the field events for SWMUs 44 and 45 will take place concurrently with field events at other locations (SWMUs 6 and 7; SWMUs 8, 9, and 51; and SWMUs 10 and 11). Therefore, the IDW from field events will be stored in a centralized location. Once the field events are completed and analytical results obtained, the IDW will be transported and disposed off-site by a subcontractor. Appropriate IDW documentation will be maintained in the project field log book.

Reporting

Information obtained from field activities detailed in this work plan addendum will be incorporated into the RFI Report Addendum for SWMUs 44 and 45.

If you have any questions with regard to this submittal, please contact me at (904) 636-6125 or via e-mail at shina.ballard@ttnus.com.

Sincerely,

Shina A. Ballard

Shina A. Ballard
Task Order Manager

SB/jf

Enclosures (14)

c: Mr. J. Cason P.G., FDEP (2 copies, 1 CD)
Mr. C. Benedikt, USEPA (CD only)
Ms. D. Racine, NAVSTA Mayport (1 copy, 1 CD)
Mr. M. Halil P.E., CH2MHill (CD only)
Ms. D. Humbert, TtNUS (cover letter only)
Mr. M. Perry, TtNUS (unbound copy, CD)
NAVSTA Mayport Administrative Record
CTO 0033 Project File

FIGURES

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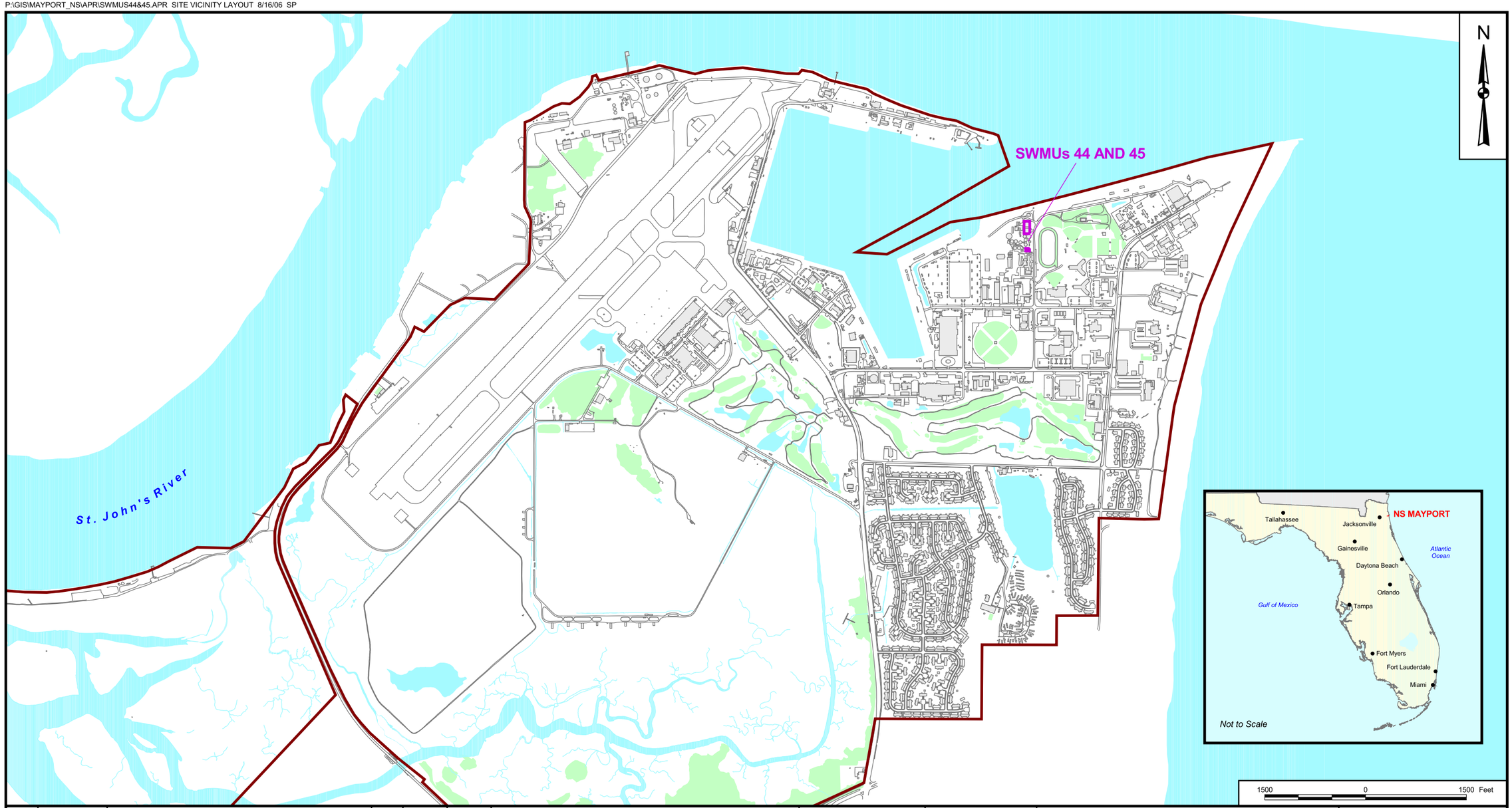

NO.	DATE	REVISIONS	BY	CHKD	APPD	REFERENCES

DRAWN BY	DATE
S. PAXTON	7/27/06
CHECKED BY	DATE
J. FOSTER	8/16/06
COST/SCHED-AREA	
SCALE	
AS NOTED	

NAVFAC

SITE VICINITY MAP
SWMUs 44 AND 45
NAVAL STATION MAYPORT
MAYPORT, FLORIDA

CONTRACT NO.	
CTO 0033	
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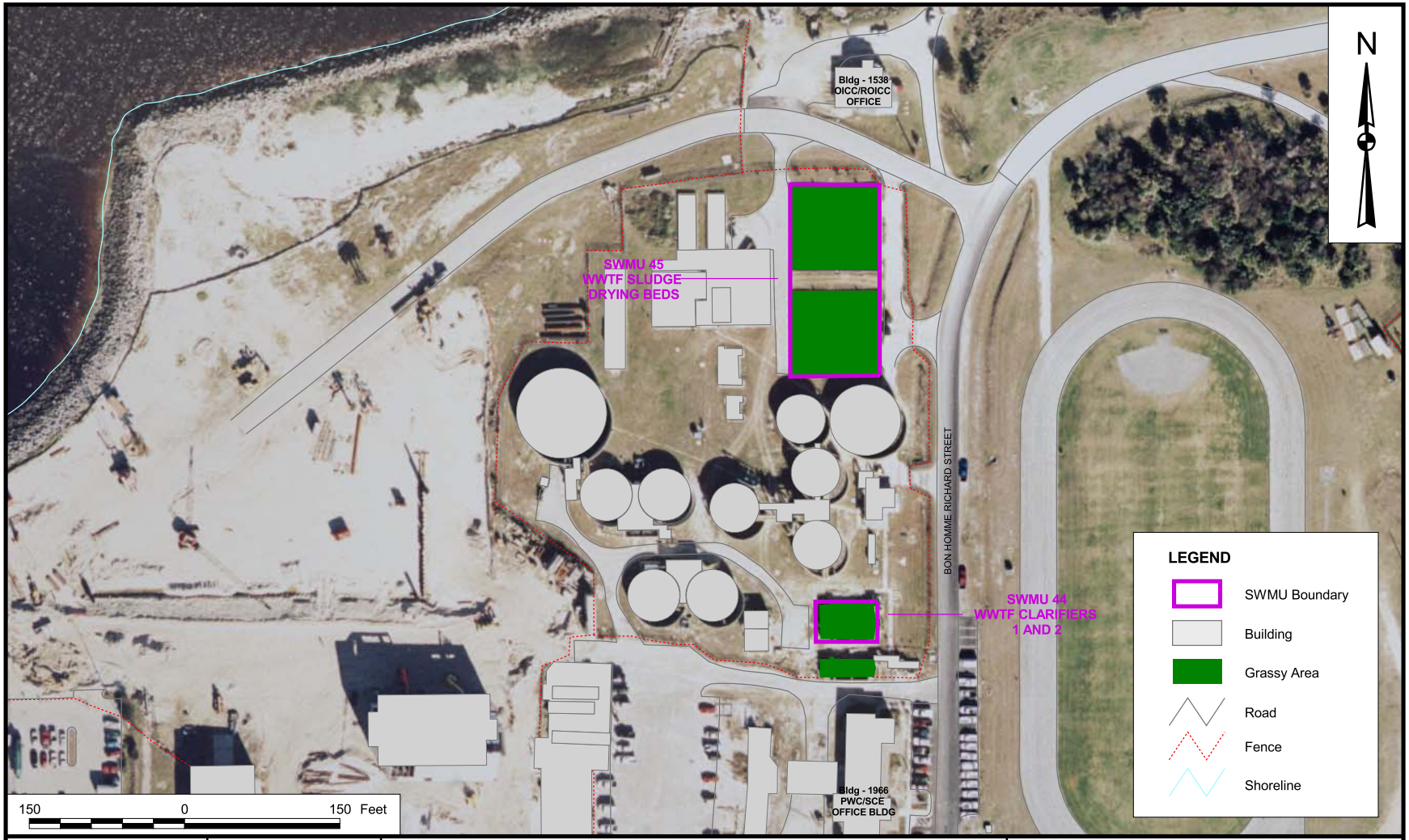
Figure 1	0



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CHECKED BY / DATE	J. FOSTER 9/12/06
COST/SCHEDULE-AREA	
SCALE	AS NOTED

NAVFAC

SITE PLAN MAP
SWMUs 44 AND 45
NAVAL STATION MAYPORT
MAYPORT, FLORIDA

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DRAWING NO.	Figure 2
REV	0

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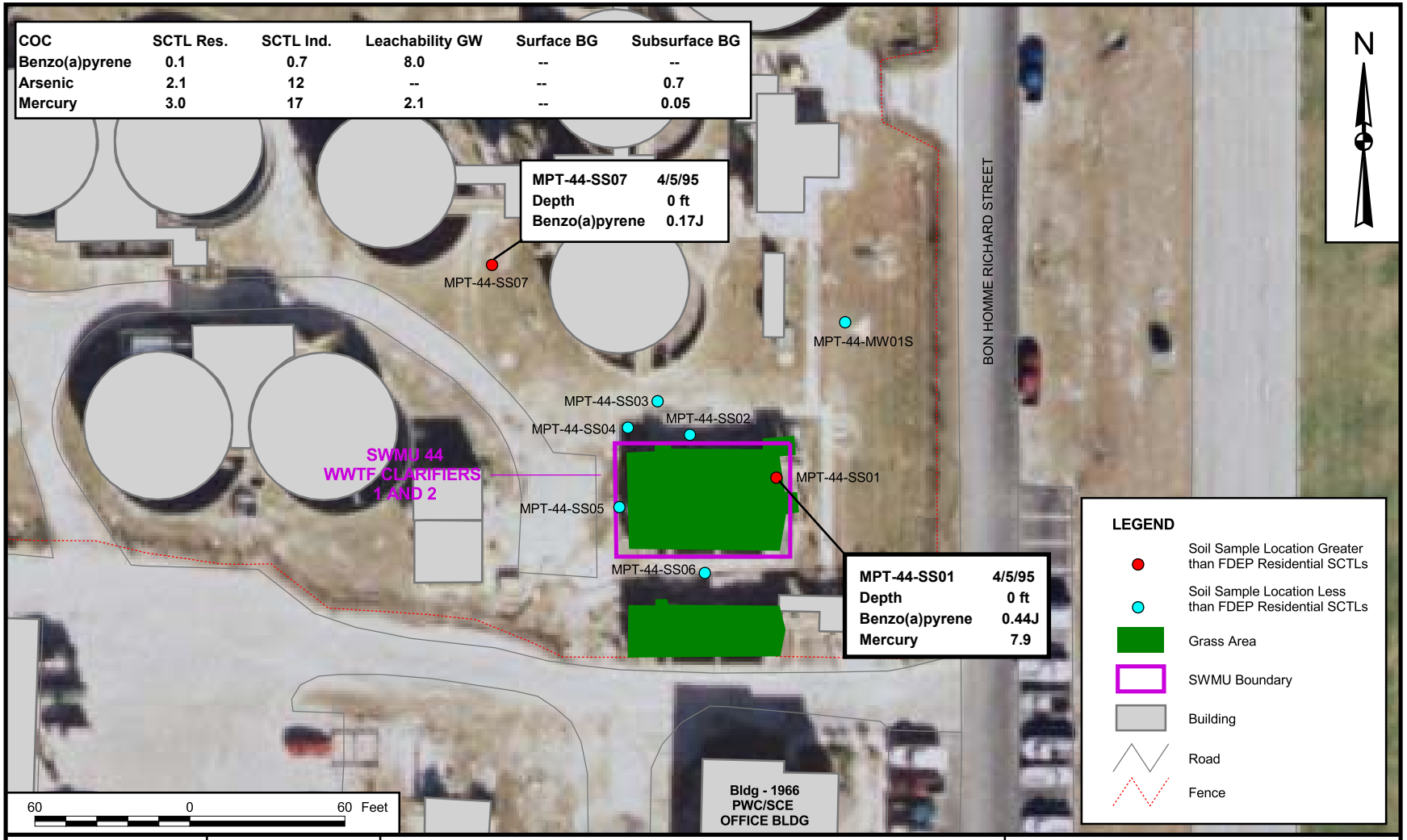

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S. PAXTON	9/07/06
CHECKED BY	DATE
S. BALLARD	10/06/06
COST/SCHEDULE-AREA	
SCALE	AS NOTED

NAVFAC

HISTORICAL SOIL SAMPLE RESULTS EXCEEDING RESIDENTIAL SCTLS

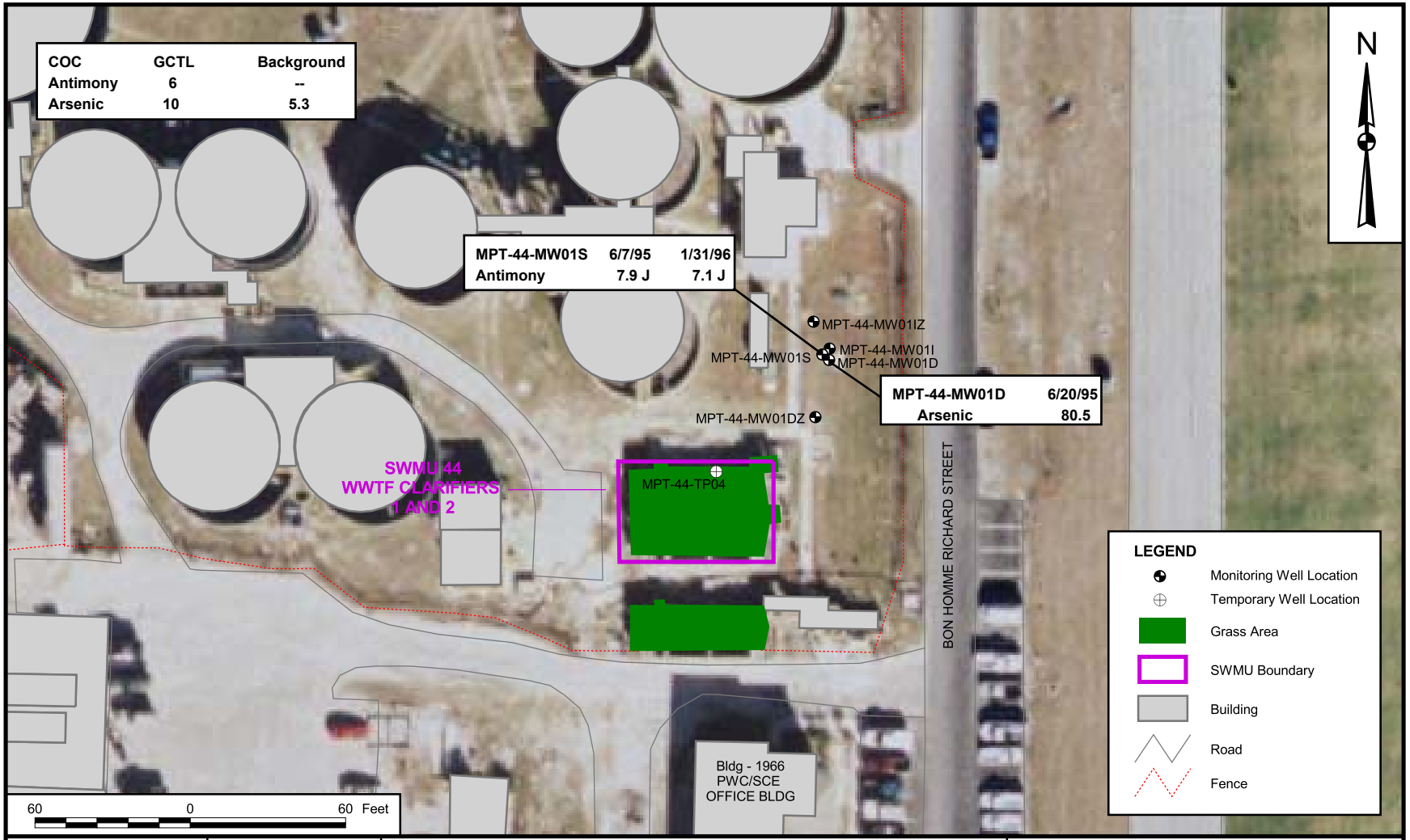
SWMU 44

NAVAL STATION MAYPORT

MAYPORT, FLORIDA

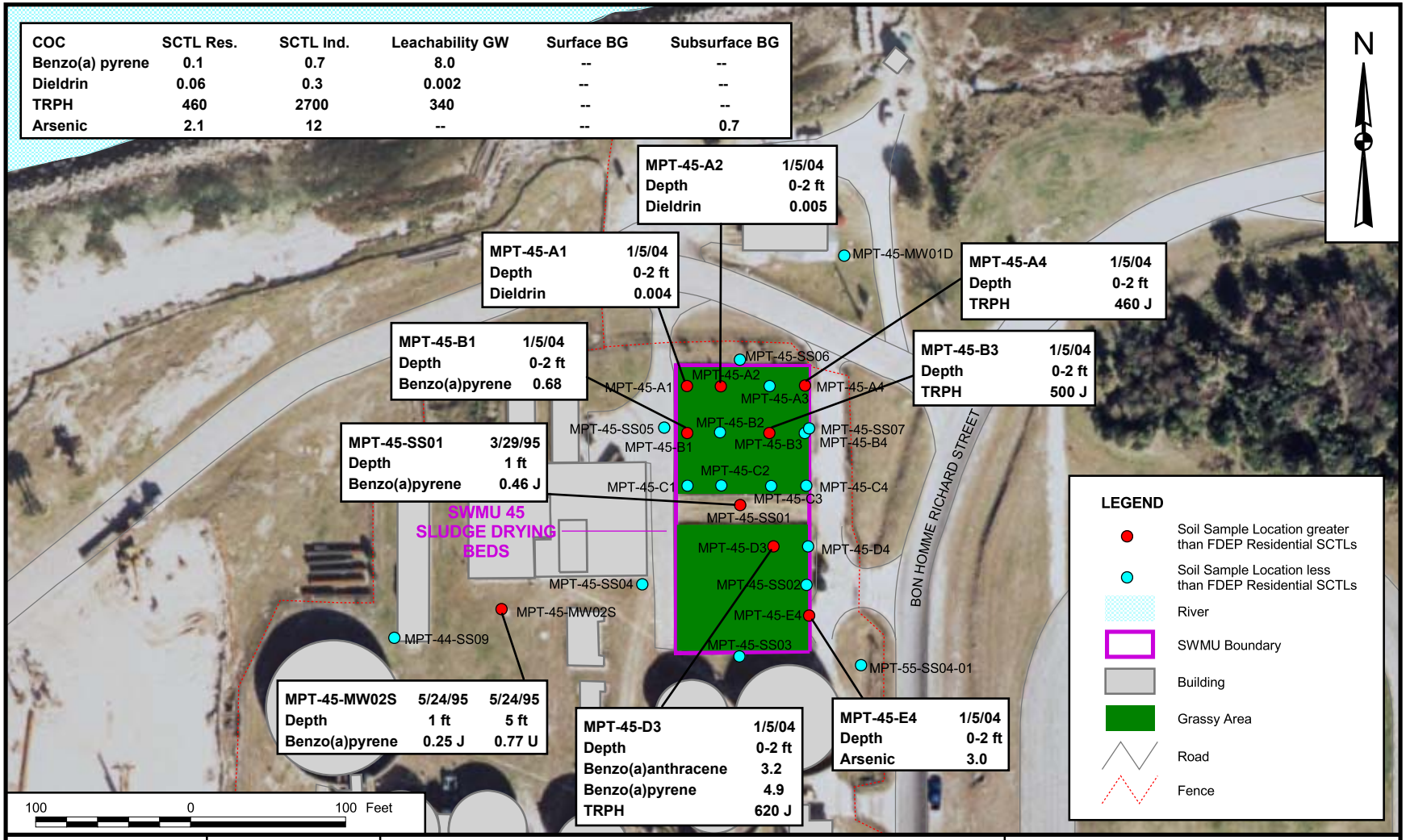
CONTRACT NUMBER	CTO 0033
APPROVED BY	DATE
—	—
APPROVED BY	DATE
—	—
DRAWING NO.	FIGURE 3
REV	0

P:\GIS\MAYPORT_NS\MAPDOCS\APR\SWMUS44&45.APR SWMU 44 EXISTING SOIL SAMPLE LOCATION LAYOUT 10/06/06 SP



DRAWN BY S. PAXTON	DATE 9/07/06	HISTORICAL GROUNDWATER SAMPLE RESULTS EXCEEDING GCTLS SWMU 44 NAVAL STATION MAYPORT MAYPORT, FLORIDA	CONTRACT NUMBER CTO 0033
CHECKED BY S. BALLARD	DATE 10/06/06		APPROVED BY — DATE —
COST/SCHEDULE-AREA			APPROVED BY — DATE —
SCALE AS NOTED	NAVFAC		DRAWING NO. FIGURE 4 REV 0

P:\GIS\MAYPORT_NS\MAPDOCS\APR\SWMUS44&45.APR SWMU 44 EXISTING GROUNDWATER SAMPLE LOCATION LAYOUT 10/06/06 SP



DRAWN BY	DATE
S. PAXTON	9/07/06
CHECKED BY	DATE
S. BALLARD	10/06/06
COST/SCHEDULE-AREA	
SCALE	AS NOTED

HISTORICAL SOIL SAMPLE RESULTS EXCEEDING RESIDENTIAL SCTLS

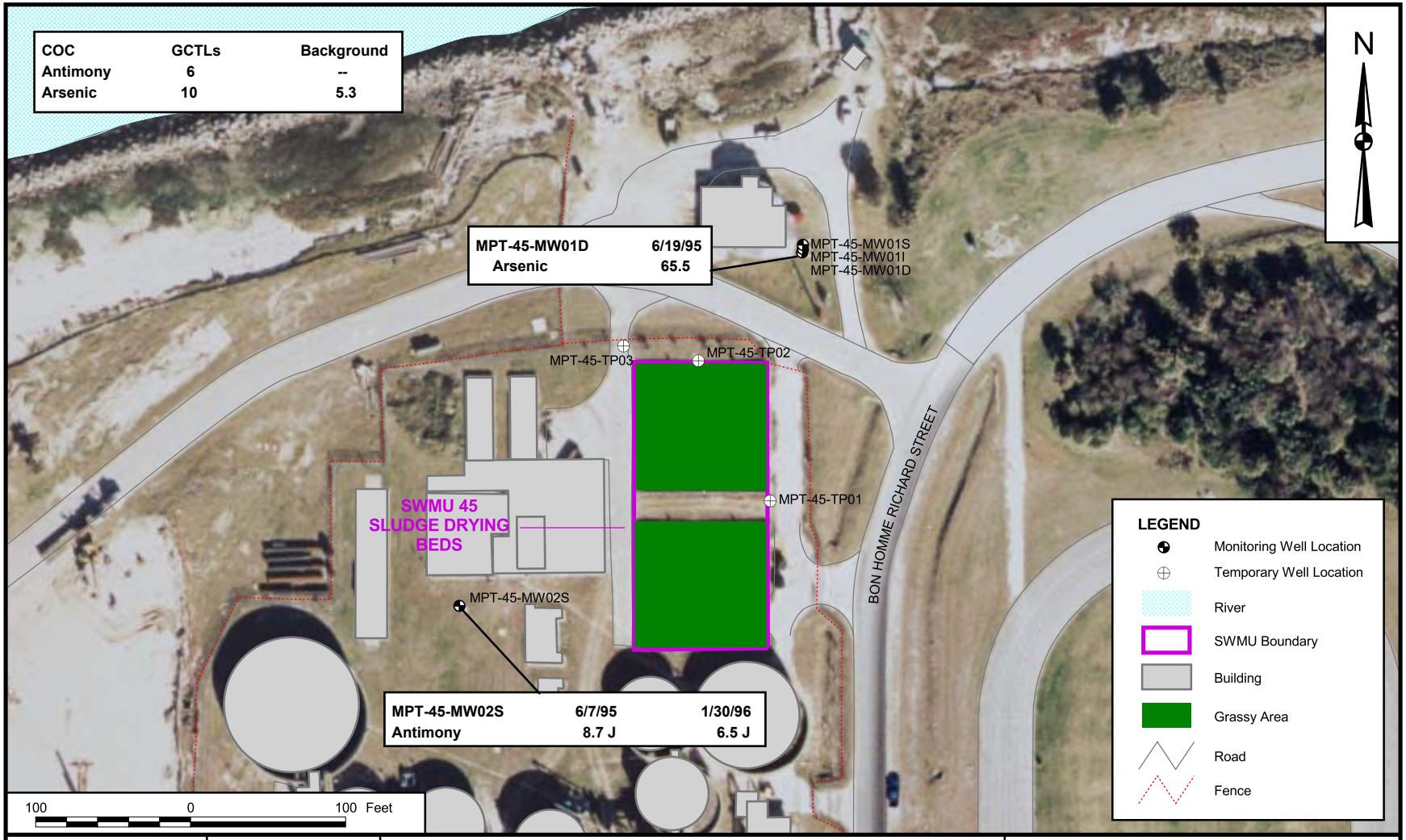
SWMU 45

NAVAL STATION MAYPORT

MAYPORT, FLORIDA

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

P:\GIS\MAYPORT_NS\MAPDOCS\APR\SWMUS44&45.APR SWMU 45 EXISTING SOIL SAMPLE LOCATION LAYOUT 10/06/06 SP



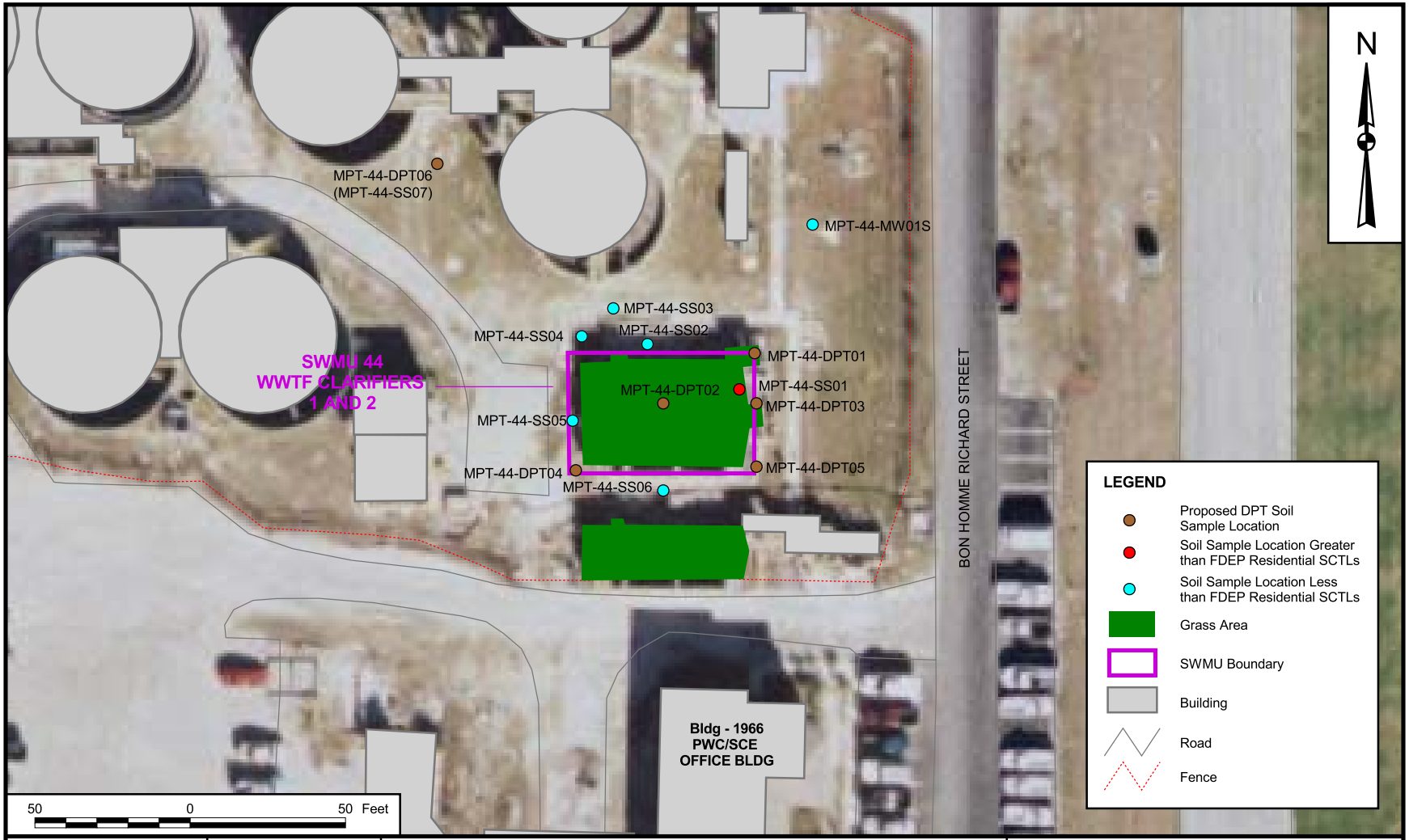
DRAWN BY / DATE	S. PAXTON 9/07/06
CHECKED BY / DATE	S. BALLARD 10/06/06
COST/SCHEDULE-AREA	
SCALE	AS NOTED

NAVFAC

HISTORICAL GROUNDWATER SAMPLE RESULTS EXCEEDING GCTLS
SWMU 45
NAVAL STATION MAYPORT
MAYPORT, FLORIDA

CONTRACT NUMBER	CTO 0033
APPROVED BY / DATE	— / —
APPROVED BY / DATE	— / —
DRAWING NO.	FIGURE 6
REV	0

P:\GIS\MAYPORT_NS\MAPDOCS\APR\SWMUS44&45.APR SWMU 45 EXISTING GROUNDWATER SAMPLE LOCATION LAYOUT 10/06/06 SP



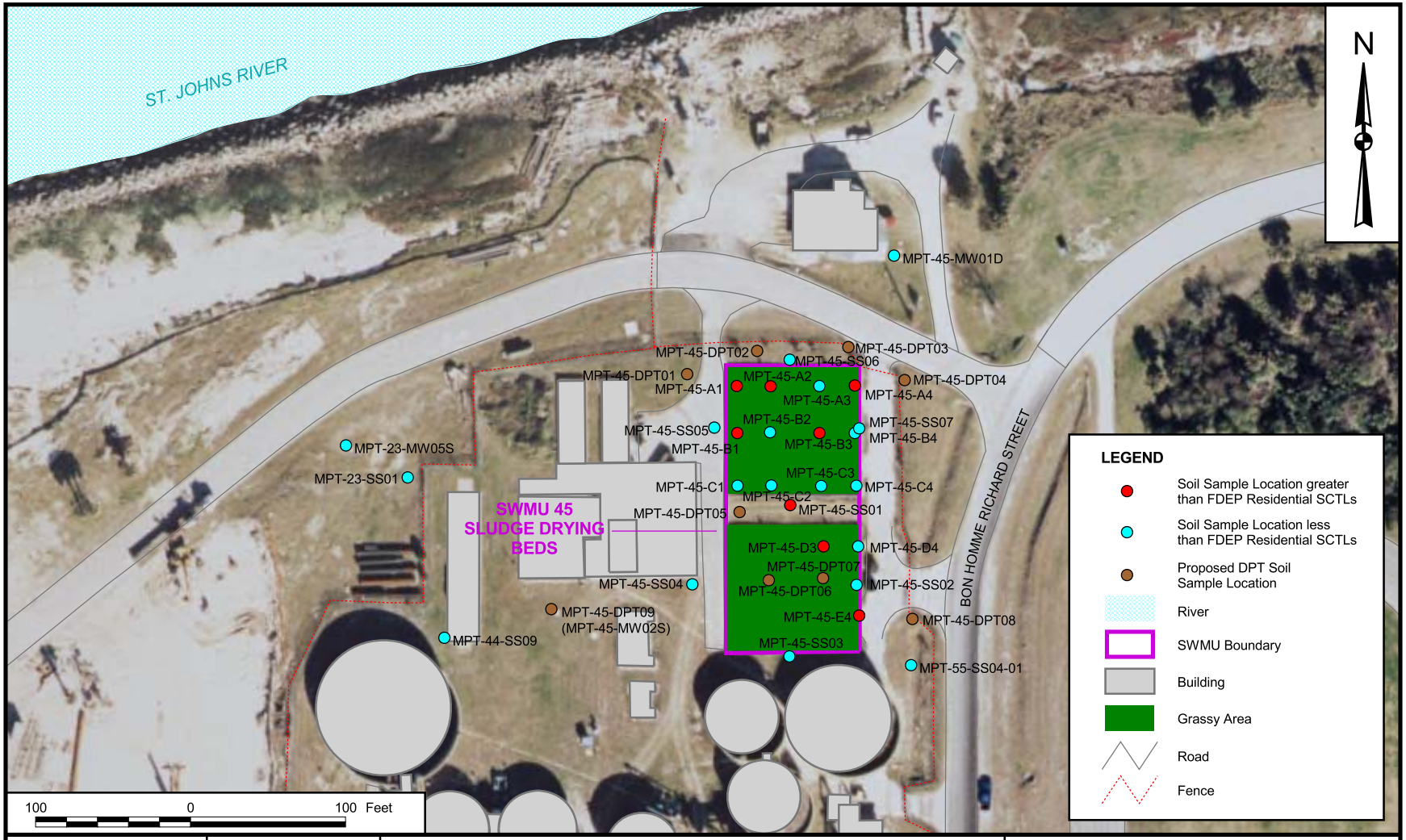
DRAWN BY	DATE
S. PAXTON	9/07/06
CHECKED BY	DATE
S. BALLARD	10/09/06
COST/SCHEDULE-AREA	
SCALE	AS NOTED

NAVFAC

PROPOSED DPT SOIL SAMPLE LOCATIONS
SWMU 44
NAVAL STATION MAYPORT
MAYPORT, FLORIDA

CONTRACT NUMBER	CTO 0033
APPROVED BY	DATE
—	—
APPROVED BY	DATE
—	—
DRAWING NO.	REV
FIGURE 7	0

P:\GIS\MAYPORT_NS\MAPDOCS\APR\SWMUS44&45.APR SWMU 44 PROPOSED SOIL SAMPLE LOCATIONS LAYOUT 10/09/06 SP



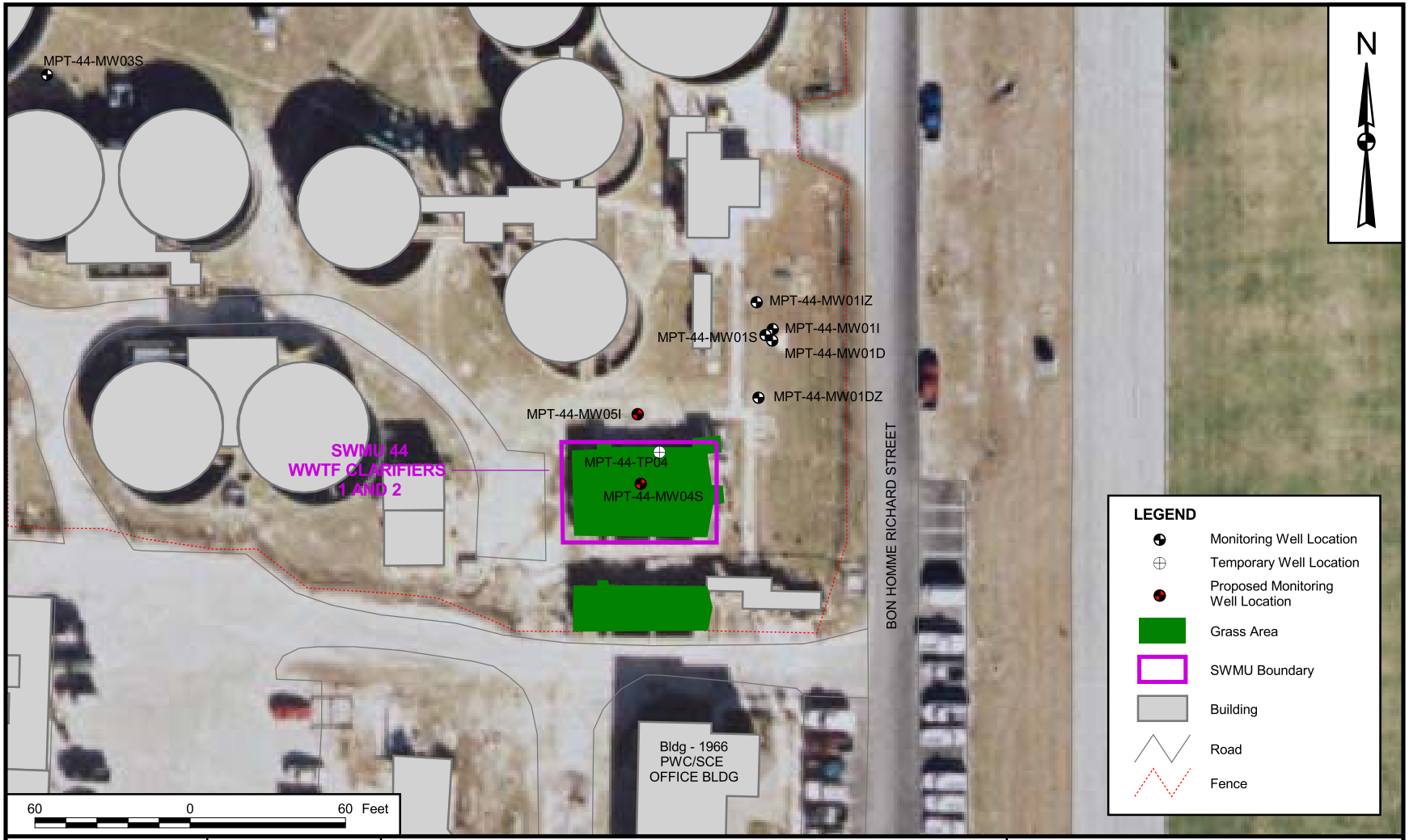
DRAWN BY: S. PAXTON	DATE: 9/07/06
CHECKED BY: S. BALLARD	DATE: 10/09/06
COST/SCHEDULE-AREA	
SCALE: AS NOTED	

NAVFAC

PROPOSED SOIL SAMPLE LOCATION MAP
SWMU 45
NAVAL STATION MAYPORT
MAYPORT, FLORIDA

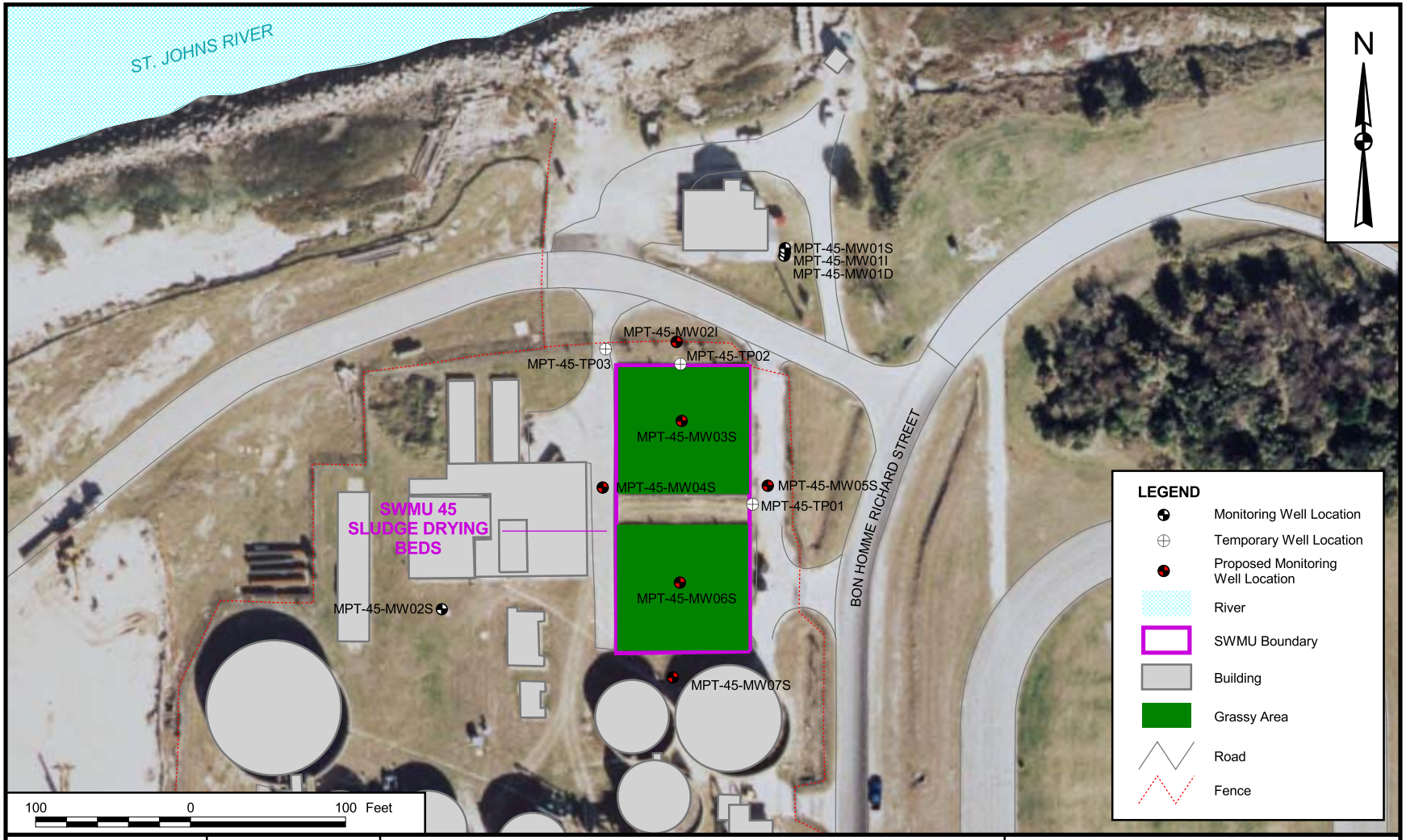
CONTRACT NUMBER: CTO 0033	
APPROVED BY: —	DATE: —
APPROVED BY: —	DATE: —
DRAWING NO.: FIGURE 8	REV: 0

P:\GIS\MAYPORT_NS\MAPDOCS\APR\SWMUS44&45.APR SWMU 45 PROPOSED SOIL SAMPLE LOCATION LAYOUT 10/09/06 SP



DRAWN BY: S. PAXTON	DATE: 9/07/06	PROPOSED MONITORING WELL LOCATIONS SWMU 44 NAVAL STATION MAYPORT MAYPORT, FLORIDA	CONTRACT NUMBER: CTO 0033
CHECKED BY: S. BALLARD	DATE: 10/06/06		APPROVED BY: — DATE: —
COST/SCHEDULE-AREA			APPROVED BY: — DATE: —
SCALE: AS NOTED			DRAWING NO.: FIGURE 9 REV: 0

P:\GIS\MAYPORT_NS\MAPDOCS\APR\SWMUS44&45.APR SWMU 44 PROPOSED MONITORING WELL LOCATIONS LAYOUT 10/06/06 SP



DRAWN BY	S. PAXTON
DATE	9/07/06
CHECKED BY	S. BALLARD
DATE	10/06/06
COST/SCHEDULE-AREA	
SCALE	AS NOTED

NAVFAC

PROPOSED MONITORING WELL LOCATION MAP
SWMU 45
NAVAL STATION MAYPORT
MAYPORT, FLORIDA

CONTRACT NUMBER	CTO 0033
APPROVED BY	—
DATE	—
APPROVED BY	—
DATE	—
DRAWING NO.	FIGURE 10
REV	0

P:\GIS\MAYPORT_NS\MAPDOCS\APR\SWMUS44&45.APR SWMU 45 PROPOSED MONITORING WELL LOCATION LAYOUT 10/06/06 SP

ATTACHMENT 1

HISTORICAL INFORMATION

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

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

Analytical Batch Number:	R9861	R9861	R9861	R9861	R9861	R9861	R9861	R9861
Sample Location:	MPT-1-SB01	MPT-1-SB01	MPT-1-SB02	MPT-1-SB03	MPT-1-SB04	MPT-1-SB05	MPT-1-SB06	MPT-1-SB07
Sample Number:	01S00101	01S00101DUP	01S00201*	01S00301	01S00401	01S00501	01S00601	01S00701
Date Sampled:	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)								
Carbon disulfide	--	1 J	--	--	--	--	--	2 J
2-Butanone	--	--	--	--	4 J	--	--	--
Benzene	--	--	--	--	1 J	--	--	--
Toluene	--	--	--	--	1 J	--	--	--
Ethylbenzene	--	--	--	--	--	--	--	--
Xylenes (total)	--	3 J	--	--	2 J	--	--	2 J
Trichlorofluoromethane	--	--	--	--	--	--	--	--
Isobutyl alcohol	--	--	--	--	--	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--
2-Methylnaphthalene	--	--	--	--	--	--	--	--
Dimethylphthalate	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	--	--	--	--
Phenanthrene	--	--	400 J	--	--	--	--	--
Anthracene	--	--	--	--	--	--	--	--
Di-n-Butylphthalate	--	--	--	--	--	--	--	--
Fluoranthene	--	--	390 J	--	--	--	--	--
Pyrene	--	--	250 J	--	--	--	--	--
Butylbenzylphthalate	--	--	--	--	--	--	--	--
Benzo(a)anthracene	--	--	100 J	--	--	--	--	--
Chrysene	--	--	130 J	--	--	--	--	--
bis(2-Ethylhexyl) phthalate	--	--	--	--	--	--	--	--
Di-n-octylphthalate	--	--	--	--	--	--	--	--

See notes at end of table.

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

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

Analytical Batch Number:	R9861	R9861	R9861	R9861	R9861	R9861	R9861	R9861
Sample Location:	MPT-1-SB01	MPT-1-SB01	MPT-1-SB02	MPT-1-SB03	MPT-1-SB04	MPT-1-SB05	MPT-1-SB06	MPT-1-SB07
Sample Number:	01S00101	01S00101DUP	01S00201*	01S00301	01S00401	01S00501	01S00601	01S00701
Date Sampled:	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Semivolatiles(µg/kg)								
Benzo(b)fluoranthene	--	--	120 J	--	--	--	--	--
Benzo(k)fluoranthene	--	--	130 J	--	--	--	--	--
Benzo(a)pyrene	--	--	96 J	--	--	--	--	--
Indeno (1,2,3-cd) pyrene	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	--	--	--	--	--
Acetophenone	--	--	--	--	--	--	--	--
Pesticides/PCBs(µg/kg)								
beta-BHC	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	--	--	--	--
Dieldrin	--	--	--	--	--	--	--	--
4,4'-DDE	1.9 J	1.9 J	--	1.9	2.3 J	0.93 J	0.98 J	--
Endrin	--	--	--	--	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	1.5	2.6 J	4.6 J	--	--
Methoxychlor	--	--	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--
Endrin ketone	--	--	--	--	--	--	--	--
Chlordane	--	--	--	--	--	--	--	--
Isodrin	--	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	--	--	--	--
Aroclor-1260	100 J	150	--	--	55 J	84 J	32 J	--

See notes at end of table.

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

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

Analytical Batch Number:	R9861	R9743	R9743	R9743	R9743	R9743	R9743	R9743
Sample Location:	MPT-23-SS07	MPT-23-SS08	MPT-23-SS08	MPT-23-SS09	MPT-23-SS10	MPT-23-SS11	MPT-23-SS12	MPT-23-SS13
Sample Number:	23S00701	23S00801	23S00801DUP	23S00901	23S01001	23S01101	23S01201	23S01301
Date Sampled:	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	07-APR-95	07-APR-95	07-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)								
Carbon disulfide	--	--	--	--	--	--	--	--
2-Butanone	--	--	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--
Toluene	--	--	--	--	--	2 J	--	--
Ethylbenzene	--	--	--	--	--	--	--	--
Xylenes (total)	--	--	--	--	--	--	--	--
Trichlorofluoromethane	--	--	--	--	--	--	--	--
Isobutyl alcohol	--	--	--	--	--	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	--	--	--	--	--
Naphthalene	--		--	--	--	--	880	--
2-Methylnaphthalene	--	--	--	--	--	--	--	--
Dimethylphthalate	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--
Anthracene	--	--	--	--	--	--	--	--
Di-n-Butylphthalate	--	--	--	--	--	--	--	--
Fluoranthene	130 J	--	--	--	--	--	--	210 J
Pyrene	200 J	--	--	--	--	--	--	240 J
Butylbenzylphthalate	--	--	--	--	--	--	--	--
Benzo(a)anthracene	90 J	--	--	--	--	--	--	160 J
Chrysene	130 J	--	--	--	--	--	--	220 J
bis(2-Ethylhexyl) phthalate	--	--	--	--	--	--	--	--
Di-n-octylphthalate	--	--	--	--	--	--	--	--

See notes at end of table.

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

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

Analytical Batch Number:	R9861	R9743	R9743	R9743	R9743	R9743	R9743	R9743
Sample Location:	MPT-23-SS07	MPT-23-SS08	MPT-23-SS08	MPT-23-SS09	MPT-23-SS10	MPT-23-SS11	MPT-23-SS12	MPT-23-SS13
Sample Number:	23S00701	23S00801	23S00801DUP	23S00901	23S01001	23S01101	23S01201	23S01301
Date Sampled:	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	07-APR-95	07-APR-95	07-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Semivolatiles (µg/kg)								
Benzo(b)fluoranthene	110 J	--	--	--	--	--	--	240 J
Benzo(k)fluoranthene	130 J	--	--	--	--	--	--	220 J
Benzo(a)pyrene	94 J	--	--	--	--	--	--	160 J
Indeno (1,2,3-cd) pyrene	--	--	--	--	--	--	--	130 J
Dibenz(a,h)anthracene	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	--	--	--	--	190 J
Acetophenone	--	--	--	--	--	--	--	--
Pesticides/PCBs (µg/kg)								
beta-BHC	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	--	--	--	--
Dieldrin	--	--	--	--	--	--	--	--
4,4'-DDE	--	1.8 J	1.9 J	--	--	1.2	--	2.2
Endrin	--	--	--	--	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--
4,4'-DDT	--	2.2	2.6 J	--	--	3.8	--	--
Methoxychlor	190 J	--	--	4.8	--	2.9	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--
Endrin ketone	22 J	--	--	--	--	--	--	--
Chlordane	--	--	--	--	--	--	--	--
Isodrin	--	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	130	--	70	--
Aroclor-1260	--	--	--	--	--	--	--	--

See notes at end of table.

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

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

Analytical Batch Number:	R9743	R9743	R9743	R9743	M8775	M8775	M8780	M8780
Sample Location:	MPT-23-SS14	MPT-23-SS15	MPT-23-SS16	MPT-23-SS18	MPT-23-SS19	MPT-23-SS20	MPT-23-SS21	MPT-23-SS22
Sample Number:	23S01401	23S01501	23S01601	23S01801	23S01901	23S02001	23S02101	23S02201
Date Sampled:	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	08-APR-95	08-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)								
Carbon disulfide	--	--	--	2 J	--	--	--	--
2-Butanone	--	--	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--
Toluene	2 J	--	4 J	--	1 J	--	6	7
Ethylbenzene	--	--	--	--	--	--	--	--
Xylenes (total)	--	--	--	--	1 J	2 J	8	12
Trichlorofluoromethane	--	--	--	--	--	--	--	--
Isobutyl alcohol	--	--	--	--	--	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	24 J
2-Methylnaphthalene	--	--	--	--	--	--	--	--
Dimethylphthalate	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	--	--	--	--
Phenanthrene	96 J	--	--	--	--	--	--	--
Anthracene	--	--	--	--	--	--	--	--
Di-n-Butylphthalate	--	79 J	200 J	--	30 J	44 J	--	20 J
Fluoranthene	330 J	--	--	--	--	29 J	--	--
Pyrene	520 J	--	--	--	--	21 J	20 J	--
Butylbenzylphthalate	--	--	--	--	--	--	--	--
Benzo(a)anthracene	330 J	--	--	--	--	--	--	--
Chrysene	440 J	--	--	--	--	21 J	34 J	--
bis(2-Ethylhexyl) phthalate	--	--	--	--	26 J	150 J	--	--
Di-n-octylphthalate	--	--	--	--	--	--	--	--

See notes at end of table.

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

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

Analytical Batch Number:	R9743	R9743	R9743	R9743	M8775	M8775	M8780	M8780
Sample Location:	MPT-23-SS14	MPT-23-SS15	MPT-23-SS16	MPT-23-SS18	MPT-23-SS19	MPT-23-SS20	MPT-23-SS21	MPT-23-SS22
Sample Number:	23S01401	23S01501	23S01601	23S01801	23S01901	23S02001	23S02101	23S02201
Date Sampled:	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	08-APR-95	08-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Semivolatiles (µg/kg)								
Benzo(b)fluoranthene	450 J	--	--	--	--	24 J	--	--
Benzo(k)fluoranthene	500 J	--	--	--	--	27 J	--	--
Benzo(a)pyrene	430 J	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	270 J	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	96 J	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	340 J	--	--	--	--	--	--	--
Acetophenone	--	--	--	--	--	--	--	--
Pesticides/PCBs (µg/kg)								
beta-BHC	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	--	--	--	--
Dieldrin	--	--	--	--	--	--	--	--
4,4'-DDE	1.2	1.3 J	8.3	--	--	--	--	--
Endrin	--	--	--	--	--	--	--	--
Endosulfan II	12	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--
4,4'-DDT	--	2	28	--	--	--	--	--
Methoxychlor	--	--	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--
Endrin ketone	--	--	--	--	--	--	--	--
Chlordane	--	--	--	--	--	--	--	--
Isodrin	--	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	--	--	--	--
Aroclor-1260	--	--	380	--	26	46 J	--	--

See notes at end of table.

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

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

Analytical Batch Number:	M8780	M8775	M8775	M8775	M8775	M8775	M8994	M8994
Sample Location:	MPT-23-SS23	MPT-23-SS24	MPT-23-SS25	MPT-23-SS26	MPT-23-SS27	MPT-23-SS28	MPT-23-MW07S	MPT-23-MW07S
Sample Number:	23S02301	23S02401	23S02501	23S02601	23S02701	23S02801	23S02901	23S02901DUP
Date Sampled:	08-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	20-MAY-95	20-MAY-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)								
Carbon disulfide	4 J	--	1 J	--	--	--	--	--
2-Butanone	--	--	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--
Toluene	13	--	2 J	--	--	--	--	--
Ethylbenzene	--	--	--	--	--	--	--	--
Xylenes (total)	2 J	--	6	2 J	2 J	2 J	--	--
Trichlorofluoromethane	--	--	--	--	--	--	--	--
Isobutyl alcohol	--	--	--	--	--	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--
2-Methylnaphthalene	--	--	--	--	--	--	--	--
Dimethylphthalate	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	32 J	--	--	--	--
Anthracene	--	--	--	--	--	--	--	--
Di-n-Butylphthalate	--	41 J	29 J	19 J	38 J	--	--	--
Fluoranthene	42 J	--	28 J	140 J	--	--	--	--
Pyrene	62 J	--	28 J	130 J	--	--	--	--
Butylbenzylphthalate	--	--	--	--	--	--	--	--
Benzo(a)anthracene	54 J	--	--	100 J	--	--	--	--
Chrysene	80 J	--	21 J	150 J	--	--	--	--
bis(2-Ethylhexyl) phthalate	--	62 J	41 J	91 J	35 J	34 J	--	--
Di-n-octylphthalate	--	--	--	--	--	--	--	--

See notes at end of table.

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

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

Analytical Batch Number:	M8780	M8775	M8775	M8775	M8775	M8775	M8994	M8994
Sample Location:	MPT-23-SS23	MPT-23-SS24	MPT-23-SS25	MPT-23-SS26	MPT-23-SS27	MPT-23-SS28	MPT-23-MW07S	MPT-23-MW07S
Sample Number:	23S02301	23S02401	23S02501	23S02601	23S02701	23S02801	23S02901	23S02901DUP
Date Sampled:	08-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	20-MAY-95	20-MAY-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Semivolatiles (µg/kg)								
Benzo(b)fluoranthene	65 J	--	22 J	170 J	--	--	--	--
Benzo(k)fluoranthene	69 J	19 J	35 J	270 J	24 J	--	--	--
Benzo(a)pyrene	74 J	--	24 J	190 J	--	--	--	--
Indeno (1,2,3-cd) pyrene	47 J	--	26 J	180 J	--	--	--	--
Dibenz(a,h)anthracene	--	--	--	69 J	--	--	--	--
Benzo(g,h,i)perylene	55 J	--	43 J	260 J	--	--	--	--
Acetophenone	--	--	28 J	--	--	--	--	--
Pesticides/PCBs (µg/kg)								
beta-BHC	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	--	--	--	--
Dieldrin	--	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--	--
Endrin	--	--	--	--	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--	--
Methoxychlor	--	--	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--
Endrin ketone	--	--	--	--	--	--	--	--
Chlordane	--	29 J	--	--	--	--	--	--
Isodrin	--	--	--	--	--	--	--	--
Aroclor-1254	220 J	--	--	--	--	--	280 J	390 J
Aroclor-1260	--	--	--	--	--	--	100	140

See notes at end of table.

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

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

Analytical Batch Number:	M8780	M8780	M8780	M8780	M8780	M8780	M8867	M8985
Sample Location:	MPT-24-SS01	MPT-24-SS02	MPT-24-SS03	MPT-24-SS04	MPT-24-SS04	MPT-24-SS05	MPT-24-SS06	MPT-24-MW01S
Sample Number:	24S00101	24S00201	24S00301	24S00401	24S00401DUP	24S00501	24S00601	24S00701
Date Sampled:	08-APR-95	08-APR-95	08-APR-95	08-APR-95	08-APR-95	08-APR-95	24-APR-95	19-MAY-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)								
Carbon disulfide	2 J	3 J	2 J	--	1 J	1 J	--	--
2-Butanone	--	--	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--
Toluene	--	--	3 J	--	1 J	--	--	--
Ethylbenzene	--	--	--	--	--	--	--	--
Xylenes (total)	3 J	--	6	3 J	6	3 J	4 J	--
Trichlorofluoromethane	--	--	--	--	--	--	--	--
Isobutyl alcohol	--	--	--	--	--	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	62 J	--	--	--	--
Naphthalene	--	--	25 J	--	--	--	--	--
2-Methylnaphthalene	--	--	22 J	--	--	--	--	--
Dimethylphthalate	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	--	--	--	--
Phenanthrene	--	120 J	--	45 J	120 J	42 J	--	760 J
Anthracene	--	36 J	--	--	19 J	--	--	180 J
Di-n-Butylphthalate	19 J	--	100 J	39 J	66 J	39 J	--	--
Fluoranthene	--	430	--	100 J	190 J	130 J	150 J	1,000 J
Pyrene	--	390 J	--	140 J	200 J	120 J	130 J	870 J
Butylbenzylphthalate	--	--	--	--	--	--	--	--
Benzo(a)anthracene	--	230 J	--	91 J	110 J	50 J	--	600 J
Chrysene	--	250 J	--	130 J	170 J	97 J	140 J	720 J
bis(2-Ethylhexyl) phthalate	--	--	--	--	--	--	--	640 J
Di-n-octylphthalate	--	--	--	--	--	--	--	--

See notes at end of table.

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

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

Analytical Batch Number:	M8780	M8780	M8780	M8780	M8780	M8780	M8867	M8985
Sample Location:	MPT-24-SS01	MPT-24-SS02	MPT-24-SS03	MPT-24-SS04	MPT-24-SS04	MPT-24-SS05	MPT-24-SS06	MPT-24-MW01S
Sample Number:	24S00101	24S00201	24S00301	24S00401	24S00401DUP	24S00501	24S00601	24S00701
Date Sampled:	08-APR-95	08-APR-95	08-APR-95	08-APR-95	08-APR-95	08-APR-95	24-APR-95	19-MAY-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Semivolatiles (µg/kg)								
Benzo(b)fluoranthene	--	190 J	--	96 J	140 J	78 J	130 J	570 J
Benzo(k)fluoranthene	--	200 J	--	85 J	150 J	140 J	140 J	560 J
Benzo(a)pyrene	--	190 J	--	83 J	130 J	76 J	120 J	500 J
Indeno (1,2,3-cd) pyrene	--	150 J	--	66 J	99 J	43 J	100 J	410 J
Dibenz(a,h)anthracene	--	54 J	--	40 J	48 J	--	--	270 J
Benzo(g,h,i)perylene	--	160 J	--	82 J	120 J	37 J	130 J	400 J
Acetophenone	--	--	--	--	--	--	--	--
Pesticides/PCs (µg/kg)								
beta-BHC	--	--	--	--	--	--	--	--
Aldrin	--	1.1	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	--	--	--	--
Dieldrin	--	3.4	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	6.3 J	--	--
Endrin	--	--	--	--	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--	--
Methoxychlor	--	--	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--
Endrin ketone	--	--	--	--	--	--	--	--
Chlordane	72	--	--	--	--	23	--	480
Isodrin	--	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	--	--	--	--
Aroclor-1260	140	--	--	--	--	--	--	--

See notes at end of table.

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

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

Analytical Batch Number:	M8985	M8793	M8793	M8793	M8793	M8793	M8793	M8793
Sample Location:	MPT-24-MW01S	MPT-25-SS01	MPT-25-SS02	MPT-25-SS03	MPT-25-SS04	MPT-25-SS04	MPT-25-SS05	MPT-25-SS06
Sample Number:	24S00701DUP	25S00101	25S00201	25S00301	25S00401	25S00401DUP	25S00501	25S00601
Date Sampled:	19-MAY-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)								
Carbon disulfide	--	1 J	--	1 J	2 J	1 J	--	--
2-Butanone	--	--	4 J	--	6 J	7 J	10 J	--
Benzene	--	--	--	--	--	--	--	--
Toluene	--	2 J	1 J	22	14	2 J	1 J	--
Ethylbenzene	--	--	--	13	6 J	--	--	--
Xylenes (total)	--	2 J	5 J	81	43	4 J	2 J	1 J
Trichlorofluoromethane	--	--	--	--	--	--	--	--
Isobutyl alcohol	--	--	--	--	--	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--
2-Methylnaphthalene	--	--	--	--	--	--	--	--
Dimethylphthalate	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	--	--	--	--
Phenanthrene	650 J	--	--	--	--	--	--	--
Anthracene	--	--	--	--	--	--	--	--
Di-n-Butylphthalate	--	66 J	130 J	--	--	--	--	--
Fluoranthene	1,200 J	--	--	--	--	--	--	--
Pyrene	1,000 J	--	--	--	--	--	--	--
Butylbenzylphthalate	--	--	--	--	--	--	--	--
Benzo(a)anthracene	580 J	--	--	--	--	--	--	--
Chrysene	640 J	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	670 J	--	--	79 J	--	--	120 J	--
Di-n-octylphthalate	--	--	--	--	--	--	400 J	--

See notes at end of table.

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

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

Analytical Batch Number:	M8985	M8793	M8793	M8793	M8793	M8793	M8793	M8793
Sample Location:	MPT-24-MW01S	MPT-25-SS01	MPT-25-SS02	MPT-25-SS03	MPT-25-SS04	MPT-25-SS04	MPT-25-SS05	MPT-25-SS06
Sample Number:	24S00701DUP	25S00101	25S00201	25S00301	25S00401	25S00401DUP	25S00501	25S00601
Date Sampled:	19-MAY-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Semivolatiles (µg/kg)								
Benzo(b)fluoranthene	520 J	--	--	--	--	--	--	--
Benzo(k)fluoranthene	570 J	--	--	--	--	--	--	--
Benzo(a)pyrene	510 J	--	--	--	--	--	--	--
Indeno (1,2,3-cd) pyrene	350 J	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	330 J	--	--	--	--	--	--	--
Acetophenone	--	--	--	--	--	--	--	--
Pesticides/PCBs (µg/kg)								
beta-BHC	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	0.81 J	1.6	2.7	--
Heptachlor epoxide	--	--	--	--	--	--	--	--
Dieldrin	--	--	--	6.2	--	--	--	2.3 J
4,4'-DDE	--	--	--	--	--	--	--	--
Endrin	--	--	--	--	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--	--
Methoxychlor	--	--	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--
Endrin ketone	--	--	--	--	--	--	--	--
Chlordane	270	24	--	--	--	15	--	24 J
Isodrin	--	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	--	--	--	--
Aroclor-1260	--	--	--	--	--	--	--	--

See notes at end of table.

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

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

Analytical Batch Number:	M8793	M8793	M8793	R9738	R9738	R9738	R9738	R9738
Sample Location:	MPT-25-SS07	MPT-25-SS08	MPT-25-SS09	MPT-44-SS01	MPT-44-SS01	MPT-44-SS02	MPT-44-SS03	MPT-44-SS04
Sample Number:	25S00701	25S00801	25S00901	44S00101	44S00101DUP	44S00201	44S00301	44S00401
Date Sampled:	10-APR-95	10-APR-95	10-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)								
Carbon disulfide	1 J	3 J	4 J	--	--	--	--	--
2-Butanone	--	4 J	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--
Toluene	2 J	8	4 J	--	--	--	--	--
Ethylbenzene	--	--	--	--	--	--	--	--
Xylenes (total)	5 J	18	4 J	--	--	--	--	--
Trichlorofluoromethane	--	--	--	2 J	2 J	--	--	2 J
Isobutyl alcohol	--	--	--	--	91 J	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	93 J	--	--	--
2-Methylnaphthalene	--	--	--	240 J	340 J	--	--	--
Dimethylphthalate	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	130 J	--	--	--
Phenanthrene	--	--	--	750	1,100	--	--	--
Anthracene	--	--	--	300 J	270 J	--	--	--
Di-n-Butylphthalate	--	--	--	--	--	--	--	--
Fluoranthene	--	--	--	1,400	1,300	--	--	--
Pyrene	--	--	--	1,300	1,300	--	--	--
Butylbenzylphthalate	--	--	--	--	--	--	--	--
Benzo(a)anthracene	--	--	--	630 J	520 J	--	--	--
Chrysene	--	--	--	670 J	590 J	--	--	--
bis(2-Ethylhexyl) phthalate	27 J	63 J	--	--	--	--	--	--
Di-n-octylphthalate	--	--	--	--	--	--	--	--

See notes at end of table.

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

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

Analytical Batch Number:	M8793	M8793	M8793	R9738	R9738	R9738	R9738	R9738
Sample Location:	MPT-25-SS07	MPT-25-SS08	MPT-25-SS09	MPT-44-SS01	MPT-44-SS01	MPT-44-SS02	MPT-44-SS03	MPT-44-SS04
Sample Number:	25S00701	25S00801	25S00901	44S00101	44S00101DUP	44S00201	44S00301	44S00401
Date Sampled:	10-APR-95	10-APR-95	10-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Semivolatiles (µg/kg)								
Benzo(b)fluoranthene	--	--	--	700 J	500 J	--	--	--
Benzo(k)fluoranthene	--	--	--	680 J	640 J	--	--	--
Benzo(a)pyrene	--	--	--	440 J	350 J	--	--	--
Indeno (1,2,3-cd) pyrene	--	--	--	240 J	170 J	--	--	--
Dibenz(a,h)anthracene	--	--	--	100 J	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	320 J	240 J	--	--	--
Acetophenone	--	--	--	--	--	--	--	--
Pesticides/PCBs (µg/kg)								
beta-BHC	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	1.6	24 J	4.2 J	--	--	--
Dieldrin	2,200	4.5 J	--	--	--	--	1.1 J	1.6 J
4,4'-DDE	--	2.5	--	--	--	--	--	2.5
Endrin	--	--	--	40 J	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	59 J**	65	2.2	--	--
Methoxychlor	--	--	--	--	29 J	--	--	--
Endrin aldehyde	--	--	--	63	--	--	--	--
Endrin ketone	--	--	--	--	14 J	--	--	1.7 J
Chlordane	--	--	38	--	--	--	--	--
Isodrin	--	--	--	--	--	0.87	--	--
Aroclor-1254	--	--	--	--	--	--	--	--
Aroclor-1260	--	--	--	--	--	--	--	--

See notes at end of table.

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

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

Analytical Batch Number:	R9738	R9738	R9738	R9738	R9955	R9712	R9712	R9712
Sample Location:	MPT-44-SS06	MPT-44-SS07	MPT-44-SS08	MPT-44-SS09	MPT-44-MW03S	MPT-45-SS01	MPT-45-SS01	MPT-45-SS02
Sample Number:	44S00601	44S00701	44S00801	44S00901	44S01001	45S00101	45S00101DUP	45S00201
Date Sampled:	05-APR-95	05-APR-95	05-APR-95	05-APR-95	24-MAY-95	29-MAR-95	29-MAR-95	29-MAR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)								
Carbon disulfide	--	--	--	--	--	--	--	--
2-Butanone	--	--	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--
Toluene	--	--	--	--	--	--	--	--
Ethylbenzene	--	--	--	--	--	--	--	--
Xylenes (total)	--	--	--	--	1 J	--	--	--
Trichlorofluoromethane	--	--	--	--	--	--	--	--
Isobutyl alcohol	--	--	--	--	--	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	40 J	--
2-Methylnaphthalene	--	--	--	--	--	--	36 J	--
Dimethylphthalate	--	92 J	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	110 J	140 J	--
Dibenzofuran	--	--	--	--	--	--	140 J	--
Fluorene	--	--	--	--	--	--	250 J	--
Phenanthrene	--	--	130 J	--	--	730	1,300	--
Anthracene	100 J	--	--	--	--	260 J	190 J	--
Di-n-Butylphthalate	--	--	83 J	--	--	2,300	440	--
Fluoranthene	--	220 J	240 J	--	--	1,100	1,100	--
Pyrene	--	200 J	160 J	75 J	--	910	670	--
Butylbenzylphthalate	--	--	--	--	--	--	88 J	--
Benzo(a)anthracene	--	140 J	140 J	--	--	600	420	--
Chrysene	--	150 J	150 J	--	--	690	520	--
bis(2-Ethylhexyl) phthalate	--	--	--	--	--	350	700	--
Di-n-octylphthalate	--	--	--	--	--	--	--	--

See notes at end of table.

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

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

Analytical Batch Number:	R9738	R9738	R9738	R9738	R9955	R9712	R9712	R9712
Sample Location:	MPT-44-SS06	MPT-44-SS07	MPT-44-SS08	MPT-44-SS09	MPT-44-MW03S	MPT-45-SS01	MPT-45-SS01	MPT-45-SS02
Sample Number:	44S00601	44S00701	44S00801	44S00901	44S01001	45S00101	45S00101DUP	45S00201
Date Sampled:	05-APR-95	05-APR-95	05-APR-95	05-APR-95	24-MAY-95	29-MAR-95	29-MAR-95	29-MAR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Semivolatiles (µg/kg)								
Benzo(b)fluoranthene	--	240 J	150 J	--	--	470	330 J	--
Benzo(k)fluoranthene	--	230 J	120 J	--	--	560	430	--
Benzo(a)pyrene	--	170 J	--	--	--	460	270 J	--
Indeno (1,2,3-cd) pyrene	--	120 J	--	--	--	230 J	140 J	--
Dibenz(a,h)anthracene	--	--	--	--	--	130 J	87 J	--
Benzo(g,h,i)perylene	--	170 J	--	--	--	230 J	150 J	--
Acetophenone	--	--	--	--	--	--	--	--
Pesticides/PCBs (µg/kg)								
beta-BHC	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	--	--	--	--
Dieldrin	--	--	3.3	--	--	1	--	--
4,4'-DDE	--	--	2 J	2.5	2.1	11	9.3	9
Endrin	--	--	--	--	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	7.5	--	1.4	--
4,4'-DDT	3.5 J	1.5 J	2.7	--	--	5	4.7	5
Methoxychlor	--	--	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--
Endrin ketone	1.5	--	--	--	--	--	--	--
Chlordane	--	--	--	--	--	--	--	--
Isodrin	0.76	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	--	--	--	--
Aroclor-1260	--	--	--	--	--	--	--	--

See notes at end of table.

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

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

Analytical Batch Number:	R9712	R9712	R9712	R9712	M8994	R9955	RA082	RA082
Sample Location:	MPT-45-SS03	MPT-45-SS04	MPT-45-SS06	MPT-45-SS07	MPT-45-MW01D	MPT-45-MW02S	MPT-TR-SS02	MPT-TR-SS02
Sample Number:	45S00301	45S00401	45S00601	45S00701	45S00801	45S01001	TRS00101DUP	TRS00201
Date Sampled:	29-MAR-95	29-MAR-95	29-MAR-95	29-MAR-95	21-MAY-95	24-MAY-95	27-JUN-95	27-JUN-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)								
Carbon disulfide	--	--	--	--	--	2 J	--	--
2-Butanone	--	--	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--
Toluene	--	--	--	--	--	--	--	--
Ethylbenzene	--	--	--	--	--	--	--	--
Xylenes (total)	--	--	--	--	--	2 J	--	--
Trichlorofluoromethane	--	--	--	--	--	--	--	--
Isobutyl alcohol	--	--	--	--	--	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--
2-Methylnaphthalene	--	--	--	--	--	--	--	--
Dimethylphthalate	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	330 J	--
Dibenzofuran	--	--	--	--	--	--	85 J	--
Fluorene	--	--	--	--	--	--	540 J	--
Phenanthrene	--	110 J	--	--	--	170 J	3,800	--
Anthracene	--	--	--	--	--	--	740	--
Di-n-Butylphthalate	--	400	48 J	--	--	470 J	--	--
Fluoranthene	45 J	150 J	--	100 J	41 J	420 J	10,000	--
Pyrene	41 J	130 J	--	83 J	36 J	410 J	7,600	--
Butylbenzylphthalate	--	--	72 J	--	--	--	--	--
Benzo(a)anthracene	--	77 J	--	71 J	--	200 J	--	--
Chrysene	35 J	110 J	--	80 J	--	260 J	4,600	--
bis(2-Ethylhexyl) phthalate	--	65 J	360 J	52 J	--	--	--	--
Di-n-octylphthalate	--	--	--	--	--	--	--	--

See notes at end of table.

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

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

Analytical Batch Number:	R9712	R9712	R9712	R9712	M8994	R9955	RA082	RA082
Sample Location:	MPT-45-SS03	MPT-45-SS04	MPT-45-SS06	MPT-45-SS07	MPT-45-MW01D	MPT-45-MW02S	MPT-TR-SS01	MPT-TR-SS02
Sample Number:	45S00301	45S00401	45S00601	45S00701	45S00801	45S01001	TRS00101DUP	TRS00201
Date Sampled:	29-MAR-95	29-MAR-95	29-MAR-95	29-MAR-95	21-MAY-95	24-MAY-95	27-JUN-95	27-JUN-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Semivolatiles (µg/kg)								
Benzo(b)fluoranthene	--	130 J	--	75 J	--	310 J	4,300	
Benzo(k)fluoranthene	--	100 J	--	65 J	--	320 J	4,200	
Benzo(a)pyrene	--	85 J	--	60 J	--	250 J	1,700	
Indeno (1,2,3-cd) pyrene	--	55 J	--	39 J	--	--	920	
Dibenz(a,h)anthracene	--	--	--	--	--	--	1,800	
Benzo(g,h,i)perylene	--	58 J	--	42 J	--	--	--	
Acetophenone	--	--	--	--	--	--	--	
Pesticides/PCBs (µg/kg)								
beta-BHC	--	--	--	--	--	2.6 J	--	--
Aldrin	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	1.1 J	--	--	--	--	--
Dieldrin	--	1.2	25	--	--	3.9 J	11 J	--
4,4'-DDE	12	5.7	--	--	--	1.8 J	1.4 J	--
Endrin	--	--	--	--	--	--	--	--
Endosulfan II	--	3.3	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--
4,4'-DDT	5.7 J	4.3	--	--	--	2.5 J	--	--
Methoxychlor	14 J	--	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--
Endrin ketone	1.8 J	--	--	--	--	--	--	--
Chlordane	--	--	540	--	--	120 J	1,100	--
Isodrin	--	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	--	--	--	--
Aroclor-1260	--	--	320 J	--	--	--	--	--

See notes at end of table.

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

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

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

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

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

Analytical Batch Number:	R9861	R9861	R9861	R9861	R9861	R9861	R9861	R9861
Sample Location:	MPT-1-SB01	MPT-1-SB01	MPT-1-SB02	MPT-1-SB03	MPT-1-SB04	MPT-1-SB05	MPT-1-SB06	MPT-1-SB07
Sample Number:	01S00101	01S00101Dup	01S00201	01S00301	01S00401	01S00501	01S00601	01S00701
Date Sampled:	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95
Sample Depth (ft, bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Inorganics (mg/kg)								
Antimony	3.2 J	4.5 J	1.2 J	3.5 J	2.3 J	.03 J	.02 J	--
Arsenic	1.5 J	1.1 J	.94 J	.96 J	3.4	.87 J	1 J	.92 J
Barium	7.4 J	7.5 J	4.4 J	9.7 J	23 J	11.7 J	7.2 J	13.7 J
Beryllium	.12 J	.08 J	.08 J	--	.65 J	.07 J	.17 J	.13 J
Cadmium	.37 J	.38 J	--	--	1 J	.68 J	--	.3 J
Chromium	9.5	9.6	3.9	2.6	11	6.4	2.4	7.8
Cobalt	--	.97 J	.71 J	--	3.8 J	1.2 J	--	--
Copper	24.2	28.1	--	9.4	84.3	18.3	--	--
Lead	33.7	24.3	4.6	24.1	37.3	86.8	11.6	1.9 J
Mercury	.1	.06 J	--	.04 J	.06 J	.4	.11	.04 J
Nickel	6.8 J	9.4	1.7 J	2.2 J	12.2	5.5 J	3 J	3.1 J
Selenium	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--
Vanadium	12	10.3 J	4.3 J	5.1 J	6.6 J	9.6 J	7.6 J	7 J
Zinc	77.2 J	98.9 J	16.6 J	46.1 J	575 J	169 J	28.6 J	10.5 J
Cyanide	.46 J	.15 J	.12 J	.18 J	.18 J	.15 J	.11 J	.09 J

See notes at end of table.

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

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

Analytical Batch Number:	M8994	R9743	R9743	R7943	R9743	R9743	R9743	R9743
Sample Number:	MPT-1-MW01D	MPT-23-SS01	MPT-23-SS02	MPT-23-SS03	MPT-23-SS04	MPT-23-SS05	MPT-23-SS06	MPT-23-SS07
Sample Location:	01S00801	23S00101	23S00201	23S00303	23S00401	23S00501	23S00601	23S00701
Date Sampled:	21-MAY-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Inorganics (mg/kg)								
Antimony	0.77 J	--	--	--	--	--	--	--
Arsenic	0.33 J	0.75 J	1 J	0.7 J	1.1 J	1.3 J	1 J	7.2 J
Barium	3 J	4.2 J	5.8 J	6.6 J	8.1 J	6.7 J	4.1 J	97.6
Beryllium	0.06 J	0.08 J	0.1 J	0.08 J	0.09 J	0.05 J	0.05 J	0.43 J
Cadmium	--	--	0.33 J	--	0.28 J	--	--	--
Chromium	2.5	0.56 J	3.3 J	3 J	4.5 J	1.2 J	1.2 J	8.3 J
Cobalt	--	--	0.78 J	--	--	--	--	1.9 J
Copper	2.2 J	--	--	12.2 J	--	--	--	25.4 J
Lead	4.5	2.4 J	9.5	4 J	16 J	3 J	2.2 J	32.3 J
Mercury	--	--	--	--	--	--	--	--
Nickel	--	1.5 J	1.2 J	5.4 J	3 J	--	--	6 J
Selenium	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	0.14 J
Tin	--	--	--	--	2.2 J	--	--	--
Vanadium	2.6 J	3.4 J	3.6 J	2.7 J	4.5 J	2.9 J	2.6 J	12.5
Zinc	11.7	5.7 J	20.2 J	44 J	45.8 J	12 J	12.2 J	53.9 J
Cyanide	--	0.13 J	0.28 J	0.07 J	0.1 J	0.13 J	0.1 J	0.11 J

See notes at end of table.

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

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

Analytical Batch Number:	R9743	R9743	R9743	R9743	R9743	R9743	R9743	R9743
Sample Location:	MPT-23-SS08	MPT-23-SS08	MPT-23-SS09	MPT-23-SS10	MPT-23-SS11	MPT-23-SS12	MPT-23-SS13	MPT-23-SS14
Sample Number:	23S00801	23S00801DUP	23S00901	23S01001	23S01101	23S01201	23S01301	23S01401
Date Sampled:	05-APR-95	05-APR-95	05-APR-95	05-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Inorganics (mg/kg)								
Antimony	--	--	--	14.8 J	--	1.9 J	1.5 J	--
Arsenic	4.5 J	6.9 J	1.1 J	1.8 J	0.79 J	1.3 J	13.9 J	7.7 J
Barium	79.6	78.8	12.2 J	24 J	8.4 J	11.1 J	107	90.7
Beryllium	0.29 J	0.44 J	0.1 J	0.18 J	0.05 J	0.08 J	0.51 J	0.64 J
Cadmium	3 J	2.9 J	0.53 J	1.2 J	0.45 J	0.52 J	1.4 J	0.75 J
Chromium	10.9 J	12.1 J	6.1 J	18.2 J	4.3 J	12.4 J	38.6 J	16.3 J
Cobalt	1.9 J	1.6 J	--	1.2 J	--	--	--	--
Copper	39.4 J	40.5 J	13 J	28.5 J	3.1 J	20.5 J	456 J	38.9 J
Lead	28.9 J	90.5 J	48.4 J	225 J	7.9 J	116 J	82.9 J	37.3 J
Mercury	--	--	0.14	--	--	--	0.04 J	--
Nickel	7.1 J	13.3	3.4 J	8.7	2.1 J	6.4 J	81.3	12.2
Selenium	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--
Thallium	0.14 J	0.19 J	--	--	--	--	--	--
Tin	--	2.6 J	--	3.3 J	--	--	31.9	3.2 J
Vanadium	11.4 J	12.7	4.5 J	7.3 J	4.9 J	4.9 J	16.4	17.9
Zinc	62.3 J	115 J	87.8 J	307 J	17.8 J	254 J	161 J	55.9 J
Cyanide	0.22 J	0.15 J	0.14 J	0.07 J	0.07 J	0.1 J	0.21 J	0.16 J

See notes at end of table.

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

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

Analytical Batch Number:	R9743	R9743	R9743	R9743	R9743	M8775	M8775	M8780
Sample Location:	MPT-23-SS15	MPT-23-SS16	MPT-23-SS17	MPT-23-SS17	MPT-23-SS18	MPT-23-SS19	MPT-23-SS20	MPT-23-SS21
Sample Number:	23S01501	23S01601	23S01701	23S01701DUP	23S01801	23S01901	23S02001	23S02101
Date Sampled:	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	08-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Inorganics (mg/kg)								
Antimony	2.4 J	2.6 J	--	--	1.2 J	0.73 J	6.9 J	--
Arsenic	1.7 J	1.4 J	0.97 J	1.1 J	0.42 J	0.35 J	3.2	--
Barium	27.9 J	9.9 J	15.3 J	12.8 J	17.4 J	14.2 J	13.9 J	3 J
Beryllium	0.2 J	0.17 J	0.19 J	0.15 J	0.16 J	0.06 J	0.1 J	0.08 J
Cadmium	1.1 J	0.43 J	--	0.34 J	0.62 J	1.3	6.3	--
Chromium	12.2 J	22.3 J	4.8 J	5.7 J	9.3 J	8.2	9.4	10.2
Cobalt	--	--	--	--	--	--	2.6 J	--
Copper	22 J	51.2 J	11.4 J	12.1 J	24.3 J	40.4	2,930	3.1 J
Lead	79.8 J	44.4 J	11.2 J	13.1 J	10.5 J	47	831	7.3
Mercury	--	--	--	--	--	0.27	0.09	--
Nickel	5.1 J	40.7	2.2 J	3.9 J	2.6 J	9.7	55.6	1.7 J
Selenium	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	5.2	--
Thallium	--	0.14 J	--	--	--	--	--	--
Tin	3 J	2.7 J	--	--	3.2 J	10 J	196	--
Vanadium	6.9 J	10.2 J	4.4 J	3.8 J	10.8 J	3.1 J	4.9	7.4
Zinc	354 J	95.6 J	47.1 J	62.1 J	32.7 J	124	5,910	9
Cyanide	0.11 J	0.11 J	--	--	--	--	--	--

See notes at end of table.

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

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

Analytical Batch Number:	M8780	M8780	M8775	M8775	M8775	M8775	M8775	M8775
Sample Location:	MPT-23-SS22	MPT-23-SS23	MPT-23-SS24	MPT-23-SS25	MPT-23-SS26	MPT-23-SS27	MPT-23-SS27	MPT-23-SS28
Sample Number:	23S02201	23S02301	23S02401	23S02501	23S02601	23S02701	23S02701DUP	23S02801
Date Sampled:	08-APR-95	08-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Inorganics (mg/kg)								
Antimony	--	--	3.2 J	--	1 J	0.76 J	--	0.99 J
Arsenic	1.7 J	2.5	0.88 J	0.2 J	0.74 J	0.67 J	0.67 J	1.1 J
Barium	8 J	28 J	126	15.3 J	60.4	9.8 J	9.4 J	14 J
Beryllium	0.11 J	0.14 J	1.9	0.14 J	0.88 J	0.19 J	0.2 J	0.24 J
Cadmium	--	2.6	1.5	--	--	--	--	--
Chromium	10	30	28.3	10.9	31.2	7.7	7.9	12.8
Cobalt	--	1.2 J	8.4 J	--	5.1 J	--	--	1.4 J
Copper	2.3 J	236	52.5	15.6	46.3	6.7	4.3 J	10.3
Lead	4.5	136	41.8	16.9	91.9	27.4	17.5	39.6
Mercury	--	0.08	--	--	--	--	--	--
Nickel	2.7 J	37.6	19.3	1.9 J	22.8	2.2 J	4.3 J	9.9
Selenium	--	--	--	--	--	--	--	--
Silver	--	1.5 J	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--
Tin	--	7.9 J	4.5 J	2.4 J	3.6 J	2.5 J	2.3 J	--
Vanadium	11.8	13.2	23.4	4 J	10.7	4.5	5.4	7.1
Zinc	7.3	815	301	91.2	1,080	85.2	92.8	108
Cyanide	--	--	--	--	--	--	--	--

See notes at end of table.

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

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

Analytical Batch Number:	M8994	M8994	M8780	M8780	M8780	M8780	M8780	M8780
Sample Location:	MPT-23-MW07S	MPT-23-MW07S	MPT-24-SS01	MPT-24-SS02	MPT-24-SS03	MPT-24-SS04	MPT-24-SS04	MPT-24-SS05
Sample Number:	23S02901	23S02901DUP	24S00101	24S00201	24S00301	24S00401	24S00401DUP	24S00501
Date Sampled:	20-MAY-95	20-MAY-95	08-APR-95	08-APR-95	08-APR-95	08-APR-95	08-APR-95	08-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Inorganics (mg/kg)								
Antimony	6.2	4.9	--	--	--	11.3 J	6.2 J	--
Arsenic	1.1 J	1.8 J	--	1.7 J	--	2 J	2 J	--
Barium	14 J	16.1 J	24.6 J	13.5 J	11 J	17.3 J	42.7	9.8 J
Beryllium	0.34 J	0.43 J	0.47 J	0.12 J	0.13 J	0.14 J	0.21 J	0.11 J
Cadmium	1.1	0.87 J	--	--	--	--	--	--
Chromium	40.4	44	9.4	5.1	4.9	4.4	7.4	9.2
Cobalt	2.3 J	2.8 J	1.8 J	--	--	--	1.2 J	--
Copper	25.4	22.6	63.7	12.1	6.5	78.2	138	28.9
Lead	216	204	34.2	44.5	18	29.3	34.9	19.6
Mercury	--	0.1 J	--	--	--	--	--	--
Nickel	6.5 J	8.5	9.1	2 J	2.3 J	2.1 J	4.2 J	3 J
Selenium	0.41 J	0.38 J	--	--	--	--	--	--
Silver	--	--	--	--	--	0.58 J	0.79 J	--
Thallium	--	--	--	--	--	--	--	--
Tin	--	19.5	13	2.2 J	3.8 J	6.4 J	12.1	1.9 J
Vanadium	10.3 J	11.9	7.9	4 J	5.4	7.4	9.7	5.4
Zinc	445	442	173	58.5	34.5	51.8	117	53.7
Cyanide	--	--	--	1.1 J	--	--	--	--

See notes at end of table.

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

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

Analytical Batch Number:	M8867	M8985	M8985	M8793	M8793	M8793	M8793	M8793
Sample Location:	MPT-24-SS06	MPT-24-MW01S	MPT-24-MW01S	MPT-25-SS01	MPT-25-SS02	MPT-25-SS03	MPT-25-SS04	MPT-25-SS04
Sample Number:	24S00601	24S00701	24S00701DUP	25S00101	25S00201	25S00301	25S00401	25S00401DUP
Date Sampled:	24-APR-95	19-MAY-95	19-MAY-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Inorganics (mg/kg)								
Antimony	--	--	1.3	0.95 J	--	--	--	--
Arsenic	0.69 J	2.7	2.8	0.96 J	0.93 J	0.79 J	0.53 J	1.1 J
Barium	13 J	95.8	120	14.9 J	19.8 J	8.6 J	6.9 J	10.8 J
Beryllium	0.06 J	1.2	1.3	0.18 J	0.3 J	0.13 J	0.08 J	0.16 J
Cadmium	--	0.93 J	1 J	--	--	--	--	--
Chromium	3.6	37.4	44.1	9.9 J	16 J	5.5 J	3.9 J	3.9 J
Cobalt	--	14	16	1.6 J	--	1.2 J	--	--
Copper	8.2	411	449	23.9 J	10.4 J	7.6 J	8.1 J	10.8 J
Lead	16.6	109	93.1	39.2 J	17.6 J	6.6 J	9.6 J	9.4 J
Mercury	--	0.24 J	0.1 J	--	--	--	--	--
Nickel	--	18.1	20.4	4 J	12.1 J	2.8 J	2.2 J	2.5 J
Selenium	--	0.54 J	0.67 J	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--
Tin	2.6 J	9.2 J	9.6 J	4.3 J	--	--	--	2.4 J
Vanadium	2.6 J	19.6	22.6	4.3 J	16.6 J	5.9 J	3.1 J	4.1 J
Zinc	35.7	1,450	1,430	428 J	63.4 J	25.9 J	21.8 J	33.1 J
Cyanide	--	--	--	--	--	0.13 J	--	1.1 J

See notes at end of table.

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

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

Analytical Batch Number:	M8793	M8793	M8793	M8793	M8793	R9738	R9738	R9738
Sample Location:	MPT-25-SS05	MPT-25-SS06	MPT-25-SS07	MPT-25-SS08	MPT-25-SS09	MPT-44-SS01	MPT-44-SS01	MPT-44-SS02
Sample Number:	25S00501	25S00601	25S00701	25S00801	25S00901	44S00101	44S00101DUP	44S00201
Date Sampled:	10-APR-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95	05-APR-95	05-APR-95	05-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Inorganics (mg/kg)								
Antimony	--	0.77 J	--	0.46 J	--	2.5 J	2.8 J	1.9 J
Arsenic	0.6 J	0.61 J	1.3 J	0.75 J	0.92 J	1.3 J	1.4 J	1 J
Barium	14.1 J	9.6 J	9 J	15.9 J	10.5 J	97.2	35.1 J	9.2 J
Beryllium	0.26 J	0.09 J	0.1 J	--	0.1 J	0.11 J	0.08 J	0.11 J
Cadmium	--	--	--	--	--	1.5	1.4	0.7 J
Chromium	11 J	4.7 J	4.1 J	14.2 J	6.6 J	21.8	27.7	9.9
Cobalt	1.4 J	--	--	--	--	--	--	--
Copper	34.4 J	10.1 J	7.2 J	16.9 J	4.1 J	242	292	34.4
Lead	9.8 J	5.6 J	5.8 J	9.5 J	5.9 J	61.6	66.6	59.7
Mercury	--	--	--	--	--	7.9	5.9	0.08
Nickel	4.3 J	--	1.9 J	--	2.6 J	11	11.7	2.7 J
Selenium	0.27 J	--	--	--	--	--	--	--
Silver	--	--	--	5.8 J	--	23.9 J	21.7 J	--
Thallium	--	--	--	--	--	--	--	--
Tin	5.8 J	2.4 J	3 J	--	1.7 J	11.9 J	11.7 J	--
Vanadium	8 J	4.8 J	3.8 J	13.9 J	10.4 J	9 J	8.9 J	4.7 J
Zinc	86.6 J	19 J	24.7 J	31 J	35.3 J	396	386	136
Cyanide	--	--	--	--	--	0.11 J	0.25 J	0.07 J

See notes at end of table.

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

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

Analytical Batch Number:	R9738	R9738	R9738	R9738	R9738	R9738	R9738	R9955
Sample Location:	MPT-44-SS03	MPT-44-SS04	MPT-44-SS05	MPT-44-SS06	MPT-44-SS07	MPT-44-SS08	MPT-44-SS09	MPT-44-MW03S
Sample Number:	44S00301	44S00401	44S00501	44S00601	44S00701	44S00801	44S00901	44S01001
Date Sampled:	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	24-MAY-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Inorganics (mg/kg)								
Antimony	1.1 J	--	--	1.9 J	1.7 J	2.6 J	--	--
Arsenic	0.68 J	0.8 J	0.7 J	0.61 J	0.79 J	1 J	1.1 J	0.65 J
Barium	11 J	9.1 J	5.8 J	7.8 J	12.5 J	29.1 J	8 J	11.9 J
Beryllium	0.07 J	0.08 J	0.07 J	0.06 J	0.11 J	0.11 J	0.17 J	0.09 J
Cadmium	0.52 J	--	--	0.39 J	0.47 J	0.73 J	2.2	0.44 J
Chromium	5	3.4	2.9	23.6	7.4	8.7	5	2.8
Cobalt	--	--	--	--	--	--	--	0.9 J
Copper	29.8	16.4	10	17.1	26.4	193	13.2	218
Lead	26.7	20.1	13	23.7	60.6	38.4	25.6	5.9
Mercury	0.16	0.12	--	0.07	0.25	0.39	--	0.04 J
Nickel	3.6 J	3.1 J	1.7 J	2.8 J	3.8 J	11.5	2.2 J	45
Selenium	--	--	--	--	--	--	--	--
Silver	0.86 J	0.51 J	--	--	1 J	2.6 J	--	--
Thallium	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	5 J
Vanadium	3.5 J	8.5 J	3.8 J	5.8 J	5.7 J	8.4 J	5.9 J	3 J
Zinc	85.2	59.6	36.1	107	98.1	129	983	79.9
Cyanide	0.1 J	0.21 J	0.07 J	0.2 J	0.17 J	0.21 J	0.07 J	0.09 J

See notes at end of table.

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

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

Analytical Batch Number:	R9712	R9712	R9712	R9712	R9712	R9712	R9712
Sample Number:	MPT-45-SS01	MPT-45-SS01	MPT-45-SS02	MPT-45-SS03	MPT-45-SS04	MPT-45-SS05	MPT-45-SS06
Sample Location:	45S00101	45S00101DUP	45S00201	45S00301	45S00401	45S00501	45S00601
Date Sampled:	29-MAR-95	29-MAR-95	29-MAR-95	29-MAR-95	29-MAR-95	29-MAR-95	29-MAR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Inorganics (mg/kg)							
Antimony	--	--	--	--	5.9 J	--	--
Arsenic	0.97 J	0.85 J	1.2 J	1.5 J	2 J	0.28 J	0.99 J
Barium	34.3 J	36.6 J	9.1 J	10.3 J	23.4 J	4.3 J	79.2
Beryllium	0.07 J	0.07 J	0.14 J	0.07 J	0.24 J	0.07 J	0.12 J
Cadmium	1 J	1 J	--	--	0.93 J	--	2.1
Chromium	8	6.7	7.5	3.8	7.4	4	13.5
Cobalt	1.2 J	1.2 J	1 J	0.9 J	1.4 J	0.61 J	1.5 J
Copper	727	777	17.9	28.4	128	5.3	397
Lead	17.9	20.3	23.1	19.6	54.6	3.3	59
Mercury	0.49	0.51	0.1	0.13	0.37	0.05 J	2
Nickel	41.4	38.7	7.5 J	4 J	15.2	1.5 J	20.9
Selenium	--	--	--	--	--	--	0.58 J
Silver	1.3 J	2.1	--	--	1.2 J	--	19.3
Thallium	--	--	--	--	--	0.15 J	--
Tin	5.7 J	9.2 J	--	4.4 J	5.7 J	--	32.6
Vanadium	4.4 J	4.5 J	10.3 J	12	17.7	3.8 J	5 J
Zinc	131	151	45	71.1	177	4.7	277
Cyanide	0.12 J	0.18 J	0.12 J	0.05 J	0.15 J	0.06 J	0.2 J

See notes at end of table.

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

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

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

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

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

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

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

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

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

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

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

See notes at end of table.

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

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

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

See notes at end of table.

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

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

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

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

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

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

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

See notes at end of table.

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

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

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

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

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

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

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

See notes at end of table.

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

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

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

See notes at end of table.

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

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

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

See notes at end of table.

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

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

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

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

ATTACHMENT 2

CONSENT ORDER NO. 97-1873 – REMOVAL OF PRIMARY CLARIFIERS

DEPARTMENT OF THE NAVY
NAVY PUBLIC WORKS CENTER JACKSONVILLE
JACKSONVILLE, FLORIDA 32212-0030

5090
Ser 300/0006

JAN 0 8 1999

Florida Department of Environmental Protection
Northeast District
Attn: Mr. Ernest E. Frey, P.E.
7825 Baymeadows Way
Suite B200
Jacksonville, FL 32256-7590

Dear Mr. Frey:

SUBJECT: QUARTERLY REPORT NO. 1, OGC CONSENT ORDER NO. 97-1873, NAVAL STATION MAYPORT WWTP - DUVAL COUNTY, FDEP PERMIT NO. DO16273563.

This status report is submitted to fulfill the Reporting and Sampling requirements contained in paragraph 23 of our Consent Agreement dated November 30, 1998. We started our aggressive program to correct plant deficiencies in November 1997. OMI has made its final treatment plant diagnostic evaluation and has closed out 191 of the 192 deficiencies. The last deficiency, cleaning the primary clarifiers, is discussed below.

Enclosure (1) is the Compliance Program from Paragraph 19 of the Consent Agreement showing scheduled dates for completion and actual completion dates. All items from Paragraph 19 have been completed.

Paragraph 26 of the Consent Order requires the removal of oily waste and sludge from the unused clarifiers/holding tanks by April 1, 1999. The pre-construction meeting for this work is scheduled to occur by January 15, 1998. Water from a holding pond that usually passes through these primary clarifiers will be diverted to a nearby manhole that eventually drains to the oily wastewater collection system. Once the piping has been installed for this diversion, the cleaning of the primary clarifiers should be finished shortly thereafter.

As requested in paragraph 24 of the Consent Order, a copy of the updated Operation and Maintenance Manual is provided with this letter.

5090
Ser 300/0006

Since the effective date of the Consent Order, November 30, 1998, we have not exceeded our FDEP permit effluent limits.

Our point of contact is Mr. Fred Burns at (904) 542-4548, extension 8312.

Sincerely,

R. EL-MOSLIMANY
Lieutenant, CEC, U.S. Navy
Deputy Environmental
Department Head
By Direction of the
Commanding Officer

Enclosure: 1. Compliance Program Table
2. Operation and maintenance Manual

Copy to: (w/o Encl 2)
COMNAVBASE Jacksonville (N4)
NAVSTA Mayport (N4)
FDEP, NE District
Jacksonville Regulatory and
Environmental Services Department
LCJ (Chris Taylor)

DEPARTMENT OF THE NAVY
NAVY PUBLIC WORKS CENTER JACKSONVILLE
JACKSONVILLE, FLORIDA 32212-0030

5090
Ser 300/0063
MAR 11 1999

CERTIFIED RETURN RECEIPT REQUESTED

Florida Department of Environmental Protection
Northeast District
Attn: Mr. Frey
7825 Baymeadows Way
Suite B200
Jacksonville, FL 32256-7590

SUBJECT: QUARTERLY REPORT NO. 2 AND REQUEST FOR TERMINATION OF OGC CONSENT AGREEMENT NO. 97-1873, NAVAL STATION MAYPORT WWTP - DUVAL COUNTY, FDEP PERMIT NO. FLA011427

This second and final quarterly report is submitted to fulfill the Reporting requirements contained in paragraph 23 of our Consent Agreement dated November 30, 1998.

Enclosure (1) is the Compliance Program from Paragraph 19 of the Consent Agreement showing scheduled dates for completion and actual completion dates. All items from Paragraph 19 have been completed on or before the deadline date.

Paragraph 26 of the Consent Agreement requires the removal of oily waste and sludge from the unused clarifiers/holding tanks by April 1, 1999. This work was completed by January 31, 1999.

As required by Paragraph 29 of the Consent Agreement, enclosure (2) is a check for $250.00.

Since our last quarterly report dated January 08, 1999, we have not exceeded our FDEP permit effluent limits.

5090
Ser 300/0063
MAR 1 1 1999

We have met all of our obligations and now request that the aforementioned Consent Agreement be terminated. We also request that such termination be evidenced in writing.

Our point of contact is Mr. David Kiebler at (904) 542-4548, extension 8300.

Sincerely,

R. G. SNOW
Commander, CEC, U.S. Navy
Commanding Officer, Acting

Enclosure: (1) Compliance Program Table
(2) Check for $250.00 payable to FDEP

Copy to: (w/o Encl 2)
FDEP, NE District
Jacksonville Regulatory and
Environmental
COMNAVREG SE Jacksonville (N4)
NAVSTA Mayport (N4)
LCJ (Chris Taylor)

ATTACHMENT 3

FIELD DATA SHEETS

Tetra Tech NUS, Inc.

DAILY ACTIVITIES RECORD

PROJECT NAME: _____ **PROJECT NUMBER:** _____

CLIENT: _____ **LOCATION:** _____

DATE: _____ **ARRIVAL TIME:** _____

Tt NUS PERSONNEL: _____ **DEPARTURE TIME:** _____

CONTRACTOR: _____ **DRILLER:** _____

ITEM	QUANTITY ESTIMATE	QUANTITY TODAY	PREVIOUS TOTAL QUANTITY	CUMULATIVE QUANTITY TO DATE

COMMENTS: _____

_____

_____

_____

APPROVED BY:

_____ _____

Tt NUS REPRESENTATIVE DRILLER

DATE: _____

INSTRUMENT CALIBRATION SHEET

PROJECT NAME :

PROJECT NUMBER :

CALIBRATION DATE	INSTRUMENT/MODEL	Serial #	STANDARDS USED	Lot #	EXP. DATE	PRE READING	FINAL READING	SIGNATURE + COMMENTS

Tetra Tech NUS, Inc.

Project Name: _____ **Project No.:**

Location: _____ **Personnel:**

Weather Conditions: _____ **Measuring Device:**

Tidally Influenced: **Remarks:**

Well ID	Date	Time	Total Depth (feet)*	Water Level (feet)*	Free Product (Yes/No)	Free Product Thickness (feet)*	Comments

* All measurements to the nearest 0.01 foot

Tetra Tech NUS / FDEP Groundwater Sampling Sheet

SITE NAME:	SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE:

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:

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):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (Liters):

TIME	VOLUME PURGED (Liters)	CUMUL. VOLUME PURGED (Liters)	PURGE RATE (lpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (^{O}C)	COND. (μmhos/cm or μS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)

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:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
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, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: _____
Project No.: _____

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other: _____
[] QA Sample Type: _____

Sample ID No.: _____
Sample Location: _____
Sampled By: _____
C.O.C. No.: _____

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: / Time: / Method: / Monitor Reading (ppm):	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

COMPOSITE SAMPLE DATA:

Date: / Method: / Monitor Readings (Range in ppm):	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

ATTACHMENT 4

NAVSTA MAYPORT IDW SOP

Standard Operating Procedure for Investigative Derived Waste

1. At Naval Station Mayport (NAVSTA), Investigative Derived Waste is defined as soil or water that is generated from the remedial investigation of contaminated sites. IDW can include, but not be limited to, drill cuttings, purge water, soil, sediment or decontamination water. Operations usually associated with IDW include soil and groundwater sampling, monitoring well installation and decontamination of equipment used for sampling and installation.

2. IDW will be containerized when generated and kept at the site of generation as coordinated with the tenant occupying the area. Drums can be moved to other locations in the general area to accommodate NAVSTA personnel movement or requirements within reason. A central location can be identified prior to the sampling event if in the best interest of the government.

3. IDW drums shall be clearly identified with “Awaiting Analytical” sticker visible containing contractor name and phone number, generation location, date of generation, NAVSTA point of contact, and contents of drum. A drum log using the format of Enclosure (1) shall be completed for each drum and provided to the NAVSTA point of contact when drum is generated. Drums shall be inspected weekly until disposal using Enclosure (2) and inspection form shall be faxed to NAVSTA Environmental Department. When sample results have been received, the analytical shall be provided to the NAVSTA point of contact for waste and disposal determination. The contractor shall be responsible for disposal of all IDW. IDW with analytical results less than Cleanup Target Levels identified in 62-777 Florida Administrative Code may be disposed onsite if sufficient soil is at location. IDW may not be disposed in storm drain or on an impervious surface. In certain conditions, non-hazardous IDW may be disposed through a sewer lift station to the Wastewater Treatment Plant with prior written approval by the Utility Engineer at Public Works Center Jacksonville.

4. If the IDW is identified as hazardous waste, the contractor shall manage drums per the NAVSTA Hazardous Waste Management Plan (SOPA(ADMIN) MYPTINST 5090.1F) and shall be disposed through the NAVSTA Hazardous Waste Storage Facility with the contractor paying disposal cost to PWC (2005 cost approximately $1.75/pound). IDW that is not hazardous waste but does not meet the Target Levels to be disposed onsite, the contractor shall arrange for the IDW to be legally transported and disposed at an approved facility. The contractor will coordinate with NAVSTA personnel to sign the non-hazardous manifest as generator.

Naval Station Mayport Investigative Derived Waste Drum Log

Contractor Company Name: _____

Individual Name: _____

Location Name: _____
(i.e. SWMU number, Bldg number)

Date of generation: _____

Expected date of results: _____

Drum Number: _____
(Use site # and unique drum number)

Type of Waste (i.e. drill cuttings, purge water)	**Quantity of Waste** (gals/lbs)	**Date**	**Individual's Initials/ Name**

Enclosure (1)

Revised 1/24/2006

WEEKLY INVESTIGATIVE DERIVED WASTE INSPECTION CHECKLIST
NAVAL STATION MAYPORT

This form is to be completed legibly by the contractor when conducting weekly inspections of IDW drums.

All discrepancies shall be corrected immediately. Failure to correct discrepancy(s) shall result in contractual action.

Date: _____

Inspector: _____

Company Name: _____

		YES	NO
1.	Are all containers properly labeled/dated?		
2.	Are containers compatible with contents?		
3.	Are all containers in good condition?		
4.	Are containers closed?		
5.	Are lids/caps/bolts/rings tight?		
6.	Are any containers dated longer than 60 days?		
7.	Number of containers inspected. _____		
Comments:			
Date/nature of repairs or remedial actions:			
Copy to: NAVSTA Mayport N4E FAX: 270-7398 (EACH FRIDAY)			

Enclosure (2)

Revised 1/24/2006