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SITE ASSESSMENT AND SITE REHABILITATION COMPLETION REPORT FOR SITE 1517
NS MAYPORT FL
11/10/2011
TETRA TECH NUS

Comprehensive Long-term Environmental Action Navy

CONTRACT NUMBER N62467-04-D-0055

Rev. 1
11/10/11

Site Assessment and Site Rehabilitation Completion Report for Site 1517

Naval Station Mayport
Jacksonville, Florida

Contract Task Order 0118

November 2011

NAVFAC
Naval Facilities Engineering Command
NAVFAC SOUTHEAST

NAS Jacksonville
Jacksonville, Florida 32212-0030

TETRA TECH NUS, Inc.

SITE ASSESSMENT AND SITE REHABILITATION COMPLETION REPORT FOR SITE 1517

NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

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

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CONTRACT NUMBER N62467-04-D-0055
CONTRACT TASK ORDER 0118

NOVEMBER 2011

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Naval Facilities Engineering Command

The professional opinions rendered in this document identified as the Site Assessment and Site Rehabilitation Completion Report for Site 1517 at Naval Station Mayport, Jacksonville, Florida were developed in accordance with commonly accepted procedures consistent with applicable standards of practice. This document was prepared under the supervision of the signing professional and is based on information obtained from others. If conditions are determined to exist differently than those described in this document, then the undersigned professional engineer should be notified to evaluate the effects of any additional information on the project described in this document.

November 10, 2011
Richard D. McCann, P.G.
Florida License Number PG-2358

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ACRONYMS

ABB-ES	ABB Environmental Services, Inc.
AST	aboveground storage tank
BTEX	benzene, toluene, ethylbenzene, and total xylenes
bls	below land surface
CLEAN	Comprehensive Long-term Environmental Action Navy
CTO	Contract Task Order
DPT	direct push technology
ENCO	Environmental Conservation Laboratories, Inc.
F.A.C.	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FID	flame ionization detector
FL-PRO	Florida Petroleum Residual Organics
GCTL	Groundwater Cleanup Target Level
µg/L	microgram per liter
mg/kg	milligram per kilogram
mg/L	milligram per liter
mgd	million gallon per day
msl	mean sea level
MTBE	methyl tertiary-butyl ether
MWR	Morale, Welfare, and Recreation
NA	not analyzed
NAVSTA	Naval Station
NGVD	National Geodetic Vertical Datum
NM	not measured
NS	not sampled
OVA	organic vapor analyzer
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
ppm	part per million
PVC	polyvinyl chloride
RFA	Resource Conservation and Recovery Act Facility Assessment
SA	site assessment
SAR	Site Assessment Report
SCTL	Soil Cleanup Target Level
SIM	selected ion method
SOP	Standard Operating Procedure

ACRONYMS (Continued)

SPLP	Synthetic Precipitation Leaching Procedure
SRCR	Site Rehabilitation Completion Report
SWMU	Solid Waste Management Unit
SVOC	semivolatile organic compound
TOC	Top of casing
TRPH	total recoverable petroleum hydrocarbons
Tetra Tech	Tetra Tech NUS, Inc.
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VOC	volatile organic compound
VSI	Visual Site Inspection

EXECUTIVE SUMMARY

Tetra Tech NUS, Inc. (Tetra Tech) has completed a site assessment (SA) at Site 1517, Naval Station (NAVSTA) Mayport, Jacksonville, Florida in accordance with the requirements of Chapter 62-770, Florida Administrative Code (F.A.C.). This Site Assessment and Site Rehabilitation Completion Report is being submitted to the Florida Department of Environmental Protection (FDEP) for approval. A Site Assessment Report summary sheet is included as Appendix A.

To complete this SA, Tetra Tech provided the following:

- Reviewed available United States Navy documents to:
  - Identify potential sources and receptors for petroleum hydrocarbons in the vicinity.
  - Identify private potable wells within a 0.25-mile radius of the site and public water supply wells within a 0.5-mile radius.
  - Locate nearby surface water bodies.
  - Evaluate surface hydrology and drainage.

- Performed a soil vapor survey in the unsaturated zone to delineate areas of excessively contaminated soil when present.

- Advanced one boring 4 feet into the groundwater table and collected groundwater for analysis by a mobile laboratory for benzene, toluene, ethyl benzene, xylenes; naphthalene; 1-methylnaphthalene; and 2-methylnaphthalene. No groundwater constituents were recorded above laboratory detection limits.

- Advanced three borings on site for soil analyses of used oil analytical group constituents per Table C, Chapter 62-770, F.A.C. No used oil analytical group constituents were identified above Soil Cleanup Target Levels.

- Installed one shallow aquifer monitoring well and sampled groundwater for used oil analytical group constituents per Table C, Chapter 62-770, F.A.C. No used oil analytical group constituents were identified above Groundwater Cleanup Target Levels (GCTLs).

- Referenced and obtained appropriate aquifer data from the United States Geological Survey to calculate aquifer characteristics at NAVSTA Mayport.

- Reviewed and presented historical and current groundwater flow data.

The objective of the proposed field investigations was to determine the extent of possible adverse soil and/or groundwater impacts associated with *de minimis* quantity spills onto a cracked concrete surface beneath the former 2,000-gallon above ground storage tank at the Morale, Welfare, and Recreation Auto Skills Center located at Building 1517.

Soil samples were collected at three boring locations and analyzed for organic vapors using a portable organic vapor analyzer equipped with a flame ionization detector.

From each of the three soil borings, two soil intervals (0 to 0.5 foot below land surface [bls] and 0.5 to 0.8 foot bls) were sampled. The 0- to 0.5-foot interval was analyzed for polynuclear aromatic hydrocarbons, semivolatile organic compounds (SVOCs), total metals (arsenic, cadmium, chromium, and lead), polychlorinated biphenyls (PCBs), and total recoverable petroleum hydrocarbons (TRPH) (used oil constituents per Table C Chapter 62-770, F.A.C.). The 0.5 to 0.8-foot interval was analyzed for volatile organic compounds (VOCs). No exceedances of FDEP Soil Cleanup Target Levels were reported; therefore, no additional soil investigation is recommended for the area of investigation.

One monitoring well, MPT-1517-MW01, was installed in the geographic center of the investigation area, and groundwater was analyzed for VOCs, SVOCs, total metals, TRPH, PCBs, and non-priority pollutant organics. No exceedances of the FDEP GCTLs and/or base-specific criteria were reported; therefore, no additional groundwater investigation is recommended for the area of investigation.

Based on the results of this investigation, Site 1517 meets the requirements under Chapter 62-770, F.A.C. for No Further Action, and it is requested that FDEP issue a Site Rehabilitation Completion Order for Site 1517.

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

Tetra Tech NUS, Inc. (Tetra Tech) performed a site assessment (SA) at Site 1517, Naval Station (NAVSTA) Mayport, for the United States Navy Naval Facilities Engineering Command Southeast under Contract Task Order (CTO) 0118 of the Comprehensive Long-term Environmental Action Navy (CLEAN) IV Contract Number N62467-04-D-0055. The data collected during the SA was used to prepare a Site Assessment Report (SAR). Information from the SA field investigation has been assimilated into this SAR to provide a characterization of site conditions from which to base future courses of action. A SAR Summary Sheet is included as Appendix A.

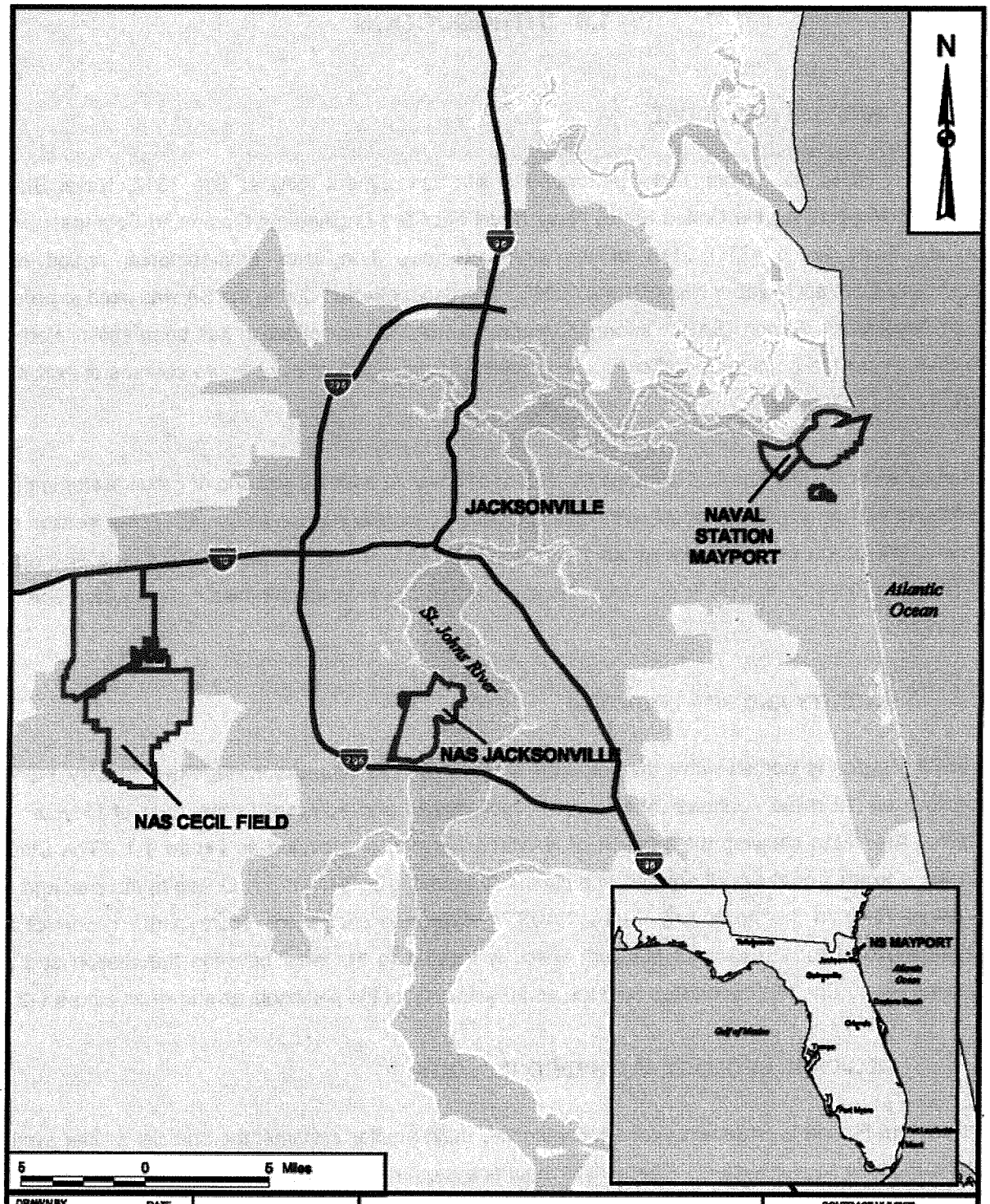
The purpose of the SA was to determine the extent of possible adverse soil and/or groundwater impacts associated with *de minimis* quantity spills onto a cracked concrete surface at Site 1517, the location of a former 2,000-gallon used oil aboveground storage tank (AST) at the Morale, Welfare, and Recreation (MWR) Auto Skills Center (Building 1517). A summary of site investigative history is provided below in Section 1.7.

1.2 FACILITY AND SITE LOCATION

NAVSTA Mayport is located within the corporate limits of the City of Jacksonville, Duval County, Florida, approximately 12 miles northeast of downtown Jacksonville and adjacent to the town of Mayport. A Regional Area Map showing the location of NAVSTA Mayport is provided as Figure 1-1. The Station complex is located on the northern end of a peninsula bounded by the Atlantic Ocean to the east and the St. Johns River to the north and west. NAVSTA Mayport occupies the entire northern part of the peninsula except for the town of Mayport, which is located to the west between the Station and the St. Johns River. Site 1517 is located near the northeastern tip of the peninsula as shown on Figure 1-2.

1.3 REGIONAL GEOLOGY AND HYDROGEOLOGY

Northeastern Florida is underlain by the following two main aquifer systems: the surficial aquifer system and the Floridan aquifer system. The surficial aquifer system near NAVSTA Mayport includes sediments of the Upper Hawthorn Group, Upper Miocene, and Pliocene deposits and Pleistocene and Holocene deposits (United States Department of Agriculture [USDA], 1978). These undifferentiated surficial deposits extend from land surface to the top of the Hawthorn Group about 50 feet below land surface (bls) (United States Geological Survey [USGS], 1992).



DRAWN BY C. FOSTER	DATE 2/9/05	REGIONAL AREA MAP SITE 1517 SAR- MWR AUTO SKILLS CENTER NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER 112G01516
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COST/SCHEDULE-AREA			APPROVED BY — DATE —
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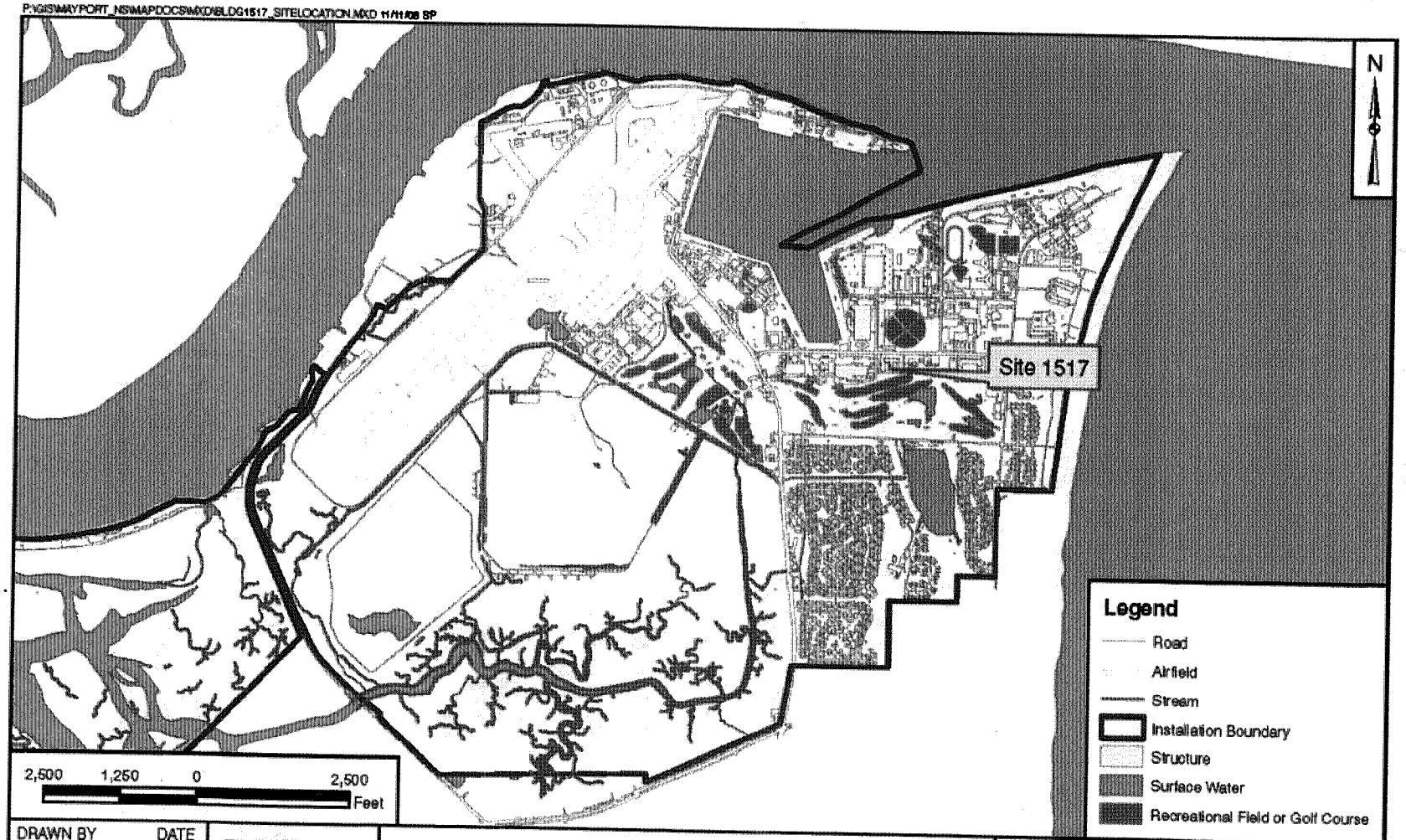

DRAWN BY K. MOORE	DATE 07/01/08	SITE LOCATION MAP SITE 1517 SAR - MWR AUTO SKILLS CENTER CONTAMINATION ASSESSMENT PLAN NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA
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COST/SCHEDULE-AREA		
SCALE AS NOTED		

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CONTRACT NUMBER	CTO 0118
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The surficial aquifer system consists of fine-grained sands near the surface interspersed with thin (less than 1 foot) clay lenses and generally grades to a mixture of sand and coarse shell fragments from 30 to 50 feet bls. The base of the surficial aquifer system is its contact with the underlying intermediate confining unit, which is a sequence of marine clays and discontinuous limestone stringers (Spechler, 1994).

The Floridan aquifer system is the principal source of groundwater for public drinking water in most of northeastern Florida. In the area of investigation, the system is comprised of (from youngest to oldest) the Ocala Formation, the Avon Park Formation, and the Oldsmar Limestone. The Hawthorn Group, a confining unit between the surficial aquifer system, and Floridan aquifer system unconformably overlies the Floridan aquifer (USDA, 1978).

1.4 POTABLE WATER WELL SURVEY

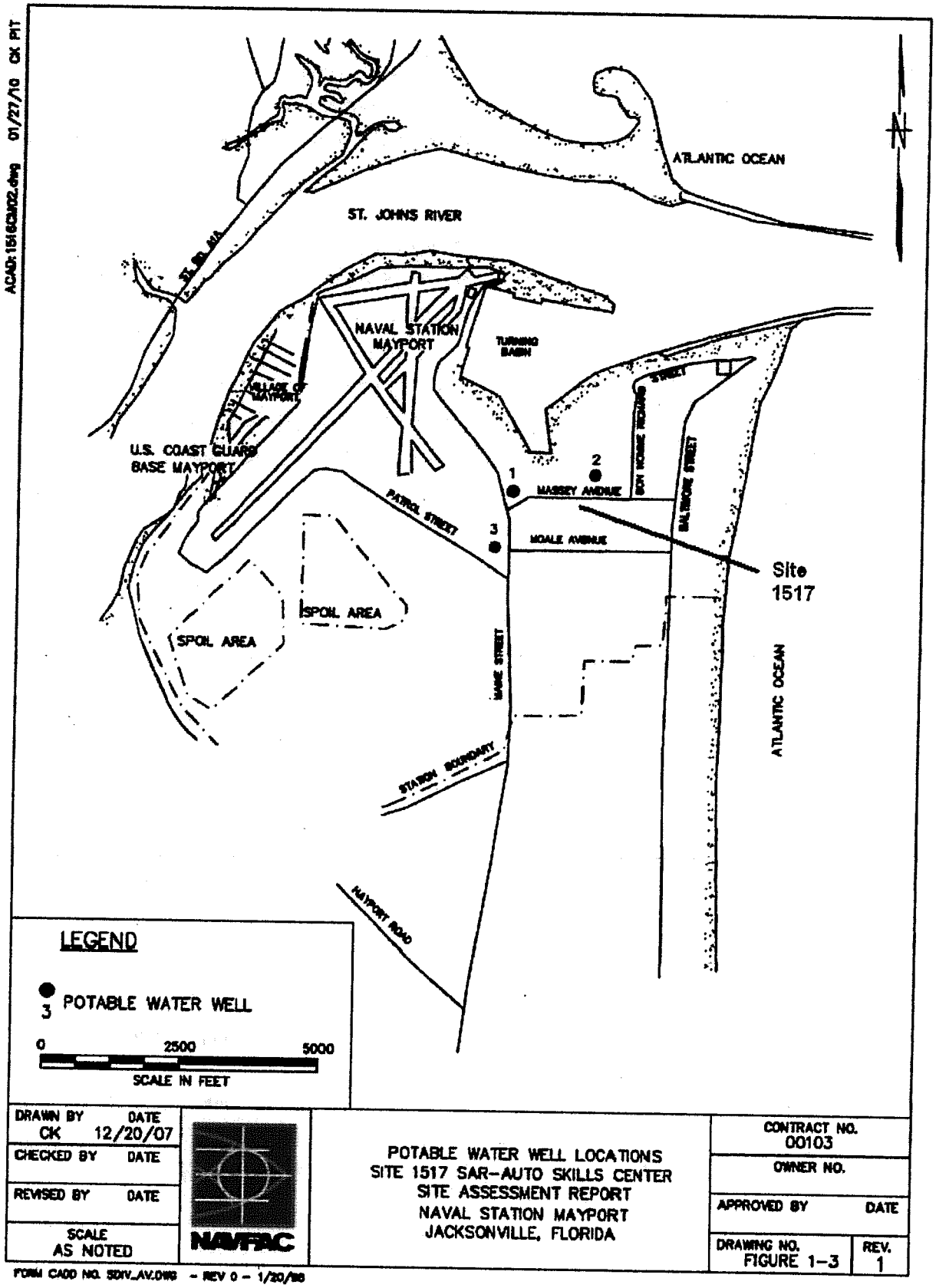
The potable water supply information presented in this report was obtained from a Contamination Assessment Report prepared by the United States Army Corps of Engineers (USACE) for a nearby site (Site 1330) in 1992 (USACE, 1992). Personnel at the water treatment plant confirmed the accuracy of the water well information. Potable well information is summarized on Table 1-1.

TABLE 1-1
POTABLE WATER WELL SURVEY RESULTS

SITE ASSESSMENT AND SITE REHABILITATION COMPLETION REPORT, SITE 1517
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

Well Identification	Approximate Distance from Site (miles)	Diameter (inches)	Depth of Well (feet bls)	Use
1	<0.5	12	1,000	In use
2	<0.5	16	1,000	In use
3	<0.5	16	1,000	In use

Potable water is supplied to NAVSTA Mayport by three on-Station supply wells that are located within ½ mile of Site 1517 as viewed on Figure 1-3. One of the three wells is 12 inches in diameter, and the other two are 16-inch diameter wells. All three wells draw water from the Floridan aquifer from depths of approximately 1,000 feet bls. Well capacities range between 2.1 and 2.9 million gallons per day (mgd) with a combined total pumping capacity of 10.0 mgd. The water is treated by the Station's water treatment plant prior to distribution.


ACAD: 1516G3002.dwg 01/27/10 CK PIT
ATLANTIC OCEAN
ST. JOHNS RIVER
NAVAL STATION MAYPORT
TURNING BASIN
VILLAGE OF MAYPORT
U.S. COAST GUARD BASE MAYPORT
PATROL STREET
MASSEY AVENUE
MOALE AVENUE
BON HOMME RICHARD STREET
BALTIMORE STREET
Site 1517
SPOIL AREA
SPOIL AREA
MAINE STREET
STATION BOUNDARY
MAYPORT ROAD
ATLANTIC OCEAN
LEGEND
POTABLE WATER WELL
0 2500 5000
SCALE IN FEET
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SCALE AS NOTED
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POTABLE WATER WELL LOCATIONS
SITE 1517 SAR-AUTO SKILLS CENTER
SITE ASSESSMENT REPORT
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA
CONTRACT NO. 00103
OWNER NO.
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FORM CADD NO. SDIV_AV.DWG - REV 0 - 1/20/98

Topography and Drainage

NAVSTA Mayport is located in the Southeastern Coastal Plain physiographic province. The topography is mostly low, gentle to flat, and composed of a series of ancient marine terraces. NAVSTA Mayport is located within the Silver Bluff Terrace. The average land surface elevation at NAVSTA Mayport is between 8 to 10 feet above mean sea level (msl) (USGS, 1992).

Site 1517 is positioned on flat area of land approximately 330 yards southeast of the southern tip of the turning basin as shown on Figure 1-2. A portion of the USGS Mayport, Florida 7.5-minute quadrangle has been reproduced as Figure 1-4 to show the site location relative to its topographic surroundings.

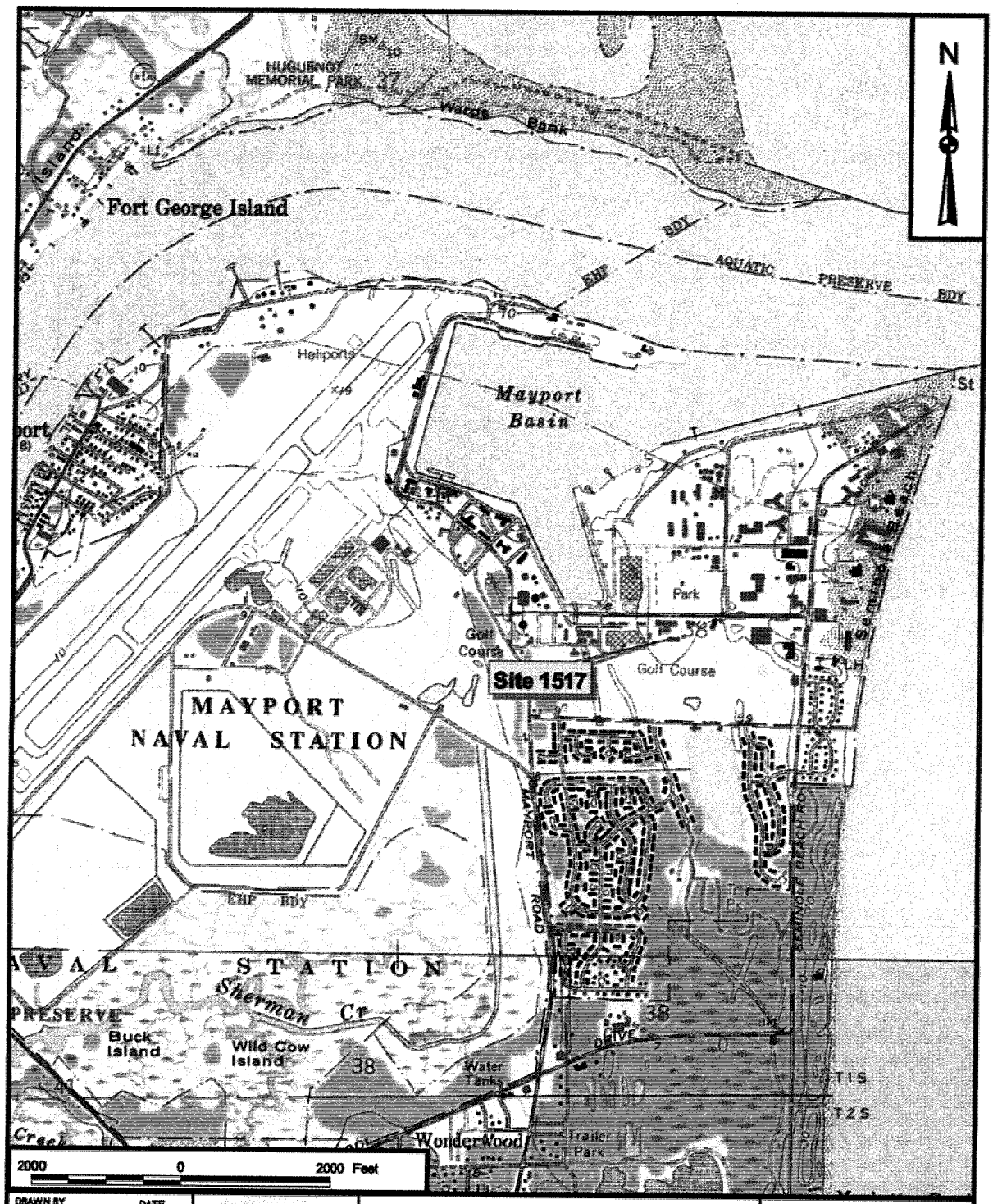
Storm water runoff for the site is collected by drains built into the cement-covered site located north and northeast of the site. Site storm water runoff is processed through an oil-water separator located at a car wash northwest of the site before being released into the storm water drainage system.

1.5 LAND USE IN SITE VICINITY

Land uses adjoining the site are commercial or public type of uses surrounding the site. Areas north, east, and west of the site are covered by concrete or covered by buildings. A network of buildings associated with the MWR Auto Skills Center partly surrounds the site. The MWR Auto Skills Center includes Building 1517 and is surround by Building 414 to the north, Building 1516 to the east, and Building 1965 to the west. In addition, a covered hazardous materials storage area (where the used oil is currently stored) is located approximately 10 feet east of the site. No building number appears to be assigned to this used oil storage structure. The area south of the site is a grass covered area and a fairway of an active golf course. A site map depicting Site 1517 and land use in the site vicinity is provided as Figure 1-5.

1.6 SITE DESCRIPTION

The area of investigation at NAVSTA Mayport is associated with the larger MWR Auto Skills Center. Building 1517 is located southeast of the intersection of Massey Avenue and Supply Street to the south of (behind) the MWR Building 414. The subject area of investigation is the former location of a 2,000-gallon steel used oil AST that was formerly located next to Building 1517. The entire area of Site 1517 is covered by concrete that is estimated to be approximately 10 inches thick. Figure 1-2 above depicts the location of the site on the NAVSTA Mayport facility. Photos of Site 1517 can be found in Appendix B.



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D. SIEFKEN	2/10/10
COST/SCHEDULE-AREA	
SCALE	
AS NOTED	

NAVFAC

USGS TOPOGRAPHIC MAP
SITE 1517 SAR - MWR AUTO SKILLS CENTER
SITE ASSESSMENT REPORT
NAVAL STATION MAYPORT
MAYPORT, FLORIDA

CONTRACT NUMBER	
CTO 0018	
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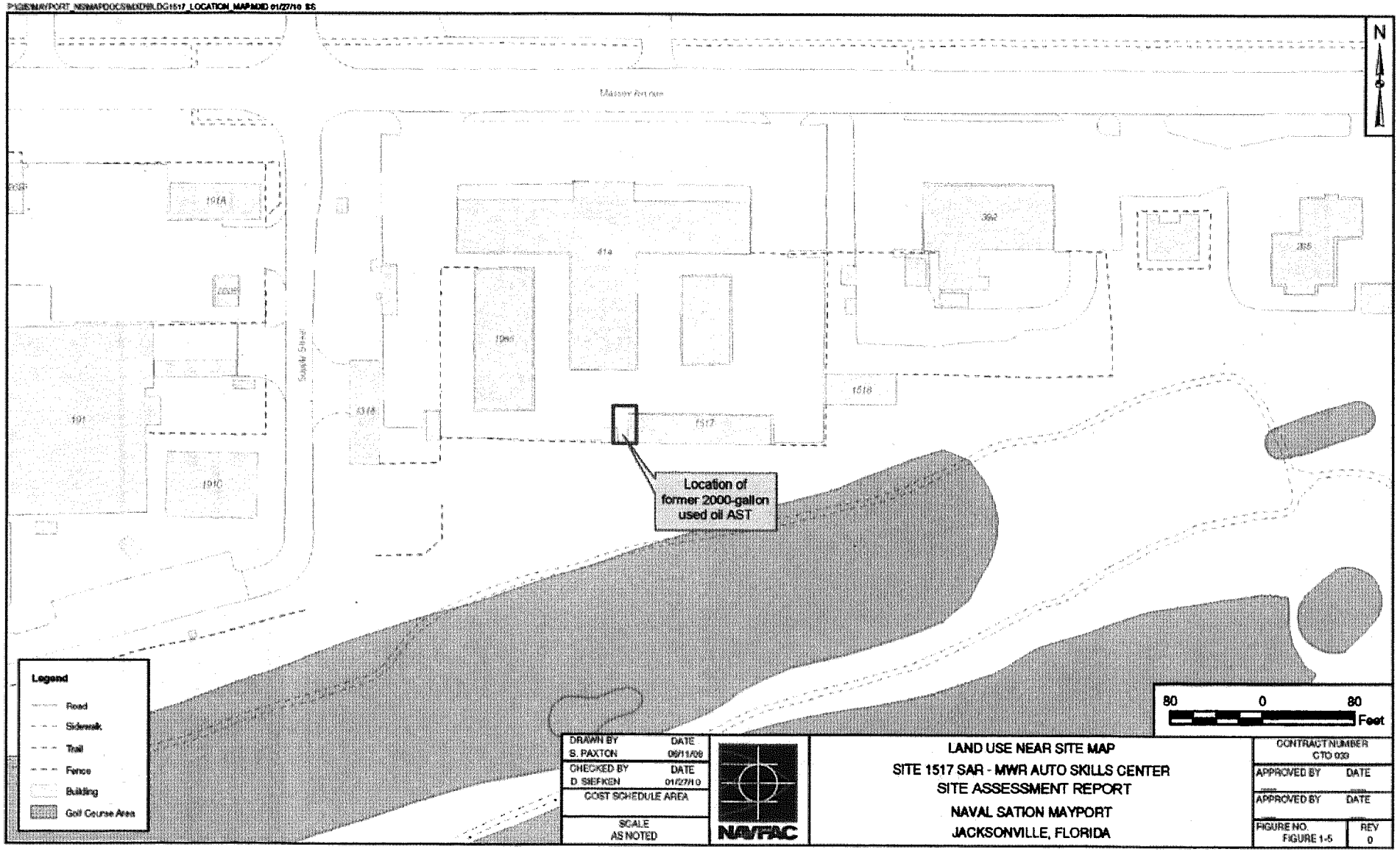

DRAWN BY B. PAXTON	DATE 09/11/09	LAND USE NEAR SITE MAP SITE 1517 SAR - MWR AUTO SKILLS CENTER SITE ASSESSMENT REPORT NAVAL SATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 039
CHECKED BY D. SIEFKEN	DATE 01/27/10		APPROVED BY DATE
COST SCHEDULE AREA			APPROVED BY DATE
SCALE AS NOTED			FIGURE NO. FIGURE 1-5 / REV 0

1.7 SITE OPERATIONS AND INVESTIGATIVE HISTORY

Site 1517 is located next to Building 1517, which is currently part of the MWR Auto Skills Center. Building 1517 is 380 feet southeast of the intersection of Massey Avenue and Supply Street as shown on Figure 1-6. Past and current practices of the MWR Auto Skills Center allow patrons to conduct their own vehicle repairs and/or maintenance. Patrons were allowed to pour used oils into a 2000-gallon AST that was formerly located next to Building 1517 at the MWR Auto Skills Center.

The focus of the investigation centers on a crack in the concrete parking area that measures 1-inch in width, is located within 2 feet of Building 1517, and parallels the length of Building 1517 (see Appendix B). As used oil was poured into the AST, any spillage from the pouring process potentially could enter the crack between the concrete pad and the building. At an unknown specified time, an elastic polymer applied by Navy personnel was used to fill the crank in the concrete. The concrete parking area is a former place to tie down airplanes and is estimated to be 10 inches thick. The used oil AST was removed from service in May 2004, and the used oil tank was removed from the site in October 2005. Used oil is currently stored in a covered structure approximately 10 feet west of Site 1517.

