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SOLID WASTE MANAGEMENT UNIT ASSESSMENT FOR TETRACHLOROETHENE RELEASE NEAR BUILDING 191 NS MAYPORT FL

4/17/1996

ABB ENVIRONMENTAL

ABB

April 17, 1996

Southern Division
Naval Facilities Engineering Command
ATTN: Mr. David Driggers
P.O. Box 190010
2155 Eagle Drive
North Charleston, SC 29418

Dear David:

SUBJECT: Solid Waste Management Unit Assessment Report
for Tetrachloroethene Release near Building 191
U.S. Naval Station, Mayport, Florida
CLEAN District I CTO No. 0028
Contract No. N62467-89-D-0317/028

INTRODUCTION

The following report presents the site description, background, field investigative activities, findings, preliminary risk evaluation, and conclusions and recommendations for the assessment of the possible release of a solvent, tetrachloroethene, to the environment at Building 191, U.S. Naval Station (NAVSTA), Mayport, Florida. Confirmation of the release at concentrations that exceed human health or ecological risk-based screening criteria are criteria used to recommend the site be designated as a solid waste management unit (SWMU) or area of concern (AOC) under the NAVSTA, Mayport Resource Conservation and Recovery Act (RCRA) Corrective Action program. Figures and tables described in this report are provided in Attachments A and B, respectively. A chronology of events and correspondence related to the possible release of the solvent at Building 191 are presented in Attachment C, Table C-1.

NAVSTA, Mayport is located in northeastern Duval County, Florida, at the confluence of the St. Johns River and the Atlantic Ocean (Figure 1). The location of Building 191 at NAVSTA, Mayport relative to other sites designated as SWMUs within the Group III SWMUs are shown on Figure 2. Building 191, which houses the Fleet Industrial Supply Center, is located on the south side of Massey Avenue in central NAVSTA, Mayport (Figure 3).

Building 191 is not listed in NAVSTA, Mayport's Hazardous and Solid Waste Amendment (HSWA) permit as either an SWMU or AOC. The purpose of the assessment at Building 191 was to collect surface and subsurface soil samples and groundwater samples for laboratory analysis. The analytical data are used to confirm whether or not a hazardous material(s) has been released to the environment. Release of a contaminant(s) to the environment at Building 191 is suspected but not confirmed.

The sampling event is not intended to assess the horizontal and vertical extent of contamination, if present. Data analysis has been focused to support one of the following recommendations for Building 191: (1) take no further action, (2) investigate the nature and extent of contamination by performing an Resource Conservation and Recovery Act (RCRA) facility investigation (RFI), or (3) implement an interim measure to remediate a potential threat to human or ecological receptors.

SITE DESCRIPTION AND BACKGROUND

Below are paragraphs describing the Building 191 site and background information pertaining to a release of tetrachloroethene near Building 191.

Site Description. Storage areas at Building 191 are used to support ship and shore services at NAVSTA, Mayport by providing areas to receive, temporarily store, and distribute supplies. Outlying building are used to warehouse hazardous materials such as solvents and compressed gases. These buildings or structures include two quonset buildings (Buildings 264 and 281), an open-sided covered structure with concrete floor (Building 191-A), and an aluminum-constructed structure (Building 191-C).

The topography of the land surface in the vicinity of Building 191 slopes gently toward the southwest. Three SWMUs are located in the vicinity of Building 191: SWMU 46, the Shore Intermediate Maintenance Activity (SIMA), and SWMUs 20 and 21, the Hobby Shop Drain and Scrap Storage Areas (Figure 2). SIMA is located to the north, across Massey Avenue from Building 191. The Hobby Shop (Building 414) is located approximately 270 feet to the east of Building 191. South of Building 191 is part of the station's golf course.

Background. An accident report dated May 4, 1993, indicates that approximately 25 to 30 gallons of tetrachloroethene (a solvent used for drycleaning) were released from a punctured 55-gallon drum onto asphalt pavement (Attachment C). The release was reported to have been contained before it could enter a nearby stormwater inlet located approximately 130 feet from the release (Attachment C; Accident Report, May 4, 1993). The release was located north of Building 191 between Buildings 281 and 191-A (Attachment C; Public Works Center Memorandum, May 4, 1994). The approximate areal extent of the release near Building 191-A is shown on Figure 3 and is based on the map in the Public Works Center Memorandum (May 4, 1994).

In correspondence dated August 10, 1994, from Lieutenant Commander Douglas P. Tomlinson, Staff Civil Engineer, Department of the Navy, to Mr. Erney Frey, Northeast District, Florida Department of Environmental Protection (FDEP), Lt. Tomlinson reports that analytical results from samples consisting of asphalt, limerock, and soil collected from within the release area "show that the area is clean of contamination and requires no further action" (Attachment C).

A contamination assessment report was prepared by Environmental Science and Engineering, Inc. (ESE, 1994) for the assessment of a potential release(s) of diesel fuel from leaking underground lines from an aboveground storage tank (300-gallon capacity) located on the southern side of Building 191. The assessment by ESE consisted of installing three piezometers and four monitoring wells, collecting information on water levels in the vicinity of Building 191, determining groundwater flow directions, and collecting groundwater samples for chemical analysis from the monitoring wells.

Tetrachloroethene (22 micrograms per liter [$\mu g/\ell$]) and trichloroethene (5 $\mu g/\ell$) were detected in a groundwater sample collected by ESE from monitoring well MW-4 (ABB Environmental Service, Inc. [ABB-ES] designation MPT-TC-MW04S), located on the northern side of Building 191 (Figure 3) (ESE, 1994). Groundwater samples collected from monitoring wells MW-1, MW-2, and MW-3 (ABB-ES

designations MPT-TC-MW01S, MPT-TC-MW02S, and MPT-TC-MW03S, respectively), located south and southwest of Building 191, did not contain detectable concentrations of tetrachloroethene or trichloroethene (ESE, 1994). Groundwater flow direction, as determined by ESE, was to the southwest.

Subsequent to the ESE report, ABB-ES was requested to prepare a workplan to assess whether hazardous materials have been released to the environment. A site visit was made by ABB-ES personnel in March 1995 to select proposed sampling locations at the site. The piezometers and monitoring wells installed by ESE were still located at Building 191 and based on their appearance were assumed to be functional. A sampling and analysis workplan was developed by ABB-ES (1995b) based upon the site visit and the results of the assessment conducted by ESE.

Soil and groundwater sampling was proposed to assess whether or not hazardous constituents have been released at the site and to obtain a sufficient number of samples to evaluate potential exposure pathways and conduct a preliminary risk screening. There are no ecological receptor pathways because the sites are paved; therefore, risks to ecological receptors were not considered.

REPORT FORMAT

This report provides results of sampling activities at Building 191. The report includes a summary of field investigative activities, findings, a preliminary risk evaluation, and recommendations. The report contains the following elements:

- Field investigations present data collection activities and deviations from the workplan (ABB-ES, 1995b), if any, that occurred during the assessment of the possible solvent release at Building 191.

- Findings present a brief characterization of the geologic and hydrologic setting and laboratory analytical results for surface and subsurface soil and groundwater samples.

- The preliminary risk evaluation presents an assessment of chemicals detected in surface and subsurface soil and groundwater samples. The preliminary risk evaluation includes comparison of the chemical concentrations detected in environmental samples with human health screening criteria (benchmarks) for each environmental medium.

- Recommendations present a suggested action(s) based on interpretation of the data collected during the field activities, the laboratory analytical results, and the preliminary risk evaluation.

A general overview of the environmental setting of NAVSTA, Mayport and methods used conducting the assessment at Building 191 is available in the RCRA Corrective Action Program General Information Report (GIR) for NAVSTA, Mayport (ABB-ES, 1995a). This report provides information generated during the RCRA Corrective Action program at NAVSTA, Mayport and includes background sampling information, analytical methodology, risk assessment approach, and the ecological characterization of NAVSTA, Mayport. The NAVSTA, Mayport GIR also contains a summary of published information including geography, physiography, demographics, climate, regional geology, and hydrogeology; methods and procedures used to conduct the field activities; methodology used to validate analytical data and conduct risk assessments; and characterization of stationwide background conditions including surface and subsurface soil, surface water, sediment, and groundwater that is used to evaluate the data from each SWMU investigation. Because the information contained in the GIR (ABB-ES, 1995a) is common to all

of NAVSTA, Mayport's SWMU groups, which includes areas adjacent to Building 191, it will not be repeated in this report.

FIELD INVESTIGATION

Except as noted within this report, field activities were conducted in general accordance with the approved NAVSTA, Mayport RFI Workplan (ABB-ES, 1991). The general operating guidelines for access, security, and field team organization implemented during investigation activities were consistent with RFI requirements as described in Chapter 2.0, Site Management Plan, of the RFI Workplan, Volume II (ABB-ES, 1991). In addition, Section 3.1, General Site Operations, of the RFI Workplan, Volume II, provides descriptions of field personnel responsibilities, sample identification, sample management, chain of custody, project documentation, field changes, corrective actions, decontamination, waste management, and other general project standards and procedures. These general requirements were followed during sampling activities at Building 191.

Field activities to assess the possible release of a solvent at Building 191 included the following: (1) field screening using a TerraProbe^{SM} to collect groundwater samples for onsite field screening using a portable gas chromatograph (GC); (2) collecting surface and subsurface soil samples; (3) installing monitoring wells; (4) collecting groundwater samples; and (5) submitting these environmental samples for laboratory analysis (ABB-ES, 1995b).

Below is a description of the field activities conducted in the vicinity of Building 191. The location of Building 191-A and the reported release relative to the sampling locations are shown on Figures 3 and 4.

Soil Sampling. Surface and subsurface soil sampling was accomplished as described in the NAVSTA, Mayport RFI Workplan (ABB-ES, 1991), and Subsection 2.1.1, Soil Sampling, of the GIR (ABB-ES, 1995a). Surface and subsurface soil samples were collected on May 31, 1995, from areas adjacent to Building 191 (Figure 4). Surface and subsurface soil samples were collected to assess whether or not hazardous constituents have been released to these media.

The soil samples consist of four surface and subsurface soil sample pairs and one duplicate for each medium. Surface soil samples were collected from the land surface to a depth of 1 foot, and subsurface soil samples were collected from 2 to 3 feet below land surface (bls).

Groundwater Field Screening. Field screening of groundwater using a TerraProbe^{SM} was accomplished as described in Paragraph 2.1.4.1, Terraprobe^{SM} Groundwater Sampling, of the NAVSTA, Mayport GIR (ABB-ES, 1995a). Groundwater field screening was proposed (ABB-ES, 1995b) to assess the area where the tetrachloroethene was reported to have been released (please refer to Attachment C) and in the vicinity of monitoring wells where groundwater samples were collected and contained tetrachloroethene and trichloroethene (ESE, 1994). The purpose of the groundwater field screening program was to select locations for installing monitoring wells that would be used in collecting groundwater samples that would be used to confirm the presence of hazardous constituents, if any.

Fifteen groundwater field screening samples (excluding duplicates) were collected in the vicinity of Building 191 using the TerraProbe^{SM} direct-push technology (Figure 4). Groundwater samples were collected from 4 to 6 feet bls. Each of the groundwater samples was then transported directly to an onsite field screening laboratory for analysis.

Monitoring Well Installation. Drilling and well installation was accomplished as described in the NAVSTA, Mayport RFI Workplan (ABB-ES, 1991) and Subsection 2.1.1, Monitoring Well and Piezometer Installation, of the NAVSTA, Mayport GIR (ABB-ES, 1995a). The purpose of the monitoring wells was to allow the collection of groundwater samples that are representative of the water table zone of the surficial aquifer.

Previously, four shallow wells (MW-1 through MW-4, designated MPT-TC-MW01S, MPT-TC-MW02S, MPT-TC-MW03S, and MPT-TC-MW04S, respectively, by ABB-ES) and one deep monitoring well (MW-1D, designated MPT-TC-MW01I by ABB-ES) were installed by ESE to assess a suspected release of diesel fuel at Building 191 (ESE, 1994) (Figures 3 and 4).

Two monitoring wells (MPT-TC-MW05S and MPT-TC-MW06S) were installed on May 31, 1995, by ABB-ES at Building 191 (Figure 4). The new monitoring wells were developed on June 2, 1995. Boring logs for the two newly installed monitoring wells at Building 191 and at nearby SWMUs 20 and 21 (Figure 4) are in Attachment D. The boring logs for monitoring wells at SWMUs 20 and 21 are included with this report because water level data from these wells were used in determining the direction of groundwater flow in the vicinity of Building 191.

Groundwater Sampling. Groundwater sampling was accomplished as described in Subsection 2.1.4, Groundwater Sampling, of the NAVSTA, Mayport GIR (ABB-ES, 1995a). Six groundwater samples were collected on June 26 and 27, 1995, from the existing and newly installed monitoring wells. The shallow water table zone monitoring wells are screened at depths which range from approximately 2 to 15 feet bls in the surficial aquifer. The purpose of the groundwater samples was to confirm whether or not there has been a release of hazardous constituents to groundwater in the vicinity of Building 191.

Monitoring well MPT-TC-MW01I (installed by ESE), which is screened from approximately 35 to 40 feet bls, was not sampled because of an obstruction in the well casing.

Groundwater sampling was accomplished using low-flow sampling (less than 1 liter a minute). This groundwater sampling procedure is a modification of previous sampling methods; however, it closely resembles a method proposed by U.S. Environmental Protection Agency (USEPA) (1994). Prior to groundwater sample collection, the monitoring well was slowly purged with the intake hose (disposable Teflon™) of a peristaltic pump at the middle of the well screen interval. Purging was conducted to remove stagnant water within the well screen interval without causing the resuspension of silts and clays. Turbidity, temperature, pH, and specific conductance were measured during purging to ensure good hydraulic continuity between the well and the surrounding aquifer matrix. Each monitoring well was purged until temperature, specific conductance, and pH had stabilized and at least three well volumes of water were removed. Also, purging continued until a turbidity of 5 nephelometric turbidity units (NTUs) or less was achieved.

The groundwater samples were collected using a peristaltic pump and disposable Teflon™ tubing. Aliquots for semivolatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBS), and inorganics were collected first, and the aliquot for volatile organics was collected last. The aliquots for SVOCs, pesticides, PCBS, and inorganics were collected before the material came in contact with the peristaltic pump. The inorganic groundwater samples were not filtered and represent total concentrations. The aliquot for volatile organic compound (VOCs) was collected when the Teflon™ tubing (which contained the groundwater sample) was removed from the monitoring well. The tubing contents were carefully transferred to a VOC vial for shipment to the laboratory.

Analytical Program and Data Validation. Environmental samples were analyzed using field screening and offsite laboratory analytical methods. Samples submitted for offsite laboratory analysis were validated, and screening data were not validated. Below is a description of the analytical programs and data validation.

Field Screening. Groundwater samples collected using direct-push technology were screened for halogenated organics and aromatic organics using HNu, Inc. systems portable GC with a photoionization detector.

Laboratory Analysis. Soil and groundwater samples were analyzed for target analytes selected from the Groundwater Monitoring List contained in Appendix IX, 40 Code of Federal Regulations (CFR), Part 264, and USEPA Contract Laboratory program target compound list and target analyte list, including VOCs, SVOCs, pesticides, PCBs, and inorganics (metals and cyanide). The analysis was conducted using methods contained in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, USEPA SW846 (USEPA, 1986). The analytical methods for each fraction and a list of the target analytes are presented in Tables 2-2 through 2-5 of the NAVSTA, Mayport GIR (ABB-ES, 1995a). Analytical results of the 1995 sampling events at Building 191 are provided in Attachment E.

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

- Data quality objectives (DQOs) and the quality assurance project plan (QAPP) in the NAVSTA, Mayport RFI Workplan (ABB-ES, 1991)
- Naval Energy and Environmental Support Activity (NEESA) guidance document 20.2-047B, Sampling and Chemical Analysis Quality Assurance Requirements for the Navy Installation Program (NEESA, 1988)
- Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses (USEPA, 1988)
- National Functional Guidelines for Organic Data Review (USEPA, 1990)

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

After the data were reviewed and validated, they were evaluated using the precision, accuracy, representativeness, comparability, and completeness (PARCC) criteria specified in the DQOs. PARCC criteria are described in Section 2.3 of the NAVSTA, Mayport GIR (ABB-ES, 1995a). The evaluation of the Building 191 data according to the PARCC criteria is presented within the Group III RFI Report for NAVSTA, Mayport (ABB-ES, 1996).

FINDINGS

Below are paragraphs describing results of the sampling activities at Building 191. The findings include site geologic and hydrogeologic conditions, results of the field screening investigation, and analyses of surface and subsurface soil and groundwater samples.

Site Geology. Subsurface soils encountered during the installation of monitoring wells at Building 191 and nearby SWMUs had little variation over the short lateral distance between each location. The boring logs (MPT-TC-MW01S through MPT-TC-MW04S) prepared by ESE (1994) indicate that to explored

depths of 13 and 14 feet bls subsurface soil consists predominantly of a fine-grained, silty sand. Beneath the pavement at boring locations MPT-TC-MW05S and MPT-TC-MW06S the subsurface soil was found to consist of dark brown fine to very fine-grained silty sands to approximately 3 feet bls, underlain by light tan to grey fine sand, with varying amounts of shell fragments.

These materials may consist of dredge and/or naturally deposited material. The thickness of the dredge material is not known because of the similarity between the dredge and natural materials.

At boring location MPT-TC-MW01I, the subsurface soil consists of fine-grained silty sands to 15 feet bls and were underlain by fine to very fine sands with varying amounts of shell fragments to the explored depth of 40 feet bls (ESE, 1994).

Site Hydrogeology. Groundwater levels were measured on July 19, 1995, in monitoring wells located in the vicinity of Building 191. The depth to groundwater at each monitoring well location was measured relative to the top of the monitoring well casing. The depths to groundwater measured in the monitoring wells and in other wells (SWMUs 20 and 21) in the vicinity of the site are provided in Table 1. Also shown in the table are values for the water level measurements relative to the National Geodetic Vertical Datum (NGVD) of 1929 (commonly referred to as mean sea level [msl]).

The elevation data were used to prepare a map of potentiometric surface lines that represent altitudes of equal height above the reference datum for the water table zone of the surficial aquifer (Figure 5). The potentiometric surface map of the water table is used to infer that groundwater flow is from higher to lower altitudes in a direction perpendicular to the equipotential lines. Based on the equipotential lines shown on Figure 5, the groundwater flow direction at Building 191 on July 19, 1995, appears to be toward the west. This direction of groundwater flow differs from the southwestern direction determined by ESE (1994). The difference is likely the use of monitoring wells located at SWMUs 20 and 21 to aid in determining the groundwater flow direction; these wells were not present at the time ESE conducted their study. The hydrologic relationship of monitoring wells relative to Building 191-A, which is located adjacent to the reported release of tetrachloroethene, is provided in Table 2.

An approximation of the horizontal linear velocity of groundwater flow in the water table zone of the surficial aquifer in the vicinity of Building 191 is based on the potentiometric surface (hydraulic gradient) of the water table, estimates of radial hydraulic conductivities at monitoring well locations, and an estimate of the porosity (ratio of the volume of voids to total volume of the soil) of the saturated subsurface soil. The horizontal linear velocity was calculated from a modified form of Darcy's equation and represents the ratio of linear travel distance to travel time between two points (Freeze and Cherry, 1979). The horizontal linear velocity is expressed as V_D/N_e, where V_D is the Darcy velocity ($V_D = KI$, K = radial hydraulic conductivity, and I = hydraulic gradient) and N_e is the effective porosity of the saturated geologic stratum. An effective porosity of 0.35 was used in the calculations. (See Subsection 3.2.3, Physical Characteristics of Soil, in the NAVSTA, Mayport GIR [ABB-ES, 1995a] or Subsection 3.2.5, Physical Characteristics of Soil, in the Group III RFI Report [ABB-ES, 1996]).

In situ radial hydraulic conductivity values for monitoring wells in the vicinity of Building 191 (including monitoring wells at SWMUs 20 and 21) are presented in Table 3. *In situ* radial hydraulic conductivity values for monitoring wells located near Building 191 range from approximately 1.4 feet per day (MPT-TC-MW06S) to 20.5 feet per day (MPT-TC-MW03S) with an average hydraulic conductivity value of 11.3 feet per day (excluding the monitoring wells at SWMUs 20 and 21).

A hydraulic gradient of 0.011 foot per foot (ft/ft) for the vicinity of Building 191 and 0.0064 ft/ft for the vicinity of SWMUs 20 and 21 was estimated between monitoring wells MPT-20-MW03S and MPT-TC-

MW04S and MPT-20-MW02S and MPT-20-MW03s, respectively, using water level data obtained on July 19, 1995.

Based on the values for horizontal linear velocity and assuming no dilution, dispersion, or retardation, a contaminant in the water table zone of the surficial aquifer may travel at rates of 16 to 235 feet per year and average approximately 130 feet per year (Table 3) in the vicinity of Building 191.

Relatively lower horizontal linear velocities, ranging from 15 to 52 feet per year, are indicated for the adjacent SWMUs 20 and 21 as compared to the range of values determined at monitoring wells at Building 191. The difference is likely a result of less permeable materials that have lower hydraulic conductivity values and a lower hydraulic gradient (Table 3).

Surface and Subsurface Soil Samples. Four surface and subsurface soil sample pairs were collected in the vicinity of Buildings 191 and 191-A (Figure 3). One surface and subsurface soil sample pair (MPT-TC-SS/BS01) was collected from a grassy area located adjacent to the north side of Building 191. The other three surface and subsurface soil sample pairs (MPT-TC-SS/BS02 through MPT-TC/SS/BS04) were collected from grassy areas on the north and east side of Building 191-A. Surface soils found at these sampling locations consist of dark brown, fine to very fine silty sand. Subsurface soil was similar to the surface soil but contained pea-size shell fragments. Below are summaries of the chemicals detected in the surface and subsurface soil samples.

Surface Soil. Tables 4 and 5 summarize the validated analytical results for organic and inorganic target analytes, respectively, detected in the surface soil samples. Organic target analytes detected in the surface soil samples consist of 1 VOC (methylene chloride), 11 SVOCs (dimethylphthalate, phenanthrene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, and benzo(g,h,i)perylene), 4 pesticides (heptachlor, heptachlor epoxide, 4,4'-dichlorodiphenyldichloroethene [DDE], and chlordane) and 1 PCB (Aroclor-1260) (Table 4). It should be noted that most of the SVOCs were detected from surface soil sampling locations MPT-TC-SS01 and MPT-TC-SS04 that were near asphalt paved areas.

Fifteen inorganic target analytes were detected in the surface soil samples. The analytes detected were arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, selenium, tin, vanadium, zinc, and cyanide (Table 5).

Subsurface Soil. Tables 6 and 7 summarize the validated analytical results for organic and inorganic target analytes, respectively, detected in the subsurface soil samples. Organic analytes detected in the subsurface soil samples consist of three VOCs (methylene chloride, carbon disulfide, and trichloro-fluoromethane), and one pesticide (chlordane) (Table 6).

Nine inorganic target analytes were detected in the subsurface soil samples. The analytes detected were barium, beryllium, chromium, copper, lead, tin, vanadium, zinc, and cyanide (Tables 7).

Groundwater Field Screening. Field screening results for the groundwater samples (Figure 5) suggest that tetrachloroethene, toluene, and trichloroethene were possibly present (Table 8). Concentrations of tetrachloroethene, toluene, and trichloroethene ranged from 34.9 to 445 $\mu g/\ell$, 1.0 to 2.5 $\mu g/\ell$, and 2.3 to 7.9 $\mu g/\ell$, respectively. The highest detected concentrations are located in the general area of the May 4, 1993, release. Based on the field screening data, monitoring well MPT-TC-MW06S was located at the release area, and well MPT-TC-MW05S was located hydraulically downgradient from the release area.

Groundwater Samples. Below is a characterization of water quality for the water table zone of the surficial aquifer in the vicinity of Building 191 and results of the chemical analysis of groundwater samples from the existing and newly installed monitoring wells (Figures 3 and 4).

Water Quality. Measurements of indicator parameters for groundwater are provided in Table 9. Results of indicator parameters for the shallow groundwater beneath Building 191 groundwater monitoring wells were compared to the State of Florida secondary water quality criteria (Florida Administrative Code [FAC], Chapter 62-550.320) (Table 10).

Total dissolved solids (TDS) ranged from 280 to 631; the secondary water quality standard for TDS is 500 milligrams per liter (mg/ℓ) (FAC, 62-520). TDS exceed State of Florida secondary water quality criteria of 500 mg/ℓ in one of six groundwater samples. A maximum value of 10,000 mg/ℓ is the criterion used to classify groundwater in an aquifer as a Class G-I or G-II drinking water supply. The values measured are less than the maximum criterion used to classify the groundwater as a G-I or G-II drinking water supply. TDS also is used to classify water as fresh (0 to 1,000 mg/ℓ), brackish (1,000 to 10,000 mg/ℓ), and saline (10,000 to 100,000 mg/ℓ) (Freeze and Cherry, 1979). The TDS results suggest that the groundwater would be considered fresh.

Concentrations of chloride detected in the groundwater samples ranged from 10.9 to 30 mg/ℓ; the secondary water quality standard for chloride is 250 mg/ℓ (FAC, 62-520, Groundwater Classes, Standards and Exemptions). Chloride measured in groundwater samples was less than this standard.

Color measured in the groundwater samples ranged from 15 to 100 American Public Health Association (APHA) units. The standard for color is 15 APHA units, which was exceeded in groundwater samples.

Sulfate, a common form of sulfur found in oxygenated systems, ranged from 33.1 to 98.1 mg/ℓ; the water quality standard for sulfate is 250 mg/ℓ (FAC, 62-520). The concentrations measured were less than the standard.

Hardness was measured at 224 to 505 mg/ℓ, which suggests that the water is very hard (greater than 180 mg/ℓ [Durfor and Becker, 1964]).

A summary of nutrients (ammonia-N [ammonia as nitrogen], nitrate/nitrite, phosphorous-P, and total Kjeldahl nitrogen) measured in the groundwater samples is provided in Tables 9 and 10.

Results of the water quality indicator parameters suggest that groundwater in the vicinity of Building 191 meets the criteria of a Class G-I or G-II drinking water supply.

Analytical Results. Tables 11 and 12 summarize the validated analytical results for organic and inorganic target analytes, respectively, detected in groundwater samples collected at Building 191. Six VOCs, including 1,2-dichloroethene, chloroform, bromodichloromethane, dibromochloromethane, tetrachloroethene, and trichloroethene, were detected in the groundwater samples collected from the monitoring wells in the vicinity of Building 191. No SVOCs, pesticides, or PCBs were detected in the groundwater samples.

The trihalomethanes, bromodichloromethane, chloroform, and dibromochloromethane were detected in the groundwater sample collected from monitoring well MPT-TC-MW02S. This monitoring well is located hydraulically sidegradient from the location of the tetrachloroethane release (Table 2, and Figures 3 and 5).

1,2-Dichloroethene, tetrachloroethene, and trichloroethene were detected in groundwater samples from monitoring wells MPT-TC-MW04S and MPT-TC-MW05S, which are located hydraulically downgradient from the release site. Trichloroethene and 1,2-dichloroethene can be byproducts from sequential reductive dehalogenation of tetrachloroethene (USEPA, 1987). Monitoring well MPT-TC-MW04S also may be considered to be slightly hydraulically sidegradient to the release site.

It should be noted that VOCs were not detected in the groundwater sample from monitoring well MPT-TC-MW06S, which was located near the tetrachloroethene release site (Figures 3 and 4).

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

Twelve inorganic analytes were detected in the groundwater samples. Inorganic analytes detected include: arsenic, barium, beryllium, calcium, iron, magnesium, manganese, selenium, silver, sodium, vanadium, and cyanide. The highest detected concentrations of arsenic, calcium, iron, manganese, and silver appear to be in the groundwater sample collected from monitoring well MPT-TC-MW01S. This monitoring well is located hydraulically sidegradient from the location of the tetrachloroethane release (Table 2, and Figures 3 and 5). The detection of these chemicals in a monitoring well located hydraulically sidegradient from the tetrachloroethene release site suggests that they are not related to the incident. It is likely that inorganic chemicals detected in groundwater samples may be related to the deposition and natural leaching of inorganics from dredge material used to construct the land mass at NAVSTA, Mayport (ABB-ES, 1996).

PRELIMINARY RISK EVALUATION

The Federal National Oil and Hazardous Substance Pollution Contingency Plan (NCP), Final Rule, (40 CFR, Part 300) states that for carcinogens a lifetime excess cancer risk in the range of $1x10^{-4}$ (a chance of 1 in 10,000 for an adverse carcinogenic effect for a continuous lifetime exposure) to $1x10^{-6}$ represents concentrations that are considered by USEPA to be protective of human health. FDEP, however, uses $1x10^{-6}$ as a risk management goal to evaluate whether or not contaminants at a site are present at concentrations that are protective of human health.

Surface and Subsurface Soil. A summary of frequencies of detection, range of detection limits, range of detected concentrations, and arithmetic mean and benchmark comparison values is provided in Tables 13 and 14 for surface and subsurface soil samples, respectively. The target analytes detected in the environmental samples were also compared in Tables 13 and 14 to background screening values computed from stationwide surface and subsurface soil samples (ABB-ES, 1995a), benchmark values from USEPA Region III risk-based concentrations (RBC) (USEPA, 1995), and the State of Florida soil cleanup goals (residential and industrial) (FDEP, 1995).

Each of the benchmark criteria provided in Tables 13 and 14 are human health-based and represent the lower of either: (1) a noncarcinogenic hazard index (HI) where values of less than 1 represent a concentration at which noncarcinogenic effects are not likely or (2) a lifetime excess cancer risk of 10^{-6}, which represents a chance of 1 in 1,000,000 for an adverse carcinogenic effect for a continuous lifetime exposure.

Surface Soil. No VOCs or pesticides were detected in the surface soil samples at concentrations that exceed the benchmark values (Table 13). One SVOC (benzo(a)pyrene), one PCB (Aroclor-1260), and one inorganic (arsenic) were detected in surface soil samples at concentrations that exceeded the residential benchmark values, which are based on values for a lifetime excess cancer risk of $1x10^{-6}$.

One surface soil sample (MPT-TC-SS01) contained benzo(a)pyrene (180 micrograms per kilograms [μg/kg]) at a concentration that exceeds residential exposure values for the USEPA Region III RBC (88 μg/kg) and the FDEP soil cleanup goal (100 μg/kg) (Tables 4 and 13). Benzo(a)pyrene was not detected in the surface soil samples at concentrations that exceed the FDEP industrial soil cleanup goal (500 μg/kg).

Two surface soil samples (MPT-TC-SS01 and MPT-TC-SS04) and one duplicate (MPT-TC-SS04) contained Aroclor-1260 at concentrations (160, 170, and 150 μg/kg, respectively) that exceed the USEPA Region III residential RBC (83 μg/kg) (Tables 4 and 13). Aroclor-1260 was not detected in the surface soil samples at concentrations that exceed the FDEP residential soil cleanup goal (900 μg/kg).

One surface soil sample (MPT-TC-SS01) contained arsenic (1.6 milligrams per kilogram [mg/kg]) at a concentration that exceeds the USEPA Region III residential RBC (0.37 mg/kg) and the FDEP residential soil cleanup goal (0.7 mg/kg) (Tables 5 and 13). Arsenic was not detected in the surface soil samples at concentrations that exceed the FDEP industrial soil cleanup goal (3.1 mg/kg). Arsenic was not detected in background surface soil samples.

Calculations for estimated cancer risk values are provided in Table 15 for the chemicals benzo(a)pyrene, Aroclor-1260, and arsenic that were detected in surface soil samples at concentrations exceeding the human health based screening values. A ratio at $1x10^{-6}$ was calculated using the maximum detected concentration of a chemical exceeding the human health-based screening values and the aggregate residential exposure (child and adult) for USEPA Region III RBCs and residential and industrial soil cleanup goals for the FDEP Soil Cleanup Goals (FDEP, 1995). The ratios for each chemical were summed to determine a value for an estimated cancer risk.

This assessment suggests that hypothetical residential exposure to these three chemicals in surface soil are likely to be within the risk management range of $1x10^{-4}$ to $1x10^{-6}$ that is acceptable to the USEPA. The assessment also suggests that the hypothetical residential exposure is greater than the FDEP risk management goal of $1x10^{-6}$; however, the industrial exposure is at the risk management goal.

Subsurface Soil. None of the VOCs, pesticides, or inorganic chemicals detected in the subsurface soil samples exceed either their respective residential or industrial benchmark values (Table 14). SVOCs and PCBs were not detected in the subsurface soil samples.

<u>Groundwater</u>. A summary of frequencies of detection, range of detection limits, range of detected concentrations, arithmetic mean, and benchmark comparison values are provided in Table 16. The target analytes detected in the environmental samples were compared in Table 16 to background screening values computed from stationwide background groundwater samples (ABB-ES, 1995a), benchmark values consisting of USEPA Region III RBCs (USEPA, 1995), and Florida groundwater guidance concentrations (FDEP, 1994). The Florida groundwater guidance concentrations consist of promulgated and unpromulgated values. The State of Florida promulgated values are equal to or more stringent than Federal primary and secondary drinking water regulations (57FR31777, July 17, 1992).

Each of the benchmark criteria provided in Table 16 are human health-based and represent the lower of either a noncarcinogenic HI where for noncarcinogens values less than 1 represent a concentration at

which noncarcinogenic effects are not likely, or for a carcinogen a lifetime excess cancer risk of $1x10^{-6}$, which represents a chance of 1 in 1,000,000 for an adverse carcinogenic effect for a continuous lifetime exposure.

Four VOCs (bromodichloromethane, chloroform, tetrachloroethene, and trichloroethene) were detected in groundwater samples at concentrations exceeding the USEPA Region III tap water RBCs and Florida groundwater guidance concentrations (Table 16).

Two trihalomethanes, bromodichloromethane and chloroform, were detected as single occurrences in monitoring well MPT-TC-MW02S at concentrations that exceed their respective USEPA Region III RBC and Florida groundwater guidance concentration. The Florida groundwater guidance concentration is based on the chemicals being carcinogens. The State's primary standard under FAC, 62-550.310, for trihalomethanes (total concentration per sample) of 100 $\mu g/\ell$ was not exceeded.

Tetrachloroethene and trichloroethene were detected in two groundwater samples (MPT-TC-MW04S and MPT-TC-MW05S) and an associated duplicate (MPT-TC-MW05S) at concentrations that exceed their respective USEPA Region III RBC and Florida groundwater guidance concentration. The Florida groundwater guidance concentrations for these two chemicals are primary standards under FAC, 62-550.310.

Four inorganic analytes (arsenic, manganese, iron, and beryllium) were detected at concentrations that exceed one or more of the benchmark values (Table 16). Arsenic and manganese were detected at concentrations exceeding the USEPA Region III tap water RBCs and Florida groundwater guidance concentrations (primary standard under FAC, 62-550.310). Iron was detected at a concentration that exceeded the Florida groundwater guidance concentration (secondary standard under FAC, 62-550.320) but not its essential nutrient screening value (ABB-ES, 1995a). Beryllium was detected at a concentration exceeding the USEPA Region III tap water RBC but not the Florida groundwater guidance concentrations.

Arsenic was detected in groundwater samples at concentrations ranging from 0.9 to 62.4 $\mu g/\ell$, which exceeds the USEPA Region III RBC. One groundwater sample (monitoring well MPT-TC-MW01S) contained arsenic at a concentration that exceeded the Florida groundwater guidance concentration of 50 $\mu g/\ell$. The concentration of arsenic in this sample also exceeds the background screening value.

Manganese was detected in three of six groundwater samples (monitoring wells MPT-TC-MW01S, MPT-TC-MW04S, and MPT-TC-MW06S) at concentrations that exceed the USEPA Region III RBC and Florida groundwater guidance concentration. One groundwater sample (MPT-TC-MW01S) contained manganese at concentrations that exceeded the background screening concentration.

Iron was detected in one of six groundwater samples at a concentration (4,950 $\mu g/\ell$) that exceeded the Florida groundwater guidance concentration (300 $\mu g/\ell$) and the background screening concentration (1,728 $\mu g/\ell$), which is also less than the essential nutrient screening value (ABB-ES, 1995a).

Beryllium was detected in one groundwater sample (MPT-TC-MW04S) at a concentration (0.36 $\mu g/\ell$) that exceeded the Region III tap water RBC (0.016 $\mu g/\ell$). This sample did not exceed the Florida groundwater guidance concentration (4 $\mu g/\ell$). Beryllium was not detected in the background groundwater samples.

The excess lifetime carcinogenic human health risk (groundwater) was estimated for analytes that exceeded benchmarks (bromodichloromethane, chloroform, tetrachloroethene, trichloroethene, arsenic, and beryllium) by comparison of the maximum detected value (Table 16) with the estimated 1×10^{-6}

cancer risk values from the USEPA Region III tap water RBC and the FDEP Florida groundwater guidance concentration (Table 17).

This assessment suggests that a hypothetical exposure to groundwater used as drinking water is likely to be above both USEPA's risk range and FDEP's target risk goal. The estimated HI of 9 also suggests that there is a potential noncancer risk.

RECOMMENDATIONS

The recommendations are derived from review and interpretation of the data collected during the assessment of the reported release of the solvent tetrachloroethene near Building 191-A. The recommendations are based on current use of the Building 191 area as an industrial site and a hypothetical future residential exposure. Based on the data collected, there appears to have been a release of tetrachloroethene and/or trichloroethene to the environment in the vicinity of Building 191-A, and it is recommended that this site be designated as an AOC. It is recommended that the investigation should concentrate on assessing the nature and extent of the tetrachloroethene release to groundwater and conducting a human health risk assessment. Should the results of the groundwater assessment suggest the presence of another possible source area(s), then additional soil sampling should be conducted. Below are the rationales used to derive and support the recommendations:

- No VOCs were detected in surface soil samples at concentrations that exceed benchmark values. Tetrachloroethene was not one of the VOCs detected in the surface soil samples.

- Estimated human health risks were based on exposure to benzo(a)pyrene, Aroclor-1260, and arsenic in surface soil. The estimated risk for residential exposure is within the range ($1x10^{-4}$ to $1x10^{-6}$) considered acceptable by USEPA but exceeds the FDEP risk target goal of $1x10^{-6}$. The estimated risk for industrial exposure is at the FDEP risk target goal.

- None of the VOCs, pesticides, or inorganic chemicals detected in the subsurface soil samples exceed either their respective residential or industrial benchmark values. Tetrachloroethene was not one of the VOCs detected in the subsurface soil samples, and SVOCs and PCBs detected in surface soil samples were not detected in the subsurface soil samples.

- Three trihalomethane compounds were detected in groundwater samples from monitoring wells located hydraulically sidegradient from the tetrachloroethene release site. The State's primary standard under FAC, 62-550.310, for trihalomethanes (total concentrations per sample) of 100 $\mu g/\ell$ was not exceeded.

- Chemical analytical results of groundwater samples suggest that tetrachloroethene, trichloroethene, and 1,2-dichloroethene (total) are likely present in the groundwater in the vicinity of Building 191-A. It is possible that trichloroethene and 1,2-dichloroethene are by-products from sequential reductive dehalogenation of tetrachloroethene.

- This assessment suggests that a hypothetical exposure to groundwater used as drinking water is likely to be above both USEPA's risk range and FDEP's target risk goal. The estimated HI also suggests that there is a potential noncancer risk.

- Tetrachloroethene, trichloroethene, and 1,2-dichloroethene (total) have higher densities relative to water and generally migrate downward in an aquifer. Where these two solvents are present as dense nonaqueous-phase liquids (DNAPLs), their downward migration may also be controlled and limited by the lithology and capillary pressure of the aquifer.

- The highest detected concentrations of inorganic chemicals were in a groundwater sample from a monitoring well located hydraulically sidegradient from the tetrachloroethene release site. This suggests that the concentrations of the inorganic analytes are not related to the tetrachloroethene release. It is likely that inorganic chemicals detected in groundwater samples may be related to the deposition and natural leaching of inorganics from dredge material used to construct the land mass at NAVSTA, Mayport (ABB-ES, 1996).

If you have any questions or comments concerning this information, or should any additional information become available for this site that would affect this recommendation, please contact us.

Sincerely,

ABB Environmental Services, Inc.

Francis K. Lesesne, P.G.
Technical Lead

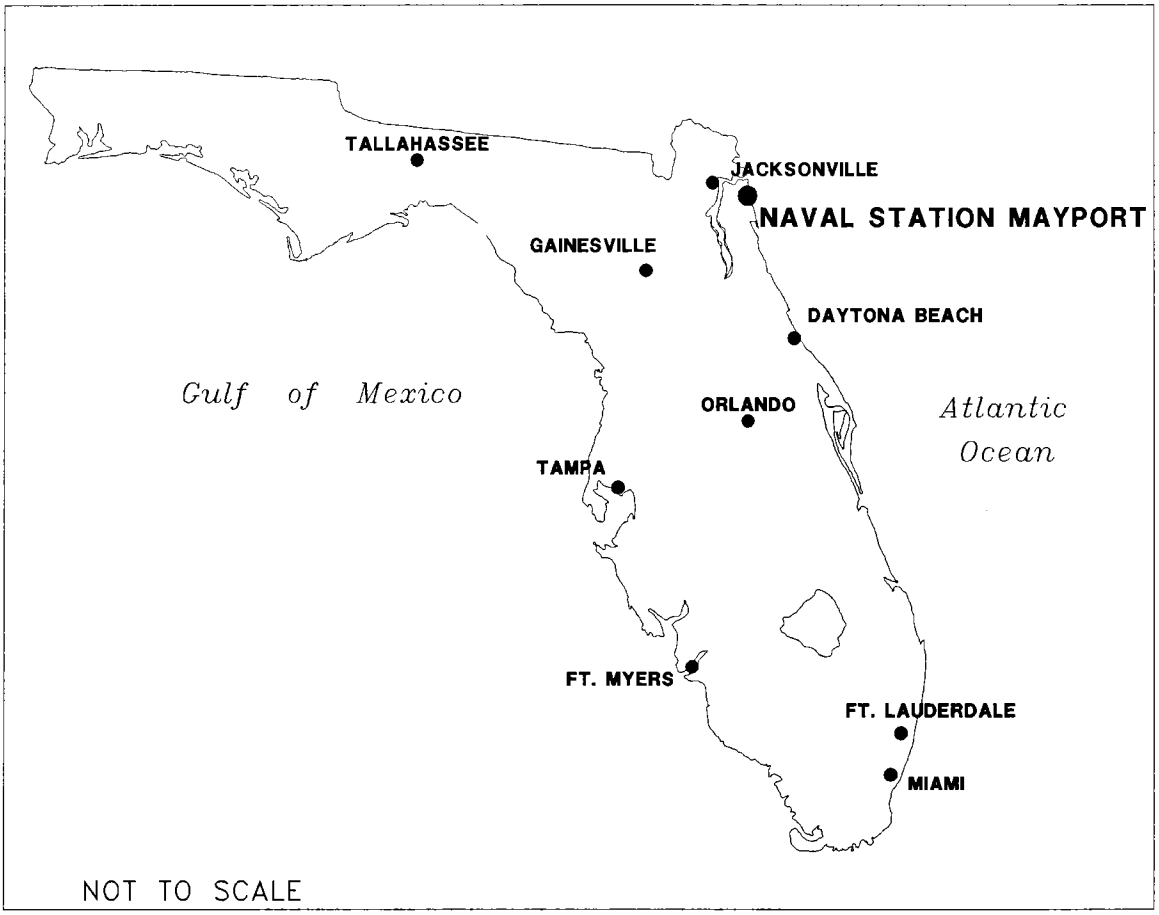
Terry Hansen, P.G.
Project Manager

cc: Cheryl Mitchell, NAVSTA, Mayport

ATTACHMENT A

ATTACHMENT A

FIGURES



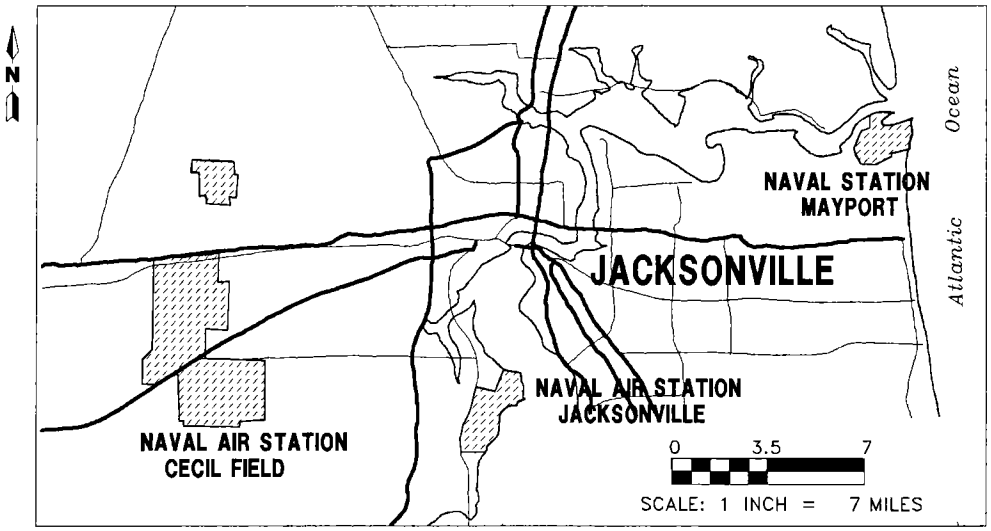


FIGURE 1
FACILITY LOCATION MAP

H:\MPT\SITEMAPS\NAB-GLC\04-05-96

SOLID WASTE MANAGEMENT UNIT ASSESSMENT REPORT, BUILDING 191

U.S. NAVAL STATION MAYPORT, FLORIDA

Figure 2

11 X 17

Figure 3

Figure 4

Figure 5

ATTACHMENT B

ATTACHMENT B

TABLES

Table 1
Building 191 Water-Level Data, July 19, 1995

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

Monitoring Well	Elevation (NGVD)	Water Level		
		Time (EST)	Depth (TOC)	Elevation (msl)
MPT-TC-MW01S	9.56	12:16	4.72	4.84
MPT-TC-MW01I	9.6	NM	NM	NM
MPT-TC-MW02S	10.89	12:14	6.06	4.83
MPT-TC-MW03S	8.68	12:06	3.88	4.8
MPT-TC-MW04S	8.78	12:40	3.78	5.0
MPT-TC-MW06S	9.84	12:36	3.75	6.09
MPT-TC-MW05S	8.73	12:38	3.77	4.96
MPT-20-MW01S	13.49	12:51	4.20	9.29
MPT-20-MW02S	13.68	11:55	4.23	9.45
MPT-20-MW03S	12.01	12:33	4.01	8.00
MPT-21-MW01S	13.21	12:46	3.77	9.44
MPT-21-MW02S	12.79	12:59	3.47	9.32
MPT-21-MW03S	12.36	13:02	2.95	9.41

Notes: SWMU = solid waste management unit.
TCE = trichloroethene.
NGVD = National Geodetic Vertical Datum of 1929.
EST = Eastern Standard Time.
TOC = top of casing; the top of casing was the surveyed datum point for measuring the water level.
msl = mean sea level.
S = suffix on the monitoring well identifier that designates a shallow monitoring well screened across the water table.
I = suffix on the monitoring well that designates a well screened in an intermediate zone of the surficial aquifer.
NM = water level not measured.

Table 2
Hydraulic Position of Monitoring Wells Relative to Building 191-A and Nearby Solid Waste Management Units

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

SWMU Number	Monitoring Well No.	Hydraulic Position	Diameter (inches)	Total Depth (feet)	Screened Interval (feet bls)
NA	MPT-TC-MW01S	S of Building 191-A	4	13	3 to 13
NA	MPT-TC-MW01I	S of Building 191-A	4	40	35 to 40
NA	MPT-TC-MW02S	S of Building 191-A	4	14	4 to 14
NA	MPT-TC-MW03S	S of Building 191-A	4	13	3 to 13
NA	MPT-TC-MW04S	D of Building 191-A	4	13	3 to 13
NA	MPT-TC-MW05S	D of Building 191-A	2	12.5	2.5 to 12.5
NA	MPT-TC-MW06S	D of Building 191-A	2	12.5	2.5 to 12.5
20	MPT-20-MW01S	U of Building 191-A	2	15.5	5 to 15
20	MPT-20-MW02S	U of Building 191-A	2	14.2	4 to 14
20	MPT-20-MW03S	U of Building 191-A	2	14	3 to 13
21	MPT-21-MW01S	U of Building 191-A	2	15.5	5 to 15
21	MPT-21-MW02S	U of Building 191-A	2	15.5	5 to 15
21	MPT-21-MW03S	U of Building 191-A	2	15.5	5 to 15

Notes: SWMU = solid waste management unit.
TCE = trichloroethene.
bls = below land surface.
NA = not applicable.
U = hydraulic upgradient.
D = hydraulic downgradient.
S = hydraulic sidegradient.

Table 3
Average Groundwater Velocities at Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

Location	Hydraulic Conductivity (ft/day)	Estimated Gradient[1] (ft/ft)	Estimated Effective Porosity	Estimated Linear Velocity (ft/day)	Estimated Linear Velocity (ft/year)
MPT-TC-MW01S	[2]11.5	0.011	0.35	0.36	132
MPT-TC-MW02S	[2]14.8	0.011	0.35	0.47	170
MPT-TC-MW03S	[2]20.5	0.011	0.35	0.64	235
MPT-TC-MW04S	[2]11.4	0.011	0.35	0.36	131
MPT-TC-MW05S	[2]8.4	0.011	0.35	0.26	96
MPT-TC-MW06S	[2]1.4	0.011	0.35	0.04	16
MPT-20-MW01S	[2]3.6	0.0064	0.35	0.07	24
MPT-20-MW02S	[2]2.3	0.0064	0.35	0.04	15
MPT-20-MW03S	[2]2.5	0.0064	0.35	0.05	17
MPT-21-MW01S	[2]7.8	0.0064	0.35	0.14	52
MPT-21-MW02S	[2]4.0	0.0064	0.35	0.07	27
MPT-21-MW03S	[2]4.1	0.0064	0.35	0.07	27

[1] Based on synoptic water table elevations on July 19, 1995.
[2] *In situ* conductivity measurement, July 1995.

Notes: SWMU = solid waste management unit.
TCE = trichloroethene.
ft/day = feet per day.
ft/ft = foot per foot.
ft/year = feet per year.

Table 4
Organic Analytes Detected in Surface Soil Samples at Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

Analytical Batch Number:	R9971	R9971	R9971	R9971	R9971
Sample Location:	MPT-TC-SS01	MPT-TC-SS02	MPT-TC-SS03	MPT-TC-SS04	MPT-TC-SS04
Sample Number:	TCS00101	TCS00201	TCS00301	TCS00401	TCS00401DUP
Date Sampled:	31-MAY-95	31-MAY-95	31-MAY-95	31-MAY-95	31-MAY-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatile Organic Compounds (μg/kg)					
Methylene chloride	--	2 J	--	--	--
Semivolatile Organic Compounds (μg/kg)					
Dimethylphthalate	--	110 J	--	--	--
Phenanthrene	71 J	--	--	57 J	--
Fluoranthene	300 J	--	64 J	110 J	130 J
Pyrene	220 J	--	42 J	67 J	86 J
Benzo(a)anthracene	130 J	--	--	51 J	64 J
Chrysene	210 J	--	47 J	63 J	90 J
Benzo(b)fluoranthene	230 J	--	--	--	100 J
Benzo(k)fluoranthene	230 J	--	--	--	110 J
Benzo(a)pyrene	180 J	--	--	--	82 J
Indeno(1,2,3-cd)pyrene	87 J	--	--	--	--
Benzo(g,h,i)perylene	85 J	--	--	--	--
Pesticides/PCBs (μg/kg)					
Heptachlor	--	--	--	1.3 J	1.2 J
Heptachlor epoxide	--	--	--	8.7	8.9
4,4-DDE	--	--	--	2.3	2
Chlordane	12	--	--	93	91
Aroclor-1260	160	--	25 J	170	150

Notes: SWMU = solid waste management unit.
TCE = trichloroethene.
DUP = duplicate.
ft bls = feet below land surface.
μg/kg = micrograms per kilogram.
-- = analyte not detected.
J = estimated value.
PCB = polychlorinated biphenyls.
DDE = dichlorodiphenyldichloroethene.

Table 5
Inorganic Analytes Detected in Surface Soil Samples at Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

Analytical Batch Number:	R9971	R9971	R9971	R9971	R9971
Sample Location:	MPT-TC-SS01	MPT-TC-SS02	MPT-TC-SS03	MPT-TC-SS04	MPT-TC-SS04
Sample Number:	TCS00101	TCS00201	TCS00301	TCS00401	TCS00401DUP
Date Sampled:	31-MAY-95	31-MAY-95	31-MAY-95	31-MAY-95	31-MAY-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Inorganics (mg/kg)					
Arsenic	1.6 J	--	--	--	--
Barium	56.7	4.4 J	7.7 J	4.2 J	3.4 J
Beryllium	0.08 J	0.09 J	0.1 J	0.12 J	--
Cadmium	0.44 J	--	--	--	--
Chromium	12.8	3	2.4	3.3	2.1 J
Cobalt	0.76 J	--	--	--	--
Copper	8.9	3.3 J	4.3 J	2.8 J	1.9 J
Lead	21.5	3.6	16.4	7.2	9.3
Mercury	--	--	--	--	0.03 J
Nickel	3.6 J	--	2.1 J	--	1.8 J
Selenium	--	--	--	0.2 J	--
Tin	--	--	--	5.7 J	--
Vanadium	5.4 J	3.3 J	4.3 J	2.9 J	2.7 J
Zinc	48.2	10.7	15.3	10.6	9.7
Cyanide	0.11 J	0.09 J	0.14 J	0.12 J	0.15 J

Notes: SWMU = solid waste management unit.
TCE = trichloroethene.
DUP = duplicate.
ft bls = feet below land surface.
mg/kg = milligrams per kilogram.
-- = analyte not detected.
J = estimated value.

Table 6
Organic Analytes Detected in Subsurface Soil Samples at Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

Analytical Batch Number:	R9971	R9971	R9971	R9971
Sample Location:	MPT-TC-BS01	MPT-TC-BS02	MPT-TC-BS03	MPT-TC-BS04
Sample Number:	TCB00103	TCB00203	TCB00303	TCB00403
Date Sampled:	31-MAY-95	31-MAY-95	31-MAY-95	31-MAY-95
Sample Depth (ft bls):	2 to 3	2 to 3	2 to 3	2 to 3
Volatile Organic Compounds (μg/kg)				
Carbon disulfide	1 J	--	--	--
Methylene chloride	2 J	4 J	4 J	1 J
Trichlorofluoromethane	--	--	--	2 J
Pesticides/PCBs (μg/kg)				
Chlordane	--	--	--	19

Notes: SWMU = solid waste management unit.
TCE = trichloroethene.
ft bls = feet below land surface.
μg/kg = micrograms per kilogram.
J = estimated value.
-- = analyte not detected.
PCB = polychlorinated biphenyls.

Table 7
Inorganic Analytes Detected in Subsurface Soil Samples at Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

Analytical Batch Number:	R9971	R9971	R9971	R9971
Sample Location:	MPT-TC-BS01	MPT-TC-BS02	MPT-TC-BS03	MPT-TCBS04
Sample Number:	TCB00103	TCB00203	TCB00303	TCB00403
Date Sampled:	31-MAY-95	31-MAY-95	31-MAY-95	31-MAY-95
Sample Depth (ft bls):	2 to 3	2 to 3	2 to 3	2 to 3
Inorganics (mg/kg)				
Barium	4.1 J	2.2 J	2.7 J	1.9 J
Beryllium	0.07 J	0.14 J	0.15 J	--
Chromium	--	2.1 J	1.9 J	1.7 J
Copper	2.2 J	2.1 J	1.4 J	1 J
Lead	0.63 J	0.67 J	1.3	1.1
Tin	--	4.4 J	--	4.8 J
Vanadium	1.8 J	1.4 J	1.9 J	1.8 J
Zinc	--	2.8 J	3.3 J	3.4 J
Cyanide	0.09 J	0.13 J	0.17 J	0.15 J

Notes: SWMU = solid waste management unit.
TCE = trichloroethene.
ft bls = feet below land surface.
mg/kg = milligrams per kilogram.
J = estimated value.
-- = analyte not detected.

Table 8
Groundwater Field Screening Results

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

Groundwater Sample Location	Tetrachloroethene µg/ℓ	Toluene µg/ℓ	Trichloroethene µg/ℓ
TCQ001	--	1.6 J	--
TCQ002	445.0 E	1.0	2.9
TCQ003	44.1 E	2.5	2.3
TCQ004	34.9 E	2.2	7.9
TCQ005	--	1.8	--
TCQ006	--	--	--
TCQ007	--	1.1	--
TCQ008	--	1.4	--
TCQ010	--	1.0	--
TCQ011	--	--	--
TCQ012	--	--	--
TCQ013	--	1.9	--
TCQ014	--	--	--
TCQ015	--	--	--

Notes: SWMU = solid waste management unit.
TCE = trichloroethene.
µg/ℓ = micrograms per liter.
-- = analyte not detected.
J = estimated value, continuing calibration standard exceeded percent D criteria.
E = estimated value, concentration outside calibration range.
Sample TCQ009 was not collected.

Table 9
Water Quality Indicator Parameters for Groundwater Samples at Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

Analytical Batch Number:		RA077	RA077	RA077	RA077	RA077	RA077
Sample Location:		MPT-TC-MW01S	MPT-TC-MW02S	MPT-TC-MW03S	MPT-TC-MW04S	MPT-TC-MW05S	MPT-TC-MW06S
Sample Number:		TCG00101	TCG00201	TCG00301	TCG00401	TCG00501	TCG00601
Date Sampled:	Units	26-JUN-95	27-JUN-95	27-JUN-95	27-JUN-95	26-JUN-95	26-JUN-95
Water Quality Parameters (mg/ℓ)							
Alkalinity as $CaCO_3$	(mg/ℓ)	460	147	200	196	258	280
Ammonia as N	(mg/ℓ)	1.1	--	--	--	--	--
Chloride	(mg/ℓ)	18.5	30	27.4	10.9	23.1	19.8
Hardness as $CaCO_3$	(mg/ℓ)	505	253	301	224	309	327
Nitrate/Nitrite as N	(mg/ℓ)	0.27	0.29	--	0.24	2.28	0.32
Phosphorous as P, Total	(mg/ℓ)	0.61	0.63	0.48	0.1	0.34	0.21
Sulfate	(mg/ℓ)	60.2	98.1	96.6	33.1	64.6	45.7
Total Dissolved Solids	(mg/ℓ)	631	340	381	280	425	410
Total Kjeldahl Nitrogen	(mg/ℓ)	1.5	--	--	0.4	0.4	0.6
Total Organic Carbon	(mg/ℓ)	19.5	4.8	3.9	5.6	6.5	6.9
Color	Alpha	100	20	15	30	20	20
pH	Standard	6.91	7.48	7.37	7.95	7.33	7.48

Notes: SWMU = solid waste management unit.
TCE = trichloroethene.
S = S as a suffix in the location identification indicates the well is screened in the shallow surficial aquifer, typically 5 to 15 feet below land surface.
mg/ℓ = milligrams per liter.
$CaCO_3$ = calcium carbonate.
N = nitrogen.
-- = analyte not detected.
P = phosphorous.

Table 10
Summary of Water Quality Indicator Parameters for Groundwater Samples at Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Range of Detected Concentrations	Range of Reporting Limits	Mean of Detected Concentrations[2]	Water Quality Criteria[3]	Exceeds Water Quality Criteria Benchmark (Yes/No)
Water Quality Parameters (mg/ℓ)[4]						
Total Organic Carbon	6/6	3.9 - 19.5	NR	7.9	NS	NS
Alkalinity as $CaCO_3$	6/6	147 - 460	NR	257	NS	NS
Ammonia as N	1/6	1.1	0.3 - 0.3	1.1	NS	NS
Chloride	6/6	10.9 - 30	NR	21.6	250	No
Hardness as $CaCO_3$	6/6	224 - 505	NR	320	NS	NS
Sulfate	6/6	33.1 - 98.1	NR	66.4	250	No
Total Dissolved Solids	6/6	280 - 631	NR	411	500	Yes
Total Kjeldahl Nitrogen	4/6	0.4 - 1.5	0.3 - 0.3	0.73	NS	NS
Nitrate/Nitrite as N	5/6	0.24 - 2.28	0.1 - 0.1	0.68	10	No
Phosphorous as P, total	6/6	0.1 - 0.63	NR	0.4	NS	NS
Color[4]	6/6	15 - 100	NR	34.2	NS	NS
pH[4]	6/6	6.91 - 7.95	NR	7.4	6.5 to 8.5	No

1 Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed (excluding rejected values, "R" qualifier).
2 The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected, including values qualified as "J"; it does not include those samples where the analyte was not detected ("U" or "UJ" qualifiers) and rejected ("R" qualifier).
3 Value is a groundwater guidance concentration from the Florida Department of Environmental Protection, Groundwater Guidance Concentrations, June 1994.
4 Units for color and ph are APHA and SU, respectively.

Notes: Environmental samples included in this evaluation are MPT-TC-MW01S, MPT-TC-MW02S, MPT-TC-MW03S, MPT-TC-MW04S, MPT-TC-MW05S, and MPT-TC-MW06S.

SWMU = solid waste management unit.
TCE = trichloroethene.
mg/ℓ = milligrams per liter.
NR = no nondetection range, see Range of Detected Concentrations.
NS = no screening concentration available.
$CaCO_3$ = calcium carbonate.
N = nitrogen.
APHA = American Public Health Association.
SU = standard units.

Table 11
Organic Analytes Detected in Groundwater Samples at Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

Analytical Batch Number:	RA077	RA077	RA077	RA077
Sample Location:	MPT-TC-MW02S	MPT-TC-MW04S	MPT-TC-MW05S	MPT-TC-MW05S
Sample Number:	TCG00201	TCG00401	TCG00501	TCG00501DUP
Date Sampled:	27-JUN-95	27-JUN-95	26-JUN-95	26-JUN-95
Volatile Organic Compounds ($\mu g/\ell$)				
1,2-Dichloroethene (total)	--	1 J	1 J	1 J
Bromodichloromethane	5	--	--	--
Chloroform	11	--	--	--
Dibromochloromethane	1 J	--	--	--
Tetrachloroethene	--	26	100	73
Trichloroethene		9	10	8

Notes: SWMU = solid waste management unit.
TCE = trichloroethene.
S = S as a suffix in the location identification indicates the well is screened in the shallow surficial aquifer, typically 3 to 13 feet below land surface.
DUP = duplicate.
$\mu g/\ell$ = micrograms per liter.
-- = analyte not detected.
J = estimated value.

Table 12
Inorganic Analytes Detected in Groundwater Samples at Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

Analytical Batch Number:	RA077	RA077	RA077	RA077	RA077	RA077	RA077
Sample Location:	MPT-TC-MW01S	MPT-TC-MW02S	MPT-TC-MW03S	MPT-TC-MW04S	MPT-TC-MW05S	MPT-TC-MW05S	MPT-TC-MW06S
Sample Number:	TCG00101	TCG00201	TCG00301	TCG00401	TCG00501	TCG00501DUP	TCG00601
Date Sampled:	26-JUN-95	27-JUN-95	27-JUN-95	27-JUN-95	26-JUN-95	26-JUN-95	26-JUN-95
Inorganics (μg/ℓ)							
Arsenic	62.4	1.2 J	0.9 J	6 J	5.6 J	6.1 J	1.6 J
Barium	9.8 J	8.7 J	2.8 J	2.8 J	4.7 J	4.5 J	7.8 J
Beryllium	--	--	--	0.36 J	--	--	--
Calcium	167,000	61,200	79,100	77,000	106,000	105,000	100,000
Iron	4,950	--	--	299	98.2 J	99.5 J	280
Magnesium	11,300	22,700	23,500	6,530	13,500	13,300	13,500
Manganese	543	.84 J	1.5 J	142	4 J	3.9 J	80.8
Selenium	--	--	--	--	0.79 J	--	--
Silver	1.7 J	--	--	--	--	--	--
Sodium	16,800	17,200	19,800	7,450	12,700	12,600	15,500
Vanadium	6.3 J	8.4 J	5.3 J	6.7 J	8.8 J	8.4 J	3.4 J
Cyanide	--	2 J	2.6 J	--	--	--	2 J

Notes: SWMU = solid waste management unit.
TCE = trichloroethene.
S = S as a suffix in the location identification indicates the well is screened in the shallow surficial aquifer, typically 5 to 15 feet below land surface.
DUP = duplicate.
μg/ℓ = micrograms per liter.
J = estimated value.
-- = analyte not detected.

Table 13
Preliminary Risk Screening of Surface Soil Samples from Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Range of Detected Concentrations[2]	Range of Reporting Limits	Mean of Detected Concentrations[3]	Background Screening Value[4]	Region III RBCs[5] Residential	FDEP Soil Cleanup Goals[6] Residential	FDEP Soil Cleanup Goals[6] Industrial	Exceeds Residential Benchmark (Yes/No)	Exceeds Industrial Benchmark (Yes/No)
Volatile Organic Compounds (µg/kg)										
Methylene chloride	1/4	2	5 - 6	2	ND	85,000	16,000	23,000	No	No
Semivolatile Organic Compounds (µg/kg)										
Benzo(a)anthracene	2/4	[2]57.5 - 130	340 - 380	93.8	ND	880	1,400	4,900	No	No
Benzo(a)pyrene	2/4	[2]136 - 180	190 - 380	158	ND	88	100	500	Yes	No
Benzo(b)fluoranthene	2/4	[2]145 - 230	190 - 380	188	ND	880	1,400	5,000	No	No
Benzo(g,h,i)perylene	1/4	85	340 - 380	85	ND	NS	14,000	50,000	No	No
Benzo(k)fluoranthene	2/4	[2]150 - 230	190 - 380	190	ND	8,800	14,000	48,000	No	No
Chrysene	3/4	47 - 210	380 - 380	111	ND	88,000	140,000	500,000	No	No
Dimethyl-phthalate	1/4	110	340 - 375	110	ND	63,000,000	63,000,000	NA	No	No
Fluoranthene	3/4	64 - 300	380 - 380	161	ND	3,100,000	2,900,000	48,000,000	No	No
Indeno(1,2,3-cd) pyrene	1/4	87	340 - 380	87	ND	880	1,400	5,000	No	No
Phenanthrene	2/4	71 - [2]121	185 - 380	96	ND	NS	1,700,000	21,000,000	No	No
Pyrene	3/4	42 - 220	380 - 380	113	ND	2,300,000	2,200,000	41,000,000	No	No
Pesticides PCBs (µg/kg)										
4,4'-DDE	1/4	[2]2.15	0.7 - 0.78	2.2	2.3	1,900	3,000	11,000	No	No
Aroclor - 1260	3/4	25 - 160	20 - 20	115	ND	83	900	3,500	Yes	No
Chlordane	2/4	12 - [2]92	7 - 7.8	52	ND	490	800	3,000	No	No
Heptachlor	1/4	[2]1.25	0.7 - 0.78	1.3	ND	140	200	500	No	No

See notes at end of table.

Table 13 (Continued)
Preliminary Risk Screening of Surface Soil Samples from Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Range of Detected Concentrations[2]	Range of Reporting Limits	Mean of Detected Concentrations[3]	Background Screening Value[4]	Region III RBCs[5] Residential	FDEP Soil Cleanup Goals[6] Residential	FDEP Soil Cleanup Goals[6] Industrial	Exceeds Residential Benchmark (Yes/No)	Exceeds Industrial Benchmark (Yes/No)
Pesticides/PCBs (μg/kg) (Continued)										
Heptachlor epoxide	1/4	[2]8.8	0.7 - 0.78	8.8	ND	70	100	300	No	No
Inorganics (mg/kg)										
Arsenic	1/4	1.6	0.46 - 1	1.6	ND	[7]0.37	0.7	3.1	Yes	No
Barium	4/4	[2]3.8 - 56.7	NR	18.2	5.6	5,500	5,200	84,000	No	No
Beryllium	4/4	[2]0.07 - 0.1	0.035 - 0.035	0.09	0.16	0.15	[8]0.2	[8]1.0	No	No
Cadmium	1/4	0.44	0.25 - 0.28	0.44	2	39	37	600	No	No
Chromium	4/4	2.4 - 12.8	NR	5.2	2.6	[9]390	[9]290	[9]430	No	No
Cobalt	1/4	0.76	0.64 - 0.72	0.76	ND	4,700	4,700	110,000	No	No
Copper	4/4	[2]2.3 - 8.9	NR	4.7	2.2	2,900	NS	NS	No	No
Lead	4/4	3.6 - 21.5	NR	12.4	ND	[10]400	500	1,000	No	No
Mercury	1/4	[2]0.022	0.015 - 0.03	0.02	ND	23	23	480	No	No
Nickel	3/4	[2]1.2 - 3.6	0.65 - 1.3	2.3	ND	1,600	1,500	26,000	No	No
Selenium	1/4	[2]0.12	0.055 - 0.12	0.13	1.36	390	390	9,900	No	No
Tin	1/4	[2]3.62	1.55 - 3.1	3.6	ND	4,700	44,000	670,000	No	No
Vanadium	4/4	[2]2.8 - 5.4	NR	4	4	550	490	4,800	No	No
Zinc	4/4	[2]10.15 - 48.2	NR	21.1	2.6	23,000	23,000	560,000	No	No
Cyanide	4/4	0.09 - 0.14	NR	0.12	ND	160	1,600	40,000	No	No

See notes at end of table.

Table 13 (Continued)
Preliminary Risk Screening of Surface Soil Samples from Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed (excluding rejected values, "R" qualifier).
[2] Values is the average of the detected concentrations in a sample and its duplicate. For duplicate samples having one nondetected value, 1/2 the Contract-Required Quantitation Limit is used as a surrogate.
[3] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected, including values qualified as "J"; it does not include those samples where the analyte was not detected ("U" or "UJ" qualifiers) and rejected ("R" qualifier).
[4] The background screening concentration is twice the average of detected concentrations for inorganic analytes in background samples. Organic values are only one time the mean of detected concentrations, and are included for comparison purposes only. Surface soil background samples are MPT-B-SS1, MPT-B-SS1DUP, MPT-B-SS2, MPT-B-SS3, MPT-B-SS4, MPT-B-SS5, and MPT-B-SS6.
[5] For all chemicals except the essential nutrients (calcium, iron, magnesium, potassium, and sodium), U.S. Environmental Protection Agency (USEPA) Region III risk-based screening concentrations (RBCs) for residential surface soil exposure per January 1993 guidance (Selecting Exposure Routes and Contaminants of Concern by Risk-Based Screening [EPA/903/R-93-001]) was used for screening. Actual values are taken from the USEPA Region III RBC Tables dated February 9, 1995 and are based on a cancer risk of 10^{-6} and for noncarcinogens a hazard quotient (HQ) of 1.
[6] Values are taken from the Florida Department of Environmental Protection memorandum, Soil Cleanup Goals for Florida, dated September 27, 1995. The values are for either a residential or industrial worker soil exposure and are based on a cancer risk of 10^{-6} and for noncarcinogens an HQ of 1.
[7] The risk-based concentration is based on carcinogenic effects.
[8] Based on dermal adsorption of 0.0001
[9] Chromium in hexavalent form.
[10] No RBC is available for lead because of the lack of toxicity data. The value provided is based on USEPA's recommended target cleanup level for Superfund sites (USEPA, 1994).

Notes: Environmental samples included in this evaluation are MPT-TC-SS01, MPT-TC-SS02, MPT-TC-SS03, MPT-TC-SS04 and MPT-TC-SS04DUP.

SWMU = solid waste management unit
TCE = trichloroethene.
RBC = risk-based concentrations.
FDEP = Florida Department of Environmental Protection.
μg/kg = micrograms per kilogram.
ND = analyte not detected in background surface soil sample.
NS = no screening concentration..
NA = value is greater than $1x10^{-6}$.
PCBs = polychlorinated biphenyls.
4,4'-DDE = dichlorodiphenyldichloroethene.
mg/kg = milligrams per kilogram.
NR = no reporting limits available.

Table 14
Preliminary Risk Screening of Subsurface Soil Samples from Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Range of Detected Concentrations	Range of Reporting Limits	Mean of Detected Concentrations[2]	Background Screening Value[3]	Region III RBCs[4] Industrial	FDEP Cleanup Goals[5] Residential	FDEP Cleanup Goals[5] Industrial	Exceeds Residential Benchmark (Yes/No)	Exceeds Industrial Benchmark (Yes/No)
Volatile Organic Compounds (µg/kg)										
Carbon disulfide	1/4	1	6 - 6	1	ND	200,000,000	5,200	34,000	No	No
Methylene chloride	4/4	1 - 4	NR	2.8	ND	440,000	16,000	23,000	No	No
Trichlorofluoromethane	1/4	2	6 - 6	2	ND	610,000,000	6,600	44,000	No	No
Pesticides/PCBs (µg/kg)										
Chlordane	1/4	19	8.2 - 8.6	19	ND	4,400	800	3,000	No	No
Inorganics (mg/kg)										
Barium	4/4	1.9 - 4.1	NR	2.7	7.2	140,000	5,200	84,000	No	No
Beryllium	3/4	0.07 - 0.15	0.07 - 0.07	0.12	0.14	1.3	[6]0.2	[6]1.0	No	No
Chromium	3/4	1.7 - 2.1	0.4 - 0.4	1.9	3.4	[7]10,000	[7]290	[7]430	No	No
Copper	4/4	1 - 2.2	NR	1.7	3.6	76,000	NS	NS	No	No
Lead	4/4	0.63 - 1.3	NR	0.93	2.8	[8]400	500	1,000	No	No
Tin	2/4	4.4 - 4.8	3.2 - 3.3	4.6	5.4	500,000	44,000	67,000	No	No
Vanadium	4/4	1.4 - 1.9	NR	1.7	3.2	14,000	490	4,800	No	No
Zinc	3/4	2.8 - 3.4	2.4 - 2.4	3.2	4.8	610,000	23,000	560,000	No	No
Cyanide	4/4	0.09 - 0.17	NR	0.14	0.66	41,000	1,600	40,000	No	No

See notes at end of table.

Table 14 (Continued)
Preliminary Risk Screening of Subsurface Soil Samples from Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed (excluding rejected values, "R" qualifier).
[2] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected, including values qualified as "J"; it does not include those samples where the analyte was not detected ("U" or "UJ" qualifiers) and rejected ("R" qualifier).
[3] The background screening concentration is twice the average of detected concentrations for inorganic analytes in background samples. Organic values are only one time the mean of detected concentrations, and are included for comparison purposes only. Subsurface soil background samples are MPT-B-BS1, MPT-B-BS1DUP, MPT-B-BS4, MPT-B-BS5, and MPT-B-BS6.
[4] For all chemicals except the essential nutrients (calcium, iron, magnesium, potassium, and sodium), U.S. Environmental Protection Agency (USEPA) Region III risk-based screening concentrations (RBCs) for industrial surface soil exposure per January 1993 guidance (Selecting Exposure Routes and Contaminants of Concern by Risk-Based Screening [EPA/903/R-93-001]) was used for screening. Actual values are taken from the USEPA Region III RBC Tables dated February 9, 1995, and are based on a cancer risk of 10^{-6} and for noncarcinogens a hazard quotient (HQ) of 1.
[5] Values are taken from the Florida Department of Environmental Protection memorandum, Soil Cleanup Goals for Florida, dated September 27, 1995. The values are for either a residential or industrial worker soil exposure and are based on a cancer risk of 10^{-6} and for noncarcinogens an HQ of 1.
[6] Based on dermal absorption of 0.0001
[7] Chromium in hexavalent form.
[8] No RBC is available for lead because of the lack of toxicity data. The value provided is based on USEPA's recommended target cleanup level for Superfund sites (USEPA, 1994).

Notes: Environmental samples included in this evaluation are MPT-TC-BS01, MPT-TC-BS02, MPT-TC-BS03 and MPT-TC-BS04.

SWMU = solid waste management unit.
TCE = trichloroethene.
μg/kg = micrograms per kilogram.
ND = analyte not detected in background surface soil sample.
NR = no reporting limits available.
PCBs = polychlorinated biphenyls.
mg/kg = milligram per kilogram.
NS = no screening concentration.

Table 15
Estimated Human Health Cancer Risk Based on Maximum Values for Chemicals Detected in Surface Soil Samples at Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Detected Concentration[1]	Residential Exposure				Industrial Exposure	
		USEPA Region III RBC[2]	Estimated Residential Cancer Risk[3]	FDEP Soil Cleanup Goal[4]	Estimated Residential Cancer Risk[3]	FDEP Soil Cleanup Goal[4]	Estimated Industrial Cancer Risk[3]
Volatile Organic Compounds (μg/kg)							
No analytes exceeded screening criteria							
Semivolatile Organic Compounds (μg/kg)							
Benzo(a)pyrene	180	88	2E-6	100	2E-6	500	4E-7
Pesticides and PCBs (μg/kg)							
Aroclor-1260	160	83	2E-6	900	2E-7	3,500	5E-8
Inorganics (mg/kg)							
Arsenic	1.6	0.37	4E-6	0.7	2E-6	3.1	5E-7
Estimated Cancer Risk			8E-6		4E-6		1E-6

[1] The maximum value is from Table 13.
[2] USEPA Region III risk-based screening concentrations (RBCs) for residential surface soil exposure per January 1993 guidance (Selecting Exposure Routes and Contaminants of Concern by Risk-Based Screening [EPA/903/R-93-001]) was used for screening. Actual values are taken from the USEPA Region III RBC Tables dated February 9, 1995, and are based on a cancer risk of 10^{-6}.
[3] The cancer risk is an estimated value based on the assumptions used to determine the human health-based risk values.
[4] Values are taken from the Florida Department of Environmental Protection memorandum, Soil Cleanup Goals for Florida, dated September 27, 1995. The values are for either a residential or industrial worker soil exposure and are based on a cancer risk of 10^{-6}.

Notes: SWMU = solid waste management unit
TCE = trichloroethene.
USEPA = U.S. Environmental Protection Agency.
RBC = risk-based concentration.
FDEP = Florida Department of Environmental Protection.
μg/kg = micrograms per kilogram.
PCB = polychlorinated biphenyl.
mg/kg = milligrams per kilogram.

Table 16
Preliminary Risk Screening of Groundwater Samples from Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Range of Detected Concentrations[2]	Range of Reporting Limits	Mean of Detected Concentrations[3]	Background Screening Value[4]	Region III RBCs Tap Water[5]	Florida Guidance Concentrations[6]	Exceeds Region III RBCs Benchmark (Yes/No)	Exceeds Florida Guidance Benchmark (Yes/No)
Volatile Organic Compounds (µg/ℓ)									
1,2-Dichloroethene (total)	2/6	1 - 1	5 - 5	1	ND	55	[9]70	No	No
Bromodichloromethane	1/6	5	5 - 5	5	2	0.17	[10]0.6	Yes	Yes
Chloroform	1/6	11	5 - 5	11	2.5	0.15	[10]6	Yes	Yes
Dibromochloromethane	1/6	1	5 - 5	1	ND	0.13	[10]1	Yes	Yes
Tetrachloroethene	2/6	26 - [2]86.5	5 - 5	56.3	ND	1.1	[9]3	Yes	Yes
Trichloroethene	2/6	9 - 9	5 - 5	9	ND	1.6	[9]3	Yes	Yes
Inorganics (µg/ℓ)									
Arsenic	6/6	0.9 - 62.4	NR	13	9.8	[7]0.038	[9]50	Yes	Yes
Barium	6/6	2.8 - 9.8	NR	6.1	39.0	2,600	[9]2,000	No	No
Beryllium	1/6	0.36	0.3 - 0.3	0.36	ND	0.016	[9]4	Yes	No
Calcium	6/6	61,200 - 167-,000	NR	98,300	207,466	[8]1,055,398	NS	No	NS
Iron	4/6	[2]98.8 - 4,950	14.8 - 27.2	1,407	1,728	[8]13,267	[11]300	No	Yes
Magnesium	6/6	66,530 - 23,500	NR	15,155	153,984	[8]118,807	NS	No	NS
Manganese	6/6	0.84 - 543	NR	129	210	180	[11]50	Yes	Yes
Selenium	1/6	[2]0.52	0.25 - 0.5	0.52	11.8	180	[9]50	No	No
Silver	1/6	1.7	1.4 - 1.4	1.7	ND	180	[11]100	No	No
Sodium	6/6	7,450 - 19,800	NR	14,900	1,519,016	[8]396,022	[9]160,000	No	No
Vanadium	6/6	3.4 - [2]8.6	NR	6.5	9.2	260	[12]49	No	No
Cyanide	3/6	2 - 2.6	1.5 - 1.5	2.2	1.9	730	[9]200	No	No

See notes at end of table.

Table 16 (Continued)
Preliminary Risk Screening of Groundwater Samples from Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed (excluding rejected values, "R" qualifier).
[2] Asterisk values are the average of the detected concentrations in a sample and its duplicate. For duplicate samples having one nondetected value, 1/2 the Contract-Required Quantitation Limit is used as a surrogate.
[3] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected, including values qualified as "J"; it does not include those samples where the analyte was not detected ("U" or "UJ" qualifiers) and rejected ("R" qualifier).
[4] The background screening concentration is twice the average of detected concentrations for inorganic analytes in background samples. Organic values are only one time the mean of detected concentrations, and are included for comparison purposes only. Surface soil background samples are 01MW001, 08MW005S, 0BMW001S, 0SMW001R, 8MW5S, MPT-1-MW1-1, MPT-S-1-1, S1 and 0SMW001RD.
[5] U.S. Environmental Protection Agency (USEPA) Region III Risk-Based Concentration for tap water per January 1993 guidance (Selecting Exposure routes and Contaminants of Concern by Risk-Based Screening [EPA/903/R-93-001]) was used for screening. Actual values are taken from the USEPA Region III RBC Tables dated February 9, 1995, and are based on a cancer risk of 10^{-6} and for noncarcinogens a hazard quotient (HQ) of 1.
[6] Value is a groundwater guidance concentration from the Florida Department of Environmental Protection, Groundwater Guidance Concentrations, June 1994.
[7] The risk-based concentration is based on carcinogenic effects.
[8] Essential Nutrient Screening Values: U.S. Naval Station Mayport General Information Report, Volume II of II (ABB-ES, July 1995).
[9] Primary Standard under Florida Administrative Code (FAC), 62-550.310.
[10] Guidance value base on chemical being a carcinogen.
[11] Secondary Standard under FAC, 62-550.320.
[12] Guidance value based on chemical being a systemic toxicant.

Notes: Environmental samples included in this evaluation are MPT-TC-MW01S, MPT-TC-MW02S, MPT-TC-MW03S, MPT-TC-MW04S, MPT-TC-MW05S, MPT-TC-MW05DUP, and MPT-TC-MW06S.

SWMU = solid waste management unit.
TCE = trichloroethene.
RBC = risk-based concentration.
$\mu g/\ell$ = micrograms per liter.
NS = no screening concentration.
ND = analyte not detected in background surface soil sample.
NR = no range available.

Table 17
Estimated Human Health Cancer and Noncancer Risk Based on Maximum Values for Chemicals Detected in Groundwater Samples at Building 191

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Detected Concentration[1]	USEPA Region III Tap Water RBCs[2]	Estimated Residential Cancer Risk[3]	Florida Guidance Concentrations[4]	Estimated Florida Guidance Concentration Cancer Risk[3]	USEPA Region III Tap Water RBCs[5]	Estimated Hazard Index
Volatile Organic Compounds (μg/ℓ)							
Bromodichloromethane	5	0.17	3E-05	0.6	8E-06	NC	NC
Chloroform	11	0.15	7E-05	6	2E-06	NC	NC
Dibromochloromethane	1	0.13	7E-06	1	1E-06	NC	NC
Tetrachloroethene	86.5	1.1	8E-05	3	3E-05	NC	NC
Trichloroethene	9	1.6	6E-06	3	3E-06	NC	NC
Semivolatile Organic Compounds (μg/ℓ)							
No analytes detected.							
Pesticides and PCBs (μg/ℓ)							
No analytes detected.							
Inorganics (mg/ℓ)							
Arsenic	62.4	0.038	2E-03	50	1E-06	11	6
Beryllium	0.36	0.016	2E-05	4	9E-08	NC	NC
Manganese	543	NA	NA	NA	NA	180	3
Estimated Cancer Risk			2E-03		4E-05		
Estimated Hazard Index (Noncancer Risk)							9

[1] The maximum value is from Table 16.
[2] USEPA Region III risk-based screening concentrations (RBCs) for tap water per January 1993 guidance (Selecting Exposure Routes and Contaminants of Concern by Risk-Based Screening (EPA/903/R-93-001) was used for screening. Actual values are taken from the USEPA Region III RBC Tables dated February 9, 1995, and are based on a cancer risk of 10^{-6}.
[3] The cancer risk is an estimated value based on the assumptions used to determine the human health based risk values.
[4] Value is a groundwater guidance concentration from the Florida Department of Environmental Protection (FDEP), Groundwater Guidance Concentrations, June 1994.
[5] USEPA Region III risk-based screening concentrations (RBCs) for tap water per January 1993 guidance (Selecting Exposure Routes and Contaminants of Concern by Risk-Based Screening [EPA/903/R-93-001]) was used for screening. Actual values are taken from the USEPA Region III RBC Tables dated February 9, 1995, and are based on a hazard index of 1.

Notes:
SWMU = solid waste management unit.
TCE = trichloroethene.
USEPA = U.S. Environmental Protection Agency.
RBC = risk-based concentration.
μg/ℓ = micrograms per liter.
NC = Not calculated; Chemical evaluated as a carcinogen.
PCB = polychlorinated biphenyl.
mg/ℓ = milligrams per liter.
NA = Not applicable, Chemical evaluated as a noncarcinogen.

ATTACHMENT C

ATTACHMENT C

PROJECT CHRONOLOGY

Table C-1
Project Chronology

SWMU Assessment Report for TCE Release near Building 191
U.S. Naval Station
Mayport, Florida

When	Action
05/04/93	U.S. Naval Station (NAVSTA) Mayport Safety Officer issued an internal accident report concerning the accidental release of tetrachloroethene near Building 191.
08/26/93	Staff Civil Engineer at NAVSTA, Mayport issued correspondence to the Northeast District Office of the Florida Department of Environmental Protection to report the release of drycleaning fluid (tetrachloroethene) near Building 191 and provided analytical results of samples from the release site.
05/04/94	Public Works Center, Jacksonville, Florida: The Environmental Department issued a memorandum requesting sampling and analytical services, remediation services, and preparation of a map of the tetrachloroethene release site.
06/24/94	Public Works Center, Jacksonville, Florida: The Environmental Department issued a memorandum reporting analytical results and indicated that contamination was not evident at the sampling locations.
08/12/94	Staff Civil Engineer at NAVSTA, Mayport issued correspondence to the Northeast District Office of the Florida Department of Environmental Protection reporting the analysis of asphalt, limerock, and soil samples. In the correspondence it was stated that the "area is clean of contamination and requires no further action." Written concurrence of this opinion also was requested.
08/11/94	Environmental Science and Engineering issued a Contamination Assessment Report to Navy Public Works Center, Jacksonville, Florida. The report was for the assessment of a release from leaking underground fuel lines which serviced a 300-gallon above-ground storage tank. The report indicates that the Building 191 site qualifies for "No Further Action" as outlined in Chapter 17-770. The report also indicated that tetrachloroethene and trichloroethene were detected in a groundwater sample from a background monitoring well at concentrations that exceed their respective Florida groundwater guidance concentrations.

ACCIDENT REPORT
FISC MAYPORT
BESIDE BLDG 191A
5/4/93

On the above date at approximately 1500 AKAN John A. Loden from the USS CONSTELLATION punctured a 55 gallon drum of chemicals creating a hazardous spill. The drum contained DRY CLEANING SOLVENT chemical name was, TETRACHLOROETHYLENE. Approximately 25 - 30 gallons were spilled, the accident was caused when he attempted to pick up a pallet of drums to move. The forklift blade punctured the drum. SKCS Montelongo was his supervisor but was not present. He was notified by another sailor who was on the detail with AKAN Loden. Due to the fact that he stepped in the chemical he was taken to medical to have his feet washed.

Problems:

(1) The drums were not stored in the spill containment area.
(2) Within 130 feet of the spill area was a storm drain.
(3) AKAN Loden did not attemp to get help to invert the drum creating a larger spill.
(4) Clean up equipment was not readily available for use.

Solutions:

(1) Move all liquid drums to spill containment area.
(2) Have a designated spill containment cart in an easily accessible area with all necessary supplies.
(3) Review spill procedures with all employees.
(4) Order a Spilmagnet Drain Cover to be kept on the cart.
(5) Have the area supervisor check the cart and maintain all supplies monthly,(example a check off sheet).

Thanks to the fast thinking of SC Martinez and Pete Wilson we were able to avoid a really serious accident by the chemical getting into the storm drain. This would have caused possible environmental damage.

Report By

Marie Boone

Marie Boone
Safety Officer
Mayport

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 1

To Mike Davenport	From Marie Boone
Co. NAE	Co. Safety

5090
Ser N4E2/ 0U110

26 AUG 1993

Mr. Ernest Frey
Northeast District
Florida Department of Environmental Protection
7825 Bay Meadows Way, Suite B-200
Jacksonville, FL 32256

Subj: DRY CLEANING FLUID SPILL

Dear Mr. Frey:

On May 4, 1993, while re-locating drums of tetrachloroethylene, a 55-gallon drum was punctured spilling 25-30 gallons of dry cleaning fluid. This spill occurred when the forklift operator was attempting to pick up a pallet of drums in the materials handling area beside Building 191A, Fleet and Industrial Supply Center Jacksonville, Fleet Support Center Mayport. The location of the spill is shown on the enclosed map. Our spill response team acted immediately to contain and remove the spill material from the concrete and spill samples were taken for analysis. Copies of the analysis results are enclosed.

Please respond if there is any further action required by Naval Station Mayport. If you have any questions, please contact Mr. Michael Davenport, of my Environmental Staff, at (904) 270-6730.

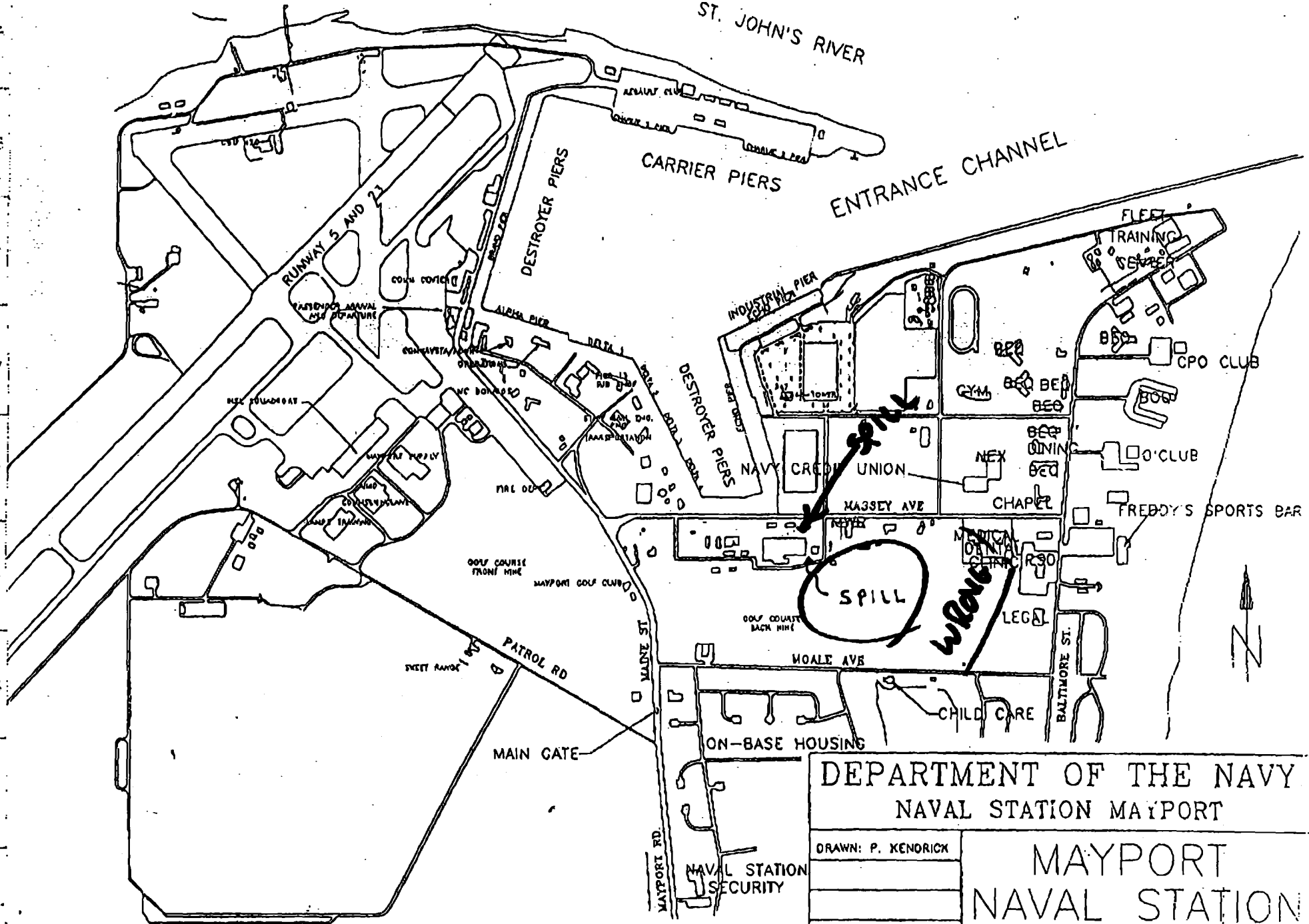
SIGN N4
N4A
N4E
N4E2

Sincerely,

DOUGLAS P. TOMLINSON
Lieutenant Commander, CEC, U.S. Nav
Staff Civil Engineer
By direction of
the Commanding Officer

Encl:
(1) Site Map
(2) Analysis Results
93-06-188 and 93-06-189

Copy to:
FDEP Tallahassee (Mr. Eric Nuzie)
FDEP Northeast District (Mr. Kenton Brown)
FISC Jacksonville
FISC Jacksonville FSC Mayport
COMNAVAVNACTS Jacksonville (N3)
COMNAVAIRLANT (N442C)
bc: N4E Chron c:\wpdocs\Spill-TE.FIS/pl/8-11



DEPARTMENT OF THE NAVY
NAVAL STATION MAYPORT

DRAWN: P. KENDRICK

FILE: SITE.DWG

MAYPORT NAVAL STATION

DRAWING NO. 91-000-005

NOT TO SCALE

FIRST COAST ENVIRONMENTAL LABORATORY INC

July 21, 1993

Client: Navy Public Work

Sample I.D.: 93-06-188

Sample Matrix: Solid

Lab #: 9307-106-1

Date Received: 7-15-93

Date Completed: 7-19-93

Date Extraction: 7-16-93

Volatile Organic Compounds
Toxicity Characteristic Leaching Procedure SW-846 Method 1311
USEPA Method 8240 - GC/MS (8260)

Parameter	CAS #	Detection Limit(mg/L)	RESULT(mg/L)	Max. Cont. Level(mg/L)
Benzene	71-43-2	0.005	< 0.005	0.5
Carbon tetrachloride	56-23-5	0.005	< 0.005	0.5
Chlorobenzene	108-90-7	0.005	< 0.005	100.0
Chloroform	67-66-3	0.005	< 0.005	6.0
1,4-Dichlorobenzene	106-46-7	0.005	< 0.005	7.5
1,2-Dichloroethane	107-06-2	0.005	< 0.005	0.5
1,1-Dichloroethene	75-35-4	0.005	< 0.005	0.7
Methyl ethyl ketone	78-93-3	0.05	< 0.05	200.0
→ Tetrachloroethene	127-18-4	0.005	0.558	0.7
Trichloroethene	79-01-6	0.005	< 0.005	0.5
Vinyl chloride	75-01-4	0.005	< 0.005	0.2

SW-846 -- "Test Methods for Evaluating Solid Waste", Third Edition, November, 1986, and Revision 1, December, 1987, and 55 FR (61) 11862 - 11875.

Surrogate Standards Recovery Percentage

	Recovey %	Acceptance Limits
Toluene - d_8	95.8	86 - 110
4-Bromofluorobenzene	106.9	86 - 115
1,2 Dichlorobenzene - d_4	102.4	87 - 112

Respectfully submitted:

Barry C. Byrd Jr., MS
Technical Director

ECB/tb

FIRST COAST ENVIRONMENTAL LABORATORY, INC.

July 23, 1993

Client: Navy Public Works

Sample I.D.: 93-06-188

Sample Matrix: Solid

Lab #: 9307-106-1

Date Received: 7-15-93

Date Completed: 7-22-93

Date Extraction 7-21-93

Analytical Report
TCLP - Contaminant List (Partial) Method 1311
Methods EPA 8250 (8270)

Parameter	Regulatory Level	Results mg/L
Cresols	200.0	ND *
2,4-Dinitrotoluene	0.13	ND *
Hexachlorobenzene	0.13	ND
Hexchlorobutadiene	0.5	ND
Hexachlorethane	3.0	ND
Nitrobenzene	2.0	ND
Pentachlorophenol	100.0	ND *
Pyridine	5.0	ND *
2,4,5-Trichlorophenol	400.0	ND *
2,4,5-Trichlorophenol	2.0	ND *

Note: ND = (None detected, lower detectable limit - 0.010 mg/L)
ND * = (None detected, lower detectable limit - 0.025 mg/L)
J = (Detected but below quantitive limit, quantition suspect)
B = (this compound also detected in the blank)

Respectfully submitted:

Barry C. Byrd, Jr., MS
Technical Director

BCB/tb

[illegible] Expressway - Jacksonville, Florida [illegible]
[illegible] 725-4947 - [illegible] 725-[illegible]

FIRST COAST ENVIRONMENTAL LABORATORY INC.

July 20, 1993

Client: Navy Public Works (93-06-188) Lab #: 9307-106-1

Sample I.D.: MYP1 Date Received: 7-15-93

Sample Matrix: Water Date Completed: 7-20-93

Metals Analytical Summary
Toxicity Characteristic Leaching Procedure SW-846 Method 1311

Parameter	SW-846 Method	CAS #	Detection Limit(mg/L)	RESULT(mg/L)	Max. Cont. Level(mg/L)
Arsenic	6010	7440-38-2	0.0394	0.053	5.0
Barium	6010	7440-39-3	0.00454	0.122	100.0
Cadmium	6010	7440-43-9	0.00836	< 0.00836	1.0
Chromium	6010	7440-47-3	0.0140	0.036	5.0
Lead	6010	7439-92-1	0.0600	< 0.060	5.0
Mercury	7470,1	7439-97-6	0.0000917	0.176	0.2
Selenium	6010	7782-49-2	0.0452	0.076	1.0
Silver	6010	7440-22-4	0.00414	0.008	5.0

SW-846 -- "Test Methods for Evaluating Solid Waste", Third Edition, November, 1986, and Revision 1, December, 1987, and 55 FR (61) 11862 - 11875.

Respectfully submitted,

Adolph W. Wollitz
Laboratory Director
FHRS Lab #E82102
FHRS Lab #82110
EPA #FL062
DER Comp QAPP # 870222G

AWW/tb

July 21, 1993

Client: [illegible] Lab #: [illegible]

Sample I.D.: 93-06-[illegible] Date Received: 7-15-93

Sample Matrix: Soil Date Completed: 7-20-93

Date Extraction: 7-19-93

Volatile Organic Compounds
Toxicity Characteristic Leaching Procedure SW-846 Method 1311
USEPA Method 8240 - GC/MS (8260)

Parameter	CAS #	Detection Limit(mg/L)	RESULT(mg/L)	Max. Cont. Level(mg/L)
Benzene	71-43-[illegible]	0.005	< 0.005	0.5
Carbon tetrachloride	56-[illegible]	0.005	< 0.005	0.5
Chlorobenzene	108-90-7	0.005	< 0.005	100.0
Chloroform	67-66-[illegible]	0.005	< 0.005	6.0
1,4-Dichlorobenzene	106-46-7	0.005	< 0.005	7.5
1,2-Dichloroethane	107-06	0.005	< 0.005	0.5
1,1-Dichloroethene	75-35-4	0.005	< 0.005	0.7
Methyl ethyl ketone	78-93	0.05	< 0.05	200.0
Tetrachloroethene	127-18	0.005	0.112	0.7
Trichloroethene	79-01-6	0.005	< 0.005	0.5
Vinyl chloride	75-01-4	0.005	< 0.005	0.2

SW-846 -- "Test Methods for Evaluating Solid Waste", Third Edition, November, 1986, and Revision 1, December, 1987, and 55 FR (61) 11862 - 11875.

Surrogate Standards Recovery Percentage

	Recovery %	Acceptance Limits
Toluene - d_8	1[illegible]	88 - 110
4-Bromofluorobenzene	10[illegible]	86 - 115
1,2 Dichlorobenzene - d_4	1[illegible]	87 - 112

Respectfully submitted,

Barry C. Byrd, Jr., MS
Technical Director

BCB/tb

FIRST COAST ENVIRONMENTAL [illegible] INC.

July 23, 1993

Client	Navy Public Works	Job #	9307-106-2
Sample I.D.	93-06-182	Date Received	7-15-93
Sample Matrix	Solid	Date Completed	7-22-93
		Date Extracted	7-21-93

Analytical Report
TCLP Contaminant List (Partial) Method 1311
Methods EPA 8150 (8270)

Parameter	Regulatory Level	Results mg/L
Cresol	200.0	ND *
2,4-Dinitrotoluene	0.13	ND *
Hexachlorobenzene	0.13	ND
Hexachlorobutadiene	0.5	ND
Hexachloroethane	3.0	ND
Nitrobenzene	2.0	ND
Pentachlorophenol	100.0	ND *
Pyridine	5.0	ND *
2,4,5-Trichlorophenol	400.0	ND *
2,4,6-Trichlorophenol	2.0	ND *

Note ND = (None detected, lower detectable limit - 0.010 mg/l)
ND * = (None detected, lower detectable limit - 0.025 mg/L)
J = (Detected but below quantitive limit, quantition suspect)
B = (this compound also detected in the blank)

Respectfully submitted:

Barry [illegible], MS
Technical Director

BCB/[illegible]

EAST COAST ENVIRONM[illegible]

July 20, 1993

Client: Navy Public Works (93-06-189) Lab #: 9307-106-2

Sample I.D.: MYPT Date Received: 7-15-93

Sample Matrix: Water Date Completed: 7-20-93

Metals Analytical Summary
Toxicity Characteristic Leaching Procedure SW-846 Method 1311

Parameter	SW-846 Method	CAS #	Detection Limit(mg/L)		RESULT(mg/L)	Max. Cont. Level(mg/L)
Arsenic	6010	7440-38-2	0.0394		0.093	5.0
Barium	6010	7440-39-3	0.00454		0.028	100.0
Cadmium	6010	7440-43-9	0.00838	<	0.00838	1.0
Chromium	6010	7440-47-3	0.0140		0.017	5.0
Lead	6010	7439-92-1	0.0600	<	0.060	5.0
Mercury	7470,1	7439-97-6	0.0000917		0.00016	0.2
Selenium	6010	7782-49-2	0.0452	<	0.0452	1.0
Silver	6010	7440-22-4	0.00414	<	0.00414	5.0

SW-846 -- "Test Methods for Evaluating Solid Waste", Third Edition, November, 1986, and Revision 1, December, 1987, and 55 FR (61) 11862 - 11875.

Respectfully submitted,

Adolph W. Wollitz
Laboratory Director
FHRS Lab #E82102
FHRS Lab #82110
EPA #FL062
DER Comp QAPP # 870222G

AWW/tb

12 July 93

From: 320.2
To: 240

Subj: ANALYTICAL TESTING

1. Request the following samples be tested for the parameters indicated.

Sample No.	Media	Test (Clin)	COST	Source
93-06-188	Solid, SAND	TCLP (full no pesticides)	$.	Mypt
93-06-189	Solid, black top	TCLP (full no pesticides)	$.	Mypt
93-06-190	Liquid	TCLP (full no pesticides)	$.	Bldg 171
		Total	$ .00	

2. All analysis shall conform to Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846.

3. Job Order number to be used this project is 1243006 and a 24-hour turn around is requested on analytical results.

4. Please contact Gail Fallon or Andy Long at 772-4551 if there are any questions.

Andy Long
ANDY LONG

RC# 00186
To 240 7/13/93
To LAB 7/15/93

FIRST COAST ENVIRONMENTAL LABORATORY, INC.

July 21, 1993

Client: Navy Public Works

Lab #: 9307-106

Sample I.D.: See Below (MYP1)

Date Received: 7-15-93

Sample Matrix: See Below

Date Completed: 7-20-93

Metals Analytical Summary

FCEL Lab #	Sample I.D. Station	Sample Matrix	Parameter	Method	Results
9307-106-1	93-06-188	Solid	Chromium	6010	7.97 mg/Kg
9307-106-2	93-06-189	Solid	Chromium	6010	5.56 mg/Kg

Respectfully submitted,

Adolph W. Wollitz
Laboratory Director
FHRS Lab #E82102
FHRS Lab #82110
EPA #FL062
DER Comp QAPP # 870222G

AWW/tb

8818 Arlington Expressway • Jacksonville, Florida 32211
(904) 725-1847 • Fax (904) 725-2315

PUBLIC WORKS CENTER
JACKSONVILLE
ENVIRONMENTAL DEPARTMENT
Memorandum

94 MAY 4 AM 12:51

Date: 4 May 1994

From: Hazardous Waste Division Director (Code 320)
To: Laboratory Division (Code 330)

Subj: ANALYTICAL SERVICES REQUEST FOR TF24030, CHEMICAL ANALYSIS AND CLEAN UP BEHIND BLDG. 191, NAVSTA MAYPORT

Encl: (1) Location Sketch
(2) Plan of Action and Milestones

1. Request subject services per the following requirements

a. Analytes/Method: Method 8240 (CLIN 0001HL)

b. Sampling: Collect 6 samples as noted on enclosure (1). Recommend pick and hand auger be used to collect samples. Requested analysis should be conducted on each of the six samples. Code 330 should leave sampling locations as level as possible after work; code 320 will followup to have paving patched pending test results (if results show tetrachloroethylene above detectable limits, remediation work will require removing additional paving anyway.)

c. Turn Around Time: Project has been charted on enclosure (2) for Mayport Zone Manager. Request sampling be performed by 20 May 94 with test results back by 8 Jun 94.

d. Point of Contact: G. Fallon at ext. 8320.

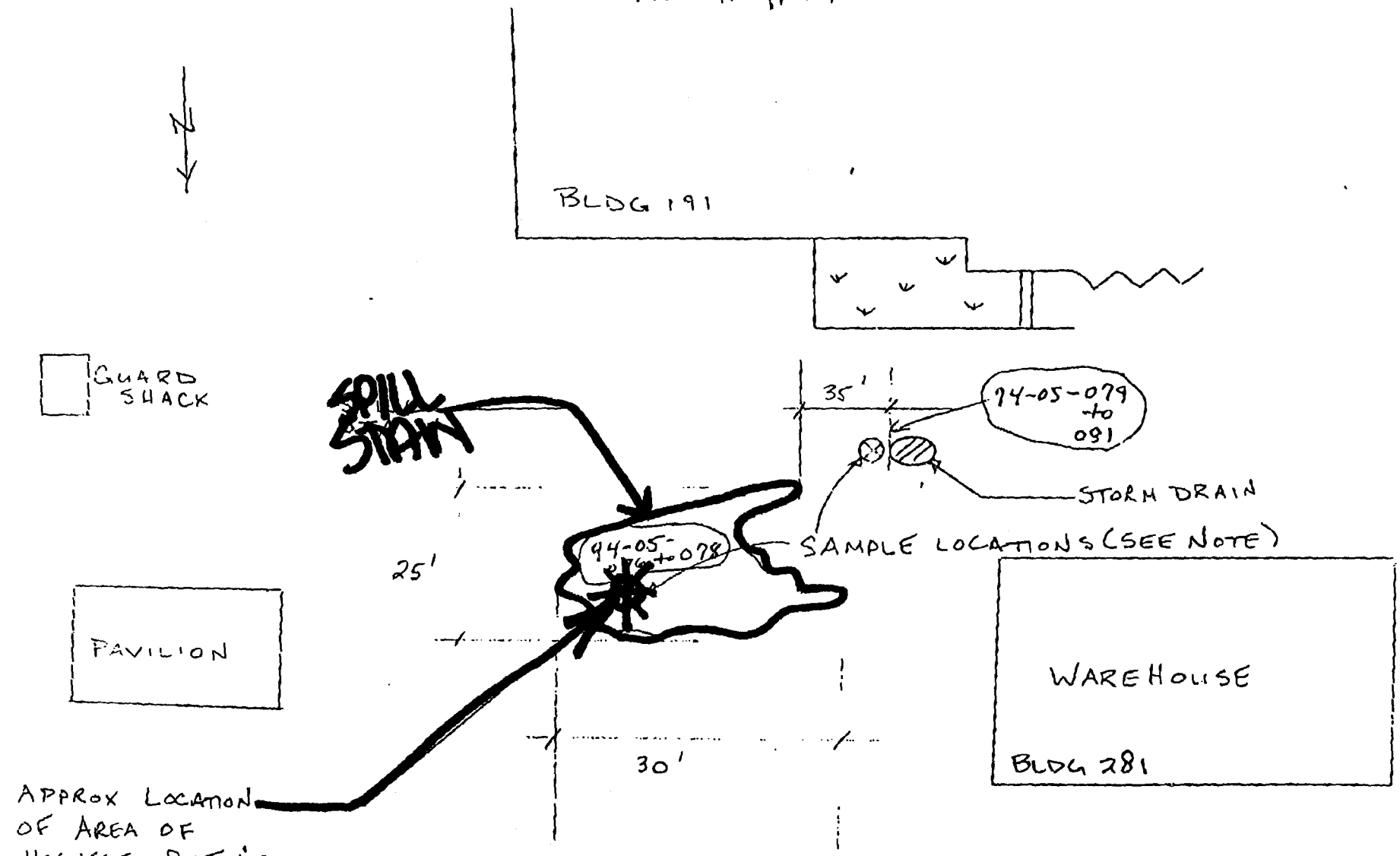
e. Job Order Number: 1243006

2. A more accurate sketch, suitable for submission to FDEP, is also requested with the final results. The sketch must include, as a minimum, the location of the spill, where the forklift punctured the drum, the storm drain, and where the samples were taken. The main concern with the sketch's accuracy is the location of samples.

Gail L. Fallon
GAIL L. FALLON

Proj # 94-161
Sample # 94-05-076 to 94-05-081

ROUGH SKETCH - BLDG 191, TF24030
FISC MAYPORT

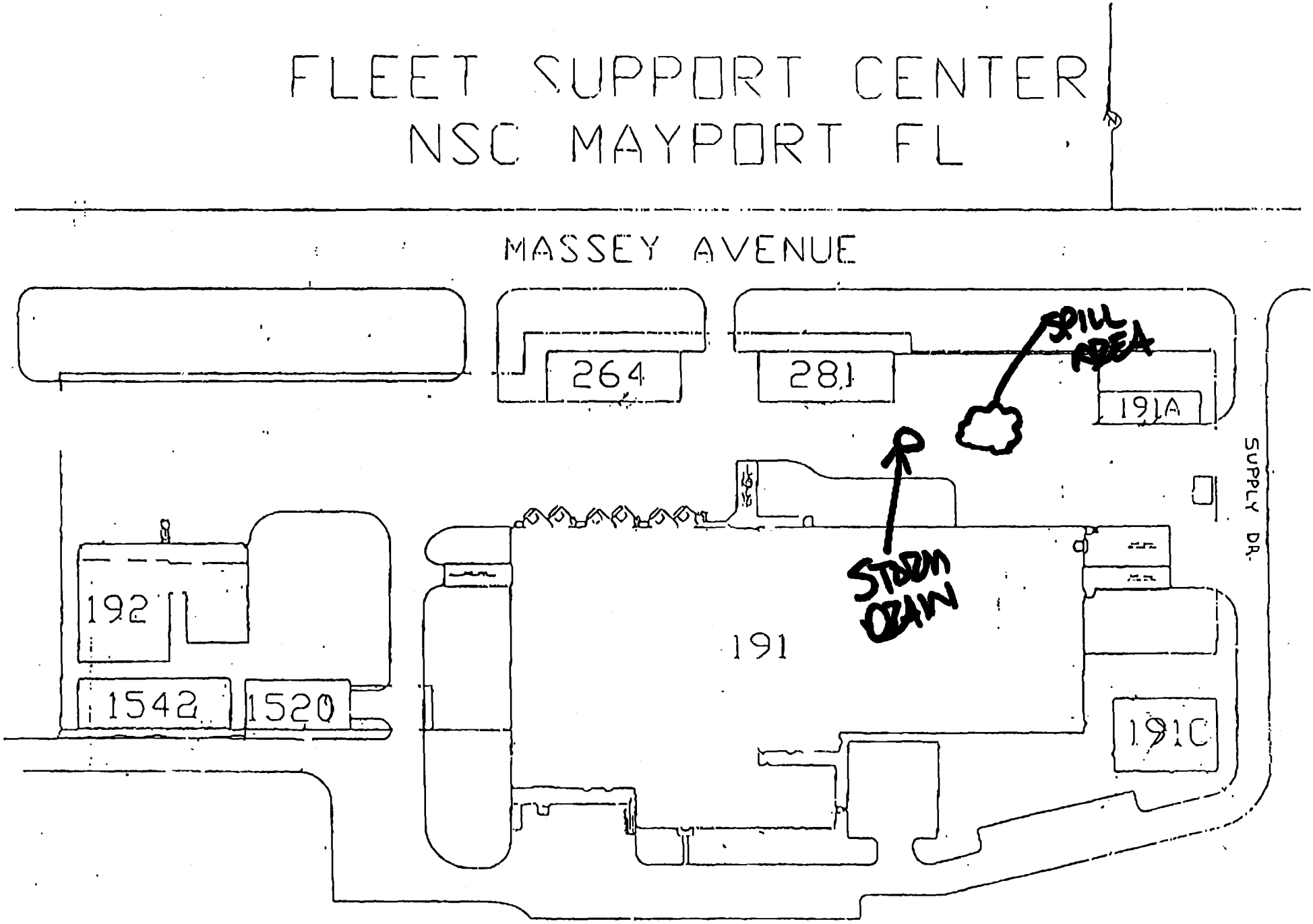


NOTE (TOTAL 6 SAMPLES)

3 SAMPLES PROPOSED AT EACH LOCATION TO INCLUDE:

	APPROX. DEPTH (FT)
1. ASPHALT SAMPLE	0
2. LIMEROCK SAMPLE	.5-1.0
3. SOIL SAMPLE	1.0-2.0

FLEET SUPPORT CENTER
NSC MAYPORT FL



7 Apr 94

PLAN OF ACTION AND MILESTONES FOR FISC BLDG. 191 SPILL (TF24030)

ACTION	ORIGINAL / REVISED DATE	STATUS
1. Code 320 identify analytical methods and submit request for sampling and analysis to Code 330.	29 Apr 94	
2. Code 330 perform sampling and deliver sample to laboratory. Also provide sketch of sample locations.	20 May 94	
3. Code 330 receive analytical results back from laboratory.	8 Jun 94	
4. Code 320 review analysis and provide recommendation on additional remediation.	10 Jul 94	
Following items contingent on discovering low level contamination		
5. Code 320 develop statement of work for site remediation; include additional analysis, excavation, and written report.	24 Jun 94	
6. Code 240 award contract for site remediation.	24 Jul 94	
7. Contractor complete work.	5 Aug 94	
8. Code 320 dispose of contaminated soil through DRMO.	23 Sep 94	

NAVY PUBLIC WORKS CENTER
JACKSONVILLE
ENVIRONMENTAL DEPARTMENT
MEMORANDUM

Date: 24 Jun 94

From: Acting HW Division Director
To: FISC (Attn: Marie Boone)

Subj: TF-24030, CHEMICAL ANALYSIS AND CLEAN UP BEHIND BLDG. 191, SPILL AREA

Encl: (1) Analytical Results
(2) Sketch of Sample Area

1. Per enclosure (1), the tetrachloroethylene sample results from enclosure (2) sample locations indicate no contamination. Constituents found such as xylene is normal for a parking area and associated motor vehicle undercarriage leakage.

K. J. MELCHIORRE
LT, CEC, USN

Copy to:
Codes 300S

23 JUN 94

MEMORANDUM

From: 330.2
To: 320

Subj: ANALYTICAL TEST RESULTS

Ref: (a) Code 320 Request for Analytical Service of 4 MAY 94

Encl: (1) Lab Results, Call # 0113, Project # 94-161
(2) Chain of Custody

1. Per reference request, samples were collected by our staff from MYPT area behind BLDG 191 and forwarded to the lab for testing. The results and the chain of custody are provided in enclosures (1) and (2).

2. If there are any questions, please call me at 772-4543, ext 8306.

FIRST COAST ENVIRONMENTAL LABORATORY, INC.

June 22, 1994

Amended

Client: Navy Public Works

Sample I.D.: 94-05-076 Asphalt

Sample Matrix: Solid

Lab #: 9405-236-1

Date Received: 5-27-94

Date Completed: 5-28-94

Sample Collection: 5-27-93

Volatile Organic Compounds
EPA Method 8040 List (GC/MS)

Parameter	RESULTS
Benzene	ND
Bromodichloromethane	ND
Bromoform	ND
Bromomethane	ND
Carbon tetrachloride	ND
Chlorobenzene	ND
Chloroethane	ND
2-Chloroethylvinyl ether	ND
Chloroform	ND
Dibromochloromethane	ND
Dichlorodifluoromethane	ND
1,1-Dichloroethane	ND
1,2-Dichloroethane	ND
1,1-Dichloroethene	ND
Trans-1,2-Dichloroehtane	ND
1,2-Dichloropropane	ND
Cis-1,2-Dichloropropene	ND
Trans-1,3-Dichloropropene	ND
Ethylbenzene	188
Methylene chloride	ND
1,1,2,2-Tetrachloroethane	ND
Tetrachloroethene	ND
Toluene	586
1,1,1-Trichloroethane	ND
1,1,2-Trichloroethane	ND
Trichloroethene	ND
Trichlorofluoromethane	ND *
Vinyl chloride	ND *
1,2 Dichlorobenzene	ND
1,3 Dichlorobenzene	ND
1,4 Dichlorobenzene	ND

Note: ND = (None detected, lower detectable limit - 5 ug/Kg)
ND * = (None detected, lower detectable limit - 50 ug/Kg)
J = (Detected but below quantitive limit, quantition suspect)
B = (this compound also detected in the blank)

Respectfully submitted,

Barry C. Byrd, Jr., MS
Technical Director
DEP Comp QAPP # 870222G

8818 Arlington Expressway • Jacksonville, Florida 32211
(904) 725-4847 • Fax (904) 725-2215

FIRST COAST ENVIRONMENTAL LABORATORY, INC.

June 22, 1994

Client: Navy Public Works
Sample I.D.: 94-05-076 Asphalt
Sample Matrix: Solid

Lab #: 9405-236-1
Date Received: 5-27-94
Date Completed: 5-28-94
Sample Collection: 5-27-93

Other Determined Volatile Organic Compounds
USEPA METHOD 624/524.2/8260 - GC/MS

The compounds reported below are compounds determined to be present in the sample which are reported on lists other than the requested parameter list.

Parameter	Conc. Units	Det. Limit	Result
Total Xylenes	ug/Kg	5	477

Tentatively Identified Compounds

The compounds in this section are compounds which generated significant peaks in the chromatographic analysis and were tentatively identified utilizing the NBS Library in the Mass Spectal Data System. Since standard instrument responses have not been determined for these compounds a Response Factor of 1.00 has been utilized to calculate the result. Therefore, the result should be viewed in a conservative manner.

Parameter	Estimated Result

Respectfully submitted,

Barry C. Byrd, Jr., MS
Technical Director
DEP Comp QAPP # 870222G

BCB/tb

8818 Arlington Expressway • Jacksonville, Florida 32211
(904) 725-4847 • Fax (904) 725-2215

FIRST COAST ENVIRONMENTAL LABORATORY, INC.

June 22, 1994

Client: Navy Public Works

Sample I.D.: 94-05-077 Limerock

Sample Matrix: Solid

Lab #: 9405-236-2

Date Received: 5-27-94

Date Completed: 5-28-94

Sample Collection: 5-27-93

Volatile Organic Compounds
EPA Method 8040 List (GC/MS)

Parameter	RESULTS
Benzene	ND
Bromodichloromethane	ND
Bromoform	ND
Bromomethane	ND
Carbon tetrachloride	ND
Chlorobenzene	ND
Chloroethane	ND
2-Chloroethylvinyl ether	ND
Chloroform	ND
Dibromochloromethane	ND
Dichlorodifluoromethane	ND
1,1-Dichloroethane	ND
1,2-Dichloroethane	ND
1,1-Dichloroethene	ND
Trans-1,2-Dichloroehtane	ND
1,2-Dichloropropane	ND
Cis-1,2-Dichloropropene	ND
Trans-1,3-Dichloropropene	ND
Ethylbenzene	66.5
Methylene chloride	ND
1,1,2,2-Tetrachloroethane	ND
Tetrachloroethene	ND
Toluene	18.2
1,1,1-Trichloroethane	ND
1,1,2-Trichloroethane	ND
Trichloroethene	ND
Trichlorofluoromethane	ND *
Vinyl chloride	ND *
1,2 Dichlorobenzene	ND
1,3 Dichlorobenzene	ND
1,4 Dichlorobenzene	ND

Note: ND = (None detected. lower detectable limit - 5 ug/Kg)
ND * = (None detected. lower detectable limit - 50 ug/Kg)
J = (Detected but below quantitive limit. quantition suspect)
B = (this compound also detected in the blank)

Respectfully submitted,

Barry C. Byrd, Dr., MS
Technical Director
DEP Comp QAPP # 870222G

BCB/tb

FIRST COAST ENVIRONMENTAL LABORATORY, INC.

June 22. 1994

Client: Navy Public Works
Sample I.D.: 94-05-077 homerock
Sample Matrix: Solid

Lab #: 9405-236-2
Date Received: 5-27-94
Date Completed: 5-28-94
Sample Collection: 5-27-93

Other Determined Volatile Organic Compounds
USEPA METHOD 624/524.2/8260 - GC/MS

The compounds reported below are compounds determined to be present in the sample which are reported on lists other than the requested parameter list.

Parameter	Conc. Units	Det. Limit	Result
Total Xylenes	ug/Kg	5	203

Tentatively Identified Compounds

The compounds in this section are compounds which generated significant peaks in the chromatographic analysis and were tentatively identified utilizing the NBS Library in the Mass Spectal Data System. Since standard instrument responses have not been determined for these compounds a Response Factor of 1.00 has been utilized to calculate the result. Therefore, the result should be viewed in a conservative manner.

Parameter	Estimated Result

Respectfully submitted

Barry C. Byrd, Jr., MS
Technical Director
DEP Comp QAPP # 870222G

BCB/tb

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FIRST COAST ENVIRONMENTAL LABORATORY, INC.

June 22, 1994

Client: Navy Public Works
Sample I.D.: 94-05-078 Soil
Sample Matrix: Solid

Lab #: 9405-236-3
Date Received: 5-27-94
Date Completed: 5-28-94
Sample Collection: 5-27-93

Volatile Organic Compounds
EPA Method 8040 List (GC/MS)

Parameter	RESULTS
Benzene	ND
Bromodichloromethane	ND
Bromoform	ND
Bromomethane	ND
Carbon tetrachloride	ND
Chlorobenzene	ND
Chloroethane	ND
2-Chloroethyl vinyl ether	ND
Chloroform	ND
Dibromochloromethane	ND
Dichlorodifluoromethane	ND
1,1-Dichloroethane	ND
1,2-Dichloroethane	ND
1,1-Dichloroethene	ND
Trans-1,2-Dichloroehtane	ND
1,2-Dichloropropane	ND
Cis-1,2-Dichloropropene	ND
Trans-1,3-Dichloropropene	ND
Ethylbenzene	ND
Methylene chloride	ND
1,1,2,2-Tetrachloroethane	ND
Tetrachloroethene	ND
Toluene	ND
1,1,1-Trichloroethane	ND
1,1,2-Trichloroethane	ND
Trichloroethene	ND
Trichlorofluoromethane	ND *
Vinyl chloride	ND *
1,2 Dichlorobenzene	ND
1,3 Dichlorobenzene	ND
1,4 Dichlorobenzene	ND

Note: ND = (None detected, lower detectable limit - 5 ug/Kg)
ND * = (None detected, lower detectable limit - 50 ug/Kg)
J = (Detected but below quantitive limit, quantition suspect)
B = (this compound also detected in the blank)

Respectfully submitted,

Barry C. Byrd, Jr., MS
Technical Director
DEP Comp QAPP # 870222G

BCB/tb

8818 Arlington Expressway • Jacksonville, Florida 32211
(904) 725-4847 • Fax (904) 725-2215

(904) 725-4847 • Fax (904) 725-2215

FIRST COAST ENVIRONMENTAL LABORATORY, INC.

June 22, 1994

Client: Navy Public Works
Sample I.D.: 94-05-079
Sample Matrix: Solid

Lab #: 9405-236-4
Date Received: 5-27-94
Date Completed: 5-28-94
Sample Collection: 5-27-93

Volatile Organic Compounds
EPA Method 8040 List (GC/MS)

Parameter	RESULTS
Benzene	ND
Bromodichloromethane	ND
Bromoform	ND
Bromomethane	ND
Carbon tetrachloride	ND
Chlorobenzene	ND
Chloroethane	ND
2-Chloroethylvinyl ether	ND
Chloroform	ND
Dibromochloromethane	ND
Dichlorodifluoromethane	ND
1,1-Dichloroethane	ND
1,2-Dichloroethane	ND
1,1-Dichloroethene	7.42
Trans-1,2-Dichloroehtane	ND
1,2-Dichloropropane	ND
Cis-1,2-Dichloropropene	ND
Trans-1,3-Dichloropropene	ND
Ethylbenzene	ND
Methylene chloride	ND
1,1,2,2-Tetrachloroethane	ND
Tetrachloroethene	ND
Toluene	9.27
1,1,1-Trichloroethane	ND
1,1,2-Trichloroethane	ND
Trichloroethene	ND
Trichlorofluoromethane	ND *
Vinyl chloride	ND *
1,2 Dichlorobenzene	ND
1,3 Dichlorobenzene	ND
1,4 Dichlorobenzene	ND

Note: ND = (None detected, lower detectable limit - 5 ug/Kg)
ND * = (None detected, lower detectable limit - 50 ug/Kg)
J = (Detected but below quantitive limit, quantition suspect)
B = (this compound also detected in the blank)

Respectfully submitted,

Barry C. Byrd, Jr., NS
Technical Director
DEP Comp QAPP # 870222G

BCB/rb

FIRST COAST ENVIRONMENTAL LABORATORY, INC.

June 22, 1994

Client: Navy Public Works

Sample I.D.: 94-05-080 Limerock

Sample Matrix: Solid

Lab #: 9405-236-5

Date Received: 5-27-94

Date Completed: 5-28-94

Sample Collection: 5-27-93

Volatile Organic Compounds
EPA Method 8040 List (GC/MS)

Parameter	RESULTS
Benzene	ND
Bromodichloromethane	ND
Bromoform	ND
Bromomethane	ND
Carbon tetrachloride	ND
Chlorobenzene	ND
Chloroethane	ND
2-Chloroethylvinyl ether	ND
Chloroform	ND
Dibromochloromethane	ND
Dichlorodifluoromethane	ND
1,1-Dichloroethane	ND
1,2-Dichloroethane	ND
1,1-Dichloroethene	ND
Trans-1,2-Dichloroehtane	ND
1,2-Dichloropropane	ND
Cis-1,2-Dichloropropene	ND
Trans-1,3-Dichloropropene	ND
Ethylbenzene	ND
Methylene chloride	ND
1,1,2,2-Tetrachloroethane	ND
Tetrachloroethene	ND
Toluene	6.77
1,1,1-Trichloroethane	ND
1,1,2-Trichloroethane	ND
Trichloroethene	ND
Trichlorofluoromethane	ND *
Vinyl chloride	ND *
1,2 Dichlorobenzene	ND
1,3 Dichlorobenzene	ND
1,4 Dichlorobenzene	ND

Note: ND = (None detected, lower detectable limit - 5 ug/Kg)
ND * = (None detected, lower detectable limit - 50 ug/Kg)
J = (Detected but below quantitive limit, quantition suspect)
B = (this compound also detected in the blank)

Respectfully submitted,

Barry E. Byrd, Jr., MS
Technical Director
DEP Comp QAPP # 870222G

BCB/tb

8818 Arlington Expressway • Jacksonville, Florida 32211
(904) 725-4847 • Fax (904) 725-2215

FIRST COAST ENVIRONMENTAL LABORATORY, INC.

June 22, 1994

Client: Navy Public Works
Sample I.D.: 94-05-082 Soil
Sample Matrix: Solid

Lab #: 9405-236-6
Date Received: 5-27-94
Date Completed: 5-28-94
Sample Collection: 5-27-93

Volatile Organic Compounds
EPA Method 8040 List (GC/MS)

Parameter	RESULTS
Benzene	ND
Bromodichloromethane	ND
Bromoform	ND
Bromomethane	ND
Carbon tetrachloride	ND
Chlorobenzene	ND
Chloroethane	ND
2-Chloroethylvinyl ether	ND
Chloroform	ND
Dibromochloromethane	ND
Dichlorodifluoromethane	ND
1,1-Dichloroethane	ND
1,2-Dichloroethane	ND
1,1-Dichloroethene	ND
Trans-1,2-Dichloroethene	ND
1,2-Dichloropropane	ND
Cis-1,2-Dichloropropene	ND
Trans-1,3-Dichloropropene	ND
Ethylbenzene	ND
Methylene chloride	ND
1,1,2,2-Tetrachloroethane	ND
Tetrachloroethene	ND
Toluene	ND
1,1,1-Trichloroethane	ND
1,1,2-Trichloroethane	ND
Trichloroethene	ND
Trichlorofluoromethane	ND *
Vinyl chloride	ND *
1,2 Dichlorobenzene	ND
1,3 Dichlorobenzene	ND
1,4 Dichlorobenzene	ND

Note: ND = (None detected, lower detectable limit - 5 ug/Kg)
ND * = (None detected, lower detectable limit - 50 ug/Kg)
J = (Detected but below quantitive limit, quantition suspect)
B = (this compound also detected in the blank)

Respectfully submitted

Barry C. Byrd, Jr., MS
Technical Director
DSP Comp QAPP # 870222G

BCB/tb

8818 Arlington Expressway • Jacksonville, Florida 32211
(904) 725-4847 • Fax (904) 725-2215

FIRST COAST ENVIRONMENTAL LABORATORY, INC.
8818 ARLINGTON EXPRESSWAY
JACKSONVILLE, FLORIDA 32211
FAX (904) 725-2215
(904) 725-4847
(904) 725-5708

CHAIN OF CUSTODY RECORD

05873

Client: NAVY PUBLIC WORKS CENTER JACKSONVILLE
ATTN: CODE 330 (ENVIRONMENTAL LABORATORY)
JACKSONVILLE, FL 32212-0030

Project Description: MAYPORT SPILL AREA AND STORM DRAIN AREA

ATTN:

PROJECT #94-161 CALL #103

NO. OF SAMPLE CONTAINERS

Sampler (Signature)

Page 1 of 1

STATION	DATE	TIME (Military)	SAMPLE DESCRIPTION	REMARKS
MYPT-SPILL AREA			94-05-076 - SOLID	8240
MYPT-SPILL AREA			94-05-077 - SOLID	8240
MYPT-SPILL AREA			94-05-078 - SOLID	8240
MYPT-STORM DRAIN			94-05-079 - SOLID	8240
MYPT-STORM DRAIN			94-05-080 - SOLID	8240
MYPT-STORM DRAIN			94-05-081 - SOLID	8240

Relinquished by (Signature):	Date	Time (Military)	Received by (Signature):	Date	Time (Military)	Relinquished by (Signature):	Date	Time (Military)	Received by (Signature):	Date	Time (Military)
[signature]	5-27-8	13:33	[signature]								
Relinquished by (Signature):	Date	Time (Military)	Received by (Signature):	Date	Time (Military)	REMARKS:					

DEPARTMENT OF THE NAVY
NAVAL STATION
MAYPORT, FLORIDA 32228-0112

Bureau of Waste Cleanup

IN REPLY REFER TO
5090.10
Ser N4E/

AUG 12 1994

10 AUG 1994

Technical Review Section

Mr. Ernest Frey
Northeast District
Florida Department of Environmental Protection
7825 Bay Meadows Way, Suite B-200
Jacksonville, FL 32256

Subj: DRY CLEANING FLUID SPILL ON
MAY 4, 1993, AT BUILDING 191

Dear Mr. Frey:

On May 4, 1993, a spill of tetrachloroethylene occurred and immediately cleaned up. The spill occurred while relocating drums Building 191, Fleet Industrial Supply Center, Fleet Support Com Mayport. Please reference Naval Station Mayport letter 5090, Ser N4E2/00110 of August 26, 1993, which provided initial report of spill and analysis.

As requested by your office, additional chemical analyses performed on the asphalt, limerock, and soil. The results enclosed and show the area is clean of contamination and requires further action.

Naval Station Mayport requests written concurrence from you, only that the area requires no further clean up. If you have questions, please contact Mr. Michael Davenport, N4E, at 904-2 6730.

Sincerely,

DOUGLAS P. TOMLINSON
Lieutenant Commander,
Staff Civil Engineer
By direction of
the Commanding Officer

Encl:
(1) Site map
(2) Analysis Results 94-05-076, 077, 078, 079, 080, 081 and Chain of Custody

Copy to:
FDEP Tallahassee (Mr. Eric Nuzie
FDEP Northeast District (Mr. Ke
FISC Jacksonville
FISC Jacksonville FSC Mayport
COMNAVBASE Jacksonville (N3)

5090.10
Ser N4E/00166
10 AUG 1994

Mr. Ernest Frey
Northeast District
Florida Department of Environmental Protection
7825 Bay Meadows Way, Suite B-200
Jacksonville, FL 32256

Subj: DRY CLEANING FLUID SPILL OF MAY 4, 1993, AT BUILDING 191

Dear Mr. Frey:

On May 4, 1993, a spill of tetrachloroethylene occurred and was immediately cleaned up. The spill occurred while relocating drums at Building 191, Fleet Industrial Supply Center, Fleet Support Center Mayport. Please reference Naval Station Mayport letter 5090, Ser N4E2/00110 of August 26, 1993, which provided initial report of spill and analysis.

As requested by your office, additional chemical analysis was performed on the asphalt, limerock, and soil. The results are enclosed and show the area is clean of contamination and requires no further action.

Naval Station Mayport requests written concurrence from your office that the area requires no further clean up. If you have any questions, please contact Mr. Michael Davenport, N4E, at 904-270-6730.

Sincerely,

DOUGLAS P. TOMLINSON
Lieutenant Commander, CEC, U.S. Navy
Staff Civil Engineer
By direction of
the Commanding Officer

Encl:
(1) Site map
(2) Analysis Results 94-05-076, 077, 078, 079, 080, 081 and Chain of Custody

Copy to:
FDEP Tallahassee (Mr. Eric Nuzie)
FDEP Northeast District (Mr. Kenton Brown)
FISC Jacksonville
FISC Jacksonville FSC Mayport
COMNAVBASE Jacksonville (N3)

bc: N4E Chron, N4E4 c:\-OHS-SPC\Spill-T2.DEP/pl/8-8

ATTACHMENT D

ATTACHMENT D

BORING LOGS

TITLE: U.S. Naval Station, Mayport, FL	**LOG of WELL:** MPT-TC-MW01S	**BORING NO.** MW-1
CLIENT: SOUTHNAVFACENGCOM		**PROJECT NO:** 8534-05
CONTRACTOR: Huss Drilling	**DATE STARTED:** 5/19/94	**COMPLTD:** 5/19/94
METHOD: Hollow Stem Auger	**CASE SIZE:** 4 in. / **SCREEN INT.:** 3.0' to 13.0'	**PROTECTION LEVEL:** D
TOC ELEV.: 9.56 FT.	**MONITOR INST.:** N/A / **TOT DPTH:** 13FT.	**DPTH TO ∇** 6 FT.
LOGGED BY: Paul Locascio (ESE)	**WELL DEVELOPMENT DATE:** 5/19/94	**SITE:** Bldg. 191

DEPTH FT.	LABORATORY SAMPLE ID.	RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN	WELL DATA
				SILTY SAND: fine grained		SM	Post-Hole Observation	
5								
10								
				Total Depth of Boring = 13' bls				
15				Note: Logs obtained from Environmental Science and Engineering, 1994, Contamination Assessment Report for Building 191, U.S. Naval Station Mayport, Florida.				
20								

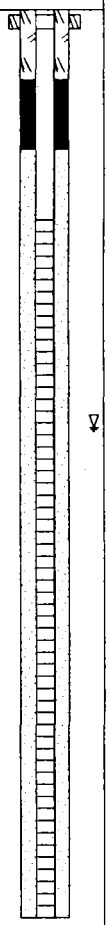

 ABB ENVIRONMENTAL SERVICES, INC.

TITLE: U.S. Naval Station, Mayport, FL		**LOG of WELL:** MPT-TC-MW01I	**BORING NO.** MW-1D
CLIENT: SOUTHNAVFACENGCOM			**PROJECT NO:** 8534-05
CONTRACTOR: Huss Drilling		**DATE STARTED:** 5/19/94	**COMPLTD:** 5/19/94
METHOD: Mud Rotary	**CASE SIZE:** 4 in.	**SCREEN INT.:** 35' to 40'	**PROTECTION LEVEL:** D
TOC ELEV.: 9.6 FT.	**MONITOR INST.:** N/A	**TOT DPTH:** 40FT.	**DPTH TO ▽** 6 FT.
LOGGED BY: Paul Locascio (ESE)	**WELL DEVELOPMENT DATE:** 5/19/94		**SITE:** Bldg. 191

DEPTH FT.	LABORATORY SAMPLE ID.	RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN	WELL DATA
				SILTY SAND: fine grained		SM	Post-Hole Observation	
5								
10								
						SP		
15								
20				SAND: fine to very fine, gray, moist, w/ shell fragments			16,20,20,22	
25				SAND: as above			18,20,20,24	
30							12,14,16,12	

ABB ENVIRONMENTAL SERVICES, INC.

TITLE: U.S. Naval Station, Mayport, FL		**LOG of WELL:** MPT-TC-MW01I	**BORING NO.** MW-1D
CLIENT: SOUTHNAVFACENGCOM			**PROJECT NO:** 8534-05
CONTRACTOR: Huss Drilling		**DATE STARTED:** 5/19/94	**COMPLTD:** 5/19/94
METHOD: Mud Rotary	**CASE SIZE:** 4 in.	**SCREEN INT.:** 35' to 40'	**PROTECTION LEVEL:** D
TOC ELEV.: 9.6 FT.	**MONITOR INST.:** N/A	**TOT DPTH:** 40FT.	**DPTH TO ▽** 6 FT.
LOGGED BY: Paul Locascio (ESE)	**WELL DEVELOPMENT DATE:** 5/19/94		**SITE:** Bldg. 191

DEPTH FT.	LABORATORY SAMPLE ID.	RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN	WELL DATA
				Continued from PAGE 1				
				SAND: as above		SP		
35				SAND: as above, w/ abundant shell fragments			12,22,24,30	
40				SAND: as above, w/ trace shell fragments			18,22,24,28	
				Total Depth of Boring = 40' bls				
45				Note: Logs obtained from Environmental Science and Engineering, 1994, Contamination Assessment Report for Building 191, U.S. Naval Station Mayport, Florida.				
50								
55								
60								

 ABB ENVIRONMENTAL SERVICES, INC.

TITLE: U.S. Naval Station, Mayport, FL		**LOG of WELL:** MPT-TC-MW02S	**BORING NO.** MW-2
CLIENT: SOUTHNAVFACENGCOM			**PROJECT NO:** 8534-05
CONTRACTOR: Huss Drilling		**DATE STARTED:** 5/19/94	**COMPLTD:** 5/19/94
METHOD: Hollow Stem Auger	**CASE SIZE:** 4 in.	**SCREEN INT.:** 4.0' to 14.0'	**PROTECTION LEVEL:** D
TOC ELEV.: 10.89 FT.	**MONITOR INST.:** N/A	**TOT DPTH:** 14FT.	**DPTH TO ▽** 6 FT.
LOGGED BY: Paul Locascio (ESE)	**WELL DEVELOPMENT DATE:** 5/19/94		**SITE:** Bldg. 191

DEPTH FT.	LABORATORY SAMPLE ID.	RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN	WELL DATA
				SILTY SAND: fine grained		SM	Post-Hole Observation	
5								
10								
15				Total Depth of Boring = 14' bls Note: Logs obtained from Environmental Science and Engineering, 1994, Contamination Assessment Report for Building 191, U.S. Naval Station Mayport, Florida.				
20								

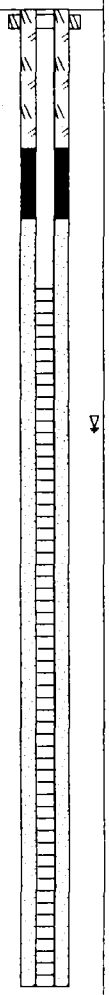

 ABB ENVIRONMENTAL SERVICES, INC.

TITLE: U.S. Naval Station, Mayport, FL		**LOG of WELL:** MPT-TC-MW03S	**BORING NO.** MW-3
CLIENT: SOUTHNAVFACENGCOM			**PROJECT NO:** 8534-05
CONTRACTOR: Huss Drilling		**DATE STARTED:** 5/19/94	**COMPLTD:** 5/19/94
METHOD: Hollow Stem Auger	**CASE SIZE:** 4 in.	**SCREEN INT.:** 3.0' to 13.0'	**PROTECTION LEVEL:** D
TOC ELEV.: 8.68 FT.	**MONITOR INST.:** N/A	**TOT DPTH:** 13FT.	**DPTH TO ▽** 6 FT.
LOGGED BY: Paul Locascio (ESE)	**WELL DEVELOPMENT DATE:** 5/19/94		**SITE:** Bldg. 191

DEPTH FT.	LABORATORY SAMPLE ID.	RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN	WELL DATA
				SILTY SAND: fine grained		SM	Post-Hole Observation	
5								
10								
				Total Depth of Boring = 13' bls				
15				Note: Logs obtained from Environmental Science and Engineering, 1994, Contamination Assessment Report for Building 191, U.S. Naval Station Mayport, Florida.				
20								

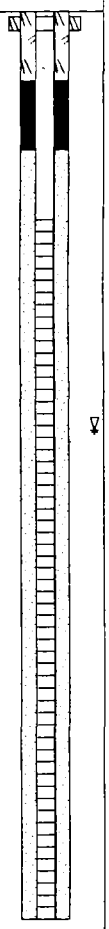

 ABB ENVIRONMENTAL SERVICES, INC.

TITLE: U.S. Naval Station, Mayport, FL		**LOG of WELL:** MPT-TC-MW04S	**BORING NO.** MW-4
CLIENT: SOUTHNAVFACENGCOM			**PROJECT NO:** 8534-05
CONTRACTOR: Huss Drilling		**DATE STARTED:** 5/20/94	**COMPLTD:** 5/20/94
METHOD: Hollow Stem Auger	**CASE SIZE:** 4 in.	**SCREEN INT.:** 3.0' to 13.0'	**PROTECTION LEVEL:** D
TOC ELEV.: 8.68 FT.	**MONITOR INST.:** N/A	**TOT DPTH:** 13FT.	**DPTH TO ▽** N/A FT.
LOGGED BY: Paul Locascio (ESE)	**WELL DEVELOPMENT DATE:** 5/20/94		**SITE:** Bldg. 191

DEPTH FT.	LABORATORY SAMPLE ID.	RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN	WELL DATA
				SILTY SAND: fine grained		SM	Post-Hole Observation	
5								
10								
				Total Depth of Boring = 13' bls				
15				Note: Logs obtained from Environmental Science and Engineering, 1994, Contamination Assessment Report for Building 191, U.S. Naval Station Mayport, Florida.				
20								

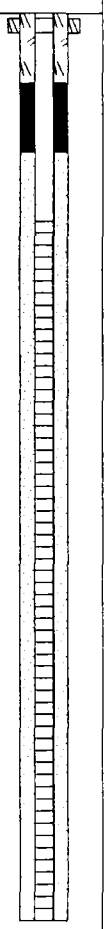

 ABB ENVIRONMENTAL SERVICES, INC.

TITLE: U.S. Naval Station, Mayport, FL		**LOG of WELL:** MPT-TC-MW05S	**BORING NO.**
CLIENT: SOUTHERN DIVISION, NAVFACENGCOM			**PROJECT NO:** 8534-05
CONTRACTOR: GROUNDWATER PROTECTION, INC.		**DATE STARTED:** 05/31/95	**COMPLTD:** 05/31/95
METHOD: 4.25" H.S.A.	**CASE SIZE:** 2"	**SCREEN INT.:** 2.5-12.5'	**PROTECTION LEVEL:** D
TOC ELEV.: 8.73 FT.	**MONITOR INST.:** F.I.D.	**TOT DPTH:** 12.5FT.	**DPTH TO ∇** 3.0 FT.
LOGGED BY: S. SCAVONE	**WELL DEVELOPMENT DATE:** 06/02/95		**SITE:** Bldg. 191

DEPTH FT.	LABORATORY SAMPLE ID.	RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN	WELL DATA
				ASPHALT (5")				
				SILTY SAND- fine to very fine, dark brown.		SM		
				SAND- fine with shell fragments, light tan.		SP		
5				SAND- as above.				
				SAND- fine with shell fragments, gray.				
10								
				TOTAL DEPTH OF BORING = 12.5' BLS				
15								
20								

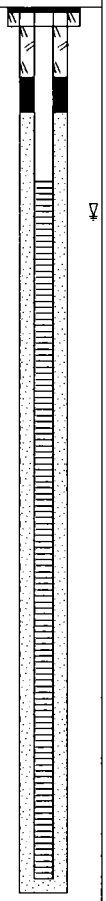

 ABB ENVIRONMENTAL SERVICES, INC.

TITLE: U.S. Naval Station, Mayport, FL		**LOG of WELL:** MPT-TC-MW06S	**BORING NO.**
CLIENT: SOUTHERN DIVISION, NAVFACENGCOM			**PROJECT NO:** 8534-05
CONTRACTOR: GROUNDWATER PROTECTION, INC.		**DATE STARTED:** 05/31/95	**COMPLTD:** 05/31/95
METHOD: 4.25" H.S.A.	**CASE SIZE:** 2"	**SCREEN INT.:** 2.5-12.5'	**PROTECTION LEVEL:** D
TOC ELEV.: 9.84 FT.	**MONITOR INST.:** F.I.D.	**TOT DPTH:** 12.5FT.	**DPTH TO ∇** 3.0 FT.
LOGGED BY: S. SCAVONE	**WELL DEVELOPMENT DATE:** 06/02/95		**SITE:** Bldg. 191

DEPTH FT.	LABORATORY SAMPLE ID.	RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN	WELL DATA
				ASPHALT (5")				
				SILTY SAND- fine to very fine, dark brown.		SM		
				SAND- fine with shell fragments, light tan.		SP		
5				SAND- as above.				
				SAND- fine with shell fragments, gray.				
10								
				TOTAL DEPTH OF BORING = 12.5' BLS				
15								
20								

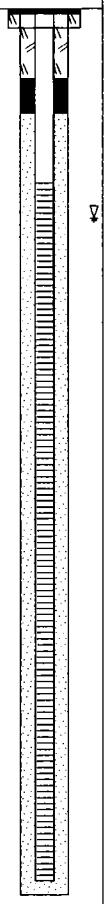

 ABB ENVIRONMENTAL SERVICES, INC.

TITLE: U.S. Naval Station, Mayport, FL		**LOG of WELL:** MPT-20-MW01S	**BORING NO.**
CLIENT: SOUTHERN DIVISION, NAVFACENGCOM			**PROJECT NO:** 8534-05
CONTRACTOR: GROUNDWATER PROTECTION, INC.		**DATE STARTED:** 05/04/95	**COMPLTD:** 05/04/95
METHOD: 4.25" H.S.A.	**CASE SIZE:** 2"	**SCREEN INT.:** 5-15'	**PROTECTION LEVEL:** D
TOC ELEV.: 13.49 FT.	**MONITOR INST.:** F.I.D.	**TOT DPTH:** 15.5FT.	**DPTH TO ∇** 5.5 FT.
LOGGED BY: S. SCAVONE	**WELL DEVELOPMENT DATE:** 05/17/95		**SITE:** SWMU 20

DEPTH FT.	LABORATORY SAMPLE ID.	RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN
	20S00101 X	100%	0.0	CONCRETE (6")			Hand Auger
				SILTY CLAY-fill material, tan to brown, slight odor.		SC	
				CONCRETE DEBRIS			
	20B00105 X	100%	0.0	SAND- fine with shell fragments, light tan to gray.		SP	Hand Auger
5				SAND- as above.			
10				CLAYEY SAND- gray to dark gray.		SC	Observation
15							
				TOTAL DEPTH OF BORING = 15.5' BLS			
20							

WELL DATA

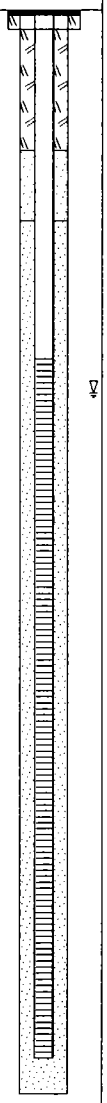

 ABB ENVIRONMENTAL SERVICES, INC.

TITLE: U.S. Naval Station, Mayport, FL		**LOG of WELL:** MPT-20-MW02S	**BORING NO.**
CLIENT: SOUTHERN DIVISION, NAVFACENGCOM			**PROJECT NO:** 8534-05
CONTRACTOR: GROUNDWATER PROTECTION, INC.		**DATE STARTED:** 05/05/95	**COMPLTD:** 05/05/95
METHOD: 4.25" H.S.A.	**CASE SIZE:** 2"	**SCREEN INT.:** 4-14'	**PROTECTION LEVEL:** D
TOC ELEV.: 13.68 FT.	**MONITOR INST.:** F.I.D.	**TOT DPTH:** 14.2FT.	**DPTH TO ∇** 5.5 FT.
LOGGED BY: S. SCAVONE	**WELL DEVELOPMENT DATE:** 05/17/95		**SITE:** SWMU 20

DEPTH FT.	LABORATORY SAMPLE ID.	RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN	WELL DATA
	20S00201 X	100%	0.0	ORGANIC RICH SOIL		OH	Hand Auger	
				SAND- fine, with shell fragmens. gray.		SP		
	20B00205 X	100%	0.0	SAND- as above.			Hand Auger	
5								∇
				SAND- as above.				
10								
				CLAYEY SAND- gray to dark gray.		SC	Observation	
15				TOTAL DEPTH OF BORING = 14.2' BLS				
20								

 ABB ENVIRONMENTAL SERVICES, INC.

TITLE: U.S. Naval Station, Mayport, FL		**LOG of WELL:** MPT-20-MW03S	**BORING NO.**
CLIENT: SOUTHERN DIVISION, NAVFACENGCOM			**PROJECT NO:** 8534-05
CONTRACTOR: GROUNDWATER PROTECTION, INC.		**DATE STARTED:** 05/05/95	**COMPLTD:** 05/05/95
METHOD: 4.25" H.S.A.	**CASE SIZE:** 2"	**SCREEN INT.:** 3-13'	**PROTECTION LEVEL:** D
TOC ELEV.: 12.01 FT.	**MONITOR INST.:** F.I.D.	**TOT DPTH:** 14.0FT.	**DPTH TO ∇** 5.0 FT.
LOGGED BY: S. SCAVONE	**WELL DEVELOPMENT DATE:** 05/17/95		**SITE:** SWMU 20

DEPTH FT.	LABORATORY SAMPLE ID.	RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN	WELL DATA
	20S00301 X	100%	0.0	ORGANIC RICH SOIL SAND- fine, damp, light gray to gray.		SP	Hand Auger	
5	20B00105 X	100%	0.0	SAND- as above.			Hand Auger	∇
				SAND- as above.			Observation	
10								
				CLAYEY SAND- gray to dark gray.		SC	Observation	
				TOTAL DEPTH OF BORING = 14.0' BLS				
15								
20								

 ABB ENVIRONMENTAL SERVICES, INC.

TITLE: U.S. Naval Station, Mayport, FL		**LOG of WELL:** MPT-21-MW01S	**BORING NO.**
CLIENT: SOUTHERN DIVISION, NAVFACENGCOM			**PROJECT NO:** 8534-05
CONTRACTOR: GROUNDWATER PROTECTION, INC.		**DATE STARTED:** 05/04/95	**COMPLTD:** 05/04/95
METHOD: 4.25" H.S.A.	**CASE SIZE:** 2"	**SCREEN INT.:** 5-15'	**PROTECTION LEVEL:** D
TOC ELEV.: 13.21 FT.	**MONITOR INST.:** F.I.D.	**TOT DPTH:** 15.5FT.	**DPTH TO ∇** 4.5 FT.
LOGGED BY: S. SCAVONE	**WELL DEVELOPMENT DATE:** 05/17/95		**SITE:** SWMU 21

DEPTH FT.	LABORATORY SAMPLE ID.		RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN	WELL DATA
	21S0010D,MS,MSD	X	100%	0.0	CONCRETE (5") SAND- fine with shell fragments, gray to light tan.		SP	Hand Auger	
	21B0010	X	100%	0.0	SAND- as above.			Hand Auger	
5									
					SAND- as above.			Observation	
10							SC		
					CLAYEY SAND- gray to dark gray.			Observation	
15									
					TOTAL DEPTH OF BORING = 15.5' BLS				
20									

 ABB ENVIRONMENTAL SERVICES, INC.

TITLE: U.S. Naval Station, Mayport, FL		**LOG of WELL:** MPT-21-MW02S	**BORING NO.**
CLIENT: SOUTHERN DIVISION, NAVFACENGCOM			**PROJECT NO:** 8534-05
CONTRACTOR: GROUNDWATER PROTECTION, INC.		**DATE STARTED:** 05/04/95	**COMPLTD:** 05/04/95
METHOD: 4.25" H.S.A.	**CASE SIZE:** 2"	**SCREEN INT.:** 5-15'	**PROTECTION LEVEL:** D
TOC ELEV.: 12.79 FT.	**MONITOR INST.:** F.I.D.	**TOT DPTH:** 15.5FT.	**DPTH TO ▽** 3.5 FT.
LOGGED BY: S. SCAVONE	**WELL DEVELOPMENT DATE:** 05/17/95		**SITE:** SWMU 21

DEPTH FT.	LABORATORY SAMPLE ID.		RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN	WELL DATA
	21S00201	X	100%	0.0	ORGANIC RICH SOIL		OL	Hand Auger	
					SAND- fine with shell fragments, gray.		SP		
	21B00203	X	100%	0.0	SAND- as above.			Hand Auger	
5									
					SAND- as above.			Observation	
10							SC		
					CLAYEY SAND- gray to dark gray, mild odor.			Observation	
15									
					TOTAL DEPTH OF BORING = 15.5' BLS				
20									

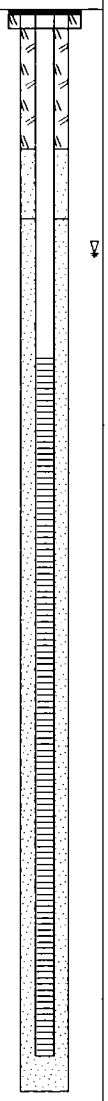

 ABB ENVIRONMENTAL SERVICES, INC.

TITLE: U.S. Naval Station, Mayport, FL	**LOG of WELL:** MPT-21-MW03S		**BORING NO.**
CLIENT: SOUTHERN DIVISION, NAVFACENGCOM			**PROJECT NO:** 8534-05
CONTRACTOR: GROUNDWATER PROTECTION, INC.		**DATE STARTED:** 05/04/95	**COMPLTD:** 05/04/95
METHOD: 4.25" H.S.A.	**CASE SIZE:** 2"	**SCREEN INT.:** 5-15'	**PROTECTION LEVEL:** D
TOC ELEV.: 12.36 FT.	**MONITOR INST.:** F.I.D.	**TOT DPTH:** 15.5FT.	**DPTH TO ∇** 3.5 FT.
LOGGED BY: S. SCAVONE	**WELL DEVELOPMENT DATE:** 05/17/95		**SITE:** SWMU 21

DEPTH FT.	LABORATORY SAMPLE ID.	RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN	WELL DATA
	21S00301 X	100%	0.0	CONCRETE (5")			Posthole	
				SAND- fine with shell fragments, moist, gray.		SP	0 to 4'	
	21B00303 X	100%	0.0	SAND- as above.			Hand Auger	
5								
				SAND- as above.				
10								
				CLAYEY SAND- gray to dark gray, mild odor.		SC	Observation	
15								
				TOTAL DEPTH OF BORING = 15.5' BLS				
20								

 ABB ENVIRONMENTAL SERVICES, INC.

ATTACHMENT E

DATA SUMMARY TABLE

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Surface Soil Data

Lab Sample Number:		R9971003				R9971003				R9971005				R9971005		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		TCS00101				TCS00101				TCS00201				TCS00201		
Collect Date:		31-MAY-95				31-MAY-95				31-MAY-95				31-MAY-95		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg																
Chloromethane		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Bromomethane		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Vinyl chloride		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Chloroethane		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Methylene chloride		5	U	ug/kg	5	-		ug/kg		2	J	ug/kg	6	-		ug/kg	
Acetone		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Carbon disulfide		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1-Dichloroethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1-Dichloroethene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloroethene (total)		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Chloroform		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloroethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
2-Butanone		11	R	ug/kg	11	-		ug/kg		11	R	ug/kg	11	-		ug/kg	
1,1,1-Trichloroethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Carbon tetrachloride		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Bromodichloromethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloropropane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
cis-1,3-Dichloropropene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Trichloroethene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Dibromochloromethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1,2-Trichloroethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Benzene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
trans-1,3-Dichloropropene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Bromoform		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
4-Methyl-2-pentanone		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
2-Hexanone		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Tetrachloroethene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Toluene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Chlorobenzene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Ethylbenzene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Styrene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Xylenes (total)		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Dichlorodifluoromethane		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Trichlorofluoromethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,3-Dichlorobenzene		5	U	ug/kg	5	360	U	ug/kg	360	6	U	ug/kg	6	380	U	ug/kg	380
Acrolein		110	UJ	ug/kg	110	-		ug/kg		110	UJ	ug/kg	110	-		ug/kg	
Iodomethane		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,4-Dichlorobenzene		5	U	ug/kg	5	360	U	ug/kg	360	6	U	ug/kg	6	380	U	ug/kg	380
Acrylonitrile		110	U	ug/kg	110	-		ug/kg		110	U	ug/kg	110	-		ug/kg	
Dibromomethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichlorobenzene		5	U	ug/kg	5	360	U	ug/kg	360	6	U	ug/kg	6	380	U	ug/kg	380
2-Chloroethylvinyl ether		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Ethyl methacrylate		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2,3-Trichloropropane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
trans-1,4-Dichloro-2-butene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Isobutyl alcohol		220	R	ug/kg	220	-		ug/kg		230	R	ug/kg	230	-		ug/kg	
1,1,1,2-Tetrachloroethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dibromo-3-chloropropane		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,2-Dibromoethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Surface Soil Data

Lab Sample Number:	R9971003				R9971003				R9971005				R9971005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	TCS00101				TCS00101				TCS00201				TCS00201			
Collect Date:	31-MAY-95				31-MAY-95				31-MAY-95				31-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	220	R	ug/kg	220	-		ug/kg		230	R	ug/kg	230	-		ug/kg	
3-Chloropropene	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Acetonitrile	110	U	ug/kg	110	-		ug/kg		110	U	ug/kg	110	-		ug/kg	
Chloroprene	220	U	ug/kg	220	-		ug/kg		230	U	ug/kg	230	-		ug/kg	
Methacrylonitrile	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Methyl methacrylate	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Pentachloroethane	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Propionitrile	110	U	ug/kg	110	-		ug/kg		110	U	ug/kg	110	-		ug/kg	
Vinyl acetate	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Surface Soil Data

Lab Sample Number:		R9971007				R9971007				R9971009				R9971009			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		TCS00301				TCS00301				TCS00401				TCS00401			
Collect Date:		31-MAY-95				31-MAY-95				31-MAY-95				31-MAY-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg																
Chloromethane		10	U	ug/kg	10	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Bromomethane		10	U	ug/kg	10	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Vinyl chloride		10	U	ug/kg	10	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Chloroethane		10	U	ug/kg	10	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Methylene chloride		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Acetone		10	U	ug/kg	10	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Carbon disulfide		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1-Dichloroethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1-Dichloroethene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloroethene (total)		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Chloroform		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloroethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
2-Butanone		10	R	ug/kg	10	-		ug/kg		11	R	ug/kg	11	-		ug/kg	
1,1,1-Trichloroethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Carbon tetrachloride		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Bromodichloromethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloropropane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
cis-1,3-Dichloropropene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Trichloroethene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Dibromochloromethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1,2-Trichloroethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Benzene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
trans-1,3-Dichloropropene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Bromoform		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
4-Methyl-2-pentanone		10	U	ug/kg	10	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
2-Hexanone		10	U	ug/kg	10	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Tetrachloroethene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Toluene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Chlorobenzene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Ethylbenzene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Styrene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Xylenes (total)		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Dichlorodifluoromethane		10	U	ug/kg	10	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Trichlorofluoromethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,3-Dichlorobenzene		5	U	ug/kg	5	340	U	ug/kg	340	6	U	ug/kg	6	380	U	ug/kg	380
Acrolein		100	UJ	ug/kg	100	-		ug/kg		110	UJ	ug/kg	110	-		ug/kg	
Iodomethane		10	U	ug/kg	10	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,4-Dichlorobenzene		5	U	ug/kg	5	340	U	ug/kg	340	6	U	ug/kg	6	380	U	ug/kg	380
Acrylonitrile		100	U	ug/kg	100	-		ug/kg		110	U	ug/kg	110	-		ug/kg	

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Surface Soil Data

Lab Sample Number:	R9971007				R9971007				R9971009				R9971009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	TCS00301				TCS00301				TCS00401				TCS00401			
Collect Date:	31-MAY-95				31-MAY-95				31-MAY-95				31-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichlorobenzene	5	U	ug/kg	5	340	U	ug/kg	340	6	U	ug/kg	6	380	U	ug/kg	380
2-Chloroethylvinyl ether	10	U	ug/kg	10	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Ethyl methacrylate	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2,3-Trichloropropane	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Isobutyl alcohol	210	R	ug/kg	210	-		ug/kg		230	R	ug/kg	230	-		ug/kg	
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dibromo-3-chloropropane	10	U	ug/kg	10	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,2-Dibromoethane	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,4-Dioxane	210	R	ug/kg	210	-		ug/kg		230	R	ug/kg	230	-		ug/kg	
3-Chloropropene	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Acetonitrile	100	U	ug/kg	100	-		ug/kg		110	U	ug/kg	110	-		ug/kg	
Chloroprene	210	U	ug/kg	210	-		ug/kg		230	U	ug/kg	230	-		ug/kg	
Methacrylonitrile	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Methyl methacrylate	10	U	ug/kg	10	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Pentachloroethane	10	U	ug/kg	10	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Propionitrile	100	U	ug/kg	100	-		ug/kg		110	U	ug/kg	110	-		ug/kg	
Vinyl acetate	10	U	ug/kg	10	-		ug/kg		11	U	ug/kg	11	-		ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Surface Soil Data

Lab Sample Number:		R9971010				R9971010			
Site		GROUP111				GROUP111			
Locator		TCS00401D				TCS00401D			
Collect Date:		31-MAY-95				31-MAY-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg								
Chloromethane		11	U	ug/kg	11	-		ug/kg	
Bromomethane		11	U	ug/kg	11	-		ug/kg	
Vinyl chloride		11	U	ug/kg	11	-		ug/kg	
Chloroethane		11	U	ug/kg	11	-		ug/kg	
Methylene chloride		6	U	ug/kg	6	-		ug/kg	
Acetone		11	U	ug/kg	11	-		ug/kg	
Carbon disulfide		6	U	ug/kg	6	-		ug/kg	
1,1-Dichloroethane		6	U	ug/kg	6	-		ug/kg	
1,1-Dichloroethene		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloroethene (total)		6	U	ug/kg	6	-		ug/kg	
Chloroform		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloroethane		6	U	ug/kg	6	-		ug/kg	
2-Butanone		11	R	ug/kg	11	-		ug/kg	
1,1,1-Trichloroethane		6	U	ug/kg	6	-		ug/kg	
Carbon tetrachloride		6	U	ug/kg	6	-		ug/kg	
Bromodichloromethane		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloropropane		6	U	ug/kg	6	-		ug/kg	
cis-1,3-Dichloropropene		6	U	ug/kg	6	-		ug/kg	
Trichloroethene		6	U	ug/kg	6	-		ug/kg	
Dibromochloromethane		6	U	ug/kg	6	-		ug/kg	
1,1,2-Trichloroethane		6	U	ug/kg	6	-		ug/kg	
Benzene		6	U	ug/kg	6	-		ug/kg	
trans-1,3-Dichloropropene		6	U	ug/kg	6	-		ug/kg	
Bromoform		6	U	ug/kg	6	-		ug/kg	
4-Methyl-2-pentanone		11	U	ug/kg	11	-		ug/kg	
2-Hexanone		11	U	ug/kg	11	-		ug/kg	
Tetrachloroethene		6	U	ug/kg	6	-		ug/kg	
1,1,2,2-Tetrachloroethane		6	U	ug/kg	6	-		ug/kg	
Toluene		6	U	ug/kg	6	-		ug/kg	
Chlorobenzene		6	U	ug/kg	6	-		ug/kg	
Ethylbenzene		6	U	ug/kg	6	-		ug/kg	
Styrene		6	U	ug/kg	6	-		ug/kg	
Xylenes (total)		6	U	ug/kg	6	-		ug/kg	
Dichlorodifluoromethane		11	U	ug/kg	11	-		ug/kg	
Trichlorofluoromethane		6	U	ug/kg	6	-		ug/kg	
1,3-Dichlorobenzene		6	U	ug/kg	6	370	U	ug/kg	370
Acrolein		110	UJ	ug/kg	110	-		ug/kg	
Iodomethane		11	U	ug/kg	11	-		ug/kg	
1,4-Dichlorobenzene		6	U	ug/kg	6	370	U	ug/kg	370
Acrylonitrile		110	U	ug/kg	110	-		ug/kg	

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Surface Soil Data

Lab Sample Number:	R9971010				R9971010			
Site	GROUP111				GROUP111			
Locator	TCS00401D				TCS00401D			
Collect Date:	31-MAY-95				31-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	U	ug/kg	6	-		ug/kg	
1,2-Dichlorobenzene	6	U	ug/kg	6	370	U	ug/kg	370
2-Chloroethylvinyl ether	11	U	ug/kg	11	-		ug/kg	
Ethyl methacrylate	6	U	ug/kg	6	-		ug/kg	
1,2,3-Trichloropropane	6	U	ug/kg	6	-		ug/kg	
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	-		ug/kg	
Isobutyl alcohol	220	R	ug/kg	220	-		ug/kg	
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	-		ug/kg	
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	-		ug/kg	
1,2-Dibromoethane	6	U	ug/kg	6	-		ug/kg	
1,4-Dioxane	220	R	ug/kg	220	-		ug/kg	
3-Chloropropene	6	U	ug/kg	6	-		ug/kg	
Acetonitrile	110	U	ug/kg	110	-		ug/kg	
Chloroprene	220	U	ug/kg	220	-		ug/kg	
Methacrylonitrile	6	U	ug/kg	6	-		ug/kg	
Methyl methacrylate	11	U	ug/kg	11	-		ug/kg	
Pentachloroethane	11	U	ug/kg	11	-		ug/kg	
Propionitrile	110	U	ug/kg	110	-		ug/kg	
Vinyl acetate	11	U	ug/kg	11	-		ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Surface Soil Data

Lab Sample Number:		R9971003				R9971005				R9971007				R9971009			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		TCS00101				TCS00201				TCS00301				TCS00401			
Collect Date:		31-MAY-95				31-MAY-95				31-MAY-95				31-MAY-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Phenol		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Aniline		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
bis(2-Chloroethyl) ether		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Benzyl Alcohol		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
2-Methylphenol		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
bis(2-Chloroisopropyl) ether		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
N-Nitroso-di-n-propylamine		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Hexachloroethane		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Nitrobenzene		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Isophorone		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
2-Nitrophenol		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
2,4-Dimethylphenol		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Benzoic acid		1700	U	ug/kg	1700	1800	U	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
bis(2-Chloroethoxy) methane		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
2,4-Dichlorophenol		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
1,2,4-Trichlorobenzene		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Naphthalene		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
4-Chloroaniline		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Hexachlorobutadiene		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
4-Chloro-3-methylphenol		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
2-Methylnaphthalene		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Hexachlorocyclopentadiene		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
2,4,6-Trichlorophenol		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Dimethylphthalate		360	U	ug/kg	360	110	J	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
2,4,5-Trichlorophenol		1700	U	ug/kg	1700	1800	U	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
2-Chloronaphthalene		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
2-Nitroaniline		1700	U	ug/kg	1700	1800	U	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
Acenaphthylene		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
2,6-Dinitrotoluene		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
3-Nitroaniline		1700	U	ug/kg	1700	1800	U	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
Acenaphthene		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
2,4-Dinitrophenol		1700	U	ug/kg	1700	1800	U	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
4-Nitrophenol		1700	U	ug/kg	1700	1800	U	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
Dibenzofuran		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
2,4-Dinitrotoluene		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Diethylphthalate		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
4-Chlorophenyl-phenylether		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Fluorene		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
4-Nitroaniline		1700	U	ug/kg	1700	1800	U	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
4,6-Dinitro-2-methylphenol		1700	U	ug/kg	1700	1800	U	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
N-Nitrosodiphenylamine (1)		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
1,2-Diphenylhydrazine		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
4-Bromophenyl-phenylether		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Hexachlorobenzene		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Pentachlorophenol		1700	U	ug/kg	1700	1800	U	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
Phenanthrene		71	J	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	57	J	ug/kg	380
Anthracene		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Di-n-Butylphthalate		360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Fluoranthene		300	J	ug/kg	360	380	U	ug/kg	380	64	J	ug/kg	340	110	J	ug/kg	380

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Surface Soil Data

Lab Sample Number:	R9971003				R9971005				R9971007				R9971009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	TCS00101				TCS00201				TCS00301				TCS00401			
Collect Date:	31-MAY-95				31-MAY-95				31-MAY-95				31-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	220	J	ug/kg	360	380	U	ug/kg	380	42	J	ug/kg	340	67	J	ug/kg	380
Butylbenzylphthalate	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
3,3-Dichlorobenzidine	720	U	ug/kg	720	760	U	ug/kg	760	690	U	ug/kg	690	760	U	ug/kg	760
Benzo (a) anthracene	130	J	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	51	J	ug/kg	380
Chrysene	210	J	ug/kg	360	380	U	ug/kg	380	47	J	ug/kg	340	63	J	ug/kg	380
bis(2-Ethylhexyl) phthalate	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Di-n-octylphthalate	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Benzo (b) fluoranthene	230	J	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Benzo (k) fluoranthene	230	J	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Benzo (a) pyrene	180	J	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Indeno (1,2,3-cd) pyrene	87	J	ug/kg	360	380	UJ	ug/kg	380	340	UJ	ug/kg	340	380	UJ	ug/kg	380
Dibenz (a,h) anthracene	360	UJ	ug/kg	360	380	U	ug/kg	380	340	UJ	ug/kg	340	380	UJ	ug/kg	380
Benzo (g,h,i) perylene	85	J	ug/kg	360	380	UJ	ug/kg	380	340	UJ	ug/kg	340	380	UJ	ug/kg	380
2-Picoline	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
Methyl methanesulfonate	360	UJ	ug/kg	360	380	UJ	ug/kg	380	340	UJ	ug/kg	340	380	UJ	ug/kg	380
Ethyl methanesulfonate	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Acetophenone	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
N-Nitrosopiperidine	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Phenyl-tert-butylamine	1700	UJ	ug/kg	1700	1800	UJ	ug/kg	1800	1700	UJ	ug/kg	1700	1800	UJ	ug/kg	1800
2,6-Dichlorophenol	360	UJ	ug/kg	360	380	UJ	ug/kg	380	340	UJ	ug/kg	340	380	UJ	ug/kg	380
N-Nitroso-di-n-butylamine	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
N-Nitrosodiethylamine	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
N-Nitrosopyrrolidine	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Benzidine	1700	U	ug/kg	1700	1800	UJ	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
1,2,4,5-Tetrachlorobenzene	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
Pentachlorobenzene	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
1-Naphthylamine	1700	UJ	ug/kg	1700	1800	UJ	ug/kg	1800	1700	UJ	ug/kg	1700	1800	UJ	ug/kg	1800
2-Naphthylamine	1700	UJ	ug/kg	1700	1800	UJ	ug/kg	1800	1700	UJ	ug/kg	1700	1800	UJ	ug/kg	1800
2,3,4,6-Tetrachlorophenol	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Phenacetin	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
4-Aminobiphenyl	1700	UJ	ug/kg	1700	1800	UJ	ug/kg	1800	1700	UJ	ug/kg	1700	1800	UJ	ug/kg	1800
Pentachloronitrobenzene	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
Pronamide	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
p-(Dimethylamino)azobenzene	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
7,12-Dimethylbenz(A)Anthracene	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
3-Methylcholanthrene	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Pyridine	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
N-Nitrosomethylethylamine	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
N-Nitrosomorpholine	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
o-Toluidine	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Hexachloropropene	1700	U	ug/kg	1700	1800	UJ	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
p-Phenylenediamine	17000	UJ	ug/kg	17000	18000	UJ	ug/kg	18000	17000	UJ	ug/kg	17000	18000	UJ	ug/kg	18000
Safrole	1700	U	ug/kg	1700	1800	UJ	ug/kg	1800	1700	UJ	ug/kg	1700	1800	UJ	ug/kg	1800
Isosafrole	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
1,4-Naphthoquinone	36000	R	ug/kg	36000	38000	U	ug/kg	38000	34000	R	ug/kg	34000	38000	R	ug/kg	38000
1,3-Dinitrobenzene	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
5-Nitro-o-toluidine	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
1,3,5-Trinitrobenzene	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
4-Nitroquinoline-1-oxide	17000	U	ug/kg	17000	18000	R	ug/kg	18000	17000	U	ug/kg	17000	18000	U	ug/kg	18000
Methapyrilene	1700	UJ	ug/kg	1700	1800	UJ	ug/kg	1800	1700	UJ	ug/kg	1700	1800	UJ	ug/kg	1800
3,3-Dimethylbenzidine	360	UJ	ug/kg	360	380	UJ	ug/kg	380	340	UJ	ug/kg	340	380	UJ	ug/kg	380
Hexachlorophene	17000	UJ	ug/kg	17000	18000	R	ug/kg	18000	17000	UJ	ug/kg	17000	18000	UJ	ug/kg	18000

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Surface Soil Data

Lab Sample Number:	R9971003				R9971005				R9971007				R9971009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	TCS00101				TCS00201				TCS00301				TCS00401			
Collect Date:	31-MAY-95				31-MAY-95				31-MAY-95				31-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
2-Chlorophenol	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
3- & 4-Methylphenol (2)	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340	380	U	ug/kg	380
Hexachloropropene	1700	U	ug/kg	1700	1800	UJ	ug/kg	1800	1700	U	ug/kg	1700	1800	U	ug/kg	1800
2-Acetylaminofluorene	360	UJ	ug/kg	360	380	UJ	ug/kg	380	340	UJ	ug/kg	340	380	UJ	ug/kg	380

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Surface Soil Data

Lab Sample Number:		R9971010			
Site		GROUP111			
Locator		TCS00401D			
Collect Date:		31-MAY-95			
		VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg				
N-Nitrosodimethylamine		370	U	ug/kg	370
Phenol		370	U	ug/kg	370
Aniline		370	U	ug/kg	370
bis(2-Chloroethyl) ether		370	U	ug/kg	370
Benzyl Alcohol		370	U	ug/kg	370
2-Methylphenol		370	U	ug/kg	370
bis(2-Chloroisopropyl) ether		370	U	ug/kg	370
N-Nitroso-di-n-propylamine		370	U	ug/kg	370
Hexachloroethane		370	U	ug/kg	370
Nitrobenzene		370	U	ug/kg	370
Isophorone		370	U	ug/kg	370
2-Nitrophenol		370	U	ug/kg	370
2,4-Dimethylphenol		370	U	ug/kg	370
Benzoic acid		1800	U	ug/kg	1800
bis(2-Chloroethoxy) methane		370	U	ug/kg	370
2,4-Dichlorophenol		370	U	ug/kg	370
1,2,4-Trichlorobenzene		370	U	ug/kg	370
Naphthalene		370	U	ug/kg	370
4-Chloroaniline		370	U	ug/kg	370
Hexachlorobutadiene		370	U	ug/kg	370
4-Chloro-3-methylphenol		370	U	ug/kg	370
2-Methylnaphthalene		370	U	ug/kg	370
Hexachlorocyclopentadiene		370	U	ug/kg	370
2,4,6-Trichlorophenol		370	U	ug/kg	370
Dimethylphthalate		370	U	ug/kg	370
2,4,5-Trichlorophenol		1800	U	ug/kg	1800
2-Chloronaphthalene		370	U	ug/kg	370
2-Nitroaniline		1800	U	ug/kg	1800
Acenaphthylene		370	U	ug/kg	370
2,6-Dinitrotoluene		370	U	ug/kg	370
3-Nitroaniline		1800	U	ug/kg	1800
Acenaphthene		370	U	ug/kg	370
2,4-Dinitrophenol		1800	U	ug/kg	1800
4-Nitrophenol		1800	U	ug/kg	1800
Dibenzofuran		370	U	ug/kg	370
2,4-Dinitrotoluene		370	U	ug/kg	370
Diethylphthalate		370	U	ug/kg	370
4-Chlorophenyl-phenylether		370	U	ug/kg	370
Fluorene		370	U	ug/kg	370
4-Nitroaniline		1800	U	ug/kg	1800

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Surface Soil Data

Lab Sample Number:	R9971010			
Site	GROUP111			
Locator	TCS00401D			
Collect Date:	31-MAY-95			
	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1800	U	ug/kg	1800
N-Nitrosodiphenylamine (1)	370	U	ug/kg	370
1,2-Diphenylhydrazine	370	U	ug/kg	370
4-Bromophenyl-phenylether	370	U	ug/kg	370
Hexachlorobenzene	370	U	ug/kg	370
Pentachlorophenol	1800	U	ug/kg	1800
Phenanthrene	370	U	ug/kg	370
Anthracene	370	U	ug/kg	370
Di-n-Butylphthalate	370	U	ug/kg	370
Fluoranthene	130	J	ug/kg	370
Pyrene	86	J	ug/kg	370
Butylbenzylphthalate	370	U	ug/kg	370
3,3-Dichlorobenzidine	740	U	ug/kg	740
Benzo (a) anthracene	64	J	ug/kg	370
Chrysene	90	J	ug/kg	370
bis(2-Ethylhexyl) phthalate	370	U	ug/kg	370
Di-n-octylphthalate	370	U	ug/kg	370
Benzo (b) fluoranthene	100	J	ug/kg	370
Benzo (k) fluoranthene	110	J	ug/kg	370
Benzo (a) pyrene	82	J	ug/kg	370
Indeno (1,2,3-cd) pyrene	370	UJ	ug/kg	370
Dibenz (a,h) anthracene	370	UJ	ug/kg	370
Benzo (g,h,i) perylene	370	UJ	ug/kg	370
2-Picoline	1800	U	ug/kg	1800
Methyl methanesulfonate	370	UJ	ug/kg	370
Ethyl methanesulfonate	370	U	ug/kg	370
Acetophenone	370	U	ug/kg	370
N-Nitrosopiperidine	370	U	ug/kg	370
Phenyl-tert-butylamine	1800	UJ	ug/kg	1800
2,6-Dichlorophenol	370	UJ	ug/kg	370
N-Nitroso-di-n-butylamine	370	U	ug/kg	370
N-Nitrosodiethylamine	370	U	ug/kg	370
N-Nitrosopyrrolidine	370	U	ug/kg	370
Benzidine	1800	U	ug/kg	1800
1,2,4,5-Tetrachlorobenzene	1800	U	ug/kg	1800
Pentachlorobenzene	1800	U	ug/kg	1800
1-Naphthylamine	1800	UJ	ug/kg	1800
2-Naphthylamine	1800	UJ	ug/kg	1800
2,3,4,6-Tetrachlorophenol	370	U	ug/kg	370
Phenacetin	370	U	ug/kg	370
4-Aminobiphenyl	1800	UJ	ug/kg	1800
Pentachloronitrobenzene	1800	U	ug/kg	1800
Pronamide	370	U	ug/kg	370
p-(Dimethylamino)azobenzene	370	U	ug/kg	370
7,12-Dimethylbenz(A)Anthracene	370	U	ug/kg	370
3-Methylcholanthrene	370	U	ug/kg	370
Pyridine	1800	U	ug/kg	1800
N-Nitrosomethylethylamine	370	U	ug/kg	370
N-Nitrosomorpholine	370	U	ug/kg	370
o-Toluidine	370	U	ug/kg	370
Hexachloropropene	1800	U	ug/kg	1800
p-Phenylenediamine	18000	UJ	ug/kg	18000

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Surface Soil Data

Lab Sample Number:	R9971010
Site	GROUP111
Locator	TCS00401D
Collect Date:	31-MAY-95

	VALUE	QUAL	UNITS	DL
Safrole	1800	UJ	ug/kg	1800
Isosafrole	1800	U	ug/kg	1800
1,4-Naphthoquinone	37000	R	ug/kg	37000
1,3-Dinitrobenzene	370	U	ug/kg	370
5-Nitro-o-toluidine	370	U	ug/kg	370
1,3,5-Trinitrobenzene	370	U	ug/kg	370
4-Nitroquinoline-1-oxide	18000	U	ug/kg	18000
Methapyrilene	1800	UJ	ug/kg	1800
3,3-Dimethylbenzidine	370	UJ	ug/kg	370
Hexachlorophene	18000	UJ	ug/kg	18000
Aramite	1800	U	ug/kg	1800
2-Chlorophenol	370	U	ug/kg	370
3- & 4-Methylphenol (2)	370	U	ug/kg	370
Hexachloropropene	1800	U	ug/kg	1800
2-Acetylaminofluorene	370	UJ	ug/kg	370

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Surface Soil Data

Lab Sample Number:		R9971003			R9971005			R9971007			R9971009		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		TCS00101			TCS00201			TCS00301			TCS00401		
Collect Date:		31-MAY-95			31-MAY-95			31-MAY-95			31-MAY-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg												
alpha-BHC		.74 U	ug/kg	.74	.78 U	ug/kg	.78	.7 U	ug/kg	.7	1.5 U	ug/kg	1.5
beta-BHC		1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	3 U	ug/kg	3
delta-BHC		.74 U	ug/kg	.74	.78 U	ug/kg	.78	.7 U	ug/kg	.7	1.5 U	ug/kg	1.5
gamma-BHC (Lindane)		.74 U	ug/kg	.74	.78 U	ug/kg	.78	.7 U	ug/kg	.7	1.5 U	ug/kg	1.5
Heptachlor		.74 U	ug/kg	.74	.78 U	ug/kg	.78	.7 U	ug/kg	.7	1.3 J	ug/kg	1.5
Aldrin		.74 U	ug/kg	.74	.78 U	ug/kg	.78	.7 U	ug/kg	.7	1.5 U	ug/kg	1.5
Heptachlor epoxide		.74 U	ug/kg	.74	.78 U	ug/kg	.78	.7 U	ug/kg	.7	8.7	ug/kg	1.5
Endosulfan I		.74 U	ug/kg	.74	.78 U	ug/kg	.78	.7 U	ug/kg	.7	1.5 U	ug/kg	1.5
Dieldrin		.74 U	ug/kg	.74	.78 U	ug/kg	.78	.7 U	ug/kg	.7	1.5 U	ug/kg	1.5
4,4-DDE		.74 U	ug/kg	.74	.78 U	ug/kg	.78	.7 U	ug/kg	.7	2.3	ug/kg	1.5
Endrin		1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	3 U	ug/kg	3
Endosulfan II		1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	3 U	ug/kg	3
4,4-DDD		1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	3 U	ug/kg	3
Endosulfan sulfate		1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	3 U	ug/kg	3
4,4-DDT		1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	3 U	ug/kg	3
Methoxychlor		3 U	ug/kg	3	3.1 U	ug/kg	3.1	2.8 U	ug/kg	2.8	6.1 U	ug/kg	6.1
Endrin aldehyde		1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	3 U	ug/kg	3
Endrin ketone		1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	3 U	ug/kg	3
Chlordane		12	ug/kg	7.4	7.8 U	ug/kg	7.8	7 U	ug/kg	7	93	ug/kg	15
Chlorobenzilate		22 U	ug/kg	22	23 U	ug/kg	23	21 U	ug/kg	21	45 U	ug/kg	45
Diallate		44 U	ug/kg	44	47 U	ug/kg	47	42 U	ug/kg	42	91 U	ug/kg	91
Toxaphene		36 U	ug/kg	36	38 U	ug/kg	38	34 U	ug/kg	34	75 U	ug/kg	75
Isodrin		.74 U	ug/kg	.74	.78 U	ug/kg	.78	.7 U	ug/kg	.7	1.5 U	ug/kg	1.5
Kepone		44 U	ug/kg	44	46 U	ug/kg	46	42 U	ug/kg	42	91 U	ug/kg	91
Aroclor-1016		36 U	ug/kg	36	38 U	ug/kg	38	34 U	ug/kg	34	75 U	ug/kg	75
Aroclor-1221		74 U	ug/kg	74	78 U	ug/kg	78	70 U	ug/kg	70	150 U	ug/kg	150
Aroclor-1232		74 U	ug/kg	74	78 U	ug/kg	78	70 U	ug/kg	70	150 U	ug/kg	150
Aroclor-1242		36 U	ug/kg	36	38 U	ug/kg	38	34 U	ug/kg	34	75 U	ug/kg	75
Aroclor-1248		36 U	ug/kg	36	38 U	ug/kg	38	34 U	ug/kg	34	75 U	ug/kg	75
Aroclor-1254		19 U	ug/kg	19	20 U	ug/kg	20	18 U	ug/kg	18	39 U	ug/kg	39
Aroclor-1260		160	ug/kg	19	20 U	ug/kg	20	25 J	ug/kg	18	170	ug/kg	39

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Surface Soil Data

Lab Sample Number:		R9971010		
Site		GROUP111		
Locator		TCS00401D		
Collect Date:		31-MAY-95		
	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg			
alpha-BHC	1.5	U	ug/kg	1.5
beta-BHC	2.9	U	ug/kg	2.9
delta-BHC	1.5	U	ug/kg	1.5
gamma-BHC (Lindane)	1.5	U	ug/kg	1.5
Heptachlor	1.2	J	ug/kg	1.5
Aldrin	1.5	U	ug/kg	1.5
Heptachlor epoxide	8.9		ug/kg	1.5
Endosulfan I	1.5	U	ug/kg	1.5
Dieldrin	1.5	U	ug/kg	1.5
4,4-DDE	2		ug/kg	1.5
Endrin	2.9	U	ug/kg	2.9
Endosulfan II	2.9	U	ug/kg	2.9
4,4-DDD	2.9	U	ug/kg	2.9
Endosulfan sulfate	2.9	U	ug/kg	2.9
4,4-DDT	2.9	U	ug/kg	2.9
Methoxychlor	6.1	U	ug/kg	6.1
Endrin aldehyde	2.9	U	ug/kg	2.9
Endrin ketone	2.9	U	ug/kg	2.9
Chlordane	91		ug/kg	15
Chlorobenzilate	45	U	ug/kg	45
Diallate	90	U	ug/kg	90
Toxaphene	74	U	ug/kg	74
Isodrin	1.5	U	ug/kg	1.5
Kepone	90	U	ug/kg	90
Aroclor-1016	74	U	ug/kg	74
Aroclor-1221	150	U	ug/kg	150
Aroclor-1232	150	U	ug/kg	150
Aroclor-1242	74	U	ug/kg	74
Aroclor-1248	74	U	ug/kg	74
Aroclor-1254	38	U	ug/kg	38
Aroclor-1260	150		ug/kg	38

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Surface Soil Data

Lab Sample Number:		R9971003				R9971005				R9971007				R9971009			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		TCS00101				TCS00201				TCS00301				TCS00401			
Collect Date:		31-MAY-95				31-MAY-95				31-MAY-95				31-MAY-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER)	mg/kg																
Antimony		1.1	U	mg/kg	1.1	1.2	U	mg/kg	1.2	1	U	mg/kg	1	1.2	U	mg/kg	1.2
Arsenic		1.6	J	mg/kg	.6	.58	UJ	mg/kg	.58	1	UJ	mg/kg	1	.58	UJ	mg/kg	.58
Barium		56.7		mg/kg	.24	4.4	J	mg/kg	.25	7.7	J	mg/kg	.23	4.2	J	mg/kg	.25
Beryllium		.08	J	mg/kg	.066	.09	J	mg/kg	.069	.1	J	mg/kg	.062	.12	J	mg/kg	.069
Cadmium		.44	J	mg/kg	.26	.28	U	mg/kg	.28	.25	U	mg/kg	.25	.28	U	mg/kg	.28
Calcium		-		mg/kg		-		mg/kg		-		mg/kg		-		mg/kg	
Chromium		12.8		mg/kg	.37	3		mg/kg	.39	2.4		mg/kg	.35	3.3		mg/kg	.39
Cobalt		.76	J	mg/kg	.68	.72	U	mg/kg	.72	.64	U	mg/kg	.64	.71	U	mg/kg	.71
Copper		8.9		mg/kg	.22	3.3	J	mg/kg	.23	4.3	J	mg/kg	.21	2.8	J	mg/kg	.23
Cyanide		.11	J	mg/kg	1.5	.09	J	mg/kg	1.5	.14	J	mg/kg	1.5	.12	J	mg/kg	1.5
Iron		-		mg/kg		-		mg/kg		-		mg/kg		-		mg/kg	
Lead		21.5		mg/kg	2	3.6		mg/kg	.4	16.4		mg/kg	2	7.2		mg/kg	.4
Magnesium		-		mg/kg		-		mg/kg		-		mg/kg		-		mg/kg	
Manganese		-		mg/kg		-		mg/kg		-		mg/kg		-		mg/kg	
Mercury		.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03
Nickel		3.6	J	mg/kg	1.2	1.3	U	mg/kg	1.3	2.1	J	mg/kg	1.2	1.3	U	mg/kg	1.3
Selenium		.11	U	mg/kg	.11	.12	U	mg/kg	.12	.1	U	mg/kg	.1	.2	J	mg/kg	.5
Silver		.31	UJ	mg/kg	.31	.32	UJ	mg/kg	.32	.29	UJ	mg/kg	.29	.32	UJ	mg/kg	.32
Sodium		-		mg/kg		-		mg/kg		-		mg/kg		-		mg/kg	
Thallium		.13	U	mg/kg	.13	.14	U	mg/kg	.14	.12	U	mg/kg	.12	.14	U	mg/kg	.14
Tin		3	U	mg/kg	3	3.1	U	mg/kg	3.1	2.8	U	mg/kg	2.8	5.7	J	mg/kg	3.1
Vanadium		5.4	J	mg/kg	.26	3.3	J	mg/kg	.28	4.3	J	mg/kg	.25	2.9	J	mg/kg	.28
Zinc		48.2		mg/kg	.46	10.7		mg/kg	.48	15.3		mg/kg	.44	10.6		mg/kg	.48

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Surface Soil Data

Lab Sample Number:		R9971010		
Site		GROUP111		
Locator		TCS00401D		
Collect Date:		31-MAY-95		
	VALUE	QUAL	UNITS	DL
INORGANICS (WATER)	mg/kg			
Antimony	1.1	UJ	mg/kg	1.1
Arsenic	.34	UJ	mg/kg	.34
Barium	3.4	J	mg/kg	.25
Beryllium	.07	U	mg/kg	.07
Cadmium	.27	U	mg/kg	.27
Calcium	-		mg/kg	
Chromium	2.1	J	mg/kg	.38
Cobalt	.7	U	mg/kg	.7
Copper	1.9	J	mg/kg	.23
Cyanide	.15	J	mg/kg	1.5
Iron	-		mg/kg	
Lead	9.3		mg/kg	.4
Magnesium	-		mg/kg	
Manganese	-		mg/kg	
Mercury	.03	J	mg/kg	.1
Nickel	1.8	J	mg/kg	1.3
Selenium	.11	U	mg/kg	.11
Silver	.32	UJ	mg/kg	.32
Sodium	-		mg/kg	
Thallium	.14	U	mg/kg	.14
Tin	3.1	U	mg/kg	3.1
Vanadium	2.7	J	mg/kg	.27
Zinc	9.7		mg/kg	.47

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Sub-Surface Soil Data

Lab Sample Number:		R9971004				R9971004				R9971006				R9971006		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		TCB00103				TCB00103				TCB00203				TCB00203		
Collect Date:		31-MAY-95				31-MAY-95				31-MAY-95				31-MAY-95		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg																
Chloromethane		12	U	ug/kg	12	-		ug/kg		13	U	ug/kg	13	-		ug/kg	
Bromomethane		12	U	ug/kg	12	-		ug/kg		13	U	ug/kg	13	-		ug/kg	
Vinyl chloride		12	U	ug/kg	12	-		ug/kg		13	U	ug/kg	13	-		ug/kg	
Chloroethane		12	U	ug/kg	12	-		ug/kg		13	U	ug/kg	13	-		ug/kg	
Methylene chloride		2	J	ug/kg	6	-		ug/kg		4	J	ug/kg	6	-		ug/kg	
Acetone		12	U	ug/kg	12	-		ug/kg		13	U	ug/kg	13	-		ug/kg	
Carbon disulfide		1	J	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1-Dichloroethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1-Dichloroethene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloroethene (total)		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Chloroform		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloroethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
2-Butanone		12	R	ug/kg	12	-		ug/kg		13	R	ug/kg	13	-		ug/kg	
1,1,1-Trichloroethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Carbon tetrachloride		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Bromodichloromethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloropropane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
cis-1,3-Dichloropropene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Trichloroethene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Dibromochloromethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1,2-Trichloroethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Benzene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
trans-1,3-Dichloropropene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Bromoform		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
4-Methyl-2-pentanone		12	U	ug/kg	12	-		ug/kg		13	U	ug/kg	13	-		ug/kg	
2-Hexanone		12	U	ug/kg	12	-		ug/kg		13	U	ug/kg	13	-		ug/kg	
Tetrachloroethene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1,2,2-Tetrachloroethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Toluene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Chlorobenzene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Ethylbenzene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Styrene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Xylenes (total)		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Dichlorodifluoromethane		12	U	ug/kg	12	-		ug/kg		13	U	ug/kg	13	-		ug/kg	
Trichlorofluoromethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,3-Dichlorobenzene		6	U	ug/kg	6	380	U	ug/kg	380	6	U	ug/kg	6	430	U	ug/kg	430
Acrolein		120	UJ	ug/kg	120	-		ug/kg		130	UJ	ug/kg	130	-		ug/kg	
Iodomethane		12	U	ug/kg	12	-		ug/kg		13	U	ug/kg	13	-		ug/kg	
1,4-Dichlorobenzene		6	U	ug/kg	6	380	U	ug/kg	380	6	U	ug/kg	6	430	U	ug/kg	430
Acrylonitrile		120	U	ug/kg	120	-		ug/kg		130	U	ug/kg	130	-		ug/kg	
Dibromomethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichlorobenzene		6	U	ug/kg	6	380	U	ug/kg	380	6	U	ug/kg	6	430	U	ug/kg	430
2-Chloroethylvinyl ether		12	U	ug/kg	12	-		ug/kg		13	U	ug/kg	13	-		ug/kg	
Ethyl methacrylate		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2,3-Trichloropropane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
trans-1,4-Dichloro-2-butene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Isobutyl alcohol		230	R	ug/kg	230	-		ug/kg		260	R	ug/kg	260	-		ug/kg	
1,1,1,2-Tetrachloroethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dibromo-3-chloropropane		12	U	ug/kg	12	-		ug/kg		13	U	ug/kg	13	-		ug/kg	
1,2-Dibromoethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Sub-Surface Soil Data

Lab Sample Number:	R9971004				R9971004				R9971006				R9971006			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	TCB00103				TCB00103				TCB00203				TCB00203			
Collect Date:	31-MAY-95				31-MAY-95				31-MAY-95				31-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	230	R	ug/kg	230	-		ug/kg		260	R	ug/kg	260	-		ug/kg	
3-Chloropropene	6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Acetonitrile	120	U	ug/kg	120	-		ug/kg		130	U	ug/kg	130	-		ug/kg	
Chloroprene	230	U	ug/kg	230	-		ug/kg		260	U	ug/kg	260	-		ug/kg	
Methacrylonitrile	6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Methyl methacrylate	12	U	ug/kg	12	-		ug/kg		13	U	ug/kg	13	-		ug/kg	
Pentachloroethane	12	U	ug/kg	12	-		ug/kg		13	U	ug/kg	13	-		ug/kg	
Propionitrile	120	U	ug/kg	120	-		ug/kg		130	U	ug/kg	130	-		ug/kg	
Vinyl acetate	12	U	ug/kg	12	-		ug/kg		13	U	ug/kg	13	-		ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Sub-Surface Soil Data

Lab Sample Number:		R9971008				R9971008				R9971011				R9971011		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		TCB00303				TCB00303				TCB00403				TCB00403		
Collect Date:		31-MAY-95				31-MAY-95				31-MAY-95				31-MAY-95		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg																
Chloromethane		12	U	ug/kg	12	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Bromomethane		12	U	ug/kg	12	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Vinyl chloride		12	U	ug/kg	12	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Chloroethane		12	U	ug/kg	12	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Methylene chloride		4	J	ug/kg	6	-		ug/kg		1	J	ug/kg	6	-		ug/kg	
Acetone		12	U	ug/kg	12	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Carbon disulfide		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1-Dichloroethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1-Dichloroethene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloroethene (total)		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Chloroform		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloroethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
2-Butanone		12	R	ug/kg	12	-		ug/kg		11	R	ug/kg	11	-		ug/kg	
1,1,1-Trichloroethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Carbon tetrachloride		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Bromodichloromethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloropropane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
cis-1,3-Dichloropropene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Trichloroethene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Dibromochloromethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1,2-Trichloroethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Benzene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
trans-1,3-Dichloropropene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Bromoform		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
4-Methyl-2-pentanone		12	U	ug/kg	12	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
2-Hexanone		12	U	ug/kg	12	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Tetrachloroethene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1,2,2-Tetrachloroethane		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Toluene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Chlorobenzene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Ethylbenzene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Styrene		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Xylenes (total)		6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Dichlorodifluoromethane		12	U	ug/kg	12	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Trichlorofluoromethane		6	U	ug/kg	6	-		ug/kg		2	J	ug/kg	6	-		ug/kg	
1,3-Dichlorobenzene		6	U	ug/kg	6	400	U	ug/kg	400	6	U	ug/kg	6	370	U	ug/kg	370
Acrolein		120	UJ	ug/kg	120	-		ug/kg		110	UJ	ug/kg	110	-		ug/kg	
Iodomethane		12	U	ug/kg	12	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,4-Dichlorobenzene		6	U	ug/kg	6	400	U	ug/kg	400	6	U	ug/kg	6	370	U	ug/kg	370
Acrylonitrile		120	U	ug/kg	120	-		ug/kg		110	U	ug/kg	110	-		ug/kg	

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Sub-Surface Soil Data

Lab Sample Number:	R9971008				R9971008				R9971011				R9971011			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	TCB00303				TCB00303				TCB00403				TCB00403			
Collect Date:	31-MAY-95				31-MAY-95				31-MAY-95				31-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichlorobenzene	6	U	ug/kg	6	400	U	ug/kg	400	6	U	ug/kg	6	370	U	ug/kg	370
2-Chloroethylvinyl ether	12	U	ug/kg	12	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Ethyl methacrylate	6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2,3-Trichloropropane	6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Isobutyl alcohol	250	R	ug/kg	250	-		ug/kg		230	R	ug/kg	230	-		ug/kg	
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dibromo-3-chloropropane	12	U	ug/kg	12	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,2-Dibromoethane	6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,4-Dioxane	250	R	ug/kg	250	-		ug/kg		230	R	ug/kg	230	-		ug/kg	
3-Chloropropene	6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Acetonitrile	120	U	ug/kg	120	-		ug/kg		110	U	ug/kg	110	-		ug/kg	
Chloroprene	250	U	ug/kg	250	-		ug/kg		230	U	ug/kg	230	-		ug/kg	
Methacrylonitrile	6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Methyl methacrylate	12	U	ug/kg	12	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Pentachloroethane	12	U	ug/kg	12	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Propionitrile	120	U	ug/kg	120	-		ug/kg		110	U	ug/kg	110	-		ug/kg	
Vinyl acetate	12	U	ug/kg	12	-		ug/kg		11	U	ug/kg	11	-		ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Sub-Surface Soil Data

Lab Sample Number:		R9971004				R9971006				R9971008				R9971011			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		TCB00103				TCB00203				TCB00303				TCB00403			
Collect Date:		31-MAY-95				31-MAY-95				31-MAY-95				31-MAY-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Phenol		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Aniline		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
bis(2-Chloroethyl) ether		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Benzyl Alcohol		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
2-Methylphenol		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
bis(2-Chloroisopropyl) ether		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
N-Nitroso-di-n-propylamine		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Hexachloroethane		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Nitrobenzene		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Isophorone		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
2-Nitrophenol		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
2,4-Dimethylphenol		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Benzoic acid		1900	U	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
bis(2-Chloroethoxy) methane		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
2,4-Dichlorophenol		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
1,2,4-Trichlorobenzene		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Naphthalene		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
4-Chloroaniline		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Hexachlorobutadiene		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
4-Chloro-3-methylphenol		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
2-Methylnaphthalene		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Hexachlorocyclopentadiene		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
2,4,6-Trichlorophenol		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Dimethylphthalate		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
2,4,5-Trichlorophenol		1900	U	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
2-Chloronaphthalene		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
2-Nitroaniline		1900	U	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
Acenaphthylene		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
2,6-Dinitrotoluene		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
3-Nitroaniline		1900	U	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
Acenaphthene		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
2,4-Dinitrophenol		1900	U	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
4-Nitrophenol		1900	U	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
Dibenzofuran		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
2,4-Dinitrotoluene		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Diethylphthalate		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
4-Chlorophenyl-phenylether		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Fluorene		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
4-Nitroaniline		1900	U	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
4,6-Dinitro-2-methylphenol		1900	U	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
N-Nitrosodiphenylamine (1)		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
1,2-Diphenylhydrazine		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
4-Bromophenyl-phenylether		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Hexachlorobenzene		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Pentachlorophenol		1900	U	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
Phenanthrene		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Anthracene		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Di-n-Butylphthalate		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Fluoranthene		380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Sub-Surface Soil Data

Lab Sample Number:	R9971004				R9971006				R9971008				R9971011			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	TCB00103				TCB00203				TCB00303				TCB00403			
Collect Date:	31-MAY-95				31-MAY-95				31-MAY-95				31-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Butylbenzylphthalate	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
3,3-Dichlorobenzidine	770	U	ug/kg	770	860	U	ug/kg	860	810	U	ug/kg	810	750	U	ug/kg	750
Benzo (a) anthracene	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Chrysene	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
bis(2-Ethylhexyl) phthalate	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Di-n-octylphthalate	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Benzo (b) fluoranthene	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Benzo (k) fluoranthene	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Benzo (a) pyrene	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Indeno (1,2,3-cd) pyrene	380	UJ	ug/kg	380	430	UJ	ug/kg	430	400	UJ	ug/kg	400	370	UJ	ug/kg	370
Dibenz (a,h) anthracene	380	U	ug/kg	380	430	UJ	ug/kg	430	400	UJ	ug/kg	400	370	UJ	ug/kg	370
Benzo (g,h,i) perylene	380	UJ	ug/kg	380	430	UJ	ug/kg	430	400	UJ	ug/kg	400	370	UJ	ug/kg	370
2-Picoline	1900	U	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
Methyl methanesulfonate	380	UJ	ug/kg	380	430	UJ	ug/kg	430	400	UJ	ug/kg	400	370	UJ	ug/kg	370
Ethyl methanesulfonate	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Acetophenone	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
N-Nitrosopiperidine	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Phenyl-tert-butylamine	1900	UJ	ug/kg	1900	2100	UJ	ug/kg	2100	2000	UJ	ug/kg	2000	1800	UJ	ug/kg	1800
2,6-Dichlorophenol	380	UJ	ug/kg	380	430	UJ	ug/kg	430	400	UJ	ug/kg	400	370	UJ	ug/kg	370
N-Nitroso-di-n-butylamine	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
N-Nitrosodiethylamine	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
N-Nitrosopyrrolidine	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Benzidine	1900	UJ	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
1,2,4,5-Tetrachlorobenzene	1900	U	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
Pentachlorobenzene	1900	U	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
1-Naphthylamine	1900	UJ	ug/kg	1900	2100	UJ	ug/kg	2100	2000	UJ	ug/kg	2000	1800	UJ	ug/kg	1800
2-Naphthylamine	1900	UJ	ug/kg	1900	2100	UJ	ug/kg	2100	2000	UJ	ug/kg	2000	1800	UJ	ug/kg	1800
2,3,4,6-Tetrachlorophenol	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Phenacetin	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
4-Aminobiphenyl	1900	UJ	ug/kg	1900	2100	UJ	ug/kg	2100	2000	UJ	ug/kg	2000	1800	UJ	ug/kg	1800
Pentachloronitrobenzene	1900	U	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
Pronamide	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
p-(Dimethylamino)azobenzene	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
7,12-Dimethylbenz(A)Anthracene	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
3-Methylcholanthrene	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Pyridine	1900	U	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
N-Nitrosomethylethylamine	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
N-Nitrosomorpholine	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
o-Toluidine	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Hexachloropropene	1900	UJ	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
p-Phenylenediamine	19000	UJ	ug/kg	19000	21000	UJ	ug/kg	21000	20000	UJ	ug/kg	20000	18000	UJ	ug/kg	18000
Safrole	1900	UJ	ug/kg	1900	2100	UJ	ug/kg	2100	2000	UJ	ug/kg	2000	1800	UJ	ug/kg	1800
Isosafrole	1900	U	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
1,4-Naphthoquinone	38000	U	ug/kg	38000	43000	R	ug/kg	43000	40000	R	ug/kg	40000	37000	R	ug/kg	37000
1,3-Dinitrobenzene	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
5-Nitro-o-toluidine	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
1,3,5-Trinitrobenzene	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
4-Nitroquinoline-1-oxide	19000	R	ug/kg	19000	21000	U	ug/kg	21000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
Methapyrilene	1900	UJ	ug/kg	1900	2100	UJ	ug/kg	2100	2000	UJ	ug/kg	2000	1800	UJ	ug/kg	1800
3,3-Dimethylbenzidine	380	UJ	ug/kg	380	430	UJ	ug/kg	430	400	UJ	ug/kg	400	370	UJ	ug/kg	370
Hexachlorophene	19000	R	ug/kg	19000	21000	UJ	ug/kg	21000	20000	UJ	ug/kg	20000	18000	UJ	ug/kg	18000

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Sub-Surface Soil Data

Lab Sample Number:	R9971004				R9971006				R9971008				R9971011			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	TCB00103				TCB00203				TCB00303				TCB00403			
Collect Date:	31-MAY-95				31-MAY-95				31-MAY-95				31-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	1900	U	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
2-Chlorophenol	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
3- & 4-Methylphenol (2)	380	U	ug/kg	380	430	U	ug/kg	430	400	U	ug/kg	400	370	U	ug/kg	370
Hexachloropropene	1900	UJ	ug/kg	1900	2100	U	ug/kg	2100	2000	U	ug/kg	2000	1800	U	ug/kg	1800
2-Acetylaminofluorene	380	UJ	ug/kg	380	430	UJ	ug/kg	430	400	UJ	ug/kg	400	370	UJ	ug/kg	370

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Sub-Surface Soil Data

Lab Sample Number:	R9971004				R9971006				R9971008				R9971011			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	TCB00103				TCB00203				TCB00303				TCB00403			
Collect Date:	31-MAY-95				31-MAY-95				31-MAY-95				31-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg																
alpha-BHC	.83	U	ug/kg	.83	.86	U	ug/kg	.86	.82	U	ug/kg	.82	.75	U	ug/kg	.75
beta-BHC	1.6	U	ug/kg	1.6	1.7	U	ug/kg	1.7	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5
delta-BHC	.83	U	ug/kg	.83	.86	U	ug/kg	.86	.82	U	ug/kg	.82	.75	U	ug/kg	.75
gamma-BHC (Lindane)	.83	U	ug/kg	.83	.86	U	ug/kg	.86	.82	U	ug/kg	.82	.75	U	ug/kg	.75
Heptachlor	.83	U	ug/kg	.83	.86	U	ug/kg	.86	.82	U	ug/kg	.82	.75	U	ug/kg	.75
Aldrin	.83	U	ug/kg	.83	.86	U	ug/kg	.86	.82	U	ug/kg	.82	.75	U	ug/kg	.75
Heptachlor epoxide	.83	U	ug/kg	.83	.86	U	ug/kg	.86	.82	U	ug/kg	.82	.75	U	ug/kg	.75
Endosulfan I	.83	U	ug/kg	.83	.86	U	ug/kg	.86	.82	U	ug/kg	.82	.75	U	ug/kg	.75
Dieldrin	.83	U	ug/kg	.83	.86	U	ug/kg	.86	.82	U	ug/kg	.82	.75	U	ug/kg	.75
4,4-DDE	.83	U	ug/kg	.83	.86	U	ug/kg	.86	.82	U	ug/kg	.82	.75	U	ug/kg	.75
Endrin	1.6	U	ug/kg	1.6	1.7	U	ug/kg	1.7	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5
Endosulfan II	1.6	U	ug/kg	1.6	1.7	U	ug/kg	1.7	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5
4,4-DDD	1.6	U	ug/kg	1.6	1.7	U	ug/kg	1.7	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5
Endosulfan sulfate	1.6	U	ug/kg	1.6	1.7	U	ug/kg	1.7	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5
4,4-DDT	1.6	U	ug/kg	1.6	1.7	U	ug/kg	1.7	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5
Methoxychlor	3.3	U	ug/kg	3.3	3.5	U	ug/kg	3.5	3.3	U	ug/kg	3.3	3	U	ug/kg	3
Endrin aldehyde	1.6	U	ug/kg	1.6	1.7	U	ug/kg	1.7	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5
Endrin ketone	1.6	U	ug/kg	1.6	1.7	U	ug/kg	1.7	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5
Chlordane	8.3	U	ug/kg	8.3	8.6	U	ug/kg	8.6	8.2	U	ug/kg	8.2	19		ug/kg	7.5
Chlorobenzilate	25	U	ug/kg	25	26	U	ug/kg	26	24	U	ug/kg	24	22	U	ug/kg	22
Diallate	49	U	ug/kg	49	51	U	ug/kg	51	49	U	ug/kg	49	45	U	ug/kg	45
Toxaphene	41	U	ug/kg	41	42	U	ug/kg	42	40	U	ug/kg	40	37	U	ug/kg	37
Isodrin	.83	U	ug/kg	.83	.86	U	ug/kg	.86	.82	U	ug/kg	.82	.75	U	ug/kg	.75
Kepone	49	U	ug/kg	49	51	U	ug/kg	51	49	U	ug/kg	49	45	U	ug/kg	45
Aroclor-1016	41	U	ug/kg	41	42	U	ug/kg	42	40	U	ug/kg	40	37	U	ug/kg	37
Aroclor-1221	83	U	ug/kg	83	86	U	ug/kg	86	82	U	ug/kg	82	75	U	ug/kg	75
Aroclor-1232	83	U	ug/kg	83	86	U	ug/kg	86	82	U	ug/kg	82	75	U	ug/kg	75
Aroclor-1242	41	U	ug/kg	41	42	U	ug/kg	42	40	U	ug/kg	40	37	U	ug/kg	37
Aroclor-1248	41	U	ug/kg	41	42	U	ug/kg	42	40	U	ug/kg	40	37	U	ug/kg	37
Aroclor-1254	21	U	ug/kg	21	22	U	ug/kg	22	21	U	ug/kg	21	19	U	ug/kg	19
Aroclor-1260	21	U	ug/kg	21	22	U	ug/kg	22	21	U	ug/kg	21	19	U	ug/kg	19

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Sub-Surface Soil Data

Lab Sample Number:		R9971004				R9971006				R9971008				R9971011			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		TCB00103				TCB00203				TCB00303				TCB00403			
Collect Date:		31-MAY-95				31-MAY-95				31-MAY-95				31-MAY-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER)	mg/kg																
Antimony		1.2	U	mg/kg	1.2	1.3	U	mg/kg	1.3	1.2	U	mg/kg	1.2	1.1	U	mg/kg	1.1
Arsenic		.42	UJ	mg/kg	.42	.39	UJ	mg/kg	.39	.88	UJ	mg/kg	.88	.2	UJ	mg/kg	.2
Barium		4.1	J	mg/kg	.26	2.2	J	mg/kg	.28	2.7	J	mg/kg	.27	1.9	J	mg/kg	.25
Beryllium		.07	J	mg/kg	.07	.14	J	mg/kg	.078	.15	J	mg/kg	.074	.07	U	mg/kg	.07
Cadmium		.28	U	mg/kg	.28	.31	U	mg/kg	.31	.29	U	mg/kg	.29	.27	U	mg/kg	.27
Calcium		-		mg/kg		-		mg/kg		-		mg/kg		-		mg/kg	
Chromium		.4	U	mg/kg	.4	2.1	J	mg/kg	.44	1.9	J	mg/kg	.42	1.7	J	mg/kg	.38
Cobalt		.72	U	mg/kg	.72	.8	U	mg/kg	.8	.76	U	mg/kg	.76	.7	U	mg/kg	.7
Copper		2.2	J	mg/kg	.23	2.1	J	mg/kg	.26	1.4	J	mg/kg	.25	1	J	mg/kg	.23
Cyanide		.09	J	mg/kg	1.5	.13	J	mg/kg	1.5	.17	J	mg/kg	1.5	.15	J	mg/kg	1.5
Iron		-		mg/kg		-		mg/kg		-		mg/kg		-		mg/kg	
Lead		.63	J	mg/kg	.4	.67	J	mg/kg	.4	1.3		mg/kg	.4	1.1		mg/kg	.4
Magnesium		-		mg/kg		-		mg/kg		-		mg/kg		-		mg/kg	
Manganese		-		mg/kg		-		mg/kg		-		mg/kg		-		mg/kg	
Mercury		.03	U	mg/kg	.03	.04	U	mg/kg	.04	.03	U	mg/kg	.03	.03	U	mg/kg	.03
Nickel		1.3	U	mg/kg	1.3	1.5	U	mg/kg	1.5	1.4	U	mg/kg	1.4	1.3	U	mg/kg	1.3
Selenium		.12	U	mg/kg	.12	.13	U	mg/kg	.13	.12	U	mg/kg	.12	.11	U	mg/kg	.11
Silver		.33	UJ	mg/kg	.33	.36	UJ	mg/kg	.36	.34	UJ	mg/kg	.34	.32	UJ	mg/kg	.32
Sodium		-		mg/kg		-		mg/kg		-		mg/kg		-		mg/kg	
Thallium		.14	U	mg/kg	.14	.16	U	mg/kg	.16	.15	U	mg/kg	.15	.14	U	mg/kg	.14
Tin		3.2	U	mg/kg	3.2	4.4	J	mg/kg	3.5	3.3	U	mg/kg	3.3	4.8	J	mg/kg	3.1
Vanadium		1.8	J	mg/kg	.28	1.4	J	mg/kg	.31	1.9	J	mg/kg	.29	1.8	J	mg/kg	.27
Zinc		2.4	UJ	mg/kg	2.4	2.8	J	mg/kg	.54	3.3	J	mg/kg	.52	3.4	J	mg/kg	.48

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Groundwater Data

Lab Sample Number:		RA077007				RA077010				RA077011				RA077009			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		TCG00101				TCG00201				TCG00301				TCG00401			
Collect Date:		26-JUN-95				27-JUN-95				27-JUN-95				27-JUN-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l																
Chloromethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Bromomethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Vinyl chloride		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chloroethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Methylene chloride		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetone		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Carbon disulfide		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,1-Dichloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,1-Dichloroethene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethene (total)		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	1	J	ug/l	5
Chloroform		5	U	ug/l	5	11		ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
2-Butanone		10	R	ug/l	10	10	R	ug/l	10	10	R	ug/l	10	10	R	ug/l	10
1,1,1-Trichloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Carbon tetrachloride		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Bromodichloromethane		5	U	ug/l	5	5		ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloropropane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
cis-1,3-Dichloropropene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Trichloroethene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	9		ug/l	5
Dibromochloromethane		5	U	ug/l	5	1	J	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,1,2-Trichloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Benzene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
trans-1,3-Dichloropropene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Bromoform		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
4-Methyl-2-pentanone		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Hexanone		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Tetrachloroethene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	26		ug/l	5
1,1,2,2-Tetrachloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Toluene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Chlorobenzene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Ethylbenzene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Styrene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Xylenes (total)		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Dichlorodifluoromethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Trichlorofluoromethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,3-Dichlorobenzene		10	U	ug/l	10	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acrolein		100	UJ	ug/l	100	100	UJ	ug/l	100	100	UJ	ug/l	100	100	UJ	ug/l	100
Iodomethane		10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
1,4-Dichlorobenzene		10	U	ug/l	10	5	U	ug/l	5	10	U	ug/l	10	5	U	ug/l	5
Acrylonitrile		100	UJ	ug/l	100	100	UJ	ug/l	100	100	UJ	ug/l	100	100	UJ	ug/l	100
Dibromomethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichlorobenzene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	10	U	ug/l	10
2-Chloroethylvinyl ether		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Ethyl methacrylate		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2,3-Trichloropropane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
trans-1,4-Dichloro-2-butene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Isobutyl alcohol		200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200
1,1,1,2-Tetrachloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dibromo-3-chloropropane		10	R	ug/l	10	10	R	ug/l	10	10	R	ug/l	10	10	R	ug/l	10
1,2-Dibromoethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Groundwater Data

Lab Sample Number:	RA077007				RA077010				RA077011				RA077009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	TCG00101				TCG00201				TCG00301				TCG00401			
Collect Date:	26-JUN-95				27-JUN-95				27-JUN-95				27-JUN-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200
3-Chloropropene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetonitrile	100	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100
Chloroprene	200	UJ	ug/l	200	200	UJ	ug/l	200	200	UJ	ug/l	200	200	UJ	ug/l	200
Methacrylonitrile	5	UJ	ug/l	5	5	UJ	ug/l	5	5	UJ	ug/l	5	5	UJ	ug/l	5
Methyl methacrylate	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
Pentachloroethane	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Propionitrile	100	UJ	ug/l	100	100	UJ	ug/l	100	100	UJ	ug/l	100	100	UJ	ug/l	100
Vinyl acetate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Groundwater Data

Lab Sample Number:		RA077004				RA077005				RA077006			
Site		GROUP111				GROUP111				GROUP111			
Locator		TCG00501				TCG00501D				TCG00601			
Collect Date:		26-JUN-95				26-JUN-95				26-JUN-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l												
Chloromethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Bromomethane		10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Vinyl chloride		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chloroethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Methylene chloride		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetone		10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Carbon disulfide		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,1-Dichloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,1-Dichloroethene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethene (total)		1	J	ug/l	5	1	J	ug/l	5	5	U	ug/l	5
Chloroform		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
2-Butanone		10	R	ug/l	10	10	R	ug/l	10	10	R	ug/l	10
1,1,1-Trichloroethane		5	UJ	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Carbon tetrachloride		5	UJ	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Bromodichloromethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloropropane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
cis-1,3-Dichloropropene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Trichloroethene		10		ug/l	5	8		ug/l	5	5	U	ug/l	5
Dibromochloromethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,1,2-Trichloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Benzene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
trans-1,3-Dichloropropene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Bromoform		5	UJ	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
4-Methyl-2-pentanone		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Hexanone		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Tetrachloroethene		100		ug/l	5	73		ug/l	5	5	U	ug/l	5
1,1,2,2-Tetrachloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Toluene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Chlorobenzene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Ethylbenzene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Styrene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Xylenes (total)		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Dichlorodifluoromethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Trichlorofluoromethane		5	UJ	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,3-Dichlorobenzene		10	U	ug/l	10	5	U	ug/l	5	10	U	ug/l	10
Acrolein		100	U	ug/l	100	100	UJ	ug/l	100	100	UJ	ug/l	100
Iodomethane		10	U	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
1,4-Dichlorobenzene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Acrylonitrile		100	U	ug/l	100	100	UJ	ug/l	100	100	UJ	ug/l	100

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Groundwater Data

Lab Sample Number:	RA077004				RA077005				RA077006			
Site	GROUP111				GROUP111				GROUP111			
Locator	TCG00501				TCG00501D				TCG00601			
Collect Date:	26-JUN-95				26-JUN-95				26-JUN-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichlorobenzene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
2-Chloroethylvinyl ether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Ethyl methacrylate	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2,3-Trichloropropane	5	UJ	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
trans-1,4-Dichloro-2-butene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Isobutyl alcohol	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200
1,1,1,2-Tetrachloroethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dibromo-3-chloropropane	10	UJ	ug/l	10	10	R	ug/l	10	10	R	ug/l	10
1,2-Dibromoethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,4-Dioxane	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200
3-Chloropropene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetonitrile	100	UJ	ug/l	100	100	U	ug/l	100	100	U	ug/l	100
Chloroprene	200	U	ug/l	200	200	UJ	ug/l	200	200	UJ	ug/l	200
Methacrylonitrile	5	U	ug/l	5	5	UJ	ug/l	5	5	UJ	ug/l	5
Methyl methacrylate	10	U	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
Pentachloroethane	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Propionitrile	100	UJ	ug/l	100	100	UJ	ug/l	100	100	UJ	ug/l	100
Vinyl acetate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Groundwater Data

Lab Sample Number:		RA077007			RA077010			RA077011			RA077009		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		TCG00101			TCG00201			TCG00301			TCG00401		
Collect Date:		26-JUN-95			27-JUN-95			27-JUN-95			27-JUN-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/l												
N-Nitrosodimethylamine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Phenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Aniline		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
bis(2-Chloroethyl) ether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Benzyl Alcohol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Methylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
bis(2-Chloroisopropyl) ether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
N-Nitroso-di-n-propylamine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachloroethane		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Nitrobenzene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Isophorone		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Nitrophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dimethylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Benzoic acid		50 UJ	ug/l	50	50 UJ	ug/l	50	50 UJ	ug/l	50	50 UJ	ug/l	50
bis(2-Chloroethoxy) methane		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dichlorophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
1,2,4-Trichlorobenzene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Naphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chloroaniline		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachlorobutadiene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chloro-3-methylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Methylnaphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachlorocyclopentadiene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4,6-Trichlorophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Dimethylphthalate		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4,5-Trichlorophenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
2-Chloronaphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Acenaphthylene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,6-Dinitrotoluene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
3-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Acenaphthene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrophenol		50 UJ	ug/l	50	50 UJ	ug/l	50	50 UJ	ug/l	50	50 UJ	ug/l	50
4-Nitrophenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Dibenzofuran		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrotoluene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Diethylphthalate		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chlorophenyl-phenylether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Fluorene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
4,6-Dinitro-2-methylphenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
N-Nitrosodiphenylamine (1)		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
1,2-Diphenylhydrazine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Bromophenyl-phenylether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachlorobenzene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Pentachlorophenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Phenanthrene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Anthracene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Di-n-Butylphthalate		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Fluoranthene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10

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Groundwater Data

Lab Sample Number:	RA077007				RA077010				RA077011				RA077009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	TCG00101				TCG00201				TCG00301				TCG00401			
Collect Date:	26-JUN-95				27-JUN-95				27-JUN-95				27-JUN-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Butylbenzylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3,3-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20
Benzo (a) anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chrysene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Ethylhexyl) phthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-octylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (b) fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (k) fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (a) pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Indeno (1,2,3-cd) pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Dibenz (a,h) anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (g,h,i) perylene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Picoline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Methyl methanesulfonate	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
Ethyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Acetophenone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopiperidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenyl-tert-butylamine	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
2,6-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosodiethylamine	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopyrrolidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzidine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1-Naphthylamine	50	UJ	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenacetin	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Aminobiphenyl	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachloronitrobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pronamide	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Methylcholanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyridine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosomethylethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosomorpholine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
o-Toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
p-Phenylenediamine	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500
Safrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Isosafrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,4-Naphthoquinone	1000	R	ug/l	1000	1000	R	ug/l	1000	1000	R	ug/l	1000	1000	R	ug/l	1000
1,3-Dinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
5-Nitro-o-toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Nitroquinoline-1-oxide	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500
Methapyrilene	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
3,3-Dimethylbenzidine	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
Hexachlorophene	500	R	ug/l	500	500	R	ug/l	500	500	R	ug/l	500	500	R	ug/l	500

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Lab Sample Number:	RA077007				RA077010				RA077011				RA077009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	TCG00101				TCG00201				TCG00301				TCG00401			
Collect Date:	26-JUN-95				27-JUN-95				27-JUN-95				27-JUN-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Chlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3- & 4-Methylphenol (2)	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
2-Acetylaminofluorene	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

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Lab Sample Number:		RA077004			RA077005			RA077006		
Site		GROUP111			GROUP111			GROUP111		
Locator		TCG00501			TCG00501D			TCG00601		
Collect Date:		26-JUN-95			26-JUN-95			26-JUN-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/l									
N-Nitrosodimethylamine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Phenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Aniline		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
bis(2-Chloroethyl) ether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Benzyl Alcohol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Methylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
bis(2-Chloroisopropyl) ether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
N-Nitroso-di-n-propylamine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachloroethane		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Nitrobenzene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Isophorone		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Nitrophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dimethylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Benzoic acid		50 UJ	ug/l	50	50 UJ	ug/l	50	50 UJ	ug/l	50
bis(2-Chloroethoxy) methane		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dichlorophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
1,2,4-Trichlorobenzene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Naphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chloroaniline		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachlorobutadiene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chloro-3-methylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Methylnaphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachlorocyclopentadiene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4,6-Trichlorophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Dimethylphthalate		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4,5-Trichlorophenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
2-Chloronaphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Acenaphthylene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,6-Dinitrotoluene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
3-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Acenaphthene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrophenol		50 UJ	ug/l	50	50 UJ	ug/l	50	50 UJ	ug/l	50
4-Nitrophenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Dibenzofuran		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrotoluene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Diethylphthalate		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chlorophenyl-phenylether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Fluorene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50

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Groundwater Data

Lab Sample Number:	RA077004				RA077005				RA077006			
Site	GROUP111				GROUP111				GROUP111			
Locator	TCG00501				TCG00501D				TCG00601			
Collect Date:	26-JUN-95				26-JUN-95				26-JUN-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosodiphenylamine (1)	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2-Diphenylhydrazine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Bromophenyl-phenylether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pentachlorophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Phenanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-Butylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Butylbenzylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3,3-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20
Benzo (a) anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chrysene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Ethylhexyl) phthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-octylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (b) fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (k) fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (a) pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Indeno (1,2,3-cd) pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Dibenz (a,h) anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (g,h,i) perylene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Picoline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Methyl methanesulfonate	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
Ethyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Acetophenone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopiperidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenyl-tert-butylamine	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
2,6-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosodiethylamine	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
N-Nitrosopyrrolidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzidine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1-Naphthylamine	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
2-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenacetin	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Aminobiphenyl	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachloronitrobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pronamide	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Methylcholanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyridine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosomethylethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosomorpholine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
o-Toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
p-Phenylenediamine	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Groundwater Data

Lab Sample Number:	RA077004				RA077005				RA077006			
Site	GROUP111				GROUP111				GROUP111			
Locator	TCG00501				TCG00501D				TCG00601			
Collect Date:	26-JUN-95				26-JUN-95				26-JUN-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Isosafrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,4-Naphthoquinone	1000	R	ug/l	1000	1000	R	ug/l	1000	1000	R	ug/l	1000
1,3-Dinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
5-Nitro-o-toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Nitroquinoline-1-oxide	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500
Methapyrilene	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
3,3-Dimethylbenzidine	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
Hexachlorophene	500	R	ug/l	500	500	R	ug/l	500	500	R	ug/l	500
Aramite	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Chlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3- & 4-Methylphenol (2)	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
2-Acetylaminofluorene	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Groundwater Data

Lab Sample Number:		RA077007			RA077010			RA077011			RA077009		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		TCG00101			TCG00201			TCG00301			TCG00401		
Collect Date:		26-JUN-95			27-JUN-95			27-JUN-95			27-JUN-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/l												
alpha-BHC		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
beta-BHC		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
delta-BHC		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
gamma-BHC (Lindane)		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Heptachlor		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Aldrin		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Heptachlor epoxide		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Endosulfan I		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Dieldrin		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
4,4-DDE		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Endrin		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Endosulfan II		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
4,4-DDD		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Endosulfan sulfate		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
4,4-DDT		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Methoxychlor		.08 U	ug/l	.08	.08 U	ug/l	.08	.08 U	ug/l	.08	.08 U	ug/l	.08
Endrin aldehyde		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Endrin ketone		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Chlordane		.2 U	ug/l	.2	.2 U	ug/l	.2	.2 U	ug/l	.2	.2 U	ug/l	.2
Chlorobenzilate		.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5
Diallate		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Toxaphene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Isodrin		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Kepone		1 UJ	ug/l	1	1 UJ	ug/l	1	1 UJ	ug/l	1	1 UJ	ug/l	1
Aroclor-1016		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Aroclor-1221		2 U	ug/l	2	2 U	ug/l	2	2 U	ug/l	2	2 U	ug/l	2
Aroclor-1232		2 U	ug/l	2	2 U	ug/l	2	2 U	ug/l	2	2 U	ug/l	2
Aroclor-1242		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Aroclor-1248		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Aroclor-1254		.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5
Aroclor-1260		.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5

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US Naval Station, Mayport, Building 191 SWMU Assessment Report
Groundwater Data

Lab Sample Number:		RA077004			RA077005			RA077006		
Site		GROUP111			GROUP111			GROUP111		
Locator		TCG00501			TCG00501D			TCG00601		
Collect Date:		26-JUN-95			26-JUN-95			26-JUN-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/l									
alpha-BHC		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
beta-BHC		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
delta-BHC		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
gamma-BHC (Lindane)		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Heptachlor		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Aldrin		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Heptachlor epoxide		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Endosulfan I		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Dieldrin		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
4,4-DDE		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Endrin		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Endosulfan II		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
4,4-DDD		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Endosulfan sulfate		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
4,4-DDT		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Methoxychlor		.08 U	ug/l	.08	.08 U	ug/l	.08	.08 U	ug/l	.08
Endrin aldehyde		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Endrin ketone		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Chlordane		.2 U	ug/l	.2	.2 U	ug/l	.2	.2 U	ug/l	.2
Chlorobenzilate		.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5
Diallate		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Toxaphene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Isodrin		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Kepone		1 UJ	ug/l	1	1 UJ	ug/l	1	1 UJ	ug/l	1
Aroclor-1016		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Aroclor-1221		2 U	ug/l	2	2 U	ug/l	2	2 U	ug/l	2
Aroclor-1232		2 U	ug/l	2	2 U	ug/l	2	2 U	ug/l	2
Aroclor-1242		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Aroclor-1248		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Aroclor-1254		.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5
Aroclor-1260		.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5

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US Naval Station, Mayport, Building 191 SWMU Assessment Report
Groundwater Data

Lab Sample Number:		RA077007				RA077010				RA077011				RA077009			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		TCG00101				TCG00201				TCG00301				TCG00401			
Collect Date:		26-JUN-95				27-JUN-95				27-JUN-95				27-JUN-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER)	ug/l																
Antimony		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Arsenic		62.4		ug/l	.6	1.2	J	ug/l	.6	.9	J	ug/l	.6	6	J	ug/l	.6
Barium		9.8	J	ug/l	1.1	8.7	J	ug/l	1.1	2.8	J	ug/l	1.1	2.8	J	ug/l	1.1
Beryllium		.3	U	ug/l	.3	.3	U	ug/l	.3	.3	U	ug/l	.3	.36	J	ug/l	.3
Cadmium		1.2	U	ug/l	1.2	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2
Calcium		167000		ug/l	34.8	61200		ug/l	34.8	79100		ug/l	34.8	77000		ug/l	34.8
Chromium		1.7	U	ug/l	1.7	1.7	U	ug/l	1.7	1.7	U	ug/l	1.7	1.7	U	ug/l	1.7
Cobalt		3.1	U	ug/l	3.1	3.1	U	ug/l	3.1	3.1	U	ug/l	3.1	3.1	U	ug/l	3.1
Copper		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Cyanide		1.5	U	ug/l	1.5	2	J	ug/l	1.5	2.6	J	ug/l	1.5	1.5	U	ug/l	1.5
Iron		4950		ug/l	1.9	14.8	UJ	ug/l	14.8	27.2	UJ	ug/l	27.2	299		ug/l	1.9
Lead		.4	U	ug/l	.4	.4	U	ug/l	.4	.4	U	ug/l	.4	.4	U	ug/l	.4
Magnesium		11300		ug/l	19.8	22700		ug/l	19.8	23500		ug/l	19.8	6530		ug/l	19.8
Manganese		543		ug/l	.5	.84	J	ug/l	.5	1.5	J	ug/l	.5	142		ug/l	.5
Mercury		.11	UJ	ug/l	.11	.11	UJ	ug/l	.11	.11	UJ	ug/l	.11	.11	UJ	ug/l	.11
Nickel		5.7	U	ug/l	5.7	5.7	U	ug/l	5.7	5.7	U	ug/l	5.7	5.7	U	ug/l	5.7
Selenium		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Silver		1.7	J	ug/l	1.4	1.4	U	ug/l	1.4	1.4	U	ug/l	1.4	1.4	U	ug/l	1.4
Sodium		16800		ug/l	19.5	17200		ug/l	19.5	19800		ug/l	19.5	7450		ug/l	19.5
Thallium		.6	U	ug/l	.6	.6	U	ug/l	.6	.6	U	ug/l	.6	.6	U	ug/l	.6
Tin		14.4	UJ	ug/l	14.4	14.4	UJ	ug/l	14.4	14.4	UJ	ug/l	14.4	14.4	UJ	ug/l	14.4
Vanadium		6.3	J	ug/l	1.2	8.4	J	ug/l	1.2	5.3	J	ug/l	1.2	6.7	J	ug/l	1.2
Zinc		4.9	UJ	ug/l	4.9	4.9	UJ	ug/l	4.9	4.9	UJ	ug/l	4.9	4.9	UJ	ug/l	4.9

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US Naval Station, Mayport, Building 191 SWMU Assessment Report
Groundwater Data

Lab Sample Number:		RA077004			RA077005			RA077006		
Site		GROUP111			GROUP111			GROUP111		
Locator		TCG00501			TCG00501D			TCG00601		
Collect Date:		26-JUN-95			26-JUN-95			26-JUN-95		
		VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
INORGANICS (WATER)	ug/l									
Antimony		5	U ug/l	5	5	U ug/l	5	5	U ug/l	5
Arsenic		5.6	J ug/l	.6	6.1	J ug/l	.6	1.6	J ug/l	.6
Barium		4.7	J ug/l	1.1	4.5	J ug/l	1.1	7.8	J ug/l	1.1
Beryllium		.3	U ug/l	.3	.3	U ug/l	.3	.3	U ug/l	.3
Cadmium		1.2	U ug/l	1.2	1.2	U ug/l	1.2	1.2	U ug/l	1.2
Calcium		106000	ug/l	34.8	105000	ug/l	34.8	100000	ug/l	34.8
Chromium		1.7	U ug/l	1.7	1.7	U ug/l	1.7	1.7	U ug/l	1.7
Cobalt		3.1	U ug/l	3.1	3.1	U ug/l	3.1	3.1	U ug/l	3.1
Copper		1	U ug/l	1	1	U ug/l	1	1	U ug/l	1
Cyanide		1.5	U ug/l	1.5	1.5	U ug/l	1.5	2	J ug/l	1.5
Iron		98.2	J ug/l	1.9	99.5	J ug/l	1.9	280	ug/l	1.9
Lead		.4	U ug/l	.4	.4	U ug/l	.4	.4	U ug/l	.4
Magnesium		13500	ug/l	19.8	13300	ug/l	19.8	13500	ug/l	19.8
Manganese		4	J ug/l	.5	3.9	J ug/l	.5	80.8	ug/l	.5
Mercury		.11	UJ ug/l	.11	.11	UJ ug/l	.11	.11	UJ ug/l	.11
Nickel		5.7	U ug/l	5.7	5.7	U ug/l	5.7	5.7	U ug/l	5.7
Selenium		.79	J ug/l	.5	.5	U ug/l	.5	.5	U ug/l	.5
Silver		1.4	U ug/l	1.4	1.4	U ug/l	1.4	1.4	U ug/l	1.4
Sodium		12700	ug/l	19.5	12600	ug/l	19.5	15500	ug/l	19.5
Thallium		.6	U ug/l	.6	.6	U ug/l	.6	.6	U ug/l	.6
Tin		14.4	UJ ug/l	14.4	14.4	UJ ug/l	14.4	14.4	UJ ug/l	14.4
Vanadium		8.8	J ug/l	1.2	8.4	J ug/l	1.2	3.4	J ug/l	1.2
Zinc		4.9	UJ ug/l	4.9	4.9	UJ ug/l	4.9	4.9	UJ ug/l	4.9

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Groundwater Data

Lab Sample Number:		RA077007			RA077010			RA077011			RA077009		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		TCG00101			TCG00201			TCG00301			TCG00401		
Collect Date:		26-JUN-95			27-JUN-95			27-JUN-95			27-JUN-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
GROUND WATER QUALITY	mg/l												
Alkalinity as CaCO3		460	mg/l	2	147	mg/l	2	200	mg/l	2	196	mg/l	2
Ammonia-N		1.1	mg/l	.3	.3 U	mg/l	.3	.3 U	mg/l	.3	.3 U	mg/l	.3
Chloride		18.5	mg/l	10	30	mg/l	10	27.4	mg/l	10	10.9	mg/l	1
Hardness as CaCO3		505	mg/l	15	253	mg/l	6	301	mg/l	6	224	mg/l	6
Nitrate/Nitrite-N		.27	mg/l	.1	.29	mg/l	.1	.1 U	mg/l	.1	.24	mg/l	.1
Oil and Grease		5 U	mg/l	5	5 U	mg/l	5	5 U	mg/l	5	5 U	mg/l	5
Phosphorous-P, Total		.61	mg/l	.1	.63	mg/l	.1	.48	mg/l	.1	.1	mg/l	.1
Sulfate		60.2	mg/l	10	98.1	mg/l	10	96.6	mg/l	10	33.1	mg/l	1
Sulfide		1 U	mg/l	1	1 U	mg/l	1	1 U	mg/l	1	1 U	mg/l	1
Total Dissolved Solids		631	mg/l	10	340	mg/l	10	381	mg/l	10	280	mg/l	10
Total Kjeldahl Nitrogen		1.5	mg/l	.3	.3 U	mg/l	.3	.3 U	mg/l	.3	.4	mg/l	.3
Total Organic Carbon		19.5	mg/l	1	4.8	mg/l	1	3.9	mg/l	1	5.6	mg/l	1
COLOR	units												
Color		100	units	10	20	units	5	15	units	5	30	units	5
pH	units												
pH		6.91	units		7.48	units		7.37	units		7.95	units	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, Building 191 SWMU Assessment Report
Groundwater Data

Lab Sample Number:		RA077004				RA077006			
Site		GROUP111				GROUP111			
Locator		TCG00501				TCG00601			
Collect Date:		26-JUN-95				26-JUN-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
GROUND WATER QUALITY	mg/l								
Alkalinity as CaCO3		258		mg/l	2	280		mg/l	2
Ammonia-N		.3	U	mg/l	.3	.3	U	mg/l	.3
Chloride		23.1		mg/l	10	19.8		mg/l	10
Hardness as CaCO3		309		mg/l	3	327		mg/l	6
Nitrate/Nitrite-N		2.28		mg/l	1	.32		mg/l	.1
Oil and Grease		5	U	mg/l	5	5	U	mg/l	5
Phosphorous-P, Total		.34		mg/l	.1	.21		mg/l	.1
Sulfate		64.6		mg/l	10	45.7		mg/l	10
Sulfide		1	U	mg/l	1	1	U	mg/l	1
Total Dissolved Solids		425		mg/l	10	410		mg/l	10
Total Kjeldahl Nitrogen		.4		mg/l	.3	.6		mg/l	.3
Total Organic Carbon		6.5		mg/l	1	6.9		mg/l	1
COLOR	units								
Color		20		units	5	20		units	5
pH	units								
pH		7.33		units		7.48		units	

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

ATTACHMENT F

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REFERENCES

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