Two former Solid Waste Management Unit (SWMU) locations area present within 100 feet of Site 1517 and include SWMU 20, the Auto Skills Center Drain, and SWMU 21, the Auto Skills Center Scrap Storage Area. SWMU 20 was located at the southeastern corner of Building 1965 and the northern end of Building 1316. SWMU 21 was located along the southern wall of Building 414. The Auto Skills Center Drain (SWMU 20) was located on the soil adjacent to a sloped concrete apron leading from the raised concrete floor of Building 1965 to the concrete storm swale in front of the building. A Resource Conservation and Recovery Act Facility Assessment (RFA) Visual Site Inspection (VSI) completed by A. T. Kearney, Inc in 1989 reported that stained soils and oily engine parts were present at SWMU 20 (Kearney, 1989). The Auto Skills Center Scrap Storage Area (SWMU 21) facility contained scrap metal, engine parts, open gas cylinders, a Freon 22™ container, an automotive battery, old appliances, and other scrap metal items that were ultimately collected by the Defense Reutilization and Marketing Office for resale.

In 1991, the Hobby Shop area underwent renovations that included construction of Building 1965, installation of a new drain system (connected to an oil-water separator) to intercept discharge from the garage bays and surrounding parking lot, and new concrete pavement across the entire site.

On May 5, 1994, ABB Environmental Services, Inc. (ABB-ES) conducted a site visit at SWMUs 20 and 21 and reported that the conditions (i.e., stained soils and oily engine parts) described during the 1989 RFA VSI were no longer applicable. Part of the May 1994 ABB-ES field activities included the collection of eight surface and six subsurface soil samples and the installation and sampling of six shallow

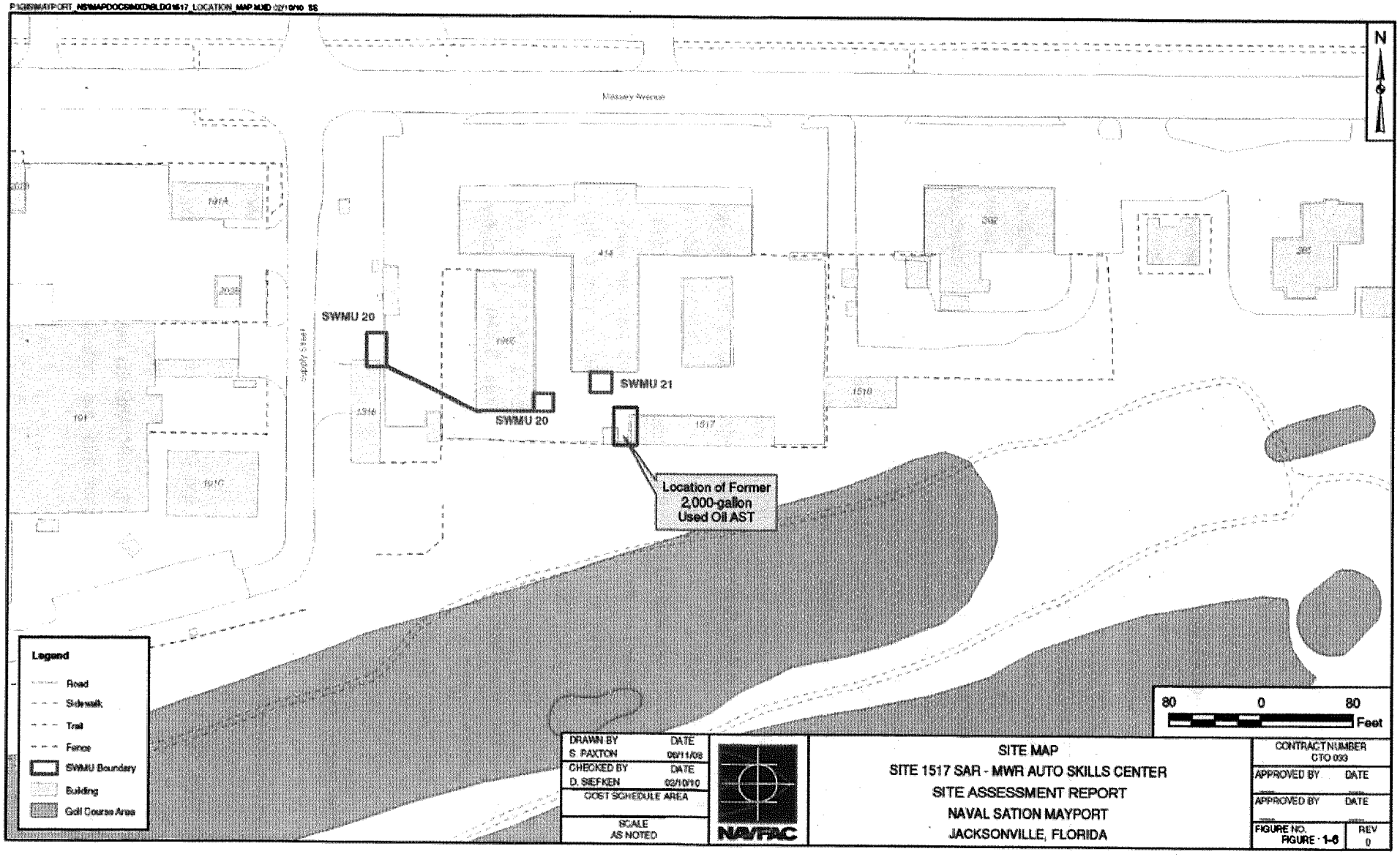
N
Massey Avenue
SWMU 20
SWMU 20
SWMU 21
Location of Former
2,000-gallon
Used Oil AST
1517
1518
1516
1914
191
191C
Legend
Road
Sidewalk
Trail
Fence
SWMU Boundary
Building
Golf Course Area
80
0
80
Feet
DRAWN BY S. PAXTON DATE 06/11/08
CHECKED BY D. SIEFKEN DATE 02/10/10
COST SCHEDULE AREA
SCALE AS NOTED
NAVFAC
SITE MAP
SITE 1517 SAR - MWR AUTO SKILLS CENTER
SITE ASSESSMENT REPORT
NAVAL SATION MAYPORT
JACKSONVILLE, FLORIDA
CONTRACT NUMBER CTO 033
APPROVED BY DATE
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FIGURE NO. FIGURE 1-6
REV 0

groundwater monitoring wells. No surface soil, subsurface soil, or groundwater constituents of concern were identified within SWMUs 20 or 21 exceeding either state industrial or residential direct exposure criteria. Therefore, No Action was recommended for SWMUs 20 and 21 (ABB-ES, 1996). Figure 1-6 presents the locations of SWMUs 20 and 21 in relation to Site 1517. A copy of the 1997 United States Environmental Protection Agency (USEPA) decision for no further investigation is provided as Appendix C.

1.8 PURPOSE OF CURRENT INVESTIGATION

The objective of the SA was to determine the extent of adverse soil and/or groundwater impacts associated spillage of used oil when patrons of the MWR Auto Skills Center spilled oil onto concrete when pouring into the former 2,000-gallon AST. Data collected during the SA was used to prepare this SAR as required by Chapter 62-770.600, Florida Administrative Code (F.A.C.). This SAR provides a characterization of site conditions from which to base future courses of action. A SAR summary sheet is provided as Appendix A.

2.0 SUBSURFACE INVESTIGATION METHODS

2.1 QUALITY ASSURANCE

The site investigation was conducted in general accordance with the Florida Department of Environmental Protection (FDEP)-approved Standard Operating Procedures (SOPs) (DEP-001/01).

2.2 ASSESSMENT STRATEGY

Borings MPT-1517-SB01, MPT-1517-SB02, and MPT-1517-SB03 were advanced through concrete covering the area west of Building 1517 where the former 2,000-gallon steel used oil AST was located. The soil borings were linearly positioned and equally spaced 7 feet apart. The borings were located near the portion of the concrete that is cracked north to south along the length of Building 1517. This biased sampling approach was designed to evaluate the magnitude and extent of any impacts to the soil and or groundwater in the area of the former 2,000-gallon waste oil AST where the concrete was cracked and may have allowed downward migration of used oil impacts. Soil quality was evaluated at the site using screening technologies such as an organic vapor analyzer (OVA) equipped with a flame ionization detector (FID) and field observation. Groundwater quality was evaluated using a mobile laboratory. Based on the initial assessment information, sample results were to be confirmed through fixed-base laboratory analysis of soil and groundwater.

2.3 DETERMINATION OF GROUNDWATER GRADIENT

Groundwater gradient data for the site were obtained from the ABB-ES (July 1995 SWMUs 20 and 21 water level data) and during a September 2010 site visit conducted by Tetra Tech. The monitoring well network provided groundwater gradient information that included Site 1517 and surrounding areas. Since the initial date when the depths to groundwater measurements were taken, some of the monitoring wells from SWMUs 20 and 21 were abandoned; therefore, measurements taken in September 2010 did not include all of the monitoring wells measured in July 1995.

Based on visits to the site and surrounding areas, there have been no structural changes to buildings or drainage patterns that would alter groundwater flow since measurements were last taken. Site and surrounding areas are of similar use today as during the time when depth to groundwater measurements were taken.

2.4 SOIL QUALITY ASSESSMENT

2.4.1 Field Screening Procedures

On March 31, 2009, three soil borings (MPT-1517-SB01, MPT-1517-SB02, and MPT-1517-SB03) were completed in a linear orientation and equally spaced 7 feet apart for evaluating soil quality. Boring locations are shown on Figure 2-1. Borings were advanced to the water table (approximately 6 feet bls at the time of the investigation) using a hand auger. Soil samples were collected from each location at depths of 0 to 0.5 foot, 0.5 to 2 feet, 2 to 4 feet, and 4 to 5.5 feet and screened for organic vapors using an OVA equipped with a FID. Soil vapor analyses were performed in accordance with the headspace screening method described in Chapter 62-770.200(19), F.A.C. Soil boring logs are included as Appendix D.

2.4.2 Soil Sampling Strategy for Fixed-base Laboratory Analysis and Procedures

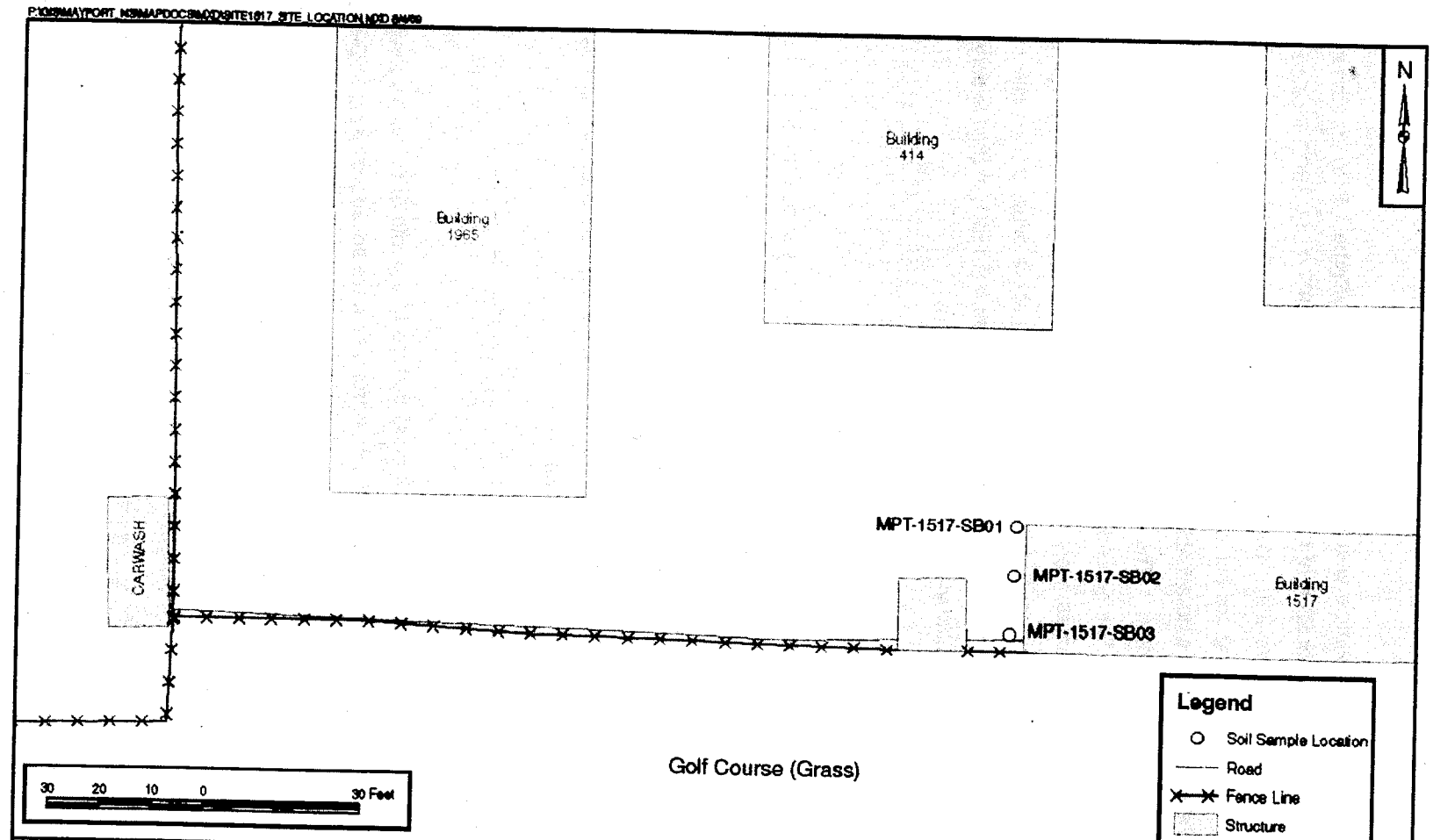
On March 31, 2009, and October 19, 2009, soil samples were submitted to Environmental Conservation Laboratories, Inc. (ENCO) for laboratory analysis from each of the three borings identified in Figure 2-1. Soil boring intervals were selected for laboratory analysis based on field screening using the OVA-FID and field observations. If no OVA-FID field screening detections above background levels were recorded, samples were collected based on observations such as stained soil or petroleum odor. If no impacts (OVA-FID) above background, staining, or odor were observed, two surface soil samples were collected from each of the three borings.

The first sample interval was collected from 0 to 0.5 foot bls and analyzed for polynuclear aromatic hydrocarbons (PAHs) and semivolatile organic compounds (SVOCs) using USEPA Method 8270, total metals (arsenic, cadmium, chromium, and lead) using USEPA Method 6010, polychlorinated biphenyls (PCBs) using USEPA method 8082, and total recoverable petroleum hydrocarbons (TRPH) using the Florida Petroleum Residual Organics (FL-PRO) Method. The soil samples collected at this interval were identified using "0.5" in the sample identification. The second sample interval depth was to be sampled from 0.5 to 0.8 foot and analyzed for volatile organic compounds (VOCs) using USEPA Method 8260. The soil samples collected at this interval were identified using "0.8" in the sample identification. Analyses used for this investigation coincide with Table C of Chapter 62-770, F.A.C.

2.5 GROUNDWATER ASSESSMENT METHODS

2.5.1 Direct Push Technology Grab Samples

The primary purpose of the direct push technology (DPT) investigation was to provide quick turnaround time data from the upper 4 feet of the saturated zone. The quick turnaround times provided through



DRAWN BY K. MOORE	DATE 08/04/09	SOIL SAMPLE LOCATION MAP SITE 1517 SAR - MWR AUTO SKILLS CENTER NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 0118
CHECKED BY D. SIEFKEN	DATE 01/27/10		APPROVED BY — DATE —
COST/SCHEDULE-AREA			APPROVED BY — DATE —
SCALE AS NOTED	NAVFAC		DRAWING NO. FIGURE 2-1 REV 0

mobile laboratory analyses allowed for a more expedient evaluation of the lateral and vertical extent of groundwater contamination in the shallow surficial aquifer.

On June 8, 2009, a groundwater grab sample was collected by DPT (GeoProbe®) from an approximate depth interval of 6 to 10 feet bls at the location of fixed-base soil boring MPT-1517-SB02, located in the center of Site 1517, as shown on Figure 2-1. This boring location was selected since no alternative screening detections were recorded during soil screening activities. The groundwater water sampler was advanced into the designated zone using a detachable drive tip attached to a 48-inch, retractable stainless steel well screen encased in the lead drive. The casing was withdrawn 48 inches to allow influx of groundwater to the retractable screen. For groundwater recovery, Teflon® tubing was connected to a peristaltic pump. Several screen volumes were pumped to reduce turbidity. After purging, the groundwater sample was collected and immediately submitted to KB Laboratories, the on-site mobile laboratory, for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX); methyl tertiary-butyl ether (MTBE); naphthalene; 1-methylnaphthalene; and 2-methylnaphthalene.

2.5.2 Permanent Monitoring Well

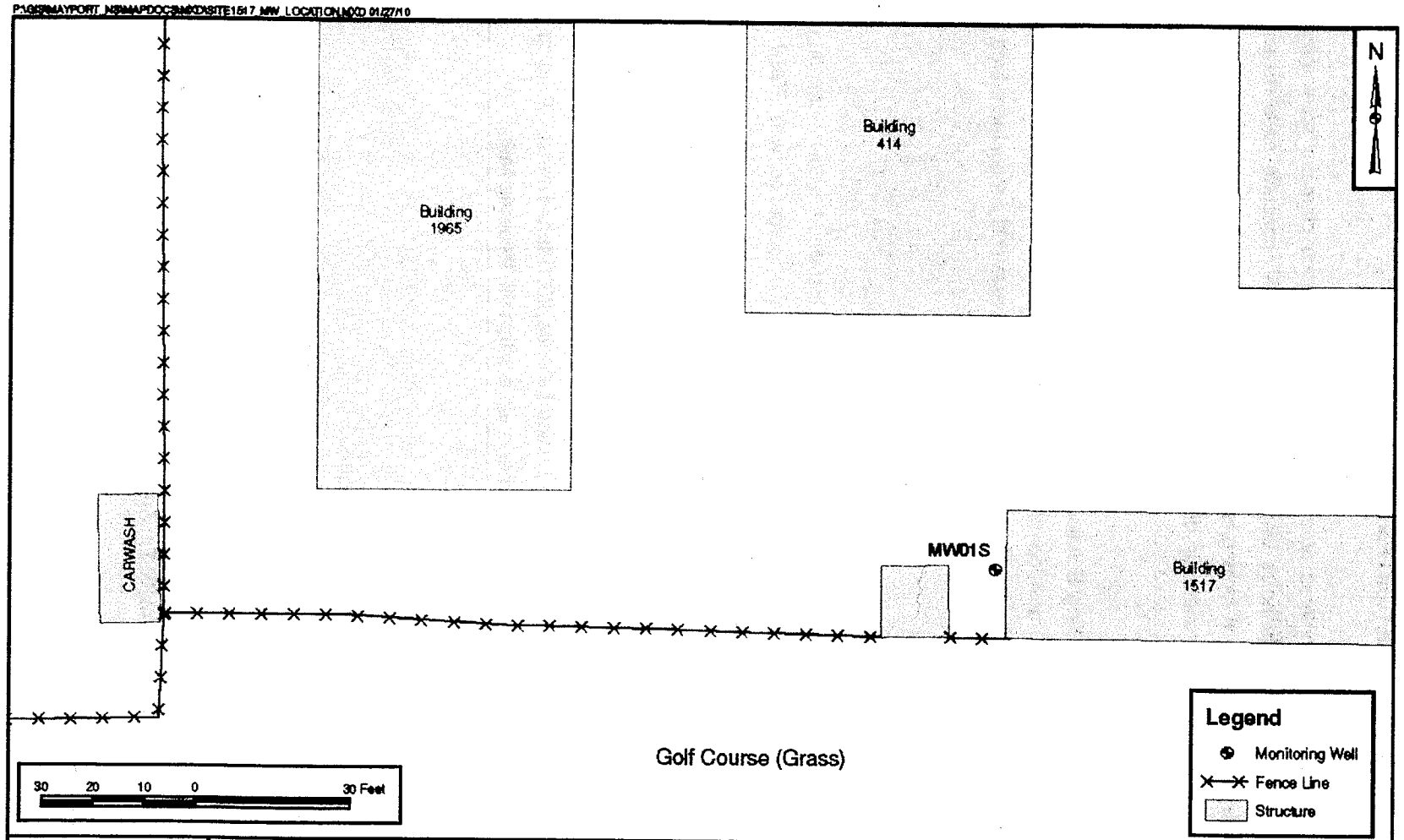
In order to substantiate the soil and groundwater field observations, OVA-FID soil screening, and mobile laboratory groundwater results, one permanent shallow monitoring well (MPT-1517-MW01S) was installed at the approximate location of MPT-1517-SB02. The monitoring well was installed on June 10, 2009, by Preferred Drilling Solutions, Inc. under Tetra Tech supervision. The monitoring well was installed to a total depth of approximately 13 feet with a 10-foot screened section intersecting the water table. The location of monitoring well MPT-1517-MW01S is shown on Figure 2-2. The monitoring well location was selected based on its central position relative to the investigation area.

2.5.2.1 Drilling Method

A posthole digger was used to excavate boreholes from ground surface to a depth of 5 feet bls to verify absence of subsurface utilities. From 5 feet bls to total depth, boreholes were advanced using 3.25-inch diameter solid stem augers attached to a DPT drill.

2.5.2.2 Construction and Development

The borehole for shallow monitoring well MPT-1517-MW01S was advanced to a total depth of 13 feet bls. The shallow monitoring well was constructed of 1-inch diameter Schedule 40 polyvinyl chloride (PVC) fitted with 0.010-inch mill slotted Schedule 40 PVC screen. The 10-foot screen was covered with graded 20/30 silica sand used as a filter pack between the well screen and surrounding media. The filter pack extended approximately 1 to 2.0 feet above the top of the screen. Approximately 1 foot of graded



DRAWN BY K. MOORE	DATE 08/04/09	MONITORING WELL LOCATION MAP SITE 1517 SAR - MWR AUTO SKILLS CENTER NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 0118
CHECKED BY D. SIEFKEN	DATE 01/27/10		APPROVED BY — DATE —
COST/SCHEDULE-AREA			APPROVED BY — DATE —
SCALE AS NOTED	NAVFAC		DRAWING NO. FIGURE 2-2 REV 0

30/65 fine sand was installed as a seal, and the remaining annular space from the top of the seal to within 6 inches of ground surface was filled with Type I Portland cement grout.

The shallow monitoring well was completed at the surface with an 8-inch diameter steel manhole equipped with a bolt down cover. Manholes were secured in place with concrete pads measuring 2 square feet square by 6 inches thick. A locking, expandable gasket cap was inserted at the top of the PVC casing after well installation. A schematic diagram showing details of a shallow monitoring well construction is provided as Figure 2-3.

Wells were developed by Preferred Drilling Solutions, Inc. representative using a peristaltic pump until purge water became virtually clear. All development water was containerized for disposal in 55-gallon steel drums. Drums were stored in a designated investigation derived waste spill containment area after labeling.

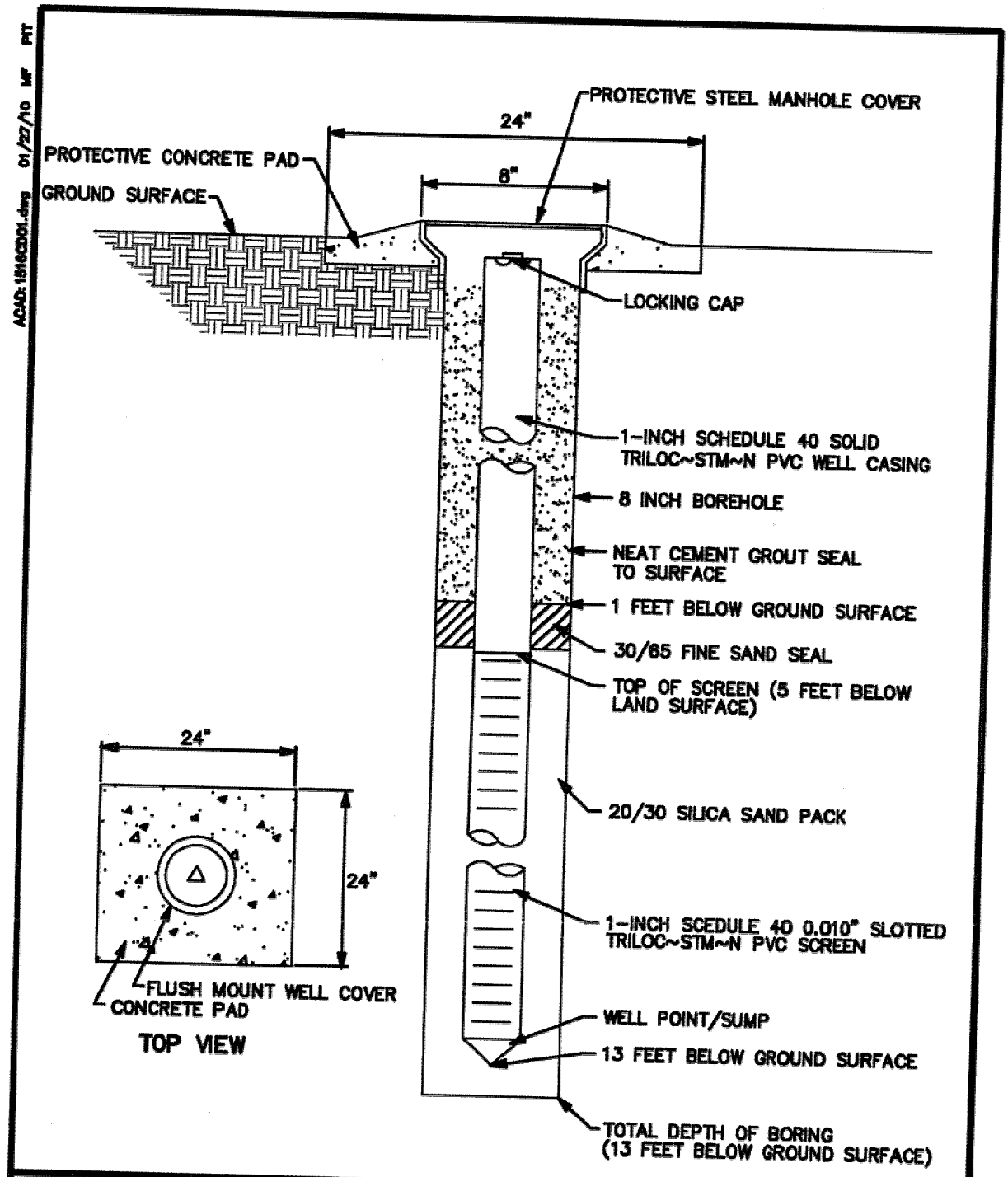
2.5.2.3 Groundwater Sampling

On June 11, 2009, groundwater samples were collected from the newly installed shallow monitoring well MPT-1517-MW01S. Groundwater sampling was conducted in general accordance with FDEP SOP DEP 001/01 revised in 2008 (FDEP, 2008). A minimum one well volume was pumped from the shallow monitoring well (partially submerged screen) using a peristaltic pump and the low flow quiescent purging method. Tubing was placed in the top 2 feet of the surficial water column. After purging of these initial quantities, purging was continued and field parameters pH, specific conductance, dissolved oxygen, temperature, and oxidation/reduction potential were measured periodically (minimum 3-minute intervals) using an YSI 556 instrument. Turbidity was measured using LaMotte 2020 turbidimeter. Purging was considered complete when three consecutive measurements were within the following limits:

- Temperature $\pm$ 0.2 degrees Celsius
- pH $\pm$ 0.2 Standard Units
- Specific conductivity $\pm$ 5 percent of previous reading(s)
- Dissolved oxygen not greater than 20 percent of saturation at field measured temperature
- Turbidity less than or equal to 20 Nephelometric Units

Groundwater sampling logs and low flow purge sheets compiled during purging and sampling of monitoring well MPT-1517-MW01S are provided in Appendix E.

After collection, samples were immediately placed on ice and delivered to ENCO under proper chain-of-custody and proper chemical and thermal preservation protocol. Samples were analyzed for VOCs using USEPA Method 8260, PAHs and SVOCs using USEPA Method 8270, total metals (arsenic,



DRAWN BY MF DATE 11/11/08	NAVFAC	TYPICAL SHALLOW MONITORING WELL DESIGN SITE BUILDING 1517 NAVAL STATION MAYPORT MAYPORT, FLORIDA	CONTRACT NO. 1516
CHECKED BY DATE			OWNER NO. 0000
REVISED BY DATE			APPROVED BY DATE
SCALE AS NOTED			DRAWING NO. FIGURE 2-3 / REV. 0

FORM CADD NO. 6DIV-AV.DWG - REV 1 - 9/10/98

ACAD: 1516CD01.dwg 01/27/10 MF PIT

cadmium, chromium, and lead) using USEPA 6010 Method, TRPH using the FL-PRO method, PCBs using USEPA Method 8082, and non-priority pollutant organics (with gas chromatography/matrix spike peaks greater than 10 micrograms per liter [µg/L]) using USEPA Methods 8260 and 8270.

3.0 RESULTS OF INVESTIGATION

3.1 SITE GEOLOGY AND HYDROGEOLOGY

3.1.1 Lithology

Soil cuttings were also described by Tetra Tech's on-site geologist from a hand auger advanced to a depth of 6 feet bls. Soil encountered consisted of fine to medium grained, light brown sands, which is typical for this region.

3.1.2 Groundwater Flow Direction

Groundwater gradient data for the site were obtained from the ABB-ES July 1995 SWMUs 20 and 21 water level data and during a September 2010 site visit conducted by Tetra Tech. The monitoring well network provided groundwater gradient information that included the Site 1517 and surrounding areas. Since the initial date when the depths to groundwater measurements were taken, some of the wells from SWMUs 20 and 21 were abandoned; therefore, measurements taken in September 2010 do not include all of the monitoring wells measured in July 1995. The groundwater flow direction from July 1995 (as depicted on Figure 3-1) was in a westerly direction. The groundwater flow direction from September 2010 (as depicted on Figure 3-2) was in a westerly direction. Water table elevation data is presented in Table 3-1.

3.1.3 Aquifer Classification and Characteristics

The State of Florida classifies the surficial aquifer underlying the site as G-II. Previous USGS aquifer test data indicate that the average hydraulic conductivity of the surficial aquifer is approximately 4.34 feet per day (Tetra Tech, 2001).

The horizontal groundwater (hydraulic) gradient across the site was evaluated from water level data listed in Table 3-1 and shown on Figure 3-1 and Figure 3-2. The average horizontal hydraulic gradient beneath the site, calculated from potentiometric contours depicted on Figure 3-1 and Figure 3-2, was determined to be 0.008 feet per foot.

Based on information provided by Driscoll (Driscoll, 1986) and on lithologic descriptions of material encountered during the current investigation, the effective porosity of surficial aquifer sediments was estimated to be 0.30.

Using Darcy's Law, the groundwater velocity at the site was calculated.

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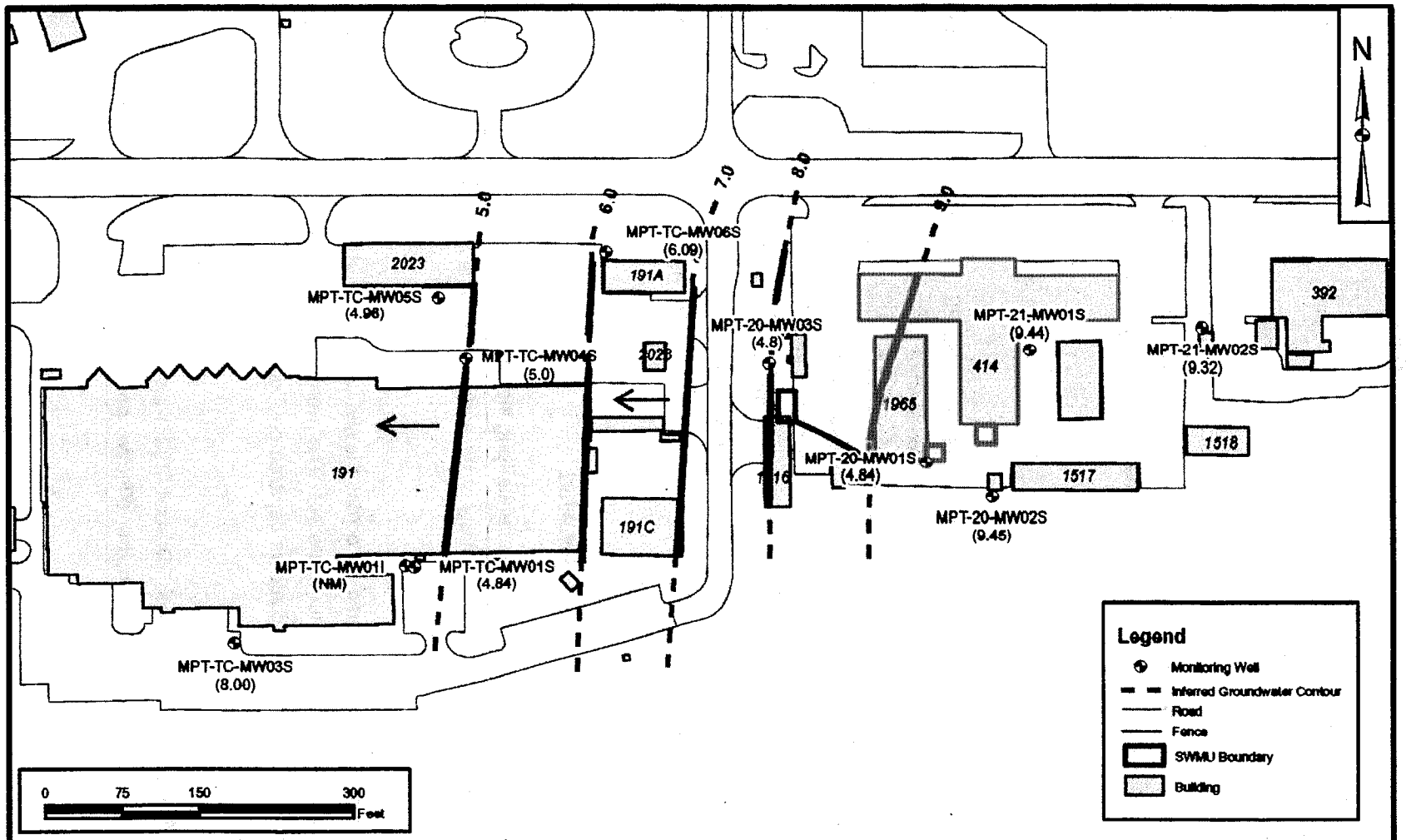

DRAWN BY	DATE		GROUNDWATER MAP	CONTRACT NUMBER CTO 0118	
S. STROZ	11/01/10		SWMUS 20 AND 21, JULY 1995	APPROVED BY —	DATE —
CHECKED BY D. SIEFKEN	DATE 11/01/10	NAVFAC	NAVAL STATION MAYPORT	APPROVED BY —	DATE —
REVISED BY —	DATE —		JACKSONVILLE, FLORIDA	FIGURE NO. FIGURE 3-1	REV 0
SCALE AS NOTED					

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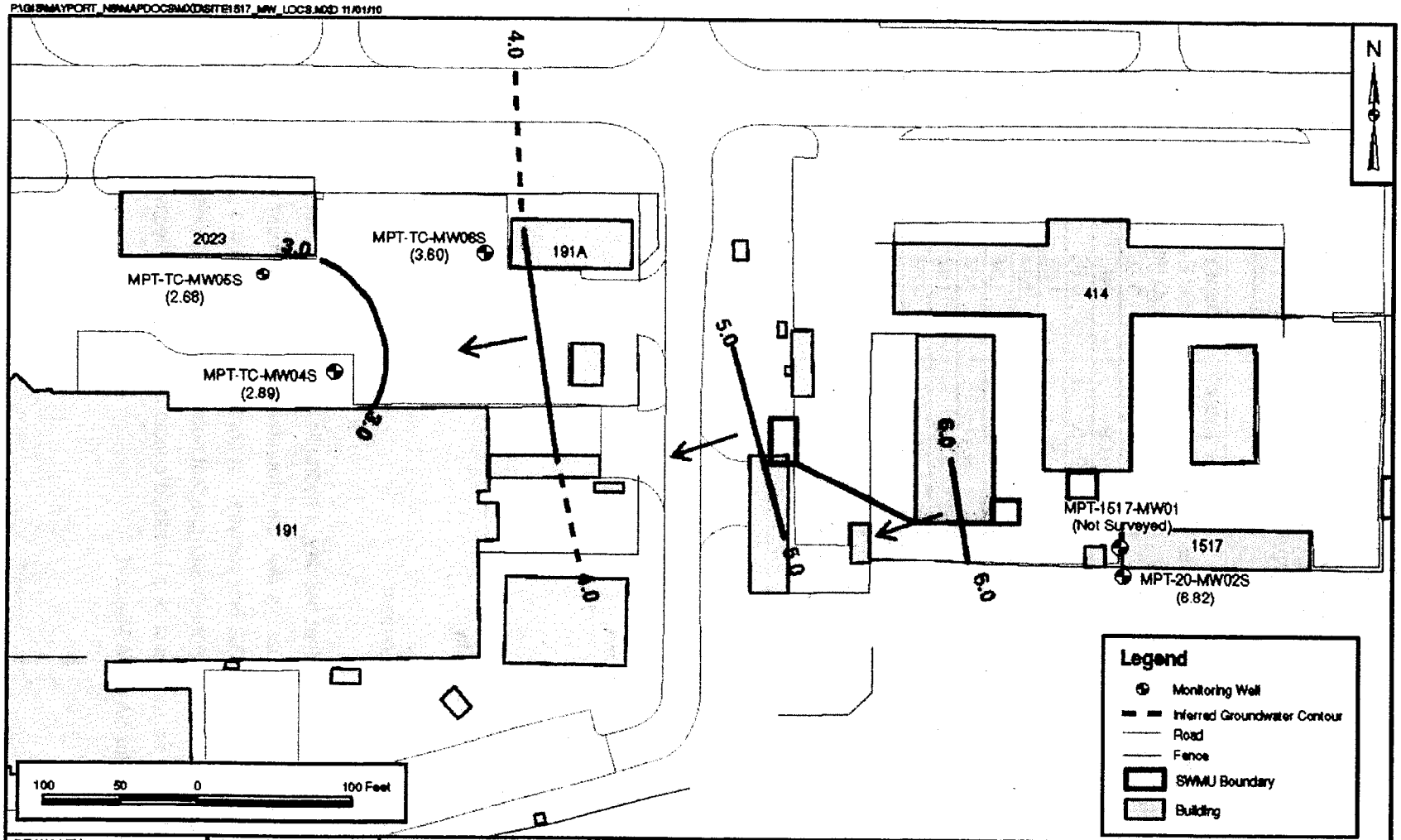

DRAWN BY S. STROZ	DATE 10/26/10	POTENTIOMETRIC GROUNDWATER MAP SEPTEMBER 2, 2010 MAP SITE 1517 SAR - MWR AUTO SKILLS CENTER NAVAL STATION MAYPORT JACKSONVILLE, FLORIDA	CONTRACT NUMBER CTO 0118
CHECKED BY D. SIEFKEN	DATE 11/01/10		APPROVED BY — DATE —
COST/SCHEDULE-AREA			APPROVED BY — DATE —
SCALE AS NOTED	NAVFAC		DRAWING NO. FIGURE 3-2 REV 0

TABLE 3-1
WATER TABLE ELEVATION DATA

SITE ASSESSMENT AND SITE REHABILITATION COMPLETION REPORT, SITE 1517
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

Monitoring Well Identification Number	Elevation (NGVD)	1995/07/19		2010/09/02	
		Depth to Water Below TOC (feet)	Water Table Elevation (feet msl)	Depth to Water Below TOC (feet)	Water Table Elevation (feet msl)
MPT-1517-MW01S	NS	NM	NM	3.86	NM
MPT-20-MW01S	13.49	4.2	9.29	NM	NM
MPT-20-MW02S	13.68	4.23	9.45	6.86	6.82
MPT-20-MW03S	12.01	4.01	8	NM	NM
MPT-21-MW01S	13.21	3.77	9.44	NM	NM
MPT-21-MW02S	12.79	3.47	9.32	NM	NM
MPT-21-MW03S	12.36	2.95	9.41	NM	NM
MPT-TC-MW01S	9.56	4.72	4.84	NM	NM
MPT-TC-MW01I	9.6	NM	NM	NM	NM
MPT-TC-MW02S	10.89	6.06	4.83	NM	NM
MPT-TC-MW03S	8.68	3.88	4.8	NM	NM
MPT-TC-MW04S	8.78	3.78	5	5.89	2.89
MPT-TC-MW05S	8.73	3.77	4.96	6.05	2.68
MPT-TC-MW06S	9.84	3.75	6.09	6.24	3.6

Notes:
NGVD = National Geodetic Vertical Datum
TOC = top of casing
NS = not sampled
NM = not measured

Darcy's Law may be expressed as follows:

$$V = \frac{(K \times I)}{n}$$

where: V = average seepage velocity
K = hydraulic conductivity
n = effective porosity
I = average hydraulic gradient

Using a hydraulic conductivity of 4.34 feet per day, a hydraulic gradient of 0.008 foot per foot, an inferred effective porosity value of 0.30, and Darcy's law, the groundwater seepage velocity across the site was calculated at 0.1157 feet per day or 42.2 feet per year. It should be noted that the groundwater velocity calculation is influenced by the steep groundwater gradient noted at the site. It is possible, therefore, that the calculated velocity may be the result of a localized condition and is not reflective of typical shallow groundwater flow velocities for NAVSTA Mayport.

3.2 SOIL SCREENING RESULTS

Soil vapor screening methods and sampling locations for headspace analyses are discussed in Section 2.4.1. On March 31, 2009, three sample locations (MPT-1517-SB01, MPT-1517-SB02, and MPT-1517-SB03), with four samples from each boring, were screened from the 0- to 0.5-foot, 0.5- to 2-foot, 2- to 4-foot, and 4- to 5.5-foot intervals. No organic vapor concentrations were detected above background levels for all samples screened and no stained soil or petroleum odors were identified while collecting soil samples. A summary of soil vapor measurements are presented in Table 3-2

3.3 SOIL SAMPLE ANALYTICAL RESULTS

Fixed-base Laboratory

Soil samples were collected from sample locations MPT-1517-SB01, MPT-1517-SB02, and MPT-1517-SB03 from the sample intervals of 0 to 0.5 foot and 0.5 to 0.8 foot bls. Soil collected for analysis from the 0- to 0.5-foot bls interval was analyzed for PAHs, total metals (arsenic, cadmium, chromium, and lead), PCBs, and TRPH. The second sample interval depth was to be sampled from and 0.5 to 0.8 foot bls and analyzed for VOCs. Samples were collected on March 31, 2009, and October 19, 2009, and submitted to ENCO for analysis.

Sample results recorded laboratory detections for sample constituents near the laboratory detection limits for VOCs, PAHs, SVOCs, PCBs, TRPH, and metals (arsenic, cadmium, and chromium), but less than FDEP Soil Cleanup Target Levels (SCTLs). The only constituent that exceeded an FDEP SCTL was arsenic (residential 2.1 milligrams per kilogram [mg/kg]) for MPT-1517-SB01 and MPT-1517-SB03 with concentrations of 3.65 mg/kg and 2.33 mg/kg, respectively. Although both samples exceed the FDEP SCTL for arsenic, the reported values are less than the FDEP-approved Basewide background action level concentration for arsenic of 13.7 mg/kg. The July 30, 2008, FDEP letter approving the background concentration of 13.7 mg/kg is included in Appendix C.

The Synthetic Precipitation Leaching Procedure (SPLP) for arsenic was performed for soil samples MPT-1517-SB01 and MPT-1517-SB03 because the FDEP SCTL was exceeded. All SPLP arsenic results were below the FDEP Groundwater Cleanup Target Level (GCTL) for arsenic (10 µg/L).

The summary of analytical results is provided as Table 3-3, and a copy of the fixed-base laboratory results is provided as Appendix F.

TABLE 3-2
SOIL VAPOR MEASUREMENTS

SITE ASSESSMENT AND SITE REHABILITATION COMPLETION REPORT, SITE 1517
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

Soil Boring Number	Date of Measurement	Sample Depth (feet bls)	Headspace Readings (ppm)		
			Total Organic Reading	Carbon Filtered Reading	Net Reading
MPT-1517-SB01	2009/03/31	0.5	0	0	0
		2	0	0	0
		4	0	0	0
		5.5	0	0	0
MPT-1517-SB02	2009/03/31	0.5	0	0	0
		2	0	0	0
		4	0	0	0
		5.5	0	0	0
MPT-1517-SB03	2009/03/31	0.5	0	0	0
		2	0	0	0
		4	0	0	0
		5.5	0	0	0

Notes:
ppm = part per million

TABLE 3-3
FIXED-BASE LABORATORY SOIL ANALYTICAL RESULTS

SITE ASSESSMENT AND SITE REHABILITATION COMPLETION
REPORT, SITE 1517
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

Compound	FDEP SCTLs			Sample Identification					
				SB01		SB02		SB03	
	Residential	Industrial	Leachability	2009/03/31	2009/10/19	2009/03/31	2009/10/19	2009/03/31	2009/10/19
VOCs (USEPA Method 8260) (mg/kg)									
Toluene	7500	60000	0.5	0.0006 I	NA	0.0005 I	NA	0.0005 I	NA
SVOCs (USEPA Methods 8270 and 8270 SIM) (mg/kg)									
Bis(2-ethylhexyl)phthalate	72	390	3600	NA	0.035 U	NA	0.12 J	NA	0.092 J
Butylbenzylphthalate	17000	380000	310	NA	0.035 U	NA	0.16 J	NA	0.33 J
Dimethylphthalate	690000	*	380	NA	0.051 U	NA	0.036 U	NA	0.13 J
Di-n-butylphthalate	8200	170000	47	NA	0.035 U	NA	0.036 U	NA	0.056 J
1-Methylnaphthalene	200	1800	3.1	0.016 U	NA	NA	0.012 J	NA	0.0032 U
2-Methylnapththalene	210	2100	8.5	0.011 U	NA	NA	0.024 J	NA	0.0034 U
Benzo(a)anthracene	#	#	0.8	0.0069 U	NA	NA	0.0037 U	NA	0.0036 U
Benzo(a)pyrene	0.1	0.7	8	0.02 U	NA	NA	0.0058 U	NA	0.0056 U
Benzo(b)fluoranthene	#	#	2.4	0.01 U	NA	NA	0.0051 U	NA	0.0049 U
Benzo(g,h,i)perylene	#	#	32000	0.01 U	NA	NA	0.0041 U	NA	0.0040 U
Benzo(k)fluoranthrene	#	#	24	0.012 U	NA	NA	0.0035 U	NA	0.0034 U
Chrysene	#	#	77	0.0004 U	NA	NA	0.0033 U	NA	0.0032 U
Dibenz(a,h)anthracene	#	#	0.7	0.013 U	NA	NA	0.0039 U	NA	0.0038 U
Fluoranthene	3200	0	1200	0.0099 U	NA	NA	0.0039 U	NA	0.0038 U
Fluorene	2600	33000	160	0.011 U	NA	NA	0.0039 U	NA	0.0038 U
Indeno(1,2,3-cd)pyrene	#	#	6.6	0.012 U	NA	NA	0.0043 U	NA	0.0042 U
Naphthalene	55	300	1.2	0.02 U	NA	NA	0.021 J	NA	0.012 J
Phenanthrene	2200	36000	250	0.0098 U	NA	NA	0.0035 U	NA	0.0034 U
Pyrene	2400	45000	880	0.0081 U	NA	NA	0.0036 U	NA	0.0035 U
Benzo(a)pyrene equivalents	0.1	0.7	8	<SCTL	NA	NA	<SCTL	NA	<SCTL
PCBs (USEPA Method 8082) (mg/kg)									
PCB-1260	0.5	2.6	17	NA	0.018 J	NA	0.030 J	NA	0.0095 U
Inorganics (mg/kg)									
Arsenic	2.1	12	TBA	**3.65****	NA	1.16	NA	**2.33****	NA
Cadmium	82	1700	7.5	0.2 I	NA	0.3	NA	0.07	NA
Chromium	210	470	38	3.03 V	NA	3.44 V	NA	2.44	NA
Lead	400	1400	NA	54.6	NA	47	NA	4.6	NA
***SPLP Arsenic µg/L	NA	NA	NA	NA	5.8	NA	NA	NA	5.84
Petroleum Hydrocarbons (FL-PRO) (mg/kg)									
TRPH (C8-C40)	460	2700	340	82.6	NA	NA	71 D	NA	4.4 UD

Notes:
Bold values are in excess of SCTLs, Chapter 62-770, F.A.C. (April 13, 1999).
VOC samples were collected from 0.8 foot bls, and the remaining analyses were collected from 0.5 foot bls.
* Contaminant is not a health concern for this exposure scenario.
** FDEP-approved NAVSTA Mayport Basewide background guidance concentration (13.7 mg/kg).
*** The GCTL for arsenic is 10 µg/L.
# Site concentrations for carcinogen PAHs must be converted to benzo(a)pyrene equivalents before comparison with appropriate direct exposure SCTL for benzo(a)pyrene using the approach described in the February 2005 "Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-77, F.A.C." The sum of the equivalence is presented as benzo(a)pyrene equivalent. No benzo(a)pyrene equivalents exceeded the FDEP SCTLs.
SIM = selected ion method
NA = not analyzed
U = nondetected value below instrument reporting limit
J = estimated result
TBA = To be analyzed for SPLP arsenic, if needed.
V = Value was reported in analysis and method blank.
D = Dilution was conducted.

3.4 GROUNDWATER ANALYTICAL RESULTS

3.4.1 Mobile Laboratory

On June 8, 2009, one groundwater sample was collected from soil boring MPT-1517-SB02 to evaluate potential impacts to the shallow surficial aquifer. Groundwater sampling methods were conducted as described in Section 2.5.1 for analysis by the on-site mobile laboratory for BTEX, MTBE, and the three naphthalenes. Results of the mobile laboratory groundwater analysis did not record any readings above the laboratory detection limits. The groundwater analytical report submitted by KB Laboratories is included with the mobile laboratory soil analytical results in Appendix G. A summary of mobile laboratory results are presented in Table 3-4.

3.4.2 Fixed-base Laboratory

On June 11, 2009, groundwater samples from monitoring well MPT-1517-MW01S were submitted to ENCO for analysis of used oil constituents per Table C of Chapter 62-770, F.A.C., as described in Section 2.5.2.3. The sample results did indicate the presence of phenanthrene (0.035 µg/L), but at concentrations less than the FDEP GCTL of 210 µg/L. No other groundwater constituents were identified.

A summary of detected compounds is presented in Table 3-5. A copy of the analytical report from ENCO is provided in Appendix F.

TABLE 3-4
MOBILE LABORATORY GROUNDWATER ANALYTICAL RESULTS

SITE ASSESSMENT AND SITE REHABILITATION COMPLETION REPORT, SITE 1517
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

Compound	FDEP GCTL	Sample Identification and Sample Date
		MPT-1517-MW01S
		2009/06/08
VOCs (USEPA Method 8260B) (µg/L)		
Benzene	1	1 U
Ethylbenzene	30	1 U
Methyl tert-butyl ether	20	5 U
m,p-Xylene	20	2 U
o-Xylene	20	1 U
Toluene	40	1 U
PAHs (µg/L)		
Naphthalene	14	5 U
1-Methylnaphthalene	28	5 U
2-Methylnaphthalene	28	5 U

Notes:
U = Non-detected result

TABLE 3-5
FIXED-BASE LABORATORY GROUNDWATER ANALYTICAL RESULTS

SITE ASSESSMENT AND SITE REHABILITATION COMPLETION REPORT, SITE 1517
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

Compound	FDEP GCTL	Sample Identification and Sample Date
		MPT-1517-MW01S
		2006/06/11
Metals (USEPA Method 6010) (µg/L)		
ARSENIC	10	5 U
CADMIUM	5	0.5 U
CHROMIUM	100	5 U
LEAD	15	5 U
PCBs (USEPA Method 8082) (µg/L)		
AROCLOR-1016/1242	NC	0.5 U
AROCLOR-1221	NC	0.5 U
AROCLOR-1232	NC	0.5 U
AROCLOR-1248	NC	0.5 U
AROCLOR-1254	NC	0.5 U
AROCLOR-1260	NC	0.5 U
PAHs (USEPA Method 8270C-SIM) (µg/L)		
1-METHYLNAPHTHALENE	28	0.03 U
2-METHYLNAPHTHALENE	28	0.03 U
ACENAPHTHENE	20	0.03 U
ACENAPHTHYLENE	210	0.03 U
ANTHRACENE	2100	0.03 U
BENZO(A)ANTHRACENE	0.05	0.03 U
BENZO(A)PYRENE	0.2	0.03 U
BENZO(B)FLUORANTHENE	0.05	0.03 U
BENZO(G,H,I)PERYLENE	210	0.03 U
BENZO(K)FLUORANTHENE	0.5	0.03 U
CHRYSENE	4.8	0.03 U
DIBENZO(A,H)ANTHRACENE	0.005	0.03 U
FLUORANTHENE	280	0.03 U
FLUORENE	280	0.03 U
INDENO(1,2,3-CD)PYRENE	0.05	0.03 U
NAPHTHALENE	14	0.03 U
PHENANTHRENE	210	0.035 J
PYRENE	210	0.03 U
Semivolatiles (USEPA Method 8270) (µg/L)		
1,2,4-TRICHLOROBENZENE	70	2.5 U
2,4,5-TRICHLOROPHENOL	1	2.5 U
2,4-DICHLOROPHENOL	0.3	2.5 U
2,4-DIMETHYLPHENOL	140	2.5 U
2,4-DINITROTOLUENE	0.05	2.5 U
2,6-DINITROTOLUENE	0.05	2.5 U
2-CHLORONAPHTHALENE	560	2.5 U
2-CHLOROPHENOL	35	2.5 U
2-NITROPHENOL	NC	2.5 U
3,3'-DICHLOROBENZIDINE	0.08	2.5 U
4,6-DINITRO-2-METHYLPHENOL	NC	2.5 U
4-BROMOPHENYL PHENYL ETHER	NC	2.5 U
4-CHLORO-3-METHYLPHENOL	63	2.5 U
4-CHLOROPHENYL PHENYL ETHER	NC	2.5 U
4-NITROPHENOL	56	15 U

TABLE 3-5
FIXED-BASE LABORATORY GROUNDWATER ANALYTICAL RESULTS

SITE ASSESSMENT AND SITE REHABILITATION COMPLETION REPORT, SITE 1517
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

Compound	FDEP GCTL	Sample Identification and Sample Date
		MPT-1517-MW01S
		2006/06/11
Semivolatiles (USEPA Method 8270) (µg/L) continued		
AZOBENZENE	0.3	2.5 U
BENZIDINE	0.0002	5 U
BIS(2-CHLOROETHOXY)METHANE	NC	2.5 U
BIS(2-CHLOROETHYL)ETHER	0.03	2.5 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	2.5 U
BUTYL BENZYL PHTHALATE	140	2.5 U
DIETHYL PHTHALATE	5600	2.5 U
DIMETHYL PHTHALATE	70000	2.5 U
DI-N-BUTYL PHTHALATE	700	2.5 U
DI-N-OCTYL PHTHALATE	140	2.5 U
HEXACHLOROBENZENE	1	2.5 U
HEXACHLOROBUTADIENE	0.4	2.5 U
HEXACHLOROCYCLOPENTADIENE	50	2.4 U
HEXACHLOROETHANE	2.5	2.5 U
ISOPHORONE	37	2.5 U
NITROBENZENE	3.5	2.5 U
N-NITROSODIMETHYLAMINE	0.0007	2.5 U
N-NITROSO-DI-N-PROPYLAMINE	0.005	2.5 U
N-NITROSODIPHENYLAMINE	7.1	2.5 U
PENTACHLOROPHENOL	1	2.5 U
PHENOL	10	2.5 U
Volatiles (USEPA Method 8260) (ug/L)		
1,1,1-TRICHLOROETHANE	200	1 U
1,1,2,2-TETRACHLOROETHANE	0.2	1 U
1,1,2-TRICHLOROETHANE	5	1 U
1,1-DICHLOROETHANE	70	1 U
1,1-DICHLOROETHENE	7	1 U
1,2,4-TRICHLOROBENZENE	70	1 U
1,2-DICHLOROBENZENE	600	1 U
1,2-DICHLOROETHANE	3	1 U
1,2-DICHLOROPROPANE	5	1 U
1,3-DICHLOROBENZENE	210	1 U
1,4-DICHLOROBENZENE	75	1 U
2-CHLOROETHYL VINYL ETHER	NC	5 U
BENZENE	1	1 U
BROMODICHLOROMETHANE	0.6	1 U
BROMOFORM	4.4	1 U
BROMOMETHANE	9.8	1 U
CARBON TETRACHLORIDE	3	1 U
CHLOROBENZENE	100	1 U
CHLORODIBROMOMETHANE	0.4	1 U
CHLOROETHANE	12	1 U
CHLOROFORM	70	1 U
CHLOROMETHANE	2.7	1 U
CIS-1,2-DICHLOROETHENE	70	1 U
CIS-1,3-DICHLOROPROPENE	NC	1 U
DICHLORODIFLUOROMETHANE	1400	1 U

TABLE 3-5
FIXED-BASE LABORATORY GROUNDWATER ANALYTICAL RESULTS

SITE ASSESSMENT AND SITE REHABILITATION COMPLETION REPORT, SITE 1517
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

Compound	FDEP GCTL	Sample Identification and Sample Date
		MPT-1517-MW01S
		2006/06/11
ETHYLBENZENE	30	1 U
METHYL TERT-BUTYL ETHER	20	1 U
METHYLENE CHLORIDE	5	1 U
TETRACHLOROETHENE	3	1 U
TOLUENE	40	1 U
TOTAL XYLENES	20	2 U
TRANS-1,2-DICHLOROETHENE	100	1 U
TRANS-1,3-DICHLOROPROPENE	NC	1 U
TRICHLOROETHENE	3	1 U
TRICHLOROFLUOROMETHANE	2100	1 U
VINYL CHLORIDE	1	1 U
Petroleum Hydrocarbons (mg/L)		
TRPH (C08-C40)	5	0.035 U

Notes:
mg/L = milligram per liter
U = Non-detected results
J = Estimated result

4.0 SUMMARY

The Site 1517 SA investigation was conducted to investigate the potential release of used oil from spillage when placing used oil in a 2,000-gallon used oil AST located west of Building 1517. The focus of the investigation centered on a crack in the concrete parking area measuring 1-inch wide located within 2 feet of Building 1517 and parallels the length of Building 1517. As used oil was poured into the AST, any *de minimis* quantity spillage from the pouring process may have entered the opening between the concrete pad and the building. At an un-specified time, an elastic polymer applied by Navy personnel was used to fill the crack in the concrete. The AST was removed from service in May 2004, and the used oil tank was removed from the site in October 2005.

Three soil borings that ran adjacent and parallel to the identified crack were completed at the site. Four samples from each of the three soil borings were screened from land surface to just above groundwater using an OVA-FID. No readings above background were recorded, and no stained soil or petroleum odors were observed. Based on the screening results, three soil samples were collected for fixed-base laboratory analysis from the same areas as the soil screening bore holes. Samples collected from sample interval 0 to 0.5 foot bls (identified with "0.5") and 0.5 to 0.8 foot bls (identified with "0.8") were analyzed for constituents listed on Table C of Chapter 62-770, F.A.C.

Results recorded laboratory detections for sample constituents near the laboratory detection limits for VOC, PAHs, SVOCs, PCBs, TRPH, and metals (arsenic, cadmium, and chromium), but below FDEP SCTLs. The only constituent that exceeded the FDEP SCTL of 2.1 mg/kg was arsenic for samples collected at MPT-1517-SB01 and MPT-1517-SB03 with concentrations of 3.65 mg/kg and 2.33 mg/kg, respectively. Although both samples exceed the FDEP SCTL for arsenic, the reported values are less than the FDEP-approved Basewide background action level concentration of 13.7 mg/kg for arsenic. A letter from Mr. John Winters of the FDEP dated July 30, 2008, affirms the arsenic FDEP-approved Basewide NAVSTA Mayport background concentration of 13.7 mg/kg (see Appendix C). Since the NAVSTA Mayport FDEP-approved background concentration for arsenic is 13.7 mg/kg, there are no exceedances of screening criteria for the soil samples collected at Site 1517. In addition, SPLP analysis for arsenic was conducted for both MPT-1517-SB01 and MPT-1517-SB03. The laboratory results were below the groundwater GCTL for arsenic (10 µg/L), and arsenic was not detected in a groundwater sample centrally located between soil borings MPT-1517-SB01 and MPT-1517-SB03.

Groundwater samples were collected at the location of soil boring MPT-1517-SB02 for analysis of select VOCs by a mobile laboratory. All results were below laboratory detection limits. A permanent shallow monitoring well (MPT-1517-MW01S) was installed in the location of soil boring MPT-1517-SB02, and groundwater was analyzed for constituents listed on Table C of Chapter 62-770, F.A.C. by a fixed-base

laboratory. The groundwater sample results for shallow monitoring well MPT-1517-MW01S recorded the presence of phenanthrene (0.035 µg/L), but at concentrations below the FDEP GCTL of 210 µg/L.

5.0 RECOMMENDATIONS

Based on field observations, screening data, soil, and groundwater results, no evidence of environmental impact was identified, and no used oil constituents listed in Table C of Chapter 62-770, F.A.C. exceeded appropriate FDEP criteria. Site 1517 meets the requirements of Chapter 62-770, F.A.C. for No Further Action, and it is requested that FDEP issue a Site Rehabilitation Completion Order.

REFERENCES

ABB-ES (ABB Environmental Services, Inc.), 1996. *Resource Conservation and Recovery Act Facility Investigation Group II Solid Waste Management Units, U.S. Naval Station, Mayport, Florida.* Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina. January.

Driscoll, Fletcher G., 1986. "Groundwater and Wells", St. Paul, Minnesota.

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FDEP, 2005a. Chapter 62-770, F.A.C., Petroleum Contamination Cleanup Criteria. April.

FDEP, 2005b. Chapter 62-777, F.A.C., Contaminant Cleanup Target Levels. May.

FDEP, 2008. Standard Operating Procedure DEP 001/01.

Kearney, A. T., 1989. *RCRA Facility Assessment of the Naval Station Mayport, Jacksonville, Florida.* Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina.

Spechler, R. M., 1994. *"Saltwater Intrusion and Quality of Water in the Floridan Aquifer System, Northeastern Florida"*: U.S. Geological Survey Water-Resources Investigations Report 92-4174.

Tetra Tech (Tetra Tech NUS, Inc.), 2001 *Site Assessment Report for Building 351*. Prepared for Southern Division, Naval Facilities Engineering Command, North Charleston, South Carolina. January.

USACE (United States Army Corps of Engineers), 1992. Contamination Assessment Report, Site 1330, Naval Station Mayport, Mayport, Florida.

USDA (United States Department of Agriculture Soil Conservation Services), 1978. Soil Survey of City of Jacksonville Duval, County Florida.

USEPA (United States Environmental Protection Agency), 1997. *Standard Operating Procedures*.

USGS (United States Geologic Survey), 1992. Mayport, Florida Quadrangle 7.5 Minute Series, Topographic Quadrangle Maps of Florida: scale 1:24,000.

APPENDIX A

SAR SUMMARY SHEET

CONTAMINATION ASSESSMENT REPORT SUMMARY SHEET

Facility Name: Site 1517 Reimbursement Site: ☐

Location: NS Mayport , Mayport, FL State Contract Site: ☐

EDI #: _____ FAC I.D.# _____ Other: Non-Prog. ☑

Date Reviewed: _____ Local Government: _____

(1) Source of Spill: Possible spilled used oil Date of Spill: Unknown

(2) Type of Product:

Gasoline Group	Gallons Lost	Kerosene Group	Gallons Lost
☐ Leaded		☐ Kerosene	
☐ Unleaded Regular		☐ Diesel	
☐ Unleaded Premium		☐ JP-4 Jet Fuel	
☐ Gasohol		☐ Heating Fuel	
☐ Undetermined		☐ Unknown	

(3) Description of IRA: none

☐ Free product Removal: _____ (gals)
☐ Soil Removal: _____ (cubic yds)
☐ Soil Incineration: _____ (cubic yds)

(4) Free Product still present (yes/no) No Maximum apparent product thickness: N/A (feet)

(5) Maximum Groundwater contamination levels (ppb): Total VOA: .0005 benzene: <1 ppm EDB: N/A
lead: 54.6 ppm MTBE: <1 ppm other: _____

(6) Brief lithologic description: Medium to fine sand. No significant lithologic variations across site.

(7) Areal and vertical extent of soils contamination defined (yes/no) N/A

Highest current soil concentration (OVA: 0 ppm) or (EPA method 5030/8020: _____ ppb)

(8) Lower aquifer contaminated? (yes/no) No Depth of vertical contamination: N/A.

(9) Date of last complete round of groundwater sampling: _____ Date of last soil sampling: _____

(10) QAPP approved? (yes/no) Date: NA

(11) Direction (e.g. NNW) of surficial groundwater flow: west (Fig. 3-1 on page _____)

(12) Average depth to groundwater: ~6.0 (ft)

(13) Observed range of seasonal groundwater fluctuations: _____ (ft) (Based on water level data collected during the CAR investigation)

(14) Estimated rate of groundwater flow: 0.1157 (ft/day)

(15) Hydraulic gradient across site: 0.008 (ft/ft)

(16) Aquifer characteristics:

	Values	Units	Method
Hydraulic conductivity	4.34	ft/day	Kasenow & Pare, 1995
Storage coefficient	-	ft/ft	-
Aquifer thickness		ft	Literature
Effective soil porosity	30	%	Literature
Transmissivity		gal/day/ft	Specific Capacity Tests

(17) Other remarks: None

APPENDIX B

SITE PHOTOGRAPHS

Photo 1 – Cracks near the former AST at Building 1517

Photo 2 – Western end of Building 1517

APPENDIX C

REGULATORY CORRESPONDENCE

SEP 10 1997

****CARBON COPY****

NAVSTA Mayport Administrative Record
Document Index Number

32228-000
19.01.00.0095

4WD-FFB

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Commanding Officer
U.S. Naval Station Mayport
Mayport, Florida 32228

SUBJ: RCRA Facility Assessment Sampling Visit Report
Naval Station Mayport, Jacksonville, Florida
EPA I.D. FL9 170 024 260

Dear Captain Gaudio:

The U.S. Environmental Protection Agency (EPA), has received and reviewed the **Resource Conservation and Recovery Act (RCRA) Facility Assessment Sampling Visit Report, Group III - Solid Waste Management Units (SWMUs) 20, 21 and 52**, ABB, August 1997. Based upon the review, EPA approves this document pursuant to condition II.D.5 of your RCRA permit effective June 15, 1993. EPA concurs with the recommendation of no further investigation for SWMUs 20, 21 and 52 based on the industrial use scenario. However, an important component of EPA's concurrence with this recommendation is the understanding that long term land use restrictions will be placed on these SWMUs to assure that the land use remains industrial. Should the land use change from industrial to residential use, then these recommendations must be revisited.

EPA's concurrence is predicated on the information provided; therefore, any new information contradicting the basis for this concurrence may require further

investigation or corrective action. Should you have any questions regarding this letter, please contact Martha Berry at (404) 562-8533.

Sincerely,

Jewell Harper
Deputy Division Director
Waste Management Division

cc: Jim Cason, FDEP
David Driggers, SOUTHNAVFACENGCOM
Cheryl Mitchel, NAVSTA Mayport
Terry Hansen, ABB
Frank Lesesne, ABB
Valerie McCain, Bechtel

Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

July 30, 2008

Mr. Dana Hayworth
Department of the Navy
Naval Facilities Engineering Command Southeast
Naval Air Station Building 135
Post Office Box 30
Jacksonville. Florida 32212

RE: Follow-up Response to Comments, Arsenic Background Study, Naval Station MAYPORT, Mayport, Florida (University of Florida's Center for Environmental & Human Toxicology, July 28, 2008)

Dear Mr. Hayworth:

Dr. Steve Roberts and his staff have completed their review of Tetra Tech NUS' recent response to comments from June 17, 2008 concerning the Arsenic Background Study at Naval Station Mayport (please see attachment). They have found them to be satisfactory. In their opinion, the revised statistical analysis (Monte Carlo analysis) is more technically sound. They also state that "While arsenic concentrations appear to be higher than in undisturbed, native soil, there is no indication that an arsenic spill or discharge to the environment has occurred that would warrant cleanup." In the letter, Dr. Roberts suggests using the maximum background concentration of 13.70mg/kg to represent the upper range of background concentrations for arsenic at Naval Station Mayport. This approach is acceptable to myself and the Florida Department of Environmental Protection.

If you require additional clarification or other assistance please feel free to contact me at 850/245-8999.

Sincerely,

John Winters, P.G.
Remedial Project Manager

JJC ESN ESN

cc Tim Bahr, FDEP, Tallahassee

Attachment

UF | UNIVERSITY of FLORIDA

Center for Environmental & Human Toxicology

PO Box 110885
Gainesville, FL 32611-0885
352-392-2243, ext. 5500
352-392-4707 Fax

July 28, 2008

Ligia Mora-Applegate
Bureau of Waste Cleanup
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399

Re: Response to Comments, Arsenic Background Study, Naval Station Mayport

Dear Ms. Mora-Applegate:

In a letter to you dated May 2, 2008, I provided comments on a statistical analysis of site versus background data for arsenic in soil at Naval Station Mayport. In a subsequent conference call on May 28 with Dr. Linda Young (Professor of Statistics at UF) participating, we further explained our concerns regarding the analysis.

TetraTech have substantially revised the analysis and provided responses to our comments in the form of a letter dated June 17, 2008. Dr. Young and I have reviewed the responses and find them to be satisfactory. The revised statistical analysis is now, in our opinion, more technically sound.

Documentation has been provided previously showing that much of Naval Station Mayport is on disturbed soil, and the statistical analysis indicates that the concentrations of arsenic in soil at the site are representative of local background conditions. The maximum arsenic concentration on site is 13.75 mg/kg, while the maximum background concentration is 13.70 mg/kg. The mean arsenic concentration on site, 1.17 mg/kg is somewhat less than the mean arsenic for background samples, 1.80 mg/kg. While arsenic concentrations appear to be higher than in undisturbed, native soil (mean, 0.75 mg/kg; maximum, 1.30 mg/kg), there is no indication that an arsenic spill or discharge to the environment has occurred that would warrant cleanup.

Sincerely,

Stephen M. Roberts, Ph.D.

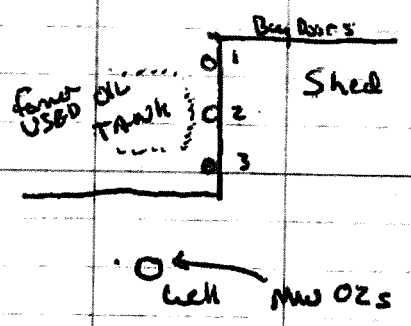
APPENDIX D

SOIL BORING LOGS AND LITHOLOGIC DESCRIPTIONS

Site IDIT Soil Sampling 05-31-09

Personel: D. Siefken
PPE level "D"
Weather Overcast 74°F
Obj: Collect soil samples from 3 borings, screen soil from each boring & collect sample w/ greatest OVA or visual impacts
LAB ENCO
ANALYSIS: TABLE C 62-770

0958 On site talk w/ person running vehicle main. office - ok to work
1015 Prepare to begin. ~~Cutting~~ drilling hole in cut concrete to lift core.
1030 Rinsate 1 033109 collected on clean sample equip. ss hand auger follow FDREP SOPs. 2 buckets w/ final DI rinse, H_2O has Liquinox in bucket & clean w/ brush.
Will collect 0-6" 6"-2' 2'-4' and scan
Checked H_2O level in nearby well MPT-20-MW02s = 6.41 ft bld so H_2O table ~ 6.1 or 6.2 ft bls.
Concrete is 8" thick & sets into ground level. but will coll soil below concrete 0 ft bls.
So 1st sample 0-6" is really 8"-14". in relation to rest of site.



Calibrate FID - Cal gas LTF106-J-CM - Pine Env Services 100 ppm
Unit # CZRP310 calibrated fine - did bump test after & read 99.9 ppm - good.

RL

Soil Sampling 3-31-09

Cleaning Hardware between OVA Samples
See table below for results. Each
Sample set for 10 min prior to screening.

	0-6	6"-2"	2-4	4-5.5
SB-01	0/	0/	0/	0/
SB02	0/	0/	0/	0/
SB03	0/	0/	0/	0/

Non filter / filtered Sample

- 6"-2 = 1.5'
- 2-4 = 3'
- 4.5.5 = 5.5
- Dump at 6.0'

Since no OVA or visual soil staining will collect soil samples except VOAs at 0-6" - will call office for direction of VOA sampling.

Soil samples were collected according to FDEP SOP

Samples Collected 3-31-09

Time	ID	Depth
1030	MPT-Rinsate 1	NA
1350	MPT 1517 SB01	-0.5
1358	MPT 1517 SB01	0.8
1405	MPT 1517 SB02	0.5
1408	MPT 1517 SB02	0.8
1415	MPT 1517 SB03	-0.5
1415	MPT 1517 SB03	0.5

Once collected samples placed on ice for transport to Lab. @ 1615

1615 Relinquish Samples - COC #0838

ANALYSIS: Total Metals (As, Cd, Cr, Pb), 8260 VOC+10H, 8270 SVM, 8082 PCB
TRPH FL Pro, TCLP Metals

MW1 Soil Samples Bldg 1317 3-31-09

Soil lithology was fairly Homogeneous.

0-8' Concrete
8-12 Limerock + sand
12-6.0 fine to med quartz sand with shell hash.
moist at 6.0' some silt seams around 4.5'
not solid very thin. Less than 2" in thickness

Sand color Homogeneous Lt tan

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: 1517
Project No.: 112g01516

[X] Surface Soil (SS)
[] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-1517-SB01-0.5
Sample Location: SB 01
Sampled By: DS
C.O.C. No.: 0838

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

GRAB SAMPLE DATA:

Date: 3/31/2009	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1350	0.5	Lt Brown	fine to med quartz sand dry
Method: grab			
Monitor Reading (ppm 0			

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
~~8260~~		ND	
8270		yes	CNO
TRPH		yes	
8 RCRA		yes	
PCB		yes	
TRPH		yes	
TCLP metals		yes	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: 1517
Project No.: 112g01516

[X] Surface Soil (SS)
[ ] Subsurface Soil (SU)
[ ] Sediment (SD)
[ ] Other:
[ ] QA Sample Type:

Sample ID No.: MPT-1517-SB01-0.8
Sample Location: SB01
Sampled By: DS
C.O.C. No.: 0838

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 3/31/2009 Time: 1358 Method: grab Monitor Reading (ppm 0	0.8"	Lt Brown	Fine to med. quartz Sand

COMPOSITE SAMPLE DATA:

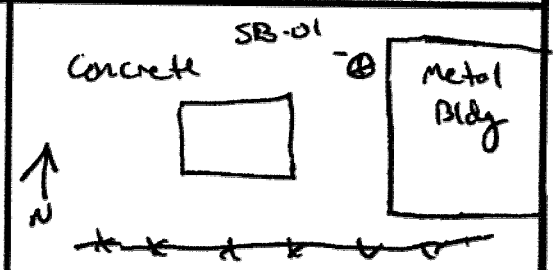
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
8260	3 40 ml	Yes	ENCO
~~8270~~			
~~TRPH~~			
~~8 RCRA~~			
~~PCB~~			
~~TRPH~~			

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: 1517
Project No.: 112g01516

Sample ID No.: MPT. 1517 SB02 - 0.5
Sample Location: MPT- 1517 SB02
Sampled By: DS
C.O.C. No.: 0838

[X] Surface Soil (SS)
[ ] Subsurface Soil (SU)
[ ] Sediment (SD)
[ ] Other:
[ ] QA Sample Type:

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 3/31/2009			
Time: 1405	0- 0.5	Lt. Brown	fine tomed. quarte sand.
Method: grab			
Monitor Reading (ppm 0			

COMPOSITE SAMPLE DATA:

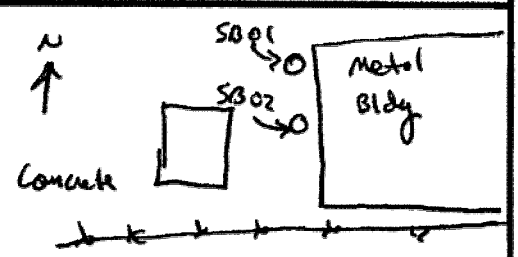
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
~~8260~~			
8270		yes	ENCO
TRPH			
8 RCRA			
PCB			
TRPH			
TCLP 8 RCRA			

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [illegible]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: 1517
Project No.: 112g01516

[✓] Surface Soil (SS)
[ ] Subsurface Soil (SU)
[ ] Sediment (SD)
[ ] Other:
[ ] QA Sample Type:

Sample ID No.: MPT - 1517 SB02 - 08
Sample Location: SB 02
Sampled By: DS
C.O.C. No.: 0838

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

GRAB SAMPLE DATA:

		Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:	3/31/2009	0.5'	Lt Brown	fine to med quartz sand.
Time:	1405			
Method:	grab			
Monitor Reading (ppm	0			

COMPOSITE SAMPLE DATA:

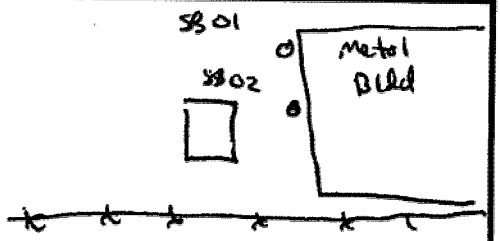
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
8260	3 vials	VCS	ENCO
~~8270~~			
~~TRPH~~			
~~8RCRA~~			
~~PCB~~			
~~TRPH~~			

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [illegible]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: 1517
Project No.: 112g01516

[x] Surface Soil (SS)
[] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-1517-SB03-05
Sample Location: SB03
Sampled By: DX
C.O.C. No.: 0838

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 3/31/2009 Time: 1415 Method: grab Monitor Reading (ppm 0	0.5'	Lt. Brown	fine to med Sand quartz

COMPOSITE SAMPLE DATA:

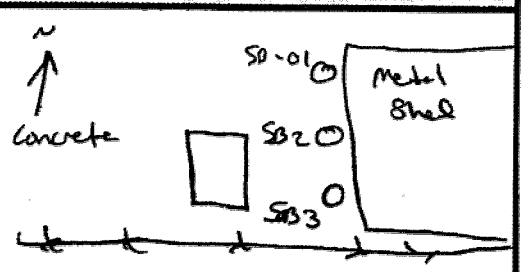
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
~~8260~~			
8270		Yes	ENCO
TRPH			
8 RCRA			
PCB			
TRPH			
TCLP Metals			

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: 1517
Project No.: 112g01516

[/] Surface Soil (SS)
[] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-1517-SB03-0.8
Sample Location: SB 03
Sampled By: DS
C.O.C. No.: 0838

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 3/31/2009 Time: 1418 Method: grab Monitor Reading (ppm 0	0.8	Lt. Brown	fine to med quartz sand

COMPOSITE SAMPLE DATA:

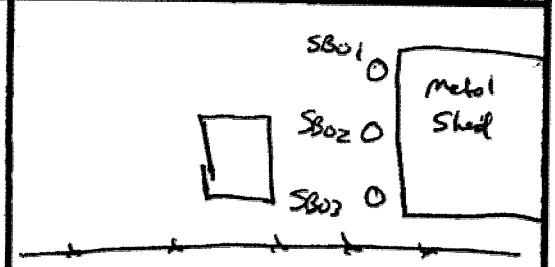
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
8260	3 vials	yes	ENCO
8270			
TRPH			
8 RCRA			
PCB			
TRPH			

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

TETRA TECH NUS, INC.

CHAIN OF CUSTODY

NUMBER 0838

PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112601516	1517	Mark Peterson	904 334-7260	ENCO / Chris
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER: David Sieffren	PHONE NUMBER: 904 334-7260	ADDRESS: 4810 Executive Ct, Suite 211
		CARRIER/WAYBILL NUMBER: Drop off		CITY, STATE: Jacksonville, FL 32216

STANDARD TAT ☒
RUSH TAT ☐ ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G)
PRESERVATIVE USED

TYPE OF ANALYSIS

DATE YEAR 2009	TIME	MPT SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	Total Metals (As, Cd, Cr, Pb)	8260 VOC + VOH	8270 SIM	8082 PCB	TCLP Metals (As, Cd, Cr, Pb)	TRPH FL Pro	COMMENTS
									1	2	2	2	1	2	
3/31	1030	Rinsate 1 033109				QC									Cool to 4° C
3/31	1350	MPT-1517-SB01-0.5				SO		2	X		X	X	X	X	
3/31	1358	MPT-1517-SB01-0.8						3		X					
3/31	1405	MPT-1517-SB02-0.5						2	X						
3/31	1408	MPT-1517-SB02-0.8						3		X					
3/31	1415	MPT-1517-SB03-0.5						2	X						
3/31	1418	MPT-1517-SB03-0.8						3		X					
3/31	1500	Trip Blank B901545-06A				QC		2		2					

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	3-31-09	1615	1. RECEIVED BY	3/31/09	1615
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: AOC - F MPT Site 1517
Project No.: 112G01516

[] Surface Soil (SS)
[] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-1517-SB-01-04
Sample Location: Site 1517
Sampled By: JC
C.O.C. No.: 0923

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/19/2009 Time: 1080 Method: grab Monitor Reading (ppm 0	.5	grey	Sand/silt

COMPOSITE SAMPLE DATA:

Date: 10/19/2009	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: GRAB :				
Monitor Readings (Range in ppm):				

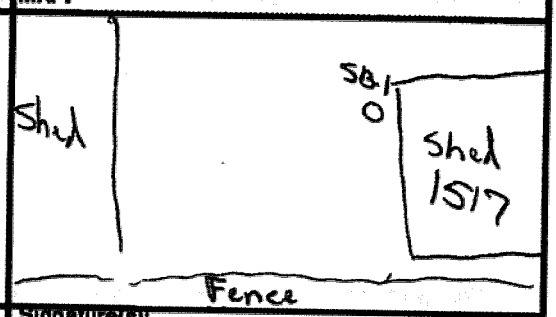
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
8270 SIM			
8270			
TRPH			
TCLP			
PCB			

OBSERVATIONS / NOTES:

Sample drawn 6" below concrete. Concrete cored by Concut

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: AOC - F MPT Site 1517
Project No.: 112G01516

[] Surface Soil (SS)
[] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-1517-SB-02-0.5
Sample Location: Site 1517
Sampled By: X
C.O.C. No.: 0923

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/19/2009 Time: 1010 Method: grab Monitor Reading (ppm 0	.5	Grey	Sand with some Silt

COMPOSITE SAMPLE DATA:

Date: 10/19/2009	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method: GRAB :				
Monitor Readings (Range in ppm):				

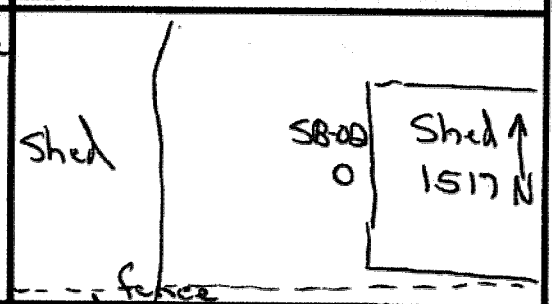
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
8270 SIM			
8270			
TRPH			
TCLP			
PCB			

OBSERVATIONS / NOTES:

Sample drawn from 6" below concrete
Concrete cut by Concut

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: AOC - F MPT Site 1517
Project No.: 112G01516

[] Surface Soil (SS)
[] Subsurface Soil (SU)
[] Sediment (SD)
[] Other:
[] QA Sample Type:

Sample ID No.: MPT-1517-SB-03-0.5
Sample Location: Site 1517
Sampled By: K
C.O.C. No.: 09213

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

GRAB SAMPLE DATA:

		Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date:	10/19/2009	0.5	grey	Sand with some silt
Time:	0945			
Method:	grab			
Monitor Reading (ppm	0			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
10/19/2009				
Method:				
GRAB :				
Monitor Readings				
(Range in ppm):				

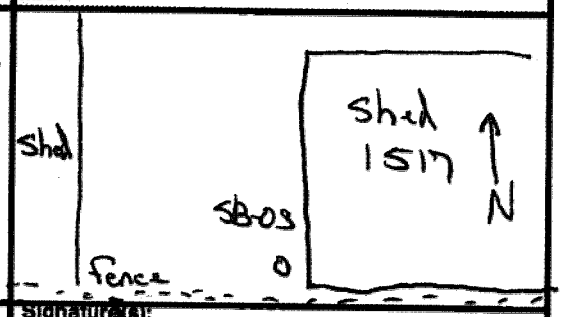
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
8270 SIM			
8270			
TRPH			
TCLP			
PCB			

OBSERVATIONS / NOTES:

Sample drawn from 6" below concrete
Concrete cut by Con-Cut.

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

TETRA TECH NUS, INC.

CHAIN OF CUSTODY

NUMBER 0923 | PAGE ___ OF ___

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
1120 1516	1517	Mark Peterson	704 334 7260	ENCO / Chris
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER: David Stafhen	PHONE NUMBER: 904 334 7260	ADDRESS: 4810 Executive Ct. Suite 211
		CARRIER/WAYBILL NUMBER: Drop-off		CITY, STATE: Jacksonville, FL 32216

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2009	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	8270 SIM	8082 PCB	TCLP METALS	TRPH	8270 Full List				COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)									G	G	G	G	G				
PRESERVATIVE USED									–	–	–	–	–				
10/19	1010	MPT-1517-SB02-0.5		0.5	0.5	SO	G	2	X	X	X	X	X				Cool to 4°C
10/19	0945	MPT-1517-SB03-0.5		0.5	0.5	SO	G	2	X	X	X	X	X				
10/19	1030	MPT-1517-SB01-0.5		0.5	0.5	SO	G	2					X				

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	10/19/09	1305	1. RECEIVED BY	10/19/09	1305
2. RELINQUISHED BY			2. RECEIVED BY		
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

CONCUT SOUTHEAST

Concrete Cutting & Coring
14476 DUVAL PLACE WEST #207
JACKSONVILLE, FL 32218
(904) 757-7217 OR (800) 396-1217
FAX (904) 757-3858

DATE 10/19/09
TICKET #
JOB # 209199 JOB NAME MAYPORT MWR
DIRECTIONS

Customer TETRA TECH
Job Address Bldg 1512 MASSEY AVE
City, State MAYPORT NAS, FL
Purchase Order #
Customer #
Other Men on Job

QUANTITY	DESCRIPTION	UNIT	PRICE
	3 holes 10"x8-10"		
	Job Complete		
		TOTAL	

Signature
Company Name

WHITE/YELLOW - CONCUT PINK - CUSTOMER

NAVFAC SE Code PRMP-12
Public Work Office Engineering Department
Excavation Permit No.
MYPT-10/10-008

Excavation to
Ground Water Investigation
at
Building 1517
By
Contractor: Tetra-Tech NUS

Contractor Representative Signature: _____
Jeff Krone

Sunshine State One Call of Florida and Naval station Mayport Have completed
Locating and Marking Underground Utilities in Excavation Site
On Date 15 October 2009

NAVFAC SE (Code PRMP 12) Public Work Office
at Naval Station Mayport
C. Wayne Purifoy at telephone number (904) 270-5184

Excavation Permit Issued by: _____
C. Wayne Purifoy

CONCUT SOUTHEAST

Concrete Cutting & Coring
14476 DUVAL PLACE WEST #207
JACKSONVILLE, FL 32218
(904) 757-7217 OR (800) 396-1217
FAX (904) 757-3858

DATE
TICKET #
JOB # | JOB NAME
DIRECTIONS

Customer
Job Address
City, State
Purchase Order #
Customer #
Other Men on Job

QUANTITY	DESCRIPTION	UNIT	PRICE
3	10" x 12" Core For Soil Sample		
	Job Postponed For dig permit issues		
		TOTAL	

Signature T+NUS
Company Name

WHITE/YELLOW - CONCUT PINK - CUSTOMER

CTO 118 112601516 U.S. Navy Station Mayport Site 1517 08Oct09

Personnel: Jeff Krone
Truck: 2001 F-250
PPE: Level D
Weather: Partly Cloudy 90°
Objective: Soil Sampling at Site 1517

0805 Departed office with sample equipment for NAVSTA, ConCut contractor called to say he is on site.

0900 Arrived at Site, met with Public Works Dept. rep Brian Seiwert, Randy Barclay (Auto Skills Center manager), Jeff with ConCut and Diana Racine to discuss the event. Discovered that the dig permit had expired and that it may be possible to renew it.

0930 Discussed permit with Wayne Purifoy and discovered the permit expired in may and could not be renewed.

1015 Departed NAVSTA and postponed sampling until another dig permit could be obtained

1100 Arrived at office.

CTO 118 112601516 U.S. Navy Station Mayport Site 1585 11 Aug 09

Personnel: Jeff Krone
Truck: 2006 F-250
PPE: Level D
Weather: Sunny 95°
Objective: Quarterly Groundwater Sampling

0835 Loaded truck and departed office for NAVSTA
1035 Arrived on site after procuring supplies and clearing security.
1040 Began groundwater measurements (uncapped wells the day before)
1100 Completed measurements and commenced equipment calibration
1120 Completed calibrations, commenced sampling event. See table below for details. Reviewed HASP and site specific safety guidelines

Well ID	Sample ID	Start	Stop	Sample time	Analyses
MW-01S	MPT-1585-MW01S-20090811	1050	1126	1130	1, 2, 3 MS/MSD
MW-02S	MPT-1585-MW02S-20090811	1215	1236	1241	1, 2, 3
MW-03S	MPT-1585-MW-03S-20090811	1305	1326	1333	1, 2, 3
MW-04S	MPT-1585-MW-04S-20090811	1350	1409	1414	1, 2, 3

Analysis Key 1: VOCs 2: PAHs 3: TRPH All samples cooled to 4°C

1505 Packed up equipment and departed site.
1530 Transferred IDW to drum 37-05, departed NAVSTA
1620 Arrived at office

APPENDIX E

GROUNDWATER FIELD SAMPLING DATA SHEETS

Tetra Tech NUS, Inc.

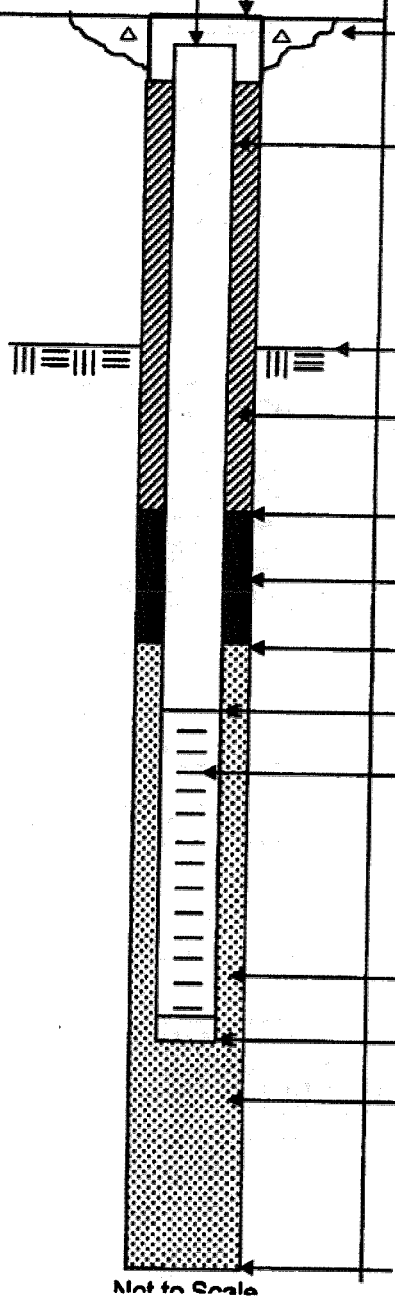
WELL No.: MPT-1517-MW015

MONITORING WELL SHEET

PROJECT:		DRILLING Co.:	Preferred	BORING No.:	
PROJECT No.:	CTO 118	DRILLER:	Christopher Burger	DATE COMPLETED:	6-10-09
SITE:	bldg 1517	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Curtis Odum	DEV. METHOD:	peristaltic pump	EASTING:	

Ground Elevation =

Datum:



Not to Scale

Elevation / Depth of Top of Riser: /

Elevation / Height of Top of Surface Casing: /

I.D. of Surface Casing:

Type of Surface Casing:

Type of Surface Seal: portland cement grout

I.D. of Riser: 1.0"

Type of Riser: PVC

Borehole Diameter: 3.25"

Elevation / Depth Top of Rock: NA /

Type of Backfill: ~~30/60 sand~~ CO NA

Elevation / Depth of Seal: 2' /

Type of Seal: 30/60 sand

Elevation / Depth of Top of Filter Pack: 2' /

Elevation / Depth of Top of Screen: 3' /

Type of Screen: PVC prepack

Slot Size x Length: 0.01" x 0.5"

I.D. of Screen: 1.0"

Type of Filter Pack: 20/30 sand

Elevation / Depth of Bottom of Screen: 13' /

Elevation / Depth of Bottom of Filter Pack: 13' /

Type of Backfill Below Well: NA

Elevation / Total Depth of Borehole: 13' /

ORIGINAL

DEP-SOP-001/01
FS 2200 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: MPT bldg 1517	SITE LOCATION: auto hobby shop
WELL NO: MPT-1517-MW01S	SAMPLE ID: MPT-1517-MW01S-0609 / DATE: 6-16-09

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): .25	WELL SCREEN INTERVAL DEPTH: 3.25 feet to 13.23 feet	STATIC DEPTH TO WATER (feet): 3.86	PURGE PUMP TYPE OR BAILER: peristaltic

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (13.23 feet – 3.86 = 9.37 feet) X 0.04 gallons/foot = .375 gallons 1.5

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 4.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 4.5	PURGING INITIATED AT: 1500	PURGING ENDED AT: 1550	TOTAL VOLUME PURGED (gallons): 20

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/l or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1520	8L	8L	8L/400	3.96	7.68	25.46	613	1.19	4	clear	none
1525	2L	10L	400	3.96	7.71	25.15	610	1.21	3	clear	none
1530	2L	12L	400	3.96	7.69	25.20	611	0.95	3	clear	no
1535	2L	14L	400	3.96	7.69	25.21	608	0.96	2	clear	no
1540	2L	16L	400	3.96	7.70	24.69	607	0.76	2	clear	no
1545	2L	18L	400	3.95	7.66	24.73	608	0.84	1	clear	no
1550	2L	20	400	3.96	7.65	24.81	611	0.88	1	clear	no

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Curtis Odom / TTNUS	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1550	SAMPLING ENDED AT: 1650
PUMP OR TUBING DEPTH IN WELL (feet): 4.5	SAMPLE PUMP FLOW RATE (mL per minute): 300	TUBING MATERIAL CODE: PE	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) Filtration Equipment Type: FILTER SIZE: ____ µm	DUPLICATE: Y N MS/MSD	

SAMPLE ID CODE	SAMPLE CONTAINER SPECIFICATION # CONTAINERS	MATERIAL CODE	VOLUME	SAMPLE PRESERVATION PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
	1	AG	1L	—			8082, 8270C	PP
	3	CG	40mL	HCL			8260B	SM
	2	AG	1L	—			8270C TICs	PP
	1	PE	250mL	HNO_3			As, Cd, Cr, Pb	PP
	2	AG	1L	H_2SO_4			FL-PRO	PP

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

APPENDIX F

FIXED-BASE LABORATORY ANALYTICAL RESULTS

Environmental Conservation Laboratories, Inc.
4810 Executive Park Court, Suite 211
Jacksonville FL, 32216-6069
Phone: 904.296.3007 FAX: 904.296.6210
www.encolabs.com

Thursday, April 16, 2009

Tetra Tech NUS (BR006)

Attn: Mark Peterson

8640 Philips Highway Suite 16

Jacksonville, FL 32256

RE: Laboratory Results for
Project Number: 0838, Project Name/Desc: CTO-118 Naval Station Mayport
ENCO Workorder: B901545

Dear Mark Peterson,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Tuesday, March 31, 2009.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Jacksonville. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Lorraine Strong

Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 40.

PROJECT NARRATIVE

Client: Tetra Tech NUS (BR006)
Project: CTO-118 Naval Station Mayport
ENCO Project ID: B901545

Overview

All samples submitted were analyzed by Environmental Conservation Laboratories, Inc. in accordance with the methods referenced in the laboratory report. Any particular difficulties encountered during sample handling and processing will be discussed in the Remarks section below.

Remarks

Analysis: % Solids

Affected Samples: MPT-1517-SB01-0.8 [B901545-03], MPT-1517-SB02-0.8 [B901545-05], MPT-1517-SB03-0.8 [B901545-07]

The sample containers for the percent solid analysis were not received by the laboratory.

Lorraine Strong
Project Manager

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: Rinsate 1 033109 | Lab ID: B901545-01 | Sampled: 03/31/09 10:30 | Received: 03/31/09 16:15

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010B	09/27/09		04/01/09	10:57	4/2/2009 15:24
EPA 8082	03/31/10	04/01/10	04/01/09	10:56	4/2/2009 12:40
EPA 8260B	04/14/09		04/06/09	19:49	4/7/2009 20:57
FLPRO	04/07/09	05/12/09	04/02/09	08:21	4/2/2009 19:57

Client ID: Rinsate 1 033109 | Lab ID: B901545-01RE1 | Sampled: 03/31/09 10:30 | Received: 03/31/09 16:15

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010B	09/27/09		04/02/09	14:47	4/6/2009 14:12
EPA 6010B	09/27/09		04/02/09	14:47	4/6/2009 14:12
EPA 8270C	04/07/09	05/11/09	04/01/09	10:40	4/2/2009 14:16

Client ID: MPT-1517-SB01-0.5 | Lab ID: B901545-02 | Sampled: 03/31/09 13:50 | Received: 03/31/09 16:15

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010B	09/27/09		04/01/09	11:04	4/2/2009 15:41
EPA 6010B	09/27/09		04/01/09	11:04	4/2/2009 15:41
EPA 8082	03/31/10	04/02/10	04/02/09	10:55	4/6/2009 09:59
EPA 8270C	04/14/09	05/12/09	04/02/09	11:42	4/6/2009 15:42
FLPRO	04/14/09	05/16/09	04/06/09	10:12	4/6/2009 15:42

Client ID: MPT-1517-SB01-0.5 | Lab ID: B901545-02RE1 | Sampled: 03/31/09 13:50 | Received: 03/31/09 16:15

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010B	09/27/09		04/02/09	14:47	4/6/2009 14:14
EPA 6010B	09/27/09		04/02/09	14:47	4/6/2009 14:14

Client ID: MPT-1517-SB01-0.8 | Lab ID: B901545-03 | Sampled: 03/31/09 13:58 | Received: 03/31/09 16:15

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	04/14/09		03/31/09	16:15	4/10/2009 15:26

Client ID: MPT-1517-SB02-0.5 | Lab ID: B901545-04 | Sampled: 03/31/09 14:05 | Received: 03/31/09 16:15

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010B	09/27/09		04/01/09	11:04	4/2/2009 15:43
EPA 6010B	09/27/09		04/01/09	11:04	4/2/2009 15:43

Client ID: MPT-1517-SB02-0.8 | Lab ID: B901545-05 | Sampled: 03/31/09 14:08 | Received: 03/31/09 16:15

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	04/14/09		03/31/09	16:15	4/10/2009 16:00

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Client ID: MPT-1517-SB03-0.5	Lab ID: B901545-06	Sampled: 03/31/09 14:15	Received: 03/31/09 16:15

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 6010B	09/27/09	04/01/09 11:04	4/2/2009 15:45
EPA 6010B	09/27/09	04/01/09 11:04	4/2/2009 15:45

Client ID: MPT-1517-SB03-0.8	Lab ID: B901545-07RE1	Sampled: 03/31/09 14:18	Received: 03/31/09 16:15

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	04/14/09	03/31/09 16:15	4/10/2009 19:31

Client ID: Trip Blank B901545-06A	Lab ID: B901545-08RE1	Sampled: 03/31/09 00:00	Received: 03/31/09 16:15

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	04/14/09	04/06/09 19:49	4/9/2009 15:55

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SAMPLE DETECTION SUMMARY

Client ID: Rinsate 1 033109 — **Lab ID: B901545-01**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Arsenic - Total	4.6	I	2.5	10.0	ug/L	EPA 6010B	
Chromium - Total	0.6	I	0.3	10.0	ug/L	EPA 6010B	
Lead - Total	3.3	I	2.5	10.0	ug/L	EPA 6010B	
TPH (C8-C40)	0.039	I	0.035	0.170	mg/L	FLPRO	

Client ID: Rinsate 1 033109 — **Lab ID: B901545-01RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Chromium - TCLP	0.00667	IV	0.00160	0.0500	mg/L	EPA 6010B	
Naphthalene	0.072	I	0.022	0.10	ug/L	EPA 8270C	

Client ID: MPT-1517-SB01-0.5 — **Lab ID: B901545-02**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Arsenic - Total	3.65		1.18	2.68	mg/kg dry	EPA 6010B	
Cadmium - Total	0.2	I	0.03	0.3	mg/kg dry	EPA 6010B	
Chromium - Total	3.03	V	0.177	2.68	mg/kg dry	EPA 6010B	
Lead - Total	54.6		0.54	2.68	mg/kg dry	EPA 6010B	
TPH (C8-C40)	82.6		1.82	7.07	mg/kg dry	FLPRO	

Client ID: MPT-1517-SB01-0.5 — **Lab ID: B901545-02RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Arsenic - TCLP	0.0243	I	0.0125	0.0500	mg/L	EPA 6010B	
Chromium - TCLP	0.00260	IV	0.00160	0.0500	mg/L	EPA 6010B	
Lead - TCLP	0.0139	I	0.0125	0.0500	mg/L	EPA 6010B	

Client ID: MPT-1517-SB01-0.8 — **Lab ID: B901545-03**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Toluene	0.0006	I	0.0005	0.0010	mg/kg wet	EPA 8260B	

Client ID: MPT-1517-SB02-0.5 — **Lab ID: B901545-04**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Cadmium - Total	0.3		0.03	0.3	mg/kg dry	EPA 6010B	
Chromium - Total	3.44	V	0.174	2.64	mg/kg dry	EPA 6010B	
Lead - Total	47.0		0.53	2.64	mg/kg dry	EPA 6010B	

Client ID: MPT-1517-SB02-0.8 — **Lab ID: B901545-05**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Toluene	0.0005	I	0.0005	0.0010	mg/kg wet	EPA 8260B	

Client ID: MPT-1517-SB03-0.5 — **Lab ID: B901545-06**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Arsenic - Total	2.33	I	1.17	2.66	mg/kg dry	EPA 6010B	
Cadmium - Total	0.07	I	0.03	0.3	mg/kg dry	EPA 6010B	
Chromium - Total	2.44	IV	0.176	2.66	mg/kg dry	EPA 6010B	
Lead - Total	4.60		0.53	2.66	mg/kg dry	EPA 6010B	

Client ID: MPT-1517-SB03-0.8 — **Lab ID: B901545-07RE1**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Toluene	0.0005	I	0.0005	0.0010	mg/kg wet	EPA 8260B	

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ANALYTICAL RESULTS

Description: Rinsate 1 033109
Matrix: Water
Project: CTO-118 Naval Station Mayport

Lab Sample ID: B901545-01
Sampled: 03/31/09 10:30
Sampled By:

Received: 03/31/09 16:15
Work Order: B901545

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.35	U	ug/L	1	0.35	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.19	U	ug/L	1	0.19	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
1,1-Dichloroethane [75-34-3] ^	0.35	U	ug/L	1	0.35	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
1,1-Dichloroethene [75-35-4] ^	0.32	U	ug/L	1	0.32	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
1,2-Dibromoethane [106-93-4] ^	0.12	U	ug/L	1	0.12	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	QV-01
1,2-Dichlorobenzene [95-50-1] ^	0.40	U	ug/L	1	0.40	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
1,2-Dichloroethane [107-06-2] ^	0.44	U	ug/L	1	0.44	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
1,2-Dichloropropane [78-87-5] ^	0.49	U	ug/L	1	0.49	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
1,3-Dichlorobenzene [541-73-1] ^	0.35	U	ug/L	1	0.35	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
1,4-Dichlorobenzene [106-46-7] ^	0.26	U	ug/L	1	0.26	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	QV-01
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
Bromodichloromethane [75-27-4] ^	0.11	U	ug/L	1	0.11	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
Bromoform [75-25-2] ^	0.26	U	ug/L	1	0.26	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
Bromomethane [74-83-9]	0.44	U	ug/L	1	0.44	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
rbon tetrachloride [56-23-5] ^	0.42	U	ug/L	1	0.42	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
lorobenzene [108-90-7] ^	0.23	U	ug/L	1	0.23	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
Chloroethane [75-00-3] ^	0.34	U	ug/L	1	0.34	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
Chloroform [67-66-3] ^	0.40	U	ug/L	1	0.40	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
Chloromethane [74-87-3] ^	0.40	U	ug/L	1	0.40	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
cis-1,2-Dichloroethene [156-59-2] ^	0.31	U	ug/L	1	0.31	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
cis-1,3-Dichloropropene [10061-01-5] ^	0.28	U	ug/L	1	0.28	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
Dibromochloromethane [124-48-1] ^	0.28	U	ug/L	1	0.28	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
Dichlorodifluoromethane [75-71-8] ^	0.13	U	ug/L	1	0.13	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
Ethylbenzene [100-41-4] ^	0.28	U	ug/L	1	0.28	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
Methyl-tert-Butyl Ether [1634-04-4] ^	0.23	U	ug/L	1	0.23	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
Tetrachloroethene [127-18-4] ^	0.31	U	ug/L	1	0.31	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
Toluene [108-88-3] ^	0.35	U	ug/L	1	0.35	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
trans-1,2-Dichloroethene [156-60-5] ^	0.46	U	ug/L	1	0.46	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	QV-01
trans-1,3-Dichloropropene [10061-02-6] ^	0.27	U	ug/L	1	0.27	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
Trichloroethene [79-01-6] ^	0.56	U	ug/L	1	0.56	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
Trichlorofluoromethane [75-69-4] ^	0.41	U	ug/L	1	0.41	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
Vinyl chloride [75-01-4] ^	0.58	U	ug/L	1	0.58	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	
Xylenes (Total) [1330-20-7] ^	0.27	U	ug/L	1	0.27	1.0	9D06015	EPA 8260B	04/07/09 20:57	JAL	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*47*	*1*	*50.0*	*94 %*	*75-120*	*9D06015*	*EPA 8260B*	*04/07/09 20:57*	*JAL*	
Dibromofluoromethane	*51*	*1*	*50.0*	*102 %*	*85-115*	*9D06015*	*EPA 8260B*	*04/07/09 20:57*	*JAL*	
Toluene-d8	*49*	*1*	*50.0*	*99 %*	*85-120*	*9D06015*	*EPA 8260B*	*04/07/09 20:57*	*JAL*	

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Jacksonville certified analyte [NELAC E82277]

alyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
1-Methylnaphthalene [90-12-0]	0.01	U	ug/L	1	0.01	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	
2-Methylnaphthalene [91-57-6] ^	0.019	U	ug/L	1	0.019	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	

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Matrix: Water
Project: CTO-118 Naval Station Mayport

Lab Sample ID: B901545-01
Sampled: 03/31/09 10:30
Sampled By:

Received: 03/31/09 16:15
Work Order: B901545

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Acenaphthene [83-32-9] ^	0.016	U	ug/L	1	0.016	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	
Acenaphthylene [208-96-8] ^	0.011	U	ug/L	1	0.011	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	
Anthracene [120-12-7] ^	0.016	U	ug/L	1	0.016	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	
Benzo(a)anthracene [56-55-3] ^	0.014	U	ug/L	1	0.014	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	
Benzo(a)pyrene [50-32-8] ^	0.014	U	ug/L	1	0.014	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	
Benzo(b)fluoranthene [205-99-2] ^	0.014	U	ug/L	1	0.014	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	
Benzo(g,h,I)perylene [191-24-2] ^	0.032	U	ug/L	1	0.032	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	
Benzo(k)fluoranthene [207-08-9] ^	0.031	U	ug/L	1	0.031	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	
Chrysene [218-01-9] ^	0.011	U	ug/L	1	0.011	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	
Dibenzo(a,h)anthracene [53-70-3] ^	0.022	U	ug/L	1	0.022	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	
Fluoranthene [206-44-0] ^	0.011	U	ug/L	1	0.011	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	
Fluorene [86-73-7] ^	0.011	U	ug/L	1	0.011	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	0.016	U	ug/L	1	0.016	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	
Naphthalene [91-20-3] ^	**0.072**	I	ug/L	1	0.022	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	
Phenanthrene [85-01-8] ^	0.016	U	ug/L	1	0.016	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	
Pyrene [129-00-0] ^	0.009	U	ug/L	1	0.009	0.10	9D01006	EPA 8270C	04/02/09 14:16	PDG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*3.1*	*1*	*5.00*	*62 %*	*39-148*	*9D01006*	*EPA 8270C*	*04/02/09 14:16*	*PDG*	

Polychlorinated Biphenyls by GC

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.32	U	ug/L	1	0.32	1.0	9D01010	EPA 8082	04/02/09 12:40	LJC	
PCB-1221 [11104-28-2] ^	0.32	U	ug/L	1	0.32	1.0	9D01010	EPA 8082	04/02/09 12:40	LJC	
PCB-1232 [11141-16-5] ^	0.32	U	ug/L	1	0.32	1.0	9D01010	EPA 8082	04/02/09 12:40	LJC	
PCB-1248 [12672-29-6] ^	0.32	U	ug/L	1	0.32	1.0	9D01010	EPA 8082	04/02/09 12:40	LJC	
PCB-1254 [11097-69-1] ^	0.32	U	ug/L	1	0.32	1.0	9D01010	EPA 8082	04/02/09 12:40	LJC	
PCB-1260 [11096-82-5] ^	0.32	U	ug/L	1	0.32	1.0	9D01010	EPA 8082	04/02/09 12:40	LJC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.97*	*1*	*1.00*	*97 %*	*38-142*	*9D01010*	*EPA 8082*	*04/02/09 12:40*	*LJC*	
Decachlorobiphenyl	*1.2*	*1*	*1.00*	*116 %*	*40-135*	*9D01010*	*EPA 8082*	*04/02/09 12:40*	*LJC*	

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Description: Rinsate 1 033109
Matrix: Water
Project: CTO-118 Naval Station Mayport

Lab Sample ID: B901545-01
Sampled: 03/31/09 10:30
Sampled By:

Received: 03/31/09 16:15
Work Order: B901545

FL Petroleum Range Organics

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
TPH (C8-C40) [ECL-0175] ^	0.039	I	mg/L	1	0.035	0.170	9D02002	FLPRO	04/02/09 19:57	PDG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
n-Nonatriacontane	0.0447	1	0.100	45 %	37-189	9D02002	FLPRO	04/02/09 19:57	PDG	
o-Terphenyl	0.0379	1	0.0500	76 %	68-118	9D02002	FLPRO	04/02/09 19:57	PDG	

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Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	**4.6**	I	ug/L	1	2.5	10.0	9D01012	EPA 6010B	04/02/09 15:24	ACV	
Cadmium [7440-43-9] ^	0.310	U	ug/L	1	0.310	1	9D01012	EPA 6010B	04/02/09 15:24	ACV	
Chromium [7440-47-3] ^	**0.6**	I	ug/L	1	0.3	10.0	9D01012	EPA 6010B	04/02/09 15:24	ACV	
Lead [7439-92-1] ^	**3.3**	I	ug/L	1	2.5	10.0	9D01012	EPA 6010B	04/02/09 15:24	ACV	

TCLP Metals by 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	0.0125	U	mg/L	1	0.0125	0.0500	9D02019	EPA 6010B	04/06/09 14:12	ACV	
Cadmium [7440-43-9] ^	0.0016	U	mg/L	1	0.0016	0.0050	9D02019	EPA 6010B	04/06/09 14:12	ACV	
Chromium [7440-47-3] ^	**0.00667**	IV	mg/L	1	0.00160	0.0500	9D02019	EPA 6010B	04/06/09 14:12	ACV	
Lead [7439-92-1] ^	0.0125	U	mg/L	1	0.0125	0.0500	9D02019	EPA 6010B	04/06/09 14:12	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: MPT-1517-SB01-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport

Lab Sample ID: B901545-02
Sampled: 03/31/09 13:50
Sampled By:

Received: 03/31/09 16:15
Work Order: B901545
% Solids: 93.33

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
1-Methylnaphthalene [90-12-0]	0.016	U	mg/kg dry	1	0.016	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	
2-Methylnaphthalene [91-57-6] ^	0.011	U	mg/kg dry	1	0.011	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	
Acenaphthene [83-32-9] ^	0.011	U	mg/kg dry	1	0.011	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	
Acenaphthylene [208-96-8] ^	0.010	U	mg/kg dry	1	0.010	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	
Anthracene [120-12-7] ^	0.0091	U	mg/kg dry	1	0.0091	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	
Benzo(a)anthracene [56-55-3] ^	0.0069	U	mg/kg dry	1	0.0069	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	
Benzo(a)pyrene [50-32-8] ^	0.020	U	mg/kg dry	1	0.020	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	
Benzo(b)fluoranthene [205-99-2] ^	0.010	U	mg/kg dry	1	0.010	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	
Benzo(g,h,i)perylene [191-24-2] ^	0.010	U	mg/kg dry	1	0.010	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	
Benzo(k)fluoranthene [207-08-9] ^	0.012	U	mg/kg dry	1	0.012	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	
Chrysene [218-01-9] ^	0.0040	U	mg/kg dry	1	0.0040	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	
Dibenzo(a,h)anthracene [53-70-3] ^	0.013	U	mg/kg dry	1	0.013	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	
Fluoranthene [206-44-0] ^	0.0099	U	mg/kg dry	1	0.0099	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	
Fluorene [86-73-7] ^	0.011	U	mg/kg dry	1	0.011	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	0.012	U	mg/kg dry	1	0.012	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	
Naphthalene [91-20-3] ^	0.020	U	mg/kg dry	1	0.020	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	
Phenanthrene [85-01-8] ^	0.0098	U	mg/kg dry	1	0.0098	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	
Pyrene [129-00-0] ^	0.0081	U	mg/kg dry	1	0.0081	0.035	9D02010	EPA 8270C	04/06/09 15:42	PDG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
Terphenyl	*1.3*	*1*	*1.79*	*75 %*	*61-150*	*9D02010*	*EPA 8270C*	*04/06/09 15:42*	*PDG*	

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Description: MPT-1517-SB01-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport

Lab Sample ID: B901545-02
Sampled: 03/31/09 13:50
Sampled By:

Received: 03/31/09 16:15
Work Order: B901545
% Solids: 93.33

Polychlorinated Biphenyls by GC

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.0096	U	mg/kg dry	1	0.0096	0.035	9D02009	EPA 8082	04/06/09 09:59	LJC	
PCB-1221 [11104-28-2] ^	0.0096	U	mg/kg dry	1	0.0096	0.035	9D02009	EPA 8082	04/06/09 09:59	LJC	
PCB-1232 [11141-16-5] ^	0.0096	U	mg/kg dry	1	0.0096	0.035	9D02009	EPA 8082	04/06/09 09:59	LJC	
PCB-1248 [12672-29-6] ^	0.0096	U	mg/kg dry	1	0.0096	0.035	9D02009	EPA 8082	04/06/09 09:59	LJC	
PCB-1254 [11097-69-1] ^	0.0096	U	mg/kg dry	1	0.0096	0.035	9D02009	EPA 8082	04/06/09 09:59	LJC	
PCB-1260 [11096-82-5] ^	0.0096	U	mg/kg dry	1	0.0096	0.035	9D02009	EPA 8082	04/06/09 09:59	LJC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.040*	*1*	*0.0357*	*111 %*	*0-200*	*9D02009*	*EPA 8082*	*04/06/09 09:59*	*LJC*	
Decachlorobiphenyl	*0.039*	*1*	*0.0357*	*109 %*	*60-125*	*9D02009*	*EPA 8082*	*04/06/09 09:59*	*LJC*	

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Description: MPT-1517-SB01-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport

Lab Sample ID: B901545-02
Sampled: 03/31/09 13:50
Sampled By:

Received: 03/31/09 16:15
Work Order: B901545
% Solids: 93.33

FL Petroleum Range Organics

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
TPH (C8-C40) [ECL-0175] ^	82.6		mg/kg dry	1	1.82	7.07	9D06006	FLPRO	04/06/09 15:42	PDG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
n-Nonatriacontane	*3.19*	*1*	*3.57*	*89 %*	*23-189*	*9D06006*	*FLPRO*	*04/06/09 15:42*	*PDG*	
o-Terphenyl	*1.71*	*1*	*1.79*	*96 %*	*64-118*	*9D06006*	*FLPRO*	*04/06/09 15:42*	*PDG*	

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Description: MPT-1517-SB01-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport

Lab Sample ID: B901545-02
Sampled: 03/31/09 13:50
Sampled By:

Received: 03/31/09 16:15
Work Order: B901545
% Solids: 93.33

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	**3.65**		mg/kg dry	5	1.18	2.68	9D01016	EPA 6010B	04/02/09 15:41	ACV	
Cadmium [7440-43-9] ^	**0.2**	I	mg/kg dry	5	0.03	0.3	9D01016	EPA 6010B	04/02/09 15:41	ACV	
Chromium [7440-47-3] ^	**3.03**	V	mg/kg dry	5	0.177	2.68	9D01016	EPA 6010B	04/02/09 15:41	ACV	
Lead [7439-92-1] ^	**54.6**		mg/kg dry	5	0.54	2.68	9D01016	EPA 6010B	04/02/09 15:41	ACV	

TCLP Metals by 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	**0.0243**	I	mg/L	1	0.0125	0.0500	9D02019	EPA 6010B	04/06/09 14:14	ACV	
Cadmium [7440-43-9] ^	0.0016	U	mg/L	1	0.0016	0.0050	9D02019	EPA 6010B	04/06/09 14:14	ACV	
Chromium [7440-47-3] ^	**0.00260**	IV	mg/L	1	0.00160	0.0500	9D02019	EPA 6010B	04/06/09 14:14	ACV	
Lead [7439-92-1] ^	**0.0139**	I	mg/L	1	0.0125	0.0500	9D02019	EPA 6010B	04/06/09 14:14	ACV	

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Description: MPT-1517-SB01-0.8
Matrix: Soil
Project: CTO-118 Naval Station Mayport

Lab Sample ID: B901545-03
Sampled: 03/31/09 13:58
Sampled By:

Received: 03/31/09 16:15
Work Order: B901545
% Solids:

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
1,1,2-Trichloroethane [79-00-5] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
1,1-Dichloroethane [75-34-3] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
1,1-Dichloroethene [75-35-4] ^	0.0005	U	mg/kg wet	1	0.0005	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
1,2-Dichlorobenzene [95-50-1] ^	0.0005	U	mg/kg wet	1	0.0005	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
1,2-Dichloroethane [107-06-2] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
1,2-Dichloropropane [78-87-5] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
1,3-Dichlorobenzene [541-73-1] ^	0.0005	U	mg/kg wet	1	0.0005	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
1,3-Dichloropropane [142-28-9] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
1,4-Dichlorobenzene [106-46-7] ^	0.0005	U	mg/kg wet	1	0.0005	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
2-Chloroethyl Vinyl Ether [110-75-8] ^	0.0014	U	mg/kg wet	1	0.0014	0.0050	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Benzene [71-43-2] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Bromodichloromethane [75-27-4] ^	0.0002	U	mg/kg wet	1	0.0002	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Bromoform [75-25-2] ^	0.0002	U	mg/kg wet	1	0.0002	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Bromomethane [74-83-9] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Carbon Tetrachloride [56-23-5] ^	0.0002	U	mg/kg wet	1	0.0002	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Chlorobenzene [108-90-7] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Chloroethane [75-00-3] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Chloroform [67-66-3] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Chloromethane [74-87-3] ^	0.0001	U	mg/kg wet	1	0.0001	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
cis-1,2-Dichloroethene [156-59-2] ^	0.0002	U	mg/kg wet	1	0.0002	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
cis-1,3-Dichloropropene [10061-01-5] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Dibromochloromethane [124-48-1] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Dichlorodifluoromethane [75-71-8] ^	0.0002	U	mg/kg wet	1	0.0002	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Ethylbenzene [100-41-4] ^	0.0006	U	mg/kg wet	1	0.0006	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Methylene Chloride [75-09-2] ^	0.0020	U	mg/kg wet	1	0.0020	0.0020	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Methyl-tert-Butyl Ether [1634-04-4] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Tetrachloroethene [127-18-4] ^	0.0007	U	mg/kg wet	1	0.0007	0.0020	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Toluene [108-88-3] ^	**0.0006**	I	mg/kg wet	1	0.0005	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
trans-1,2-Dichloroethene [156-60-5] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
trans-1,3-Dichloropropene [10061-02-6] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Trichloroethene [79-01-6] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Trichlorofluoromethane [75-69-4] ^	0.0001	U	mg/kg wet	1	0.0001	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Vinyl chloride [75-01-4] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 15:26	JAL	
Xylenes (Total) [1330-20-7] ^	0.0011	U	mg/kg wet	1	0.0011	0.0020	9D10015	EPA 8260B	04/10/09 15:26	JAL	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*51*	*1*	*50.0*	*102 %*	*77-122*	*9D10015*	*EPA 8260B*	*04/10/09 15:26*	*JAL*	
Dibromofluoromethane	*52*	*1*	*50.0*	*103 %*	*76-125*	*9D10015*	*EPA 8260B*	*04/10/09 15:26*	*JAL*	
Toluene-d8	*48*	*1*	*50.0*	*96 %*	*80-117*	*9D10015*	*EPA 8260B*	*04/10/09 15:26*	*JAL*	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: MPT-1517-SB02-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport

Lab Sample ID: B901545-04
Sampled: 03/31/09 14:05
Sampled By:

Received: 03/31/09 16:15
Work Order: B901545
% Solids: 94.56

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	1.16	U	mg/kg dry	5	1.16	2.64	9D01016	EPA 6010B	04/02/09 15:43	ACV	
Cadmium [7440-43-9] ^	**0.3**		mg/kg dry	5	0.03	0.3	9D01016	EPA 6010B	04/02/09 15:43	ACV	
Chromium [7440-47-3] ^	**3.44**	V	mg/kg dry	5	0.174	2.64	9D01016	EPA 6010B	04/02/09 15:43	ACV	
Lead [7439-92-1] ^	**47.0**		mg/kg dry	5	0.53	2.64	9D01016	EPA 6010B	04/02/09 15:43	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: MPT-1517-SB02-0.8
Matrix: Soil
Project: CTO-118 Naval Station Mayport

Lab Sample ID: B901545-05
Sampled: 03/31/09 14:08
Sampled By:

Received: 03/31/09 16:15
Work Order: B901545
% Solids:

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
1,1,2-Trichloroethane [79-00-5] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
1,1-Dichloroethane [75-34-3] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
1,1-Dichloroethene [75-35-4] ^	0.0005	U	mg/kg wet	1	0.0005	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
1,2-Dichlorobenzene [95-50-1] ^	0.0005	U	mg/kg wet	1	0.0005	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
1,2-Dichloroethane [107-06-2] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
1,2-Dichloropropane [78-87-5] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
1,3-Dichlorobenzene [541-73-1] ^	0.0005	U	mg/kg wet	1	0.0005	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
1,3-Dichloropropene [142-28-9] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
1,4-Dichlorobenzene [106-46-7] ^	0.0005	U	mg/kg wet	1	0.0005	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
2-Chloroethyl Vinyl Ether [110-75-8] ^	0.0014	U	mg/kg wet	1	0.0014	0.0050	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Benzene [71-43-2] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Bromodichloromethane [75-27-4] ^	0.0002	U	mg/kg wet	1	0.0002	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Bromoform [75-25-2] ^	0.0002	U	mg/kg wet	1	0.0002	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Bromomethane [74-83-9] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Carbon Tetrachloride [56-23-5] ^	0.0002	U	mg/kg wet	1	0.0002	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Chlorobenzene [108-90-7] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Chloroethane [75-00-3] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
loroform [67-66-3] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
loromethane [74-87-3] ^	0.0001	U	mg/kg wet	1	0.0001	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
cis-1,2-Dichloroethene [156-59-2] ^	0.0002	U	mg/kg wet	1	0.0002	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
cis-1,3-Dichloropropene [10061-01-5] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Dibromochloromethane [124-48-1] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Dichlorodifluoromethane [75-71-8] ^	0.0002	U	mg/kg wet	1	0.0002	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Ethylbenzene [100-41-4] ^	0.0006	U	mg/kg wet	1	0.0006	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Methylene Chloride [75-09-2] ^	0.0020	U	mg/kg wet	1	0.0020	0.0020	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Methyl-tert-Butyl Ether [1634-04-4] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Tetrachloroethene [127-18-4] ^	0.0007	U	mg/kg wet	1	0.0007	0.0020	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Toluene [108-88-3] ^	**0.0005**	**I**	mg/kg wet	1	0.0005	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
trans-1,2-Dichloroethene [156-60-5] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
trans-1,3-Dichloropropene [10061-02-6] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Trichloroethene [79-01-6] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Trichlorofluoromethane [75-69-4] ^	0.0001	U	mg/kg wet	1	0.0001	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Vinyl chloride [75-01-4] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 16:00	JAL	
Xylenes (Total) [1330-20-7] ^	0.0011	U	mg/kg wet	1	0.0011	0.0020	9D10015	EPA 8260B	04/10/09 16:00	JAL	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*50*	*1*	*50.0*	*101 %*	*77-122*	*9D10015*	*EPA 8260B*	*04/10/09 16:00*	*JAL*	
Dibromofluoromethane	*50*	*1*	*50.0*	*100 %*	*76-125*	*9D10015*	*EPA 8260B*	*04/10/09 16:00*	*JAL*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*80-117*	*9D10015*	*EPA 8260B*	*04/10/09 16:00*	*JAL*	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: MPT-1517-SB03-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport

Lab Sample ID: B901545-06
Sampled: 03/31/09 14:15
Sampled By:

Received: 03/31/09 16:15
Work Order: B901545
% Solids: 93.88

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	2.33	I	mg/kg dry	5	1.17	2.66	9D01016	EPA 6010B	04/02/09 15:45	ACV	
Cadmium [7440-43-9] ^	0.07	I	mg/kg dry	5	0.03	0.3	9D01016	EPA 6010B	04/02/09 15:45	ACV	
Chromium [7440-47-3] ^	2.44	IV	mg/kg dry	5	0.176	2.66	9D01016	EPA 6010B	04/02/09 15:45	ACV	
Lead [7439-92-1] ^	4.60		mg/kg dry	5	0.53	2.66	9D01016	EPA 6010B	04/02/09 15:45	ACV	

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Description: MPT-1517-SB03-0.8
Matrix: Soil
Project: CTO-118 Naval Station Mayport

Lab Sample ID: B901545-07
Sampled: 03/31/09 14:18
Sampled By:

Received: 03/31/09 16:15
Work Order: B901545
% Solids:

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
1,1,2-Trichloroethane [79-00-5] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
1,1-Dichloroethane [75-34-3] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
1,1-Dichloroethene [75-35-4] ^	0.0005	U	mg/kg wet	1	0.0005	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
1,2-Dichlorobenzene [95-50-1] ^	0.0005	U	mg/kg wet	1	0.0005	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
1,2-Dichloroethane [107-06-2] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
1,2-Dichloropropane [78-87-5] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
1,3-Dichlorobenzene [541-73-1] ^	0.0005	U	mg/kg wet	1	0.0005	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
1,3-Dichloropropane [142-28-9] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
1,4-Dichlorobenzene [106-46-7] ^	0.0005	U	mg/kg wet	1	0.0005	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
2-Chloroethyl Vinyl Ether [110-75-8] ^	0.0014	U	mg/kg wet	1	0.0014	0.0050	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Benzene [71-43-2] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Bromodichloromethane [75-27-4] ^	0.0002	U	mg/kg wet	1	0.0002	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Bromoform [75-25-2] ^	0.0002	U	mg/kg wet	1	0.0002	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Bromomethane [74-83-9] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Carbon Tetrachloride [56-23-5] ^	0.0002	U	mg/kg wet	1	0.0002	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Chlorobenzene [108-90-7] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Chloroethane [75-00-3] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Chloroform [67-66-3] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Chloromethane [74-87-3] ^	0.0001	U	mg/kg wet	1	0.0001	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
cis-1,2-Dichloroethene [156-59-2] ^	0.0002	U	mg/kg wet	1	0.0002	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
cis-1,3-Dichloropropene [10061-01-5] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Dibromochloromethane [124-48-1] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Dichlorodifluoromethane [75-71-8] ^	0.0002	U	mg/kg wet	1	0.0002	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Ethylbenzene [100-41-4] ^	0.0006	U	mg/kg wet	1	0.0006	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Methylene Chloride [75-09-2] ^	0.0020	U	mg/kg wet	1	0.0020	0.0020	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Methyl-tert-Butyl Ether [1634-04-4] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Tetrachloroethene [127-18-4] ^	0.0007	U	mg/kg wet	1	0.0007	0.0020	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Toluene [108-88-3] ^	**0.0005**	I	mg/kg wet	1	0.0005	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
trans-1,2-Dichloroethene [156-60-5] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
trans-1,3-Dichloropropene [10061-02-6] ^	0.0003	U	mg/kg wet	1	0.0003	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Trichloroethene [79-01-6] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Trichlorofluoromethane [75-69-4] ^	0.0001	U	mg/kg wet	1	0.0001	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Vinyl chloride [75-01-4] ^	0.0004	U	mg/kg wet	1	0.0004	0.0010	9D10015	EPA 8260B	04/10/09 19:31	JAL	
Xylenes (Total) [1330-20-7] ^	0.0011	U	mg/kg wet	1	0.0011	0.0020	9D10015	EPA 8260B	04/10/09 19:31	JAL	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*52*	*1*	*50.0*	*104 %*	*77-122*	*9D10015*	*EPA 8260B*	*04/10/09 19:31*	*JAL*	
Dibromofluoromethane	*52*	*1*	*50.0*	*104 %*	*76-125*	*9D10015*	*EPA 8260B*	*04/10/09 19:31*	*JAL*	
Toluene-d8	*51*	*1*	*50.0*	*102 %*	*80-117*	*9D10015*	*EPA 8260B*	*04/10/09 19:31*	*JAL*	

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Description: Trip Blank B901545-06A
Matrix: Water
Project: CTO-118 Naval Station Mayport

Lab Sample ID: B901545-08
Sampled: 03/31/09 00:00
Sampled By:

Received: 03/31/09 16:15
Work Order: B901545

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	0.35	U	ug/L	1	0.35	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.19	U	ug/L	1	0.19	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	QV-03
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	QV-03
1,1-Dichloroethane [75-34-3] ^	0.35	U	ug/L	1	0.35	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
1,1-Dichloroethene [75-35-4] ^	0.32	U	ug/L	1	0.32	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
1,2-Dibromoethane [106-93-4] ^	0.12	U	ug/L	1	0.12	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	QV-03
1,2-Dichlorobenzene [95-50-1] ^	0.40	U	ug/L	1	0.40	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	QV-03
1,2-Dichloroethane [107-06-2] ^	0.44	U	ug/L	1	0.44	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
1,2-Dichloropropane [78-87-5] ^	0.49	U	ug/L	1	0.49	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
1,3-Dichlorobenzene [541-73-1] ^	0.35	U	ug/L	1	0.35	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
1,4-Dichlorobenzene [106-46-7] ^	0.26	U	ug/L	1	0.26	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	QV-03
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	QV-03
Bromodichloromethane [75-27-4] ^	0.11	U	ug/L	1	0.11	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	QV-03
Bromoform [75-25-2] ^	0.26	U	ug/L	1	0.26	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	QV-03
Bromomethane [74-83-9]	0.44	U	ug/L	1	0.44	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	QV-03
Carbon tetrachloride [56-23-5] ^	0.42	U	ug/L	1	0.42	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	QV-03
Chlorobenzene [108-90-7] ^	0.23	U	ug/L	1	0.23	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
Chloroethane [75-00-3] ^	0.34	U	ug/L	1	0.34	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
Chloroform [67-66-3] ^	0.40	U	ug/L	1	0.40	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
Chloromethane [74-87-3] ^	0.40	U	ug/L	1	0.40	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	QV-03
cis-1,2-Dichloroethene [156-59-2] ^	0.31	U	ug/L	1	0.31	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	QV-03
cis-1,3-Dichloropropene [10061-01-5] ^	0.28	U	ug/L	1	0.28	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	QV-03
Dibromochloromethane [124-48-1] ^	0.28	U	ug/L	1	0.28	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	QV-03
Dichlorodifluoromethane [75-71-8] ^	0.13	U	ug/L	1	0.13	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	QV-03
Ethylbenzene [100-41-4] ^	0.28	U	ug/L	1	0.28	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
Methylene chloride [75-09-2] ^	0.23	U	ug/L	1	0.23	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
Methyl-tert-Butyl Ether [1634-04-4] ^	0.23	U	ug/L	1	0.23	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
Tetrachloroethene [127-18-4] ^	0.31	U	ug/L	1	0.31	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	QV-03
Toluene [108-88-3] ^	0.35	U	ug/L	1	0.35	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
trans-1,2-Dichloroethene [156-60-5] ^	0.46	U	ug/L	1	0.46	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
trans-1,3-Dichloropropene [10061-02-6] ^	0.27	U	ug/L	1	0.27	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
Trichloroethene [79-01-6] ^	0.56	U	ug/L	1	0.56	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
Trichlorofluoromethane [75-69-4] ^	0.41	U	ug/L	1	0.41	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
Vinyl chloride [75-01-4] ^	0.58	U	ug/L	1	0.58	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	
Xylenes (Total) [1330-20-7] ^	0.27	U	ug/L	1	0.27	1.0	9D06015	EPA 8260B	04/09/09 15:55	JAL	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*50*	*1*	*50.0*	*100 %*	*75-120*	*9D06015*	*EPA 8260B*	*04/09/09 15:55*	*JAL*	
Dibromofluoromethane	*52*	*1*	*50.0*	*105 %*	*85-115*	*9D06015*	*EPA 8260B*	*04/09/09 15:55*	*JAL*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*85-120*	*9D06015*	*EPA 8260B*	*04/09/09 15:55*	*JAL*	

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QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 9D06015 - EPA 5030B_MS

Blank (9D06015-BLK1)

Prepared: 04/06/2009 19:49 Analyzed: 04/07/2009 13:41

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.35	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.19	U	1.0	ug/L							
1,1,2-Trichloroethane	0.40	U	1.0	ug/L							
1,1-Dichloroethane	0.35	U	1.0	ug/L							
1,1-Dichloroethene	0.32	U	1.0	ug/L							
1,2-Dibromoethane	0.12	U	1.0	ug/L							
1,2-Dichlorobenzene	0.40	U	1.0	ug/L							
1,2-Dichloroethane	0.44	U	1.0	ug/L							
1,2-Dichloropropane	0.49	U	1.0	ug/L							
1,3-Dichlorobenzene	0.35	U	1.0	ug/L							
1,4-Dichlorobenzene	0.26	U	1.0	ug/L							
2-Chloroethyl Vinyl Ether	1.5	U	5.0	ug/L							
Benzene	0.27	U	1.0	ug/L							
Bromodichloromethane	0.11	U	1.0	ug/L							
Bromoform	0.26	U	1.0	ug/L							
Bromomethane	0.44	U	1.0	ug/L							
Carbon tetrachloride	0.42	U	1.0	ug/L							
Chlorobenzene	0.23	U	1.0	ug/L							
Chloroethane	0.34	U	1.0	ug/L							
Chloroform	0.40	U	1.0	ug/L							
Chloromethane	0.40	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.31	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.28	U	1.0	ug/L							
Dibromochloromethane	0.28	U	1.0	ug/L							
Dichlorodifluoromethane	0.13	U	1.0	ug/L							
Ethylbenzene	0.28	U	1.0	ug/L							
Methylene chloride	0.23	U	1.0	ug/L							
Methyl-tert-Butyl Ether	0.23	U	1.0	ug/L							
Tetrachloroethene	0.31	U	1.0	ug/L							
Toluene	0.35	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.46	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.27	U	1.0	ug/L							
Trichloroethene	0.56	U	1.0	ug/L							
Trichlorofluoromethane	0.41	U	1.0	ug/L							
Vinyl chloride	0.58	U	1.0	ug/L							
Xylenes (Total)	0.27	U	1.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*50*			*ug/L*	*50.0*		*100*	*75-120*			
Surrogate: Dibromofluoromethane	*48*			*ug/L*	*50.0*		*97*	*85-115*			
Surrogate: Toluene-d8	*51*			*ug/L*	*50.0*		*101*	*85-120*			

LCS (9D06015-BS1)

Prepared: 04/06/2009 19:49 Analyzed: 04/07/2009 14:55

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	21		1.0	ug/L	20.0		104	65-130			
1,1,2,2-Tetrachloroethane	18		1.0	ug/L	20.0		92	65-130			
1,1,2-Trichloroethane	19		1.0	ug/L	20.0		96	75-125			
1,1-Dichloroethane	21		1.0	ug/L	20.0		103	70-135			
1,1-Dichloroethene	20		1.0	ug/L	20.0		100	70-130			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 9D06015 - EPA 5030B_MS

LCS (9D06015-BS1) Continued Prepared: 04/06/2009 19:49 Analyzed: 04/07/2009 14:55

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2-Dibromoethane	19		1.0	ug/L	20.0		93	80-120			
1,2-Dichlorobenzene	22		1.0	ug/L	20.0		110	70-120			
1,2-Dichloroethane	20		1.0	ug/L	20.0		100	70-130			
1,2-Dichloropropane	21		1.0	ug/L	20.0		103	75-125			
1,3-Dichlorobenzene	23		1.0	ug/L	20.0		115	75-125			
1,4-Dichlorobenzene	23		1.0	ug/L	20.0		114	75-125			
2-Chloroethyl Vinyl Ether	100		5.0	ug/L	100		102	10-200			
Benzene	21		1.0	ug/L	20.0		105	80-120			
Bromodichloromethane	20		1.0	ug/L	20.0		98	75-120			
Bromoform	18		1.0	ug/L	20.0		92	70-130			
Bromomethane	13		1.0	ug/L	20.0		66	30-145			
Carbon tetrachloride	20		1.0	ug/L	20.0		99	65-140			
Chlorobenzene	22		1.0	ug/L	20.0		109	80-120			
Chloroethane	20		1.0	ug/L	20.0		101	60-135			
Chloroform	19		1.0	ug/L	20.0		97	65-135			
Chloromethane	17		1.0	ug/L	20.0		83	40-125			
cis-1,2-Dichloroethene	20		1.0	ug/L	20.0		98	70-125			
cis-1,3-Dichloropropene	20		1.0	ug/L	20.0		100	70-130			
Dibromochloromethane	20		1.0	ug/L	20.0		100	60-135			
Dichlorodifluoromethane	12		1.0	ug/L	20.0		61	30-155			
Ethylbenzene	20		1.0	ug/L	20.0		100	75-125			
m,p-Xylenes	44		2.0	ug/L	40.0		110	75-130			
Methylene chloride	20		1.0	ug/L	20.0		101	55-140			
Methyl-tert-Butyl Ether	20		1.0	ug/L	20.0		99	65-125			
o-Xylene	22		1.0	ug/L	20.0		108	80-120			
Tetrachloroethene	22		1.0	ug/L	20.0		108	45-150			
Toluene	22		1.0	ug/L	20.0		110	75-120			
trans-1,2-Dichloroethene	20		1.0	ug/L	20.0		101	60-140			
trans-1,3-Dichloropropene	22		1.0	ug/L	20.0		111	55-140			
Trichloroethene	19		1.0	ug/L	20.0		95	70-125			
Trichlorofluoromethane	19		1.0	ug/L	20.0		97	60-145			
Vinyl chloride	15		1.0	ug/L	20.0		77	50-145			
Surrogate: 4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*94*	*75-120*			
Surrogate: Dibromofluoromethane	*50*			*ug/L*	*50.0*		*100*	*85-115*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*98*	*85-120*			

Matrix Spike (9D06015-MS1) Prepared: 04/06/2009 19:49 Analyzed: 04/07/2009 15:28

Source: B901543-04

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	22		1.0	ug/L	20.0	0.35 U	112	65-130			
1,1,2,2-Tetrachloroethane	23		1.0	ug/L	20.0	0.19 U	116	65-130			
1,1,2-Trichloroethane	22		1.0	ug/L	20.0	0.40 U	112	75-125			
1,1-Dichloroethane	23		1.0	ug/L	20.0	0.35 U	113	70-135			
1,1-Dichloroethene	22		1.0	ug/L	20.0	0.32 U	108	70-130			
1,2-Dibromoethane	22		1.0	ug/L	20.0	0.12 U	109	80-120			
1,2-Dichlorobenzene	25		1.0	ug/L	20.0	4.2	104	70-120			
1,2-Dichloroethane	23		1.0	ug/L	20.0	0.44 U	116	70-130			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 9D06015 - EPA 5030B_MS

Matrix Spike (9D06015-MS1) Continued

Source: B901543-04

Prepared: 04/06/2009 19:49 Analyzed: 04/07/2009 15:28

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2-Dichloropropane	22		1.0	ug/L	20.0	0.49 U	108	75-125			
1,3-Dichlorobenzene	25		1.0	ug/L	20.0	0.35 U	125	75-125			
1,4-Dichlorobenzene	25		1.0	ug/L	20.0	0.26 U	126	75-125			QM-07
2-Chloroethyl Vinyl Ether	100		5.0	ug/L	100	1.5 U	100	10-200			
Benzene	23		1.0	ug/L	20.0	0.27 U	114	80-120			
Bromodichloromethane	21		1.0	ug/L	20.0	0.11 U	106	75-120			
Bromoform	21		1.0	ug/L	20.0	0.26 U	107	70-130			
Bromomethane	14		1.0	ug/L	20.0	0.44 U	69	30-145			
Carbon tetrachloride	22		1.0	ug/L	20.0	0.42 U	111	65-140			
Chlorobenzene	24		1.0	ug/L	20.0	0.23 U	118	80-120			
Chloroethane	22		1.0	ug/L	20.0	0.34 U	108	60-135			
Chloroform	22		1.0	ug/L	20.0	0.40 U	108	65-135			
Chloromethane	17		1.0	ug/L	20.0	0.40 U	87	40-125			
cis-1,2-Dichloroethene	21		1.0	ug/L	20.0	0.31 U	104	70-125			
cis-1,3-Dichloropropene	22		1.0	ug/L	20.0	0.28 U	111	70-130			
Dibromochloromethane	22		1.0	ug/L	20.0	0.28 U	111	60-135			
Dichlorodifluoromethane	13		1.0	ug/L	20.0	0.13 U	63	30-155			
Ethylbenzene	22		1.0	ug/L	20.0	0.28 U	108	75-125			
m,p-Xylenes	47		2.0	ug/L	40.0	0.24 U	117	75-130			
Methylene chloride	22		1.0	ug/L	20.0	3.8	92	55-140			
Methyl-tert-Butyl Ether	25		1.0	ug/L	20.0	0.23 U	123	65-125			
o-Xylene	23		1.0	ug/L	20.0	0.27 U	115	80-120			
Tetrachloroethene	22		1.0	ug/L	20.0	0.31 U	108	45-150			
Toluene	23		1.0	ug/L	20.0	0.35 U	117	75-120			
trans-1,2-Dichloroethene	21		1.0	ug/L	20.0	0.46 U	107	60-140			
trans-1,3-Dichloropropene	25		1.0	ug/L	20.0	0.27 U	126	55-140			
Trichloroethene	20		1.0	ug/L	20.0	0.56 U	100	70-125			
Trichlorofluoromethane	21		1.0	ug/L	20.0	0.41 U	105	60-145			
Vinyl chloride	16		1.0	ug/L	20.0	0.58 U	82	50-145			
Surrogate: 4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*95*	*75-120*			
Surrogate: Dibromofluoromethane	*49*			*ug/L*	*50.0*		*99*	*85-115*			
Surrogate: Toluene-d8	*51*			*ug/L*	*50.0*		*101*	*85-120*			

Matrix Spike Dup (9D06015-MSD1)

Source: B901543-04

Prepared: 04/06/2009 19:49 Analyzed: 04/07/2009 16:00

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	20		1.0	ug/L	20.0	0.35 U	98	65-130	13	30	
1,1,2,2-Tetrachloroethane	18		1.0	ug/L	20.0	0.19 U	89	65-130	26	30	
1,1,2-Trichloroethane	19		1.0	ug/L	20.0	0.40 U	95	75-125	16	30	
1,1-Dichloroethane	20		1.0	ug/L	20.0	0.35 U	102	70-135	11	30	
1,1-Dichloroethene	19		1.0	ug/L	20.0	0.32 U	94	70-130	14	30	
1,2-Dibromoethane	18		1.0	ug/L	20.0	0.12 U	92	80-120	17	30	
1,2-Dichlorobenzene	20		1.0	ug/L	20.0	4.2	81	70-120	21	30	
1,2-Dichloroethane	19		1.0	ug/L	20.0	0.44 U	93	70-130	22	30	
1,2-Dichloropropane	18		1.0	ug/L	20.0	0.49 U	88	75-125	20	30	
1,3-Dichlorobenzene	21		1.0	ug/L	20.0	0.35 U	104	75-125	18	30	

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 9D06015 - EPA 5030B_MS

Matrix Spike Dup (9D06015-MSD1) Continued Prepared: 04/06/2009 19:49 Analyzed: 04/07/2009 16:00

Source: B901543-04

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	20		1.0	ug/L	20.0	0.26 U	101	75-125	22	30	
2-Chloroethyl Vinyl Ether	53		5.0	ug/L	100	1.5 U	53	10-200	61	30	QM-11
Benzene	19		1.0	ug/L	20.0	0.27 U	95	80-120	18	30	
Bromodichloromethane	18		1.0	ug/L	20.0	0.11 U	90	75-120	16	30	
Bromoform	18		1.0	ug/L	20.0	0.26 U	90	70-130	17	30	
Bromomethane	13		1.0	ug/L	20.0	0.44 U	65	30-145	6	30	
Carbon tetrachloride	18		1.0	ug/L	20.0	0.42 U	90	65-140	21	30	
Chlorobenzene	20		1.0	ug/L	20.0	0.23 U	100	80-120	16	30	
Chloroethane	19		1.0	ug/L	20.0	0.34 U	97	60-135	11	30	
Chloroform	18		1.0	ug/L	20.0	0.40 U	92	65-135	16	30	
Chloromethane	16		1.0	ug/L	20.0	0.40 U	80	40-125	8	30	
cis-1,2-Dichloroethene	18		1.0	ug/L	20.0	0.31 U	91	70-125	13	30	
cis-1,3-Dichloropropene	18		1.0	ug/L	20.0	0.28 U	92	70-130	18	30	
Dibromochloromethane	19		1.0	ug/L	20.0	0.28 U	96	60-135	14	30	
Dichlorodifluoromethane	11		1.0	ug/L	20.0	0.13 U	57	30-155	10	30	
Ethylbenzene	18		1.0	ug/L	20.0	0.28 U	89	75-125	19	30	
m,p-Xylenes	40		2.0	ug/L	40.0	0.24 U	101	75-130	15	30	
Methylene chloride	19		1.0	ug/L	20.0	3.8	78	55-140	13	30	
Methyl-tert-Butyl Ether	20		1.0	ug/L	20.0	0.23 U	99	65-125	22	30	
o-Xylene	20		1.0	ug/L	20.0	0.27 U	100	80-120	14	30	
Tetrachloroethene	19		1.0	ug/L	20.0	0.31 U	97	45-150	10	30	
Toluene	20		1.0	ug/L	20.0	0.35 U	98	75-120	18	30	
trans-1,2-Dichloroethene	19		1.0	ug/L	20.0	0.46 U	97	60-140	10	30	
trans-1,3-Dichloropropene	21		1.0	ug/L	20.0	0.27 U	106	55-140	17	30	
Trichloroethene	17		1.0	ug/L	20.0	0.56 U	87	70-125	14	30	
Trichlorofluoromethane	18		1.0	ug/L	20.0	0.41 U	92	60-145	12	30	
Vinyl chloride	14		1.0	ug/L	20.0	0.58 U	71	50-145	15	30	
Surrogate: 4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*97*	*75-120*			
Surrogate: Dibromofluoromethane	*50*			*ug/L*	*50.0*		*101*	*85-115*			
Surrogate: Toluene-d8	*49*			*ug/L*	*50.0*		*98*	*85-120*			

Batch 9D10015 - EPA 5035_MS

Blank (9D10015-BLK1) Prepared: 04/10/2009 08:00 Analyzed: 04/10/2009 11:18

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	0.0003	U	0.0010	mg/kg wet							
1,1,2,2-Tetrachloroethane	0.0003	U	0.0010	mg/kg wet							
1,1,2-Trichloroethane	0.0004	U	0.0010	mg/kg wet							
1,1-Dichloroethane	0.0004	U	0.0010	mg/kg wet							
1,1-Dichloroethene	0.0005	U	0.0010	mg/kg wet							
1,2-Dichlorobenzene	0.0005	U	0.0010	mg/kg wet							
1,2-Dichloroethane	0.0004	U	0.0010	mg/kg wet							
1,2-Dichloropropane	0.0003	U	0.0010	mg/kg wet							
1,3-Dichlorobenzene	0.0005	U	0.0010	mg/kg wet							
1,3-Dichloropropane	0.0003	U	0.0010	mg/kg wet							
1,4-Dichlorobenzene	0.0005	U	0.0010	mg/kg wet							

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 9D10015 - EPA 5035_MS

Blank (9D10015-BLK1) Continued

Prepared: 04/10/2009 08:00 Analyzed: 04/10/2009 11:18

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2-Chloroethyl Vinyl Ether	0.0014	U	0.0050	mg/kg wet							
Benzene	0.0003	U	0.0010	mg/kg wet							
Bromodichloromethane	0.0002	U	0.0010	mg/kg wet							
Bromoform	0.0002	U	0.0010	mg/kg wet							
Bromomethane	0.0004	U	0.0010	mg/kg wet							
Carbon Tetrachloride	0.0002	U	0.0010	mg/kg wet							
Chlorobenzene	0.0003	U	0.0010	mg/kg wet							
Chloroethane	0.0003	U	0.0010	mg/kg wet							
Chloroform	0.0003	U	0.0010	mg/kg wet							
Chloromethane	0.0001	U	0.0010	mg/kg wet							
cis-1,2-Dichloroethene	0.0002	U	0.0010	mg/kg wet							
cis-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Dibromochloromethane	0.0004	U	0.0010	mg/kg wet							
Dichlorodifluoromethane	0.0002	U	0.0010	mg/kg wet							
Ethylbenzene	0.0006	U	0.0010	mg/kg wet							
Methylene Chloride	0.0020	U	0.0020	mg/kg wet							
Methyl-tert-Butyl Ether	0.0003	U	0.0010	mg/kg wet							
Tetrachloroethene	0.0007	U	0.0020	mg/kg wet							
Toluene	0.0005	U	0.0010	mg/kg wet							
trans-1,2-Dichloroethene	0.0003	U	0.0010	mg/kg wet							
trans-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Trichloroethene	0.0004	U	0.0010	mg/kg wet							
Trichlorofluoromethane	0.0001	U	0.0010	mg/kg wet							
Vinyl chloride	0.0004	U	0.0010	mg/kg wet							
Xylenes (Total)	0.0011	U	0.0020	mg/kg wet							
Surrogate: 4-Bromofluorobenzene	*50*			*ug/L*	*50.0*		*100*	*77-122*			
Surrogate: Dibromofluoromethane	*47*			*ug/L*	*50.0*		*94*	*76-125*			
Surrogate: Toluene-d8	*50*			*ug/L*	*50.0*		*101*	*80-117*			

LCS (9D10015-BS1)

Prepared: 04/10/2009 08:00 Analyzed: 04/10/2009 11:51

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	22		1.0	ug/L	20.0		110	70-135			
1,1,2,2-Tetrachloroethane	20		1.0	ug/L	20.0		100	55-130			
1,1,2-Trichloroethane	20		1.0	ug/L	20.0		102	60-125			
1,1-Dichloroethane	21		1.0	ug/L	20.0		103	75-125			
1,1-Dichloroethene	22		1.0	ug/L	20.0		108	65-135			
1,2-Dichlorobenzene	20		1.0	ug/L	20.0		99	75-120			
1,2-Dichloroethane	19		1.0	ug/L	20.0		96	70-135			
1,2-Dichloropropane	21		1.0	ug/L	20.0		104	70-120			
1,3-Dichlorobenzene	20		1.0	ug/L	20.0		100	70-125			
1,3-Dichloropropane	20		1.0	ug/L	20.0		102	75-125			
1,4-Dichlorobenzene	20		1.0	ug/L	20.0		98	70-125			
2-Chloroethyl Vinyl Ether	82		5.0	ug/L	100		82	10-166			
Benzene	21		1.0	ug/L	20.0		103	75-125			
Bromodichloromethane	19		1.0	ug/L	20.0		95	70-130			
Bromoform	20		1.0	ug/L	20.0		102	55-135			
Bromomethane	16		1.0	ug/L	20.0		80	30-160			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 9D10015 - EPA 5035_MS

LCS (9D10015-BS1) Continued Prepared: 04/10/2009 08:00 Analyzed: 04/10/2009 11:51

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Carbon Tetrachloride	22		1.0	ug/L	20.0		109	65-135			
Chlorobenzene	21		1.0	ug/L	20.0		104	75-125			
Chloroethane	22		1.0	ug/L	20.0		108	40-155			
Chloroform	20		1.0	ug/L	20.0		100	70-125			
Chloromethane	17		1.0	ug/L	20.0		83	50-130			
cis-1,2-Dichloroethene	19		1.0	ug/L	20.0		95	65-125			
cis-1,3-Dichloropropene	20		1.0	ug/L	20.0		102	70-125			
Dibromochloromethane	19		1.0	ug/L	20.0		93	65-130			
Dichlorodifluoromethane	22		1.0	ug/L	20.0		111	35-135			
Ethylbenzene	21		1.0	ug/L	20.0		106	75-125			
m,p-Xylenes	41		2.0	ug/L	40.0		104	80-125			
Methylene Chloride	18		2.0	ug/L	20.0		91	55-140			
Methyl-tert-Butyl Ether	18		1.0	ug/L	20.0		92	58-123			
o-Xylene	21		1.0	ug/L	20.0		106	75-125			
Tetrachloroethene	22		2.0	ug/L	20.0		110	65-140			
Toluene	21		1.0	ug/L	20.0		104	70-125			
trans-1,2-Dichloroethene	20		1.0	ug/L	20.0		102	65-135			
trans-1,3-Dichloropropene	22		1.0	ug/L	20.0		109	65-125			
Trichloroethene	22		1.0	ug/L	20.0		109	75-125			
Trichlorofluoromethane	19		1.0	ug/L	20.0		97	25-185			
Vinyl chloride	18		1.0	ug/L	20.0		92	60-125			
Surrogate: 4-Bromofluorobenzene	*51*			*ug/L*	*50.0*		*102*	*77-122*			
Surrogate: Dibromofluoromethane	*51*			*ug/L*	*50.0*		*101*	*76-125*			
Surrogate: Toluene-d8	*51*			*ug/L*	*50.0*		*103*	*80-117*			

Matrix Spike (9D10015-MS1) Prepared: 04/10/2009 08:00 Analyzed: 04/10/2009 13:03

Source: B901543-21

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	19		1.0	ug/L	20.0	0.28 U	95	70-135			
1,1,2,2-Tetrachloroethane	18		1.0	ug/L	20.0	0.32 U	91	55-130			
1,1,2-Trichloroethane	19		1.0	ug/L	20.0	0.41 U	95	60-125			
1,1-Dichloroethane	18		1.0	ug/L	20.0	0.36 U	92	75-125			
1,1-Dichloroethene	20		1.0	ug/L	20.0	0.52 U	102	65-135			
1,2-Dichlorobenzene	19		1.0	ug/L	20.0	0.51 U	95	75-120			
1,2-Dichloroethane	18		1.0	ug/L	20.0	0.41 U	92	70-135			
1,2-Dichloropropane	19		1.0	ug/L	20.0	0.33 U	96	70-120			
1,3-Dichlorobenzene	19		1.0	ug/L	20.0	0.53 U	94	70-125			
1,3-Dichloropropane	19		1.0	ug/L	20.0	0.32 U	94	75-125			
1,4-Dichlorobenzene	19		1.0	ug/L	20.0	0.46 U	93	70-125			
2-Chloroethyl Vinyl Ether	3.0		5.0	ug/L	100	1.4 U	3	10-166			QM-07
Benzene	19		1.0	ug/L	20.0	0.26 U	95	75-125			
Bromodichloromethane	18		1.0	ug/L	20.0	0.24 U	88	70-130			
Bromoform	18		1.0	ug/L	20.0	0.23 U	92	55-135			
Bromomethane	11		1.0	ug/L	20.0	0.35 U	56	30-160			
Carbon Tetrachloride	18		1.0	ug/L	20.0	0.18 U	91	65-135			
Chlorobenzene	19		1.0	ug/L	20.0	0.33 U	95	75-125			
Chloroethane	24		1.0	ug/L	20.0	0.33 U	120	40-155			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 9D10015 - EPA 5035_MS

Matrix Spike (9D10015-MS1) Continued

Source: B901543-21

Prepared: 04/10/2009 08:00 Analyzed: 04/10/2009 13:03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloroform	19		1.0	ug/L	20.0	0.33 U	93	70-125			
Chloromethane	15		1.0	ug/L	20.0	0.14 U	73	50-130			
cis-1,2-Dichloroethene	18		1.0	ug/L	20.0	0.18 U	90	65-125			
cis-1,3-Dichloropropene	18		1.0	ug/L	20.0	0.32 U	88	70-125			
Dibromochloromethane	18		1.0	ug/L	20.0	0.37 U	89	65-130			
Dichlorodifluoromethane	18		1.0	ug/L	20.0	0.15 U	88	35-135			
Ethylbenzene	20		1.0	ug/L	20.0	0.56 U	99	75-125			
m,p-Xylenes	39		2.0	ug/L	40.0	1.1 U	97	80-125			
Methylene Chloride	18		2.0	ug/L	20.0	2.0 U	88	55-140			
Methyl-tert-Butyl Ether	14		1.0	ug/L	20.0	0.29 U	71	58-123			
o-Xylene	20		1.0	ug/L	20.0	0.30 U	99	75-125			
Tetrachloroethene	20		2.0	ug/L	20.0	0.70 U	102	65-140			
Toluene	19		1.0	ug/L	20.0	0.48 U	95	70-125			
trans-1,2-Dichloroethene	20		1.0	ug/L	20.0	0.27 U	100	65-135			
trans-1,3-Dichloropropene	19		1.0	ug/L	20.0	0.32 U	94	65-125			
Trichloroethene	19		1.0	ug/L	20.0	0.38 U	95	75-125			
Trichlorofluoromethane	22		1.0	ug/L	20.0	0.14 U	111	25-185			
Vinyl chloride	16		1.0	ug/L	20.0	0.44 U	82	60-125			
Surrogate: 4-Bromofluorobenzene	*51*			*ug/L*	*50.0*		*101*	*77-122*			
Surrogate: Dibromofluoromethane	*51*			*ug/L*	*50.0*		*102*	*76-125*			
Surrogate: Toluene-d8	*50*			*ug/L*	*50.0*		*100*	*80-117*			

Matrix Spike Dup (9D10015-MSD1)

Source: B901543-21

Prepared: 04/10/2009 08:00 Analyzed: 04/10/2009 13:39

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	19		1.0	ug/L	20.0	0.28 U	95	70-135	0.5	30	
1,1,2,2-Tetrachloroethane	19		1.0	ug/L	20.0	0.32 U	96	55-130	5	30	
1,1,2-Trichloroethane	20		1.0	ug/L	20.0	0.41 U	101	60-125	6	30	
1,1-Dichloroethane	19		1.0	ug/L	20.0	0.36 U	97	75-125	5	30	
1,1-Dichloroethene	21		1.0	ug/L	20.0	0.52 U	104	65-135	2	30	
1,2-Dichlorobenzene	19		1.0	ug/L	20.0	0.51 U	95	75-120	0.2	30	
1,2-Dichloroethane	19		1.0	ug/L	20.0	0.41 U	97	70-135	5	30	
1,2-Dichloropropane	20		1.0	ug/L	20.0	0.33 U	102	70-120	6	30	
1,3-Dichlorobenzene	18		1.0	ug/L	20.0	0.53 U	92	70-125	2	30	
1,3-Dichloropropane	19		1.0	ug/L	20.0	0.32 U	95	75-125	1	30	
1,4-Dichlorobenzene	19		1.0	ug/L	20.0	0.46 U	94	70-125	1	30	
2-Chloroethyl Vinyl Ether	2.6		5.0	ug/L	100	1.4 U	3	10-166	12	30	QM-07
Benzene	20		1.0	ug/L	20.0	0.26 U	100	75-125	5	30	
Bromodichloromethane	18		1.0	ug/L	20.0	0.24 U	92	70-130	5	30	
Bromoform	19		1.0	ug/L	20.0	0.23 U	96	55-135	4	30	
Bromomethane	13		1.0	ug/L	20.0	0.35 U	67	30-160	18	30	
Carbon Tetrachloride	19		1.0	ug/L	20.0	0.18 U	97	65-135	6	30	
Chlorobenzene	19		1.0	ug/L	20.0	0.33 U	96	75-125	0.3	30	
Chloroethane	24		1.0	ug/L	20.0	0.33 U	119	40-155	0.9	30	
Chloroform	20		1.0	ug/L	20.0	0.33 U	100	70-125	7	30	
Chloromethane	15		1.0	ug/L	20.0	0.14 U	76	50-130	4	30	

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 9D10015 - EPA 5035_MS

Matrix Spike Dup (9D10015-MSD1) Continued Prepared: 04/10/2009 08:00 Analyzed: 04/10/2009 13:39

Source: B901543-21

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
cis-1,2-Dichloroethene	19		1.0	ug/L	20.0	0.18 U	94	65-125	3	30	
cis-1,3-Dichloropropene	18		1.0	ug/L	20.0	0.32 U	90	70-125	3	30	
Dibromochloromethane	18		1.0	ug/L	20.0	0.37 U	92	65-130	3	30	
Dichlorodifluoromethane	18		1.0	ug/L	20.0	0.15 U	91	35-135	3	30	
Ethylbenzene	20		1.0	ug/L	20.0	0.56 U	99	75-125	0.4	30	
m,p-Xylenes	39		2.0	ug/L	40.0	1.1 U	98	80-125	0.5	30	
Methylene Chloride	17		2.0	ug/L	20.0	2.0 U	87	55-140	1	30	
Methyl-tert-Butyl Ether	14		1.0	ug/L	20.0	0.29 U	72	58-123	0.6	30	
o-Xylene	19		1.0	ug/L	20.0	0.30 U	96	75-125	3	30	
Tetrachloroethene	19		2.0	ug/L	20.0	0.70 U	96	65-140	6	30	
Toluene	19		1.0	ug/L	20.0	0.48 U	95	70-125	0.5	30	
trans-1,2-Dichloroethene	20		1.0	ug/L	20.0	0.27 U	100	65-135	0.4	30	
trans-1,3-Dichloropropene	19		1.0	ug/L	20.0	0.32 U	95	65-125	2	30	
Trichloroethene	20		1.0	ug/L	20.0	0.38 U	99	75-125	4	30	
Trichlorofluoromethane	22		1.0	ug/L	20.0	0.14 U	112	25-185	1	30	
Vinyl chloride	17		1.0	ug/L	20.0	0.44 U	86	60-125	5	30	
Surrogate: 4-Bromofluorobenzene	*51*			*ug/L*	*50.0*		*101*	*77-122*			
Surrogate: Dibromofluoromethane	*52*			*ug/L*	*50.0*		*103*	*76-125*			
Surrogate: Toluene-d8	*50*			*ug/L*	*50.0*		*101*	*80-117*			

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 9D01006 - EPA 3510C_MS

Blank (9D01006-BLK1) Prepared: 04/01/2009 10:40 Analyzed: 04/01/2009 19:48

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	0.01	U	0.10	ug/L							
2-Methylnaphthalene	0.019	U	0.10	ug/L							
Acenaphthene	0.016	U	0.10	ug/L							
Acenaphthylene	0.011	U	0.10	ug/L							
Anthracene	0.016	U	0.10	ug/L							
Benzo(a)anthracene	0.014	U	0.10	ug/L							
Benzo(a)pyrene	0.014	U	0.10	ug/L							
Benzo(b)fluoranthene	0.014	U	0.10	ug/L							
Benzo(g,h,i)perylene	0.032	U	0.10	ug/L							
Benzo(k)fluoranthene	0.031	U	0.10	ug/L							
Chrysene	0.011	U	0.10	ug/L							
Dibenzo(a,h)anthracene	0.022	U	0.10	ug/L							
Fluoranthene	0.011	U	0.10	ug/L							
Fluorene	0.011	U	0.10	ug/L							
Indeno(1,2,3-cd)pyrene	0.016	U	0.10	ug/L							
Naphthalene	0.022	U	0.10	ug/L							
Phenanthrene	0.016	U	0.10	ug/L							
Pyrene	0.009	U	0.10	ug/L							
Surrogate: p-Terphenyl	*3.4*			*ug/L*	*5.00*		*69*	*39-148*			

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 9D01006 - EPA 3510C_MS

LCS (9D01006-BS1)

Prepared: 04/01/2009 10:40 Analyzed: 04/01/2009 20:09

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	1.3		0.10	ug/L	2.00		67	41-120			
2-Methylnaphthalene	1.3		0.10	ug/L	2.00		65	45-105			
Acenaphthene	1.5		0.10	ug/L	2.00		77	35-105			
Acenaphthylene	1.4		0.10	ug/L	2.00		72	35-115			
Anthracene	1.3		0.10	ug/L	2.00		64	40-110			
Benzo(a)anthracene	1.6		0.10	ug/L	2.00		78	50-110			
Benzo(a)pyrene	1.5		0.10	ug/L	2.00		74	45-115			
Benzo(b)fluoranthene	1.7		0.10	ug/L	2.00		87	50-110			
Benzo(g,h,i)perylene	1.0		0.10	ug/L	2.00		52	35-120			
Benzo(k)fluoranthene	1.8		0.10	ug/L	2.00		92	50-110			
Chrysene	1.6		0.10	ug/L	2.00		81	50-115			
Dibenzo(a,h)anthracene	0.92		0.10	ug/L	2.00		46	20-110			
Fluoranthene	1.6		0.10	ug/L	2.00		78	50-115			
Fluorene	1.6		0.10	ug/L	2.00		79	35-105			
Indeno(1,2,3-cd)pyrene	1.0		0.10	ug/L	2.00		52	45-110			
Naphthalene	1.6		0.10	ug/L	2.00		81	35-105			
Phenanthrene	1.4		0.10	ug/L	2.00		71	40-120			
Pyrene	1.4		0.10	ug/L	2.00		71	50-110			
Surrogate: p-Terphenyl	*3.5*			*ug/L*	*5.00*		*69*	*39-148*			

Matrix Spike (9D01006-MS1)

Source: B901551-03

Prepared: 04/01/2009 10:40 Analyzed: 04/01/2009 20:30

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	1.4		0.10	ug/L	2.00	0.01 U	72	41-120			
2-Methylnaphthalene	1.4		0.10	ug/L	2.00	0.019 U	69	45-105			
Acenaphthene	1.6		0.10	ug/L	2.00	0.016 U	78	35-105			
Acenaphthylene	1.5		0.10	ug/L	2.00	0.011 U	73	35-115			
Anthracene	1.3		0.10	ug/L	2.00	0.016 U	64	40-110			
Benzo(a)anthracene	1.5		0.10	ug/L	2.00	0.014 U	73	50-110			
Benzo(a)pyrene	1.4		0.10	ug/L	2.00	0.014 U	68	45-115			
Benzo(b)fluoranthene	1.7		0.10	ug/L	2.00	0.014 U	84	50-110			
Benzo(g,h,i)perylene	0.96		0.10	ug/L	2.00	0.032 U	48	35-120			
Benzo(k)fluoranthene	1.6		0.10	ug/L	2.00	0.031 U	82	50-110			
Chrysene	1.5		0.10	ug/L	2.00	0.011 U	76	50-115			
Dibenzo(a,h)anthracene	0.88		0.10	ug/L	2.00	0.022 U	44	20-110			
Fluoranthene	1.5		0.10	ug/L	2.00	0.011 U	76	50-115			
Fluorene	1.5		0.10	ug/L	2.00	0.011 U	77	35-105			
Indeno(1,2,3-cd)pyrene	0.96		0.10	ug/L	2.00	0.016 U	48	45-110			
Naphthalene	1.6		0.10	ug/L	2.00	0.022 U	81	35-105			
Phenanthrene	1.4		0.10	ug/L	2.00	0.016 U	70	40-120			
Pyrene	1.4		0.10	ug/L	2.00	0.009 U	68	50-110			
Surrogate: p-Terphenyl	*3.3*			*ug/L*	*5.00*		*66*	*39-148*			

Matrix Spike Dup (9D01006-MSD1)

Source: B901551-03

Prepared: 04/01/2009 10:40 Analyzed: 04/01/2009 20:51

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 9D01006 - EPA 3510C_MS

Matrix Spike Dup (9D01006-MSD1) Continued Prepared: 04/01/2009 10:40 Analyzed: 04/01/2009 20:51

Source: B901551-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	1.3		0.10	ug/L	2.00	0.01 U	67	41-120	8	30	
2-Methylnaphthalene	1.3		0.10	ug/L	2.00	0.019 U	64	45-105	8	30	
Acenaphthene	1.5		0.10	ug/L	2.00	0.016 U	76	35-105	2	30	
Acenaphthylene	1.3		0.10	ug/L	2.00	0.011 U	66	35-115	10	30	
Anthracene	1.3		0.10	ug/L	2.00	0.016 U	63	40-110	2	30	
Benzo(a)anthracene	1.5		0.10	ug/L	2.00	0.014 U	74	50-110	1	30	
Benzo(a)pyrene	1.3		0.10	ug/L	2.00	0.014 U	67	45-115	1	30	
Benzo(b)fluoranthene	1.7		0.10	ug/L	2.00	0.014 U	84	50-110	0.4	30	
Benzo(g,h,i)perylene	1.0		0.10	ug/L	2.00	0.032 U	50	35-120	5	30	
Benzo(k)fluoranthene	1.7		0.10	ug/L	2.00	0.031 U	85	50-110	4	30	
Chrysene	1.6		0.10	ug/L	2.00	0.011 U	78	50-115	3	30	
Dibenzo(a,h)anthracene	0.91		0.10	ug/L	2.00	0.022 U	46	20-110	4	30	
Fluoranthene	1.5		0.10	ug/L	2.00	0.011 U	73	50-115	3	30	
Fluorene	1.3		0.10	ug/L	2.00	0.011 U	66	35-105	15	30	
Indeno(1,2,3-cd)pyrene	1.0		0.10	ug/L	2.00	0.016 U	51	45-110	6	30	
Naphthalene	1.6		0.10	ug/L	2.00	0.022 U	78	35-105	3	30	
Phenanthrene	1.4		0.10	ug/L	2.00	0.016 U	68	40-120	3	30	
Pyrene	1.3		0.10	ug/L	2.00	0.009 U	67	50-110	0.7	30	
Surrogate: p-Terphenyl	*3.4*			*ug/L*	*5.00*		*69*	*39-148*			

Batch 9D02010 - EPA 3545_MS

Blank (9D02010-BLK1) Prepared: 04/02/2009 11:42 Analyzed: 04/06/2009 14:19

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	0.015	U	0.033	mg/kg wet							
2-Methylnaphthalene	0.0099	U	0.033	mg/kg wet							
Acenaphthene	0.010	U	0.033	mg/kg wet							
Acenaphthylene	0.0096	U	0.033	mg/kg wet							
Anthracene	0.0085	U	0.033	mg/kg wet							
Benzo(a)anthracene	0.0064	U	0.033	mg/kg wet							
Benzo(a)pyrene	0.019	U	0.033	mg/kg wet							
Benzo(b)fluoranthene	0.0095	U	0.033	mg/kg wet							
Benzo(g,h,i)perylene	0.0096	U	0.033	mg/kg wet							
Benzo(k)fluoranthene	0.011	U	0.033	mg/kg wet							
Chrysene	0.0037	U	0.033	mg/kg wet							
Dibenzo(a,h)anthracene	0.012	U	0.033	mg/kg wet							
Fluoranthene	0.0092	U	0.033	mg/kg wet							
Fluorene	0.010	U	0.033	mg/kg wet							
Indeno(1,2,3-cd)pyrene	0.011	U	0.033	mg/kg wet							
Naphthalene	0.019	U	0.033	mg/kg wet							
Phenanthrene	0.0091	U	0.033	mg/kg wet							
Pyrene	0.0076	U	0.033	mg/kg wet							
Surrogate: p-Terphenyl	*1.3*			*mg/kg wet*	*1.67*		*80*	*61-150*			

LCS (9D02010-BS1) Prepared: 04/02/2009 11:42 Analyzed: 04/06/2009 14:40

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 9D02010 - EPA 3545_MS

LCS (9D02010-BS1) Continued

Prepared: 04/02/2009 11:42 Analyzed: 04/06/2009 14:40

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	0.57		0.033	mg/kg wet	0.667		86	52-116			
2-Methylnaphthalene	0.53		0.033	mg/kg wet	0.667		80	45-105			
Acenaphthene	0.62		0.033	mg/kg wet	0.667		93	35-110			
Acenaphthylene	0.60		0.033	mg/kg wet	0.667		89	35-115			
Anthracene	0.53		0.033	mg/kg wet	0.667		79	45-125			
Benzo(a)anthracene	0.59		0.033	mg/kg wet	0.667		88	50-105			
Benzo(a)pyrene	0.54		0.033	mg/kg wet	0.667		80	40-135			
Benzo(b)fluoranthene	0.63		0.033	mg/kg wet	0.667		95	55-120			
Benzo(g,h,i)perylene	0.48		0.033	mg/kg wet	0.667		72	55-115			
Benzo(k)fluoranthene	0.73		0.033	mg/kg wet	0.667		109	50-120			
Chrysene	0.65		0.033	mg/kg wet	0.667		97	55-120			
Dibenzo(a,h)anthracene	0.53		0.033	mg/kg wet	0.667		80	45-115			
Fluoranthene	0.61		0.033	mg/kg wet	0.667		91	40-135			
Fluorene	0.60		0.033	mg/kg wet	0.667		90	45-105			
Indeno(1,2,3-cd)pyrene	0.54		0.033	mg/kg wet	0.667		82	55-135			
Naphthalene	0.62		0.033	mg/kg wet	0.667		93	50-110			
Phenanthrene	0.56		0.033	mg/kg wet	0.667		84	55-125			
Pyrene	0.55		0.033	mg/kg wet	0.667		83	50-115			
Surrogate: p-Terphenyl	*1.3*			*mg/kg wet*	*1.67*		*80*	*61-150*			

Matrix Spike (9D02010-MS1)

Source: B901545-02

Prepared: 04/02/2009 11:42 Analyzed: 04/06/2009 15:00

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	0.60		0.035	mg/kg dry	0.714	0.016 U	85	52-116			
2-Methylnaphthalene	0.58		0.035	mg/kg dry	0.714	0.011 U	81	45-105			
Acenaphthene	0.67		0.035	mg/kg dry	0.714	0.011 U	94	35-110			
Acenaphthylene	0.64		0.035	mg/kg dry	0.714	0.010 U	89	35-115			
Anthracene	0.57		0.035	mg/kg dry	0.714	0.0091 U	80	45-125			
Benzo(a)anthracene	0.66		0.035	mg/kg dry	0.714	0.0069 U	92	50-105			
Benzo(a)pyrene	0.71		0.035	mg/kg dry	0.714	0.020 U	100	40-135			
Benzo(b)fluoranthene	0.69		0.035	mg/kg dry	0.714	0.010 U	97	55-120			
Benzo(g,h,i)perylene	0.72		0.035	mg/kg dry	0.714	0.010 U	101	55-115			
Benzo(k)fluoranthene	0.80		0.035	mg/kg dry	0.714	0.012 U	112	50-120			
Chrysene	0.68		0.035	mg/kg dry	0.714	0.0040 U	96	55-120			
Dibenzo(a,h)anthracene	0.70		0.035	mg/kg dry	0.714	0.013 U	98	45-115			
Fluoranthene	0.68		0.035	mg/kg dry	0.714	0.0099 U	95	40-135			
Fluorene	0.66		0.035	mg/kg dry	0.714	0.011 U	93	45-105			
Indeno(1,2,3-cd)pyrene	0.70		0.035	mg/kg dry	0.714	0.012 U	98	55-135			
Naphthalene	0.67		0.035	mg/kg dry	0.714	0.020 U	93	50-110			
Phenanthrene	0.60		0.035	mg/kg dry	0.714	0.0098 U	85	55-125			
Pyrene	0.61		0.035	mg/kg dry	0.714	0.0081 U	85	50-115			
Surrogate: p-Terphenyl	*1.4*			*mg/kg dry*	*1.79*		*80*	*61-150*			

Matrix Spike Dup (9D02010-MSD1)

Source: B901545-02

Prepared: 04/02/2009 11:42 Analyzed: 04/06/2009 15:21

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 9D02010 - EPA 3545_MS

Matrix Spike Dup (9D02010-MSD1) Continued Prepared: 04/02/2009 11:42 Analyzed: 04/06/2009 15:21

Source: B901545-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	0.47		0.035	mg/kg dry	0.714	0.016 U	66	52-116	24	15	QM-11
2-Methylnaphthalene	0.46		0.035	mg/kg dry	0.714	0.011 U	64	45-105	23	30	
Acenaphthene	0.48		0.035	mg/kg dry	0.714	0.011 U	67	35-110	33	30	QM-11
Acenaphthylene	0.46		0.035	mg/kg dry	0.714	0.010 U	64	35-115	33	30	QM-11
Anthracene	0.40		0.035	mg/kg dry	0.714	0.0091 U	56	45-125	35	30	QM-11
Benzo(a)anthracene	0.45		0.035	mg/kg dry	0.714	0.0069 U	63	50-105	37	30	QM-11
Benzo(a)pyrene	0.46		0.035	mg/kg dry	0.714	0.020 U	65	40-135	43	30	QM-11
Benzo(b)fluoranthene	0.47		0.035	mg/kg dry	0.714	0.010 U	66	55-120	38	30	QM-11
Benzo(g,h,i)perylene	0.46		0.035	mg/kg dry	0.714	0.010 U	64	55-115	45	30	QM-11
Benzo(k)fluoranthene	0.52		0.035	mg/kg dry	0.714	0.012 U	72	50-120	43	30	QM-11
Chrysene	0.45		0.035	mg/kg dry	0.714	0.0040 U	63	55-120	40	30	QM-11
Dibenzo(a,h)anthracene	0.44		0.035	mg/kg dry	0.714	0.013 U	62	45-115	45	30	QM-11
Fluoranthene	0.46		0.035	mg/kg dry	0.714	0.0099 U	65	40-135	38	30	QM-11
Fluorene	0.45		0.035	mg/kg dry	0.714	0.011 U	64	45-105	37	30	QM-11
Indeno(1,2,3-cd)pyrene	0.45		0.035	mg/kg dry	0.714	0.012 U	63	55-135	44	30	QM-11
Naphthalene	0.56		0.035	mg/kg dry	0.714	0.020 U	79	50-110	17	30	
Phenanthrene	0.41		0.035	mg/kg dry	0.714	0.0098 U	58	55-125	38	30	QM-11
Pyrene	0.42		0.035	mg/kg dry	0.714	0.0081 U	58	50-115	37	30	QM-1
Surrogate: p-Terphenyl	*0.97*			*mg/kg dry*	*1.79*		*54*	*61-150*			*QS-03*

Polychlorinated Biphenyls by GC - Quality Control

Batch 9D01010 - EPA 3510C

Blank (9D01010-BLK1) Prepared: 04/01/2009 10:56 Analyzed: 04/02/2009 10:48

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.32	U	1.0	ug/L							
PCB-1221	0.32	U	1.0	ug/L							
PCB-1232	0.32	U	1.0	ug/L							
PCB-1248	0.32	U	1.0	ug/L							
PCB-1254	0.32	U	1.0	ug/L							
PCB-1260	0.32	U	1.0	ug/L							
Surrogate: 2,4,5,6-TCMX	*1.0*			*ug/L*	*1.00*		*103*	*38-142*			
Surrogate: Decachlorobiphenyl	*1.2*			*ug/L*	*1.00*		*120*	*40-135*			

LCS (9D01010-BS1) Prepared: 04/01/2009 10:56 Analyzed: 04/02/2009 11:38

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	11		1.0	ug/L	10.0		106	25-145			
PCB-1260	10		1.0	ug/L	10.0		102	30-145			
Surrogate: 2,4,5,6-TCMX	*0.98*			*ug/L*	*1.00*		*98*	*38-142*			
Surrogate: Decachlorobiphenyl	*1.1*			*ug/L*	*1.00*		*111*	*40-135*			

Matrix Spike (9D01010-MS1) Prepared: 04/01/2009 10:56 Analyzed: 04/02/2009 11:50

Source: B901551-01

QUALITY CONTROL

Polychlorinated Biphenyls by GC - Quality Control

Batch 9D01010 - EPA 3510C

Matrix Spike (9D01010-MS1) Continued

Source: B901551-01

Prepared: 04/01/2009 10:56 Analyzed: 04/02/2009 11:50

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	11		1.0	ug/L	10.0	0.32 U	111	25-145			
PCB-1260	11		1.0	ug/L	10.0	0.32 U	107	30-145			
Surrogate: 2,4,5,6-TCMX	*1.0*			*ug/L*	*1.00*		*102*	*38-142*			
Surrogate: Decachlorobiphenyl	*1.2*			*ug/L*	*1.00*		*118*	*40-135*			

Matrix Spike Dup (9D01010-MSD1)

Source: B901551-01

Prepared: 04/01/2009 10:56 Analyzed: 04/02/2009 12:03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	12		1.0	ug/L	10.0	0.32 U	116	25-145	4	30	
PCB-1260	11		1.0	ug/L	10.0	0.32 U	110	30-145	3	30	
Surrogate: 2,4,5,6-TCMX	*1.1*			*ug/L*	*1.00*		*110*	*38-142*			
Surrogate: Decachlorobiphenyl	*1.2*			*ug/L*	*1.00*		*121*	*40-135*			

Batch 9D02009 - EPA 3545

Blank (9D02009-BLK1)

Prepared: 04/02/2009 10:54 Analyzed: 04/06/2009 09:09

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.0090	U	0.033	mg/kg wet							
PCB-1221	0.0090	U	0.033	mg/kg wet							
PCB-1232	0.0090	U	0.033	mg/kg wet							
PCB-1248	0.0090	U	0.033	mg/kg wet							
PCB-1254	0.0090	U	0.033	mg/kg wet							
PCB-1260	0.0090	U	0.033	mg/kg wet							
Surrogate: 2,4,5,6-TCMX	*0.039*			*mg/kg wet*	*0.0333*		*118*	*0-200*			
Surrogate: Decachlorobiphenyl	*0.036*			*mg/kg wet*	*0.0333*		*107*	*60-125*			

LCS (9D02009-BS1)

Prepared: 04/02/2009 10:54 Analyzed: 04/06/2009 09:21

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.34		0.033	mg/kg wet	0.333		102	40-140			
PCB-1260	0.34		0.033	mg/kg wet	0.333		101	60-130			
Surrogate: 2,4,5,6-TCMX	*0.038*			*mg/kg wet*	*0.0333*		*115*	*0-200*			
Surrogate: Decachlorobiphenyl	*0.036*			*mg/kg wet*	*0.0333*		*108*	*60-125*			

Matrix Spike (9D02009-MS1)

Source: B901545-02

Prepared: 04/02/2009 10:54 Analyzed: 04/06/2009 09:34

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.35		0.035	mg/kg dry	0.357	0.0096 U	98	40-140			
PCB-1260	0.36		0.035	mg/kg dry	0.357	0.0096 U	101	60-130			
Surrogate: 2,4,5,6-TCMX	*0.038*			*mg/kg dry*	*0.0357*		*106*	*0-200*			
Surrogate: Decachlorobiphenyl	*0.039*			*mg/kg dry*	*0.0357*		*108*	*60-125*			

QUALITY CONTROL

Polychlorinated Biphenyls by GC - Quality Control

Batch 9D02009 - EPA 3545

Matrix Spike Dup (9D02009-MSD1) Prepared: 04/02/2009 10:54 Analyzed: 04/06/2009 09:46

Source: B901545-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.33		0.035	mg/kg dry	0.357	0.0096 U	92	40-140	6	30	
PCB-1260	0.33		0.035	mg/kg dry	0.357	0.0096 U	92	60-130	9	30	
Surrogate: 2,4,5,6-TCMX	*0.036*			*mg/kg dry*	*0.0357*		*102*	*0-200*			
Surrogate: Decachlorobiphenyl	*0.037*			*mg/kg dry*	*0.0357*		*102*	*60-125*			

FL Petroleum Range Organics - Quality Control

Batch 9D02002 - EPA 3510C

Blank (9D02002-BLK1) Prepared: 04/02/2009 08:21 Analyzed: 04/02/2009 16:56

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	0.035	U	0.170	mg/L							
Surrogate: n-Nonatriacontane	*0.0699*			*mg/L*	*0.100*		*70*	*37-189*			
Surrogate: o-Terphenyl	*0.0444*			*mg/L*	*0.0500*		*89*	*68-118*			

LCS (9D02002-BS1) Prepared: 04/02/2009 08:21 Analyzed: 04/02/2009 17:21

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	1.53		0.170	mg/L	1.70		90	55-118			
Surrogate: n-Nonatriacontane	*0.0774*			*mg/L*	*0.100*		*77*	*42-193*			
Surrogate: o-Terphenyl	*0.0452*			*mg/L*	*0.0500*		*90*	*82-142*			

Matrix Spike (9D02002-MS1) Prepared: 04/02/2009 08:21 Analyzed: 04/02/2009 17:47

Source: B901551-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	1.56		0.170	mg/L	1.70	0.035 U	92	65-126			
Surrogate: n-Nonatriacontane	*0.0743*			*mg/L*	*0.100*		*74*	*37-189*			
Surrogate: o-Terphenyl	*0.0464*			*mg/L*	*0.0500*		*93*	*68-118*			

Matrix Spike Dup (9D02002-MSD1) Prepared: 04/02/2009 08:21 Analyzed: 04/02/2009 18:13

Source: B901551-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	1.57		0.170	mg/L	1.70	0.035 U	92	65-126	0.6	15	
Surrogate: n-Nonatriacontane	*0.0731*			*mg/L*	*0.100*		*73*	*37-189*			
Surrogate: o-Terphenyl	*0.0470*			*mg/L*	*0.0500*		*94*	*68-118*			

Batch 9D06006 - EPA 3545

Blank (9D06006-BLK1) Prepared: 04/06/2009 10:12 Analyzed: 04/06/2009 14:08

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	1.70	U	6.60	mg/kg wet							

QUALITY CONTROL

FL Petroleum Range Organics - Quality Control

Batch 9D06006 - EPA 3545

Blank (9D06006-BLK1) Continued

Prepared: 04/06/2009 10:12 Analyzed: 04/06/2009 14:08

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: n-Nonatriacontane	*2.76*			*mg/kg wet*	*3.33*		*83*	*23-189*			
Surrogate: o-Terphenyl	*1.56*			*mg/kg wet*	*1.67*		*94*	*64-118*			

LCS (9D06006-BS1)

Prepared: 04/06/2009 10:12 Analyzed: 04/06/2009 14:32

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	52.9		6.60	mg/kg wet	56.7		93	63-153			
Surrogate: n-Nonatriacontane	*2.38*			*mg/kg wet*	*3.33*		*71*	*60-118*			
Surrogate: o-Terphenyl	*1.74*			*mg/kg wet*	*1.67*		*105*	*62-109*			

Matrix Spike (9D06006-MS1)

Source: B901545-02

Prepared: 04/06/2009 10:12 Analyzed: 04/06/2009 14:55

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	114		7.07	mg/kg dry	60.7	82.6	52	63-122			QM-02
Surrogate: n-Nonatriacontane	*3.30*			*mg/kg dry*	*3.57*		*92*	*23-189*			
Surrogate: o-Terphenyl	*1.84*			*mg/kg dry*	*1.79*		*103*	*64-118*			

Matrix Spike Dup (9D06006-MSD1)

Source: B901545-02

Prepared: 04/06/2009 10:12 Analyzed: 04/06/2009 15:18

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	120		7.07	mg/kg dry	60.7	82.6	62	63-122	5	30	QM-02
Surrogate: n-Nonatriacontane	*3.42*			*mg/kg dry*	*3.57*		*96*	*23-189*			
Surrogate: o-Terphenyl	*1.86*			*mg/kg dry*	*1.79*		*104*	*64-118*			

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 9D01012 - EPA 3005A

Blank (9D01012-BLK1)

Prepared: 04/01/2009 10:57 Analyzed: 04/02/2009 15:11

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	2.5	U	10.0	ug/L							
Cadmium	0.310	U	1	ug/L							
Chromium	0.3	U	10.0	ug/L							
Lead	2.5	U	10.0	ug/L							

LCS (9D01012-BS1)

Prepared: 04/01/2009 10:57 Analyzed: 04/02/2009 15:17

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	1040		10.0	ug/L	1000		104	80-120			
Cadmium	513		1	ug/L	500		103	80-120			
Chromium	1020		10.0	ug/L	1000		102	80-120			
Lead	1040		10.0	ug/L	1000		104	80-120			

QUALITY CONTROL

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 9D01012 - EPA 3005A

Matrix Spike (9D01012-MS1) Prepared: 04/01/2009 10:57 Analyzed: 04/02/2009 15:20

Source: B901545-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	1020		10.0	ug/L	1000	4.56	101	80-120			
Cadmium	505		1	ug/L	500	0.310 U	101	80-120			
Chromium	1000		10.0	ug/L	1000	0.563	100	80-120			
Lead	1020		10.0	ug/L	1000	3.32	102	80-120			

Matrix Spike Dup (9D01012-MSD1) Prepared: 04/01/2009 10:57 Analyzed: 04/02/2009 15:22

Source: B901545-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	1020		10.0	ug/L	1000	4.56	101	80-120	0.2	30	
Cadmium	503		1	ug/L	500	0.310 U	101	80-120	0.5	30	
Chromium	1000		10.0	ug/L	1000	0.563	100	80-120	0.5	30	
Lead	1020		10.0	ug/L	1000	3.32	101	80-120	0.1	30	

Batch 9D01016 - EPA 3050B

Blank (9D01016-BLK1) Prepared: 04/01/2009 11:04 Analyzed: 04/02/2009 15:13

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.22	U	0.50	mg/kg wet							
Cadmium	0.006	U	0.05	mg/kg wet							
Chromium	**0.035**	**I**	0.500	mg/kg wet							
Lead	0.10	U	0.50	mg/kg wet							

LCS (9D01016-BS1) Prepared: 04/01/2009 11:04 Analyzed: 04/02/2009 15:33

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	49.1		0.50	mg/kg wet	50.0		98	80-120			
Cadmium	24.5		0.05	mg/kg wet	25.0		98	80-120			
Chromium	49.6		0.500	mg/kg wet	50.0		99	80-120			
Lead	49.7		0.50	mg/kg wet	50.0		99	80-120			

Matrix Spike (9D01016-MS1) Prepared: 04/01/2009 11:04 Analyzed: 04/02/2009 15:35

Source: B901545-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	46.2		0.54	mg/kg dry	51.6	3.65	83	80-120			
Cadmium	22.3		0.05	mg/kg dry	25.8	0.160	86	80-120			
Chromium	48.9		0.536	mg/kg dry	51.6	3.03	89	80-120			
Lead	91.1		0.54	mg/kg dry	51.6	54.6	71	80-120			QM-07

Matrix Spike Dup (9D01016-MSD1) Prepared: 04/01/2009 11:04 Analyzed: 04/02/2009 15:38

Source: B901545-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	46.1		0.54	mg/kg dry	51.4	3.65	83	80-120	0.2	30	

QUALITY CONTROL

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 9D01016 - EPA 3050B

Matrix Spike Dup (9D01016-MSD1) Continued

Source: B901545-02

Prepared: 04/01/2009 11:04 Analyzed: 04/02/2009 15:38

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Cadmium	22.3		0.05	mg/kg dry	25.7	0.160	86	80-120	0.1	30	
Chromium	49.1		0.536	mg/kg dry	51.4	3.03	90	80-120	0.4	30	
Lead	93.8		0.54	mg/kg dry	51.4	54.6	76	80-120	3	30	QM-07

Post Spike (9D01016-PS1)

Source: B901545-02

Prepared: 04/01/2009 11:04 Analyzed: 04/06/2009 14:10

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Lead	1.23		0.01	mg/L	1.00	0.208	102	80-120			

TCLP Metals by 6000/7000 Series Methods - Quality Control

Batch 9D02019 - EPA 3010A

Blank (9D02019-BLK1)

Prepared: 04/02/2009 14:47 Analyzed: 04/03/2009 16:59

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.00250	U	0.0100	mg/L							
Cadmium	0.0003	U	0.0010	mg/L							
Chromium	**0.00046**	I	0.0100	mg/L							
Lead	0.0025	U	0.0100	mg/L							

Blank (9D02019-BLK3)

Prepared: 04/02/2009 14:47 Analyzed: 04/06/2009 15:12

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.0125	U	0.0500	mg/L							
Cadmium	0.0016	U	0.0050	mg/L							
Chromium	0.00160	U	0.0500	mg/L							
Lead	0.0125	U	0.0500	mg/L							

LCS (9D02019-BS1)

Prepared: 04/02/2009 14:47 Analyzed: 04/03/2009 17:19

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.963		0.0100	mg/L	1.00		96	89-116			
Cadmium	0.489		0.0010	mg/L	0.500		98	90-112			
Chromium	0.993		0.0100	mg/L	1.00		99	89-114			
Lead	0.979		0.0100	mg/L	1.00		98	90-113			

Matrix Spike (9D02019-MS1)

Source: B901545-01

Prepared: 04/02/2009 14:47 Analyzed: 04/03/2009 17:27

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	4.76		0.0500	mg/L	5.00	0.0125 U	95	89-116			
Cadmium	2.41		0.0050	mg/L	2.50	0.00401	96	90-112			
Chromium	4.90		0.0500	mg/L	5.00	0.0122	98	89-114			
Lead	4.83		0.0500	mg/L	5.00	0.0134	96	90-113			

QUALITY CONTROL

TCLP Metals by 6000/7000 Series Methods - Quality Control

Batch 9D02019 - EPA 3010A

Matrix Spike Dup (9D02019-MSD1) Prepared: 04/02/2009 14:47 Analyzed: 04/03/2009 17:30

Source: B901545-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	4.81		0.0500	mg/L	5.00	0.0125 U	96	89-116	1	25	
Cadmium	2.41		0.0050	mg/L	2.50	0.00401	96	90-112	0.1	25	
Chromium	4.91		0.0500	mg/L	5.00	0.0122	98	89-114	0.2	25	
Lead	4.88		0.0500	mg/L	5.00	0.0134	97	90-113	0.9	25	

FLAGS/NOTES AND DEFINITIONS

PQL	PQL: Practical Quantitation Limit.
B	Results are based upon membrane filter colony counts that are outside the method indicated ideal range.
I	The reported value is between the laboratory method detection limit (MDL) and the practical quantitation limit (PQL).
J	Estimated value. The associated sample note or project narrative indicate the causative reason.
K	Off-scale low; Actual value is known to be less than the value given.
L	Off-scale high; Actual value is known to be greater than value given.
M	Presence of analyte is verified but not quantified; the actual value is less than the MRL but greater than the MDL.
N	Presumptive evidence of presence of material.
O	Sampled, but analysis lost or not performed.
Q	Sample exceeded the accepted holding time.
T	Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.
U	Indicates that the compound was analyzed for but not detected.
V	Indicates that the analyte was detected in both the sample and the associated method blank.
Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.
Z	Too many colonies were present (TNTC); the numeric value represents the filtration volume.
?	Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.
*	Not reported due to interference.
QM-02	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM-11	Precision between duplicate matrix spikes of the same sample was outside acceptance limits.
QS-03	Surrogate recovery outside accept limits.
QV-01	The associated continuing calibration verification standard exhibited high bias; since the result is ND, the impact on data quality is minimal.
QV-03	Result estimated, calibration verification standard exceeded lower control limit. A low-level standard was analyzed to verify instrument sensitivity.

TETRA TECH NUS, INC.

CHAIN OF CUSTODY NUMBER 0838 PAGE 1 OF 1

B901545

PROJECT NO: 112601516
FACILITY: 1517
SAMPLERS (SIGNATURE):
PROJECT MANAGER: Mark Peterson
PHONE NUMBER: 904 334-7260
FIELD OPERATIONS LEADER: David Siefker
PHONE NUMBER: 904 334-7260
CARRIER/AIRBILL NUMBER: Drop off
LABORATORY NAME AND CONTACT: ENCO / Chris
ADDRESS: 4810 Executive Ct, Suite 211
CITY, STATE: Jacksonville, FL 32216

STANDARD TAT ☒
RUSH TAT ☐ ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G)
PRESERVATIVE USED

TYPE OF ANALYSIS

DATE YEAR 2009	TIME MPT	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	Total Metals (As, Cd, Cr, Pb)	8260 VOC + OCH	8270 SIM	8082 PCB	TCLP Metals (As, Cd, Cr, Pb)	TRPH FL Pro	COMMENTS
									1	2	2	2	1	2	
3/31	1030	Rinsate 1 03 31 09				QC									Cool to 4° C
3/31	1350	MPT-1517-SB01-0.5				SO		2	X		X	X	X	X	
3/31	1358	MPT-1517-SB01-0.8						3		X					
3/31	1405	MPT 1517-SB02-0.5						2	X						
3/31	1408	MPT 1517-SB02-0.8						3		X					
3/31	1415	MPT 1517-SB03-0.5						2	X						
3/31	1418	MPT-1517-SB03-0.8						3		X					
3/31	1500	Trip Blank B901545 064				QC		2		2					

1 RELINQUISHED BY: DATE 3-31-09 TIME 1615
2 RELINQUISHED BY: DATE TIME
3. RELINQUISHED BY: DATE TIME
COMMENTS

1 RECEIVED BY: DATE 3/31/09 TIME 1615
2 RECEIVED BY: DATE TIME
3 RECEIVED BY: DATE TIME

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

MR-8 0.0°C

4/02R
FORM NO TtNUS-001

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Environmental Conservation Laboratories, Inc.
4810 Executive Park Court, Suite 211
Jacksonville FL, 32216-6069
Phone: 904.296.3007 FAX: 904.296.6210

www.encolabs.com

Thursday, November 12, 2009

Tetra Tech NUS (BR006)

Attn: Mr. Dave Siefken

8640 Philips Highway Suite 16

Jacksonville, FL 32256

RE: Laboratory Results for
Project Number: 112601516, Project Name/Desc: CTO-118 Naval Station Mayport Site 1517
ENCO Workorder: B905250

Dear Mr. Dave Siefken,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, November 5, 2009.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Jacksonville. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Lorraine Strong

Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 6.

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: MPT-1517-SB01-0.5	Lab ID: B905250-01	Sampled: 10/19/09 10:30	Received: 11/05/09 10:13

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	10/19/10	10/19/10	11/10/09	10:10	11/11/2009 14:29

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SAMPLE DETECTION SUMMARY

Client ID: MPT-1517-SB01-0.5 Lab ID: B905250-01

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
PCB-1260	0.018	J	0.0096	0.053	mg/kg dry	EPA 8082A	

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ANALYTICAL RESULTS

Description: MPT-1517-SB01-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B905250-01
Sampled: 10/19/09 10:30
Sampled By: Dave Siefken

Received: 11/05/09 10:13
Work Order: B905250
% Solids: 94.1

Polychlorinated Biphenyls by GC

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.0096	U	mg/kg dry	1	0.0096	0.053	9K10006	EPA 8082A	11/11/09 14:29	LJC	
PCB-1221 [11104-28-2] ^	0.0096	U	mg/kg dry	1	0.0096	0.053	9K10006	EPA 8082A	11/11/09 14:29	LJC	
PCB-1232 [11141-16-5] ^	0.0096	U	mg/kg dry	1	0.0096	0.053	9K10006	EPA 8082A	11/11/09 14:29	LJC	
PCB-1248 [12672-29-6] ^	0.0096	U	mg/kg dry	1	0.0096	0.053	9K10006	EPA 8082A	11/11/09 14:29	LJC	
PCB-1254 [11097-69-1] ^	0.0096	U	mg/kg dry	1	0.0096	0.053	9K10006	EPA 8082A	11/11/09 14:29	LJC	
PCB-1260 [11096-82-5] ^	**0.018**	J	mg/kg dry	1	0.0096	0.053	9K10006	EPA 8082A	11/11/09 14:29	LJC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.036*	*1*	*0.0354*	*101 %*	*0-200*	*9K10006*	*EPA 8082A*	*11/11/09 14:29*	*LJC*	
Decachlorobiphenyl	*0.040*	*1*	*0.0354*	*114 %*	*60-125*	*9K10006*	*EPA 8082A*	*11/11/09 14:29*	*LJC*	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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QUALITY CONTROL

Polychlorinated Biphenyls by GC - Quality Control

Batch 9K10006 - EPA 3545A

Blank (9K10006-BLK1)

Prepared: 11/10/2009 10:10 Analyzed: 11/11/2009 13:39

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.0090	U	0.050	mg/kg wet							
PCB-1221	0.0090	U	0.050	mg/kg wet							
PCB-1232	0.0090	U	0.050	mg/kg wet							
PCB-1248	0.0090	U	0.050	mg/kg wet							
PCB-1254	0.0090	U	0.050	mg/kg wet							
PCB-1260	0.0090	U	0.050	mg/kg wet							
Surrogate: 2,4,5,6-TCMX	*0.035*			*mg/kg wet*	*0.0333*		*106*	*0-200*			
Surrogate: Decachlorobiphenyl	*0.037*			*mg/kg wet*	*0.0333*		*111*	*60-125*			

LCS (9K10006-BS1)

Prepared: 11/10/2009 10:10 Analyzed: 11/11/2009 13:52

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.34		0.050	mg/kg wet	0.333		102	40-140			
PCB-1260	0.38		0.050	mg/kg wet	0.333		114	60-130			
Surrogate: 2,4,5,6-TCMX	*0.035*			*mg/kg wet*	*0.0333*		*104*	*0-200*			
Surrogate: Decachlorobiphenyl	*0.038*			*mg/kg wet*	*0.0333*		*115*	*60-125*			

Matrix Spike (9K10006-MS1)
Source: B905250-01

Prepared: 11/10/2009 10:10 Analyzed: 11/11/2009 14:04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.35		0.053	mg/kg dry	0.354	0.0096 U	99	40-140			
PCB-1260	0.41		0.053	mg/kg dry	0.354	0.018	111	60-130			
Surrogate: 2,4,5,6-TCMX	*0.038*			*mg/kg dry*	*0.0354*		*107*	*0-200*			
Surrogate: Decachlorobiphenyl	*0.040*			*mg/kg dry*	*0.0354*		*112*	*60-125*			

Matrix Spike Dup (9K10006-MSD1)
Source: B905250-01

Prepared: 11/10/2009 10:10 Analyzed: 11/11/2009 14:17

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.35		0.053	mg/kg dry	0.354	0.0096 U	100	40-140	0.3	30	
PCB-1260	0.42		0.053	mg/kg dry	0.354	0.018	112	60-130	0.8	30	
Surrogate: 2,4,5,6-TCMX	*0.037*			*mg/kg dry*	*0.0354*		*104*	*0-200*			
Surrogate: Decachlorobiphenyl	*0.041*			*mg/kg dry*	*0.0354*		*115*	*60-125*			

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.

Environmental Conservation Laboratories, Inc.
4810 Executive Park Court, Suite 211
Jacksonville FL, 32216-6069
Phone: 904.296.3007 FAX: 904.296.6210
www.encolabs.com

Thursday, October 29, 2009

Tetra Tech NUS (BR006)

Attn: Mark Peterson

8640 Philips Highway Suite 16

Jacksonville, FL 32256

RE: Laboratory Results for
Project Number: 112601516, Project Name/Desc: CTO-118 Naval Station Mayport Site 1517
ENCO Workorder: B904752

Dear Mark Peterson,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Monday, October 19, 2009.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Jacksonville. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Lorraine Strong
Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 26.

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: MPT-1517-SB02-0.5 Lab ID: B904752-01 Sampled: 10/19/09 10:10 Received: 10/19/09 13:05

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	04/17/10	04/21/10	10/23/09	16:07	10/26/2009 15:42
EPA 7470A	11/16/09		10/23/09	13:59	10/24/2009 12:27
EPA 8082A	10/19/10	10/19/10	10/22/09	13:29	10/23/2009 14:06
EPA 8270D	11/02/09	11/29/09	10/20/09	08:38	10/21/2009 20:31
EPA 8270D	11/02/09	12/01/09	10/22/09	13:32	10/23/2009 11:31
FLPRO	11/02/09	11/29/09	10/20/09	08:42	10/22/2009 01:41

Client ID: MPT-1517-SB03-0.5 Lab ID: B904752-02 Sampled: 10/19/09 09:45 Received: 10/19/09 13:05

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	04/17/10	04/21/10	10/23/09	16:07	10/26/2009 15:44
EPA 7470A	11/16/09		10/23/09	13:59	10/24/2009 12:28
EPA 8082A	10/19/10	10/19/10	10/22/09	13:29	10/23/2009 14:19
EPA 8270D	11/02/09	11/29/09	10/20/09	08:38	10/21/2009 21:57
EPA 8270D	11/02/09	12/01/09	10/22/09	13:32	10/23/2009 11:49
FLPRO	11/02/09	11/29/09	10/20/09	08:42	10/22/2009 02:05

Client ID: MPT-1517-SB01-0.5 Lab ID: B904752-03 Sampled: 10/19/09 10:30 Received: 10/19/09 13:05

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8270D	11/02/09	11/29/09	10/20/09	08:38	10/21/2009 22:26

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SAMPLE DETECTION SUMMARY

Client ID: MPT-1S17-SB02-0.5 **Lab ID: 8904752-01**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1-Methylnaphthalene	0.012	J	0.0033	0.050	mg/kg dry	EPA 8270D	
2-Methylnaphthalene	0.024	J	0.0035	0.050	mg/kg dry	EPA 8270D	
Barium - TCLP	0.232	JB	0.00195	0.500	mg/L	EPA 6010C	
Bis(2-ethylhexyl)phthalate	0.12	J	0.036	0.36	mg/kg dry	EPA 8270D	
Butylbenzylphthalate	0.16	J	0.036	0.36	mg/kg dry	EPA 8270D	
Cadmium - TCLP	0.00268	J	0.00210	0.00500	mg/L	EPA 6010C	
Lead - TCLP	0.0156	J	0.0120	0.0500	mg/L	EPA 6010C	
Naphthalene	0.021	J	0.0040	0.050	mg/kg dry	EPA 8270D	
PCB-1260	0.030	J	0.0098	0.054	mg/kg dry	EPA 8082A	
TPH (C8-C40)	71	D	4.5	54	mg/kg dry	FLPRO	

Client ID: MPT-1S17-SB03-0.5 **Lab ID: 8904752-02**

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Arsenic - TCLP	0.0332	J	0.0290	0.0500	mg/L	EPA 6010C	
Barium - TCLP	0.169	JB	0.00195	0.500	mg/L	EPA 6010C	
Bis(2-ethylhexyl)phthalate	0.092	J	0.035	0.35	mg/kg dry	EPA 8270D	
Butylbenzylphthalate	0.33	J	0.035	0.35	mg/kg dry	EPA 8270D	
Cadmium - TCLP	0.00355	J	0.00210	0.00500	mg/L	EPA 6010C	
Dimethylphthalate	0.13	J	0.048	0.35	mg/kg dry	EPA 8270D	
Di-n-butylphthalate	0.056	J	0.035	0.35	mg/kg dry	EPA 8270D	
Lead - TCLP	0.0156	J	0.0120	0.0500	mg/L	EPA 6010C	
Naphthalene	0.012	J	0.0039	0.048	mg/kg dry	EPA 8270D	

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ANALYTICAL RESULTS

Description: MPT-1517-SB02-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B904752-01
Sampled: 10/19/09 10:10
Sampled By: Dave Siefken

Received: 10/19/09 13:05
Work Order: B904752
% Solids: 92.0

Semivolatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
1,2,4-Trichlorobenzene [120-82-1] ^	0.061	U	mg/kg dry	1	0.061	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
2,4,6-Trichlorophenol [88-06-2] ^	0.061	U	mg/kg dry	1	0.061	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
2,4-Dichlorophenol [120-83-2] ^	0.075	U	mg/kg dry	1	0.075	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
2,4-Dimethylphenol [105-67-9] ^	0.071	U	mg/kg dry	1	0.071	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
2,4-Dinitrophenol [51-28-5] ^	0.080	U	mg/kg dry	1	0.080	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
2,4-Dinitrotoluene [121-14-2] ^	0.054	U	mg/kg dry	1	0.054	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
2,6-Dinitrotoluene [606-20-2] ^	0.057	U	mg/kg dry	1	0.057	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
2-Chloronaphthalene [91-58-7] ^	0.055	U	mg/kg dry	1	0.055	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
2-Chlorophenol [95-57-8] ^	0.065	U	mg/kg dry	1	0.065	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	0.078	U	mg/kg dry	1	0.078	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
2-Nitrophenol [88-75-5] ^	0.072	U	mg/kg dry	1	0.072	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
4-Bromophenyl-phenylether [101-55-3] ^	0.054	U	mg/kg dry	1	0.054	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
4-Chloro-3-methylphenol [59-50-7] ^	0.064	U	mg/kg dry	1	0.064	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
4-Chlorophenyl-phenylether [7005-72-3] ^	0.051	U	mg/kg dry	1	0.051	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
4-Nitrophenol [100-02-7] ^	0.036	U	mg/kg dry	1	0.036	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
Benzidine [92-87-5] ^	0.21	U	mg/kg dry	1	0.21	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
Bis(2-chloroethoxy)methane [111-91-1] ^	0.057	U	mg/kg dry	1	0.057	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
Bis(2-chloroethyl)ether [111-44-4] ^	0.061	U	mg/kg dry	1	0.061	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
Bis(2-ethylhexyl)phthalate [117-81-7] ^	**0.12**	J	mg/kg dry	1	0.036	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
Butylbenzylphthalate [85-68-7] ^	**0.16**	J	mg/kg dry	1	0.036	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
Diethylphthalate [84-66-2] ^	0.052	U	mg/kg dry	1	0.052	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
Dimethylphthalate [131-11-3] ^	0.050	U	mg/kg dry	1	0.050	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
Di-n-butylphthalate [84-74-2] ^	0.036	U	mg/kg dry	1	0.036	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
Di-n-octylphthalate [117-84-0] ^	0.036	U	mg/kg dry	1	0.036	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
DPH (as Azobenzene) [103-33-3]	0.11	U	mg/kg dry	1	0.11	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
Hexachlorobenzene [118-74-1] ^	0.045	U	mg/kg dry	1	0.045	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
Hexachlorobutadiene [87-68-3] ^	0.070	U	mg/kg dry	1	0.070	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
Hexachloroethane [67-72-1] ^	0.076	U	mg/kg dry	1	0.076	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
Isophorone [78-59-1] ^	0.052	U	mg/kg dry	1	0.052	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
Nitrobenzene [98-95-3] ^	0.052	U	mg/kg dry	1	0.052	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
N-Nitrosodimethylamine [62-75-9] ^	0.074	U	mg/kg dry	1	0.074	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
N-Nitroso-di-n-propylamine [621-64-7] ^	0.061	U	mg/kg dry	1	0.061	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]	0.088	U	mg/kg dry	1	0.088	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
Pentachlorophenol [87-86-5] ^	0.058	U	mg/kg dry	1	0.058	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	
Phenol [108-95-2] ^	0.069	U	mg/kg dry	1	0.069	0.36	9J20008	EPA 8270D	10/21/09 20:31	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*1.7*	*1*	*1.82*	*92 %*	*35-125*	*9J20008*	*EPA 8270D*	*10/21/09 20:31*	*JWJ*	
2-Fluorobiphenyl	*1.4*	*1*	*1.82*	*77 %*	*45-105*	*9J20008*	*EPA 8270D*	*10/21/09 20:31*	*JWJ*	
2-Fluorophenol	*1.5*	*1*	*1.82*	*81 %*	*35-105*	*9J20008*	*EPA 8270D*	*10/21/09 20:31*	*JWJ*	
Nitrobenzene-d5	*1.3*	*1*	*1.82*	*72 %*	*35-100*	*9J20008*	*EPA 8270D*	*10/21/09 20:31*	*JWJ*	
Phenol-d5	*1.5*	*1*	*1.82*	*83 %*	*40-100*	*9J20008*	*EPA 8270D*	*10/21/09 20:31*	*JWJ*	
Terphenyl-d14	*1.6*	*1*	*1.82*	*88 %*	*30-125*	*9J20008*	*EPA 8270D*	*10/21/09 20:31*	*JWJ*	

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Description: MPT-1517-SB02-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B904752-01
Sampled: 10/19/09 10:10
Sampled By: Dave Siefken

Received: 10/19/09 13:05
Work Order: B904752
% Solids: 92.0

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
1-Methylnaphthalene [90-12-0] ^	**0.012**	J	mg/kg dry	1	0.0033	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	
2-Methylnaphthalene [91-57-6] ^	**0.024**	J	mg/kg dry	1	0.0035	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	
Acenaphthene [83-32-9] ^	0.0029	U	mg/kg dry	1	0.0029	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	
Acenaphthylene [208-96-8] ^	0.0029	U	mg/kg dry	1	0.0029	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	
Anthracene [120-12-7] ^	0.0029	U	mg/kg dry	1	0.0029	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	
Benzo(a)anthracene [56-55-3] ^	0.0037	U	mg/kg dry	1	0.0037	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	
Benzo(a)pyrene [50-32-8] ^	0.0058	U	mg/kg dry	1	0.0058	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	
Benzo(b)fluoranthene [205-99-2] ^	0.0051	U	mg/kg dry	1	0.0051	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	
Benzo(g,h,i)perylene [191-24-2] ^	0.0041	U	mg/kg dry	1	0.0041	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	
Benzo(k)fluoranthene [207-08-9] ^	0.0035	U	mg/kg dry	1	0.0035	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	
Chrysene [218-01-9] ^	0.0033	U	mg/kg dry	1	0.0033	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	
Dibenzo(a,h)anthracene [53-70-3] ^	0.0039	U	mg/kg dry	1	0.0039	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	
Fluoranthene [206-44-0] ^	0.0039	U	mg/kg dry	1	0.0039	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	
Fluorene [86-73-7] ^	0.0039	U	mg/kg dry	1	0.0039	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	0.0043	U	mg/kg dry	1	0.0043	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	
Naphthalene [91-20-3] ^	**0.021**	J	mg/kg dry	1	0.0040	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	
Phenanthrene [85-01-8] ^	0.0035	U	mg/kg dry	1	0.0035	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	
Pyrene [129-00-0] ^	0.0036	U	mg/kg dry	1	0.0036	0.050	9J22018	EPA 8270D	10/23/09 11:31	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*1.7*	*1*	*1.80*	*95 %*	*61-150*	*9J22018*	*EPA 8270D*	*10/23/09 11:31*	*JWJ*	

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Description:	MPT-1517-SB02-0.5	**Lab Sample ID:**	B904752-01	**Received:**	10/19/09 13:05
Matrix:	Soil	**Sampled:**	10/19/09 10:10	**Work Order:**	B904752
Project:	CTO-118 Naval Station Mayport Site 1517	**Sampled By:**	Dave Siefken	**% Solids:**	92.0

Polychlorinated Biphenyls by GC

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.0098	U	mg/kg dry	1	0.0098	0.054	9J22017	EPA 8082A	10/23/09 14:06	LJC	
PCB-1221 [11104-28-2] ^	0.0098	U	mg/kg dry	1	0.0098	0.054	9J22017	EPA 8082A	10/23/09 14:06	LJC	
PCB-1232 [11141-16-5] ^	0.0098	U	mg/kg dry	1	0.0098	0.054	9J22017	EPA 8082A	10/23/09 14:06	LJC	
PCB-1248 [12672-29-6] ^	0.0098	U	mg/kg dry	1	0.0098	0.054	9J22017	EPA 8082A	10/23/09 14:06	LJC	
PCB-1254 [11097-69-1] ^	0.0098	U	mg/kg dry	1	0.0098	0.054	9J22017	EPA 8082A	10/23/09 14:06	LJC	
PCB-1260 [11096-82-5] ^	**0.030**	J	mg/kg dry	1	0.0098	0.054	9J22017	EPA 8082A	10/23/09 14:06	LJC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.036*	*1*	*0.0360*	*99 %*	*0-200*	*9J22017*	*EPA 8082A*	*10/23/09 14:06*	*LJC*	
Decachlorobiphenyl	*0.042*	*1*	*0.0360*	*118 %*	*60-125*	*9J22017*	*EPA 8082A*	*10/23/09 14:06*	*LJC*	

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Description: MPT-1517-SB02-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B904752-01
Sampled: 10/19/09 10:10
Sampled By: Dave Siefken

Received: 10/19/09 13:05
Work Order: B904752
% Solids: 92.0

FL Petroleum Range Organics

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
TPH (C8-C40) [ECL-0175] ^	71	D	mg/kg dry	5	4.5	54	9J20010	FLPRO	10/22/09 01:41	LJC	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
n-Nonatriacontane	*0.0*	*5*	*3.60*	*%*	*23-189*	*9J20010*	*FLPRO*	*10/22/09 01:41*	*LJC*	*QS-04*
o-Terphenyl	*0.0*	*5*	*1.80*	*%*	*64-118*	*9J20010*	*FLPRO*	*10/22/09 01:41*	*LJC*	*QS-04*

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Description: MPT-1517-SB02-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B904752-01
Sampled: 10/19/09 10:10
Sampled By: Dave Siefken

Received: 10/19/09 13:05
Work Order: B904752
% Solids: 92.0

TCLP Metals by 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	0.0290	U	mg/L	1	0.0290	0.0500	9J23017	EPA 6010C	10/26/09 15:42	ACV	
Barium [7440-39-3] ^	**0.232**	JB	mg/L	1	0.00195	0.500	9J23017	EPA 6010C	10/26/09 15:42	ACV	
Cadmium [7440-43-9] ^	**0.00268**	J	mg/L	1	0.00210	0.00500	9J23017	EPA 6010C	10/26/09 15:42	ACV	
Chromium [7440-47-3] ^	0.00400	U	mg/L	1	0.00400	0.0500	9J23017	EPA 6010C	10/26/09 15:42	ACV	
Lead [7439-92-1] ^	**0.0156**	J	mg/L	1	0.0120	0.0500	9J23017	EPA 6010C	10/26/09 15:42	ACV	
Mercury [7439-97-6] ^	0.00046	U	mg/L	1	0.00046	0.00200	9J23002	EPA 7470A	10/24/09 12:27	SMA	
Selenium [7782-49-2] ^	0.0400	U	mg/L	1	0.0400	0.0500	9J23017	EPA 6010C	10/26/09 15:42	ACV	
Silver [7440-22-4] ^	0.00900	U	mg/L	1	0.00900	0.0500	9J23017	EPA 6010C	10/26/09 15:42	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: MPT-1517-SB03-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B904752-02
Sampled: 10/19/09 09:45
Sampled By: Dave Siefken

Received: 10/19/09 13:05
Work Order: B904752
% Solids: 95.2

Semivolatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
1,2,4-Trichlorobenzene [120-82-1] ^	0.059	U	mg/kg dry	1	0.059	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
2,4,6-Trichlorophenol [88-06-2] ^	0.059	U	mg/kg dry	1	0.059	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
2,4-Dichlorophenol [120-83-2] ^	0.073	U	mg/kg dry	1	0.073	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
2,4-Dimethylphenol [105-67-9] ^	0.068	U	mg/kg dry	1	0.068	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
2,4-Dinitrophenol [51-28-5] ^	0.078	U	mg/kg dry	1	0.078	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
2,4-Dinitrotoluene [121-14-2] ^	0.053	U	mg/kg dry	1	0.053	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
2,6-Dinitrotoluene [606-20-2] ^	0.055	U	mg/kg dry	1	0.055	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
2-Chloronaphthalene [91-58-7] ^	0.054	U	mg/kg dry	1	0.054	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
2-Chlorophenol [95-57-8] ^	0.063	U	mg/kg dry	1	0.063	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	0.076	U	mg/kg dry	1	0.076	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
2-Nitrophenol [88-75-5] ^	0.069	U	mg/kg dry	1	0.069	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
4-Bromophenyl-phenylether [101-55-3] ^	0.053	U	mg/kg dry	1	0.053	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
4-Chloro-3-methylphenol [59-50-7] ^	0.062	U	mg/kg dry	1	0.062	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
4-Chlorophenyl-phenylether [7005-72-3] ^	0.049	U	mg/kg dry	1	0.049	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
4-Nitrophenol [100-02-7] ^	0.035	U	mg/kg dry	1	0.035	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
Benzidine [92-87-5] ^	0.20	U	mg/kg dry	1	0.20	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
Bis(2-chloroethoxy)methane [111-91-1] ^	0.055	U	mg/kg dry	1	0.055	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
Bis(2-chloroethyl)ether [111-44-4] ^	0.059	U	mg/kg dry	1	0.059	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
-(2-ethylhexyl)phthalate [117-81-7]	**0.092**	J	mg/kg dry	1	0.035	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
Butylbenzylphthalate [85-68-7] ^	**0.33**	J	mg/kg dry	1	0.035	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
Diethylphthalate [84-66-2] ^	0.050	U	mg/kg dry	1	0.050	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
Dimethylphthalate [131-11-3] ^	**0.13**	J	mg/kg dry	1	0.048	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
Di-n-butylphthalate [84-74-2] ^	**0.056**	J	mg/kg dry	1	0.035	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
Di-n-octylphthalate [117-84-0] ^	0.035	U	mg/kg dry	1	0.035	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
DPH (as Azobenzene) [103-33-3]	0.11	U	mg/kg dry	1	0.11	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
Hexachlorobenzene [118-74-1] ^	0.043	U	mg/kg dry	1	0.043	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
Hexachlorobutadiene [87-68-3] ^	0.067	U	mg/kg dry	1	0.067	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
Hexachloroethane [67-72-1] ^	0.074	U	mg/kg dry	1	0.074	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
Isophorone [78-59-1] ^	0.050	U	mg/kg dry	1	0.050	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
Nitrobenzene [98-95-3] ^	0.050	U	mg/kg dry	1	0.050	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
N-Nitrosodimethylamine [62-75-9] ^	0.071	U	mg/kg dry	1	0.071	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
N-Nitroso-di-n-propylamine [621-64-7] ^	0.059	U	mg/kg dry	1	0.059	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]	0.085	U	mg/kg dry	1	0.085	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
Pentachlorophenol [87-86-5] ^	0.056	U	mg/kg dry	1	0.056	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	
Phenol [108-95-2] ^	0.066	U	mg/kg dry	1	0.066	0.35	9J20008	EPA 8270D	10/21/09 21:57	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*1.6*	*1*	*1.75*	*94 %*	*35-125*	*9J20008*	*EPA 8270D*	*10/21/09 21:57*	*JWJ*	
2-Fluorobiphenyl	*1.5*	*1*	*1.75*	*86 %*	*45-105*	*9J20008*	*EPA 8270D*	*10/21/09 21:57*	*JWJ*	
2-Fluorophenol	*1.5*	*1*	*1.75*	*88 %*	*35-105*	*9J20008*	*EPA 8270D*	*10/21/09 21:57*	*JWJ*	
Nitrobenzene-d5	*1.4*	*1*	*1.75*	*79 %*	*35-100*	*9J20008*	*EPA 8270D*	*10/21/09 21:57*	*JWJ*	
Phenol-d5	*1.5*	*1*	*1.75*	*88 %*	*40-100*	*9J20008*	*EPA 8270D*	*10/21/09 21:57*	*JWJ*	
Terphenyl-d14	*1.7*	*1*	*1.75*	*97 %*	*30-125*	*9J20008*	*EPA 8270D*	*10/21/09 21:57*	*JWJ*	

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Description: MPT-1517-SB03-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B904752-02
Sampled: 10/19/09 09:45
Sampled By: Dave Siefken

Received: 10/19/09 13:05
Work Order: B904752
% Solids: 95.2

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
1-Methylnaphthalene [90-12-0] ^	0.0032	U	mg/kg dry	1	0.0032	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	
2-Methylnaphthalene [91-57-6] ^	0.0034	U	mg/kg dry	1	0.0034	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	
Acenaphthene [83-32-9] ^	0.0028	U	mg/kg dry	1	0.0028	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	
Acenaphthylene [208-96-8] ^	0.0028	U	mg/kg dry	1	0.0028	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	
Anthracene [120-12-7] ^	0.0028	U	mg/kg dry	1	0.0028	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	
Benzo(a)anthracene [56-55-3] ^	0.0036	U	mg/kg dry	1	0.0036	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	
Benzo(a)pyrene [50-32-8] ^	0.0056	U	mg/kg dry	1	0.0056	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	
Benzo(b)fluoranthene [205-99-2] ^	0.0049	U	mg/kg dry	1	0.0049	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	
Benzo(g,h,i)perylene [191-24-2] ^	0.0040	U	mg/kg dry	1	0.0040	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	
Benzo(k)fluoranthene [207-08-9] ^	0.0034	U	mg/kg dry	1	0.0034	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	
Chrysene [218-01-9] ^	0.0032	U	mg/kg dry	1	0.0032	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	
Dibenzo(a,h)anthracene [53-70-3] ^	0.0038	U	mg/kg dry	1	0.0038	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	
Fluoranthene [206-44-0] ^	0.0038	U	mg/kg dry	1	0.0038	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	
Fluorene [86-73-7] ^	0.0038	U	mg/kg dry	1	0.0038	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	0.0042	U	mg/kg dry	1	0.0042	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	
Naphthalene [91-20-3] ^	**0.012**	J	mg/kg dry	1	0.0039	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	
Phenanthrene [85-01-8] ^	0.0034	U	mg/kg dry	1	0.0034	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	
Pyrene [129-00-0] ^	0.0035	U	mg/kg dry	1	0.0035	0.048	9J22018	EPA 8270D	10/23/09 11:49	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	*Notes*
p-Terphenyl	*1.6*	*1*	*1.74*	*90 %*	*61-150*	*9J22018*	*EPA 8270D*	*10/23/09 11:49*	*JWJ*	

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Description: MPT-1517-SB03-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B904752-02
Sampled: 10/19/09 09:45
Sampled By: Dave Siefken

Received: 10/19/09 13:05
Work Order: B904752
% Solids: 95.2

Polychlorinated Biphenyls by GC

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.0095	U	mg/kg dry	1	0.0095	0.052	9J22017	EPA 8082A	10/23/09 14:19	LJC	
PCB-1221 [11104-28-2] ^	0.0095	U	mg/kg dry	1	0.0095	0.052	9J22017	EPA 8082A	10/23/09 14:19	LJC	
PCB-1232 [11141-16-5] ^	0.0095	U	mg/kg dry	1	0.0095	0.052	9J22017	EPA 8082A	10/23/09 14:19	LJC	
PCB-1248 [12672-29-6] ^	0.0095	U	mg/kg dry	1	0.0095	0.052	9J22017	EPA 8082A	10/23/09 14:19	LJC	
PCB-1254 [11097-69-1] ^	0.0095	U	mg/kg dry	1	0.0095	0.052	9J22017	EPA 8082A	10/23/09 14:19	LJC	
PCB-1260 [11096-82-5] ^	0.0095	U	mg/kg dry	1	0.0095	0.052	9J22017	EPA 8082A	10/23/09 14:19	LJC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.034*	*1*	*0.0348*	*97 %*	*0-200*	*9J22017*	*EPA 8082A*	*10/23/09 14:19*	*LJC*	
Decachlorobiphenyl	*0.039*	*1*	*0.0348*	*112 %*	*60-125*	*9J22017*	*EPA 8082A*	*10/23/09 14:19*	*LJC*	

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Description: MPT-1517-SB03-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B904752-02
Sampled: 10/19/09 09:45
Sampled By: Dave Siefken

Received: 10/19/09 13:05
Work Order: B904752
% Solids: 95.2

FL Petroleum Range Organics

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
TPH (C8-C40) [ECL-0175] ^	4.4	UD	mg/kg dry	5	4.4	53	9J20010	FLPRO	10/22/09 02:05	LJC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
n-Nonatriacontane	*0.0*	*5*	*3.47*	*%*	*23-189*	*9J20010*	*FLPRO*	*10/22/09 02:05*	*LJC*	*QS-04*
o-Terphenyl	*0.0*	*5*	*1.73*	*%*	*64-118*	*9J20010*	*FLPRO*	*10/22/09 02:05*	*LJC*	*QS-04*

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Description: MPT-1517-SB03-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B904752-02
Sampled: 10/19/09 09:45
Sampled By: Dave Siefken

Received: 10/19/09 13:05
Work Order: B904752
% Solids: 95.2

TCLP Metals by 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	**0.0332**	J	mg/L	1	0.0290	0.0500	9J23017	EPA 6010C	10/26/09 15:44	ACV	
Barium [7440-39-3] ^	**0.169**	JB	mg/L	1	0.00195	0.500	9J23017	EPA 6010C	10/26/09 15:44	ACV	
Cadmium [7440-43-9] ^	**0.00355**	J	mg/L	1	0.00210	0.00500	9J23017	EPA 6010C	10/26/09 15:44	ACV	
Chromium [7440-47-3] ^	0.00400	U	mg/L	1	0.00400	0.0500	9J23017	EPA 6010C	10/26/09 15:44	ACV	
Lead [7439-92-1] ^	**0.0156**	J	mg/L	1	0.0120	0.0500	9J23017	EPA 6010C	10/26/09 15:44	ACV	
Mercury [7439-97-6] ^	0.00046	U	mg/L	1	0.00046	0.00200	9J23002	EPA 7470A	10/24/09 12:28	SMA	
Selenium [7782-49-2] ^	0.0400	U	mg/L	1	0.0400	0.0500	9J23017	EPA 6010C	10/26/09 15:44	ACV	
Silver [7440-22-4] ^	0.00900	U	mg/L	1	0.00900	0.0500	9J23017	EPA 6010C	10/26/09 15:44	ACV	

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Description: MPT-1517-SB01-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B904752-03
Sampled: 10/19/09 10:30
Sampled By: Dave Siefken

Received: 10/19/09 13:05
Work Order: B904752
% Solids: 93.8

Semivolatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
1,2,4-Trichlorobenzene [120-82-1] ^	0.060	U	mg/kg dry	1	0.060	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
2,4,6-Trichlorophenol [88-06-2] ^	0.060	U	mg/kg dry	1	0.060	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
2,4-Dichlorophenol [120-83-2] ^	0.074	U	mg/kg dry	1	0.074	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
2,4-Dimethylphenol [105-67-9] ^	0.069	U	mg/kg dry	1	0.069	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
2,4-Dinitrophenol [51-28-5] ^	0.079	U	mg/kg dry	1	0.079	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
2,4-Dinitrotoluene [121-14-2] ^	0.053	U	mg/kg dry	1	0.053	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
2,6-Dinitrotoluene [606-20-2] ^	0.055	U	mg/kg dry	1	0.055	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
2-Chloronaphthalene [91-58-7] ^	0.054	U	mg/kg dry	1	0.054	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
2-Chlorophenol [95-57-8] ^	0.064	U	mg/kg dry	1	0.064	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	0.077	U	mg/kg dry	1	0.077	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
2-Nitrophenol [88-75-5] ^	0.070	U	mg/kg dry	1	0.070	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
4-Bromophenyl-phenylether [101-55-3] ^	0.053	U	mg/kg dry	1	0.053	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
4-Chloro-3-methylphenol [59-50-7] ^	0.063	U	mg/kg dry	1	0.063	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
4-Chlorophenyl-phenylether [7005-72-3] ^	0.050	U	mg/kg dry	1	0.050	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
4-Nitrophenol [100-02-7] ^	0.035	U	mg/kg dry	1	0.035	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
Benzidine [92-87-5] ^	0.20	U	mg/kg dry	1	0.20	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
Bis(2-chloroethoxy)methane [111-91-1] ^	0.055	U	mg/kg dry	1	0.055	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
Bis(2-chloroethyl)ether [111-44-4] ^	0.060	U	mg/kg dry	1	0.060	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
Bis(2-ethylhexyl)phthalate [117-81-7] ^	0.035	U	mg/kg dry	1	0.035	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
Butylbenzylphthalate [85-68-7] ^	0.035	U	mg/kg dry	1	0.035	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
Diethylphthalate [84-66-2] ^	0.051	U	mg/kg dry	1	0.051	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
Dimethylphthalate [131-11-3] ^	0.049	U	mg/kg dry	1	0.049	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
Di-n-butylphthalate [84-74-2] ^	0.035	U	mg/kg dry	1	0.035	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
Di-n-octylphthalate [117-84-0] ^	0.035	U	mg/kg dry	1	0.035	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
DPH (as Azobenzene) [103-33-3]	0.11	U	mg/kg dry	1	0.11	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
Hexachlorobenzene [118-74-1] ^	0.044	U	mg/kg dry	1	0.044	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
Hexachlorobutadiene [87-68-3] ^	0.068	U	mg/kg dry	1	0.068	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
Hexachloroethane [67-72-1] ^	0.075	U	mg/kg dry	1	0.075	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
Isophorone [78-59-1] ^	0.051	U	mg/kg dry	1	0.051	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
Nitrobenzene [98-95-3] ^	0.051	U	mg/kg dry	1	0.051	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
N-Nitrosodimethylamine [62-75-9] ^	0.072	U	mg/kg dry	1	0.072	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
N-Nitroso-di-n-propylamine [621-64-7] ^	0.060	U	mg/kg dry	1	0.060	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]	0.086	U	mg/kg dry	1	0.086	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
Pentachlorophenol [87-86-5] ^	0.056	U	mg/kg dry	1	0.056	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	
Phenol [108-95-2] ^	0.067	U	mg/kg dry	1	0.067	0.35	9J20008	EPA 8270D	10/21/09 22:26	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*1.6*	*1*	*1.77*	*88 %*	*35-125*	*9J20008*	*EPA 8270D*	*10/21/09 22:26*	*JWJ*	
2-Fluorobiphenyl	*1.4*	*1*	*1.77*	*78 %*	*45-105*	*9J20008*	*EPA 8270D*	*10/21/09 22:26*	*JWJ*	
2-Fluorophenol	*1.4*	*1*	*1.77*	*80 %*	*35-105*	*9J20008*	*EPA 8270D*	*10/21/09 22:26*	*JWJ*	
Nitrobenzene-d5	*1.3*	*1*	*1.77*	*71 %*	*35-100*	*9J20008*	*EPA 8270D*	*10/21/09 22:26*	*JWJ*	
Phenol-d5	*1.4*	*1*	*1.77*	*80 %*	*40-100*	*9J20008*	*EPA 8270D*	*10/21/09 22:26*	*JWJ*	
Terphenyl-d14	*1.5*	*1*	*1.77*	*87 %*	*30-125*	*9J20008*	*EPA 8270D*	*10/21/09 22:26*	*JWJ*	

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QUALITY CONTROL

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 9J20008 - EPA 3545_MS

Blank (9J20008-BLK1)

Prepared: 10/20/2009 08:38 Analyzed: 10/21/2009 18:36

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	0.056	U	0.33	mg/kg wet							
2,4,6-Trichlorophenol	0.056	U	0.33	mg/kg wet							
2,4-Dichlorophenol	0.069	U	0.33	mg/kg wet							
2,4-Dimethylphenol	0.065	U	0.33	mg/kg wet							
2,4-Dinitrophenol	0.074	U	0.33	mg/kg wet							
2,4-Dinitrotoluene	0.050	U	0.33	mg/kg wet							
2,6-Dinitrotoluene	0.052	U	0.33	mg/kg wet							
2-Chloronaphthalene	0.051	U	0.33	mg/kg wet							
2-Chlorophenol	0.060	U	0.33	mg/kg wet							
2-Methyl-4,6-dinitrophenol	0.072	U	0.33	mg/kg wet							
2-Nitrophenol	0.066	U	0.33	mg/kg wet							
3,3'-Dichlorobenzidine	0.054	U	0.33	mg/kg wet							
4-Bromophenyl-phenylether	0.050	U	0.33	mg/kg wet							
4-Chloro-3-methylphenol	0.059	U	0.33	mg/kg wet							
4-Chlorophenyl-phenylether	0.047	U	0.33	mg/kg wet							
4-Nitrophenol	0.033	U	0.33	mg/kg wet							
Benzidine	0.19	U	0.33	mg/kg wet							
Bis(2-chloroethoxy)methane	0.052	U	0.33	mg/kg wet							
Bis(2-chloroethyl)ether	0.056	U	0.33	mg/kg wet							
Bis(2-ethylhexyl)phthalate	0.033	U	0.33	mg/kg wet							
Butylbenzylphthalate	0.033	U	0.33	mg/kg wet							
Diethylphthalate	0.048	U	0.33	mg/kg wet							
Dimethylphthalate	0.046	U	0.33	mg/kg wet							
Di-n-butylphthalate	0.033	U	0.33	mg/kg wet							
Di-n-octylphthalate	0.033	U	0.33	mg/kg wet							
DPH (as Azobenzene)	0.10	U	0.33	mg/kg wet							
Hexachlorobenzene	0.041	U	0.33	mg/kg wet							
Hexachlorobutadiene	0.064	U	0.33	mg/kg wet							
Hexachloroethane	0.070	U	0.33	mg/kg wet							
Isophorone	0.048	U	0.33	mg/kg wet							
Nitrobenzene	0.048	U	0.33	mg/kg wet							
N-Nitrosodimethylamine	0.068	U	0.33	mg/kg wet							
N-Nitroso-di-n-propylamine	0.056	U	0.33	mg/kg wet							
N-nitrosodiphenylamine/Diphenylamine	0.081	U	0.33	mg/kg wet							
Phenol	0.063	U	0.33	mg/kg wet							
Surrogate: 2,4,6-Tribromophenol	*1.5*			*mg/kg wet*	*1.67*		*93*	*35-125*			
Surrogate: 2-Fluorobiphenyl	*1.5*			*mg/kg wet*	*1.67*		*90*	*45-105*			
Surrogate: 2-Fluorophenol	*1.5*			*mg/kg wet*	*1.67*		*92*	*35-105*			
Surrogate: Nitrobenzene-d5	*1.4*			*mg/kg wet*	*1.67*		*83*	*35-100*			
Surrogate: Phenol-d5	*1.6*			*mg/kg wet*	*1.67*		*95*	*40-100*			
Surrogate: Terphenyl-d14	*1.8*			*mg/kg wet*	*1.67*		*107*	*30-125*			

LCS (9J20008-BS1)

Prepared: 10/20/2009 08:38 Analyzed: 10/21/2009 19:04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	1.4		0.33	mg/kg wet	1.67		81	45-110			
2,4,6-Trichlorophenol	1.4		0.33	mg/kg wet	1.67		83	45-110			
2,4-Dichlorophenol	1.3		0.33	mg/kg wet	1.67		79	45-110			

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 9J20008 - EPA 3545_MS

LCS (9J20008-BS1) Continued Prepared: 10/20/2009 08:38 Analyzed: 10/21/2009 19:04

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dimethylphenol	1.5		0.33	mg/kg wet	1.67		88	30-105			
2,4-Dinitrophenol	1.2		0.33	mg/kg wet	1.67		72	15-130			
2,4-Dinitrotoluene	1.5		0.33	mg/kg wet	1.67		92	50-115			
2,6-Dinitrotoluene	1.5		0.33	mg/kg wet	1.67		91	50-110			
2-Chloronaphthalene	1.1		0.33	mg/kg wet	1.67		68	45-105			
2-Chlorophenol	1.2		0.33	mg/kg wet	1.67		74	45-105			
2-Methyl-4,6-dinitrophenol	1.4		0.33	mg/kg wet	1.67		84	30-135			
2-Nitrophenol	1.3		0.33	mg/kg wet	1.67		77	40-110			
3,3'-Dichlorobenzidine	1.2		0.33	mg/kg wet	1.67		71	10-130			
4-Bromophenyl-phenylether	1.6		0.33	mg/kg wet	1.67		94	45-115			
4-Chloro-3-methylphenol	1.3		0.33	mg/kg wet	1.67		78	45-115			
4-Chlorophenyl-phenylether	1.6		0.33	mg/kg wet	1.67		96	45-110			
4-Nitrophenol	1.5		0.33	mg/kg wet	1.67		91	15-140			
Benzidine	0.86		0.33	mg/kg wet	1.67		52	10-121			
Bis(2-chloroethoxy)methane	1.4		0.33	mg/kg wet	1.67		86	45-110			
Bis(2-chloroethyl)ether	1.4		0.33	mg/kg wet	1.67		87	40-105			
Bis(2-ethylhexyl)phthalate	1.6		0.33	mg/kg wet	1.67		95	45-125			
Butylbenzylphthalate	1.8		0.33	mg/kg wet	1.67		107	50-125			
Diethylphthalate	1.5		0.33	mg/kg wet	1.67		92	50-115			
Dimethylphthalate	1.6		0.33	mg/kg wet	1.67		95	50-110			
Di-n-butylphthalate	1.8		0.33	mg/kg wet	1.67		105	55-110			
Di-n-octylphthalate	1.5		0.33	mg/kg wet	1.67		88	40-130			
DPH (as Azobenzene)	1.5		0.33	mg/kg wet	1.67		88	0-200			
Hexachlorobenzene	1.6		0.33	mg/kg wet	1.67		98	45-120			
Hexachlorobutadiene	1.4		0.33	mg/kg wet	1.67		82	40-115			
Hexachloroethane	1.3		0.33	mg/kg wet	1.67		76	35-110			
Isophorone	1.4		0.33	mg/kg wet	1.67		83	45-110			
Nitrobenzene	1.3		0.33	mg/kg wet	1.67		79	40-115			
N-Nitrosodimethylamine	1.1		0.33	mg/kg wet	1.67		65	20-115			
N-Nitroso-di-n-propylamine	1.4		0.33	mg/kg wet	1.67		83	40-115			
N-nitrosodiphenylamine/Diphenylamine	1.4		0.33	mg/kg wet	1.67		82	50-115			
Phenol	1.2		0.33	mg/kg wet	1.67		74	40-100			
Surrogate: 2,4,6-Tribromophenol	*1.6*			*mg/kg wet*	*1.67*		*98*	*35-125*			
Surrogate: 2-Fluorobiphenyl	*1.4*			*mg/kg wet*	*1.67*		*82*	*45-105*			
Surrogate: 2-Fluorophenol	*1.3*			*mg/kg wet*	*1.67*		*75*	*35-105*			
Surrogate: Nitrobenzene-d5	*1.3*			*mg/kg wet*	*1.67*		*76*	*35-100*			
Surrogate: Phenol-d5	*1.3*			*mg/kg wet*	*1.67*		*80*	*40-100*			
Surrogate: Terphenyl-d14	*1.7*			*mg/kg wet*	*1.67*		*101*	*30-125*			

Matrix Spike (9J20008-MS1) Prepared: 10/20/2009 08:38 Analyzed: 10/21/2009 19:33

Source: B904752-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	1.6		0.36	mg/kg dry	1.81	0.061 U	88	45-110			
2,4,6-Trichlorophenol	1.7		0.36	mg/kg dry	1.81	0.061 U	91	45-110			
2,4-Dichlorophenol	1.6		0.36	mg/kg dry	1.81	0.075 U	87	45-110			
2,4-Dimethylphenol	1.4		0.36	mg/kg dry	1.81	0.071 U	78	30-105			
2,4-Dinitrophenol	0.080	U	0.36	mg/kg dry	1.81	0.080 U		15-130			QM-07

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 9J20008 - EPA 3545_MS

Matrix Spike (9J20008-MS1) Continued

Prepared: 10/20/2009 08:38 Analyzed: 10/21/2009 19:33

Source: B904752-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-Dinitrotoluene	1.7		0.36	mg/kg dry	1.81	0.054 U	93	50-115			
2,6-Dinitrotoluene	1.7		0.36	mg/kg dry	1.81	0.057 U	96	50-110			
2-Chloronaphthalene	1.3		0.36	mg/kg dry	1.81	0.055 U	73	45-105			
2-Chlorophenol	1.5		0.36	mg/kg dry	1.81	0.065 U	81	45-105			
2-Methyl-4,6-dinitrophenol	0.78		0.36	mg/kg dry	1.81	0.078 U	43	30-135			
2-Nitrophenol	1.5		0.36	mg/kg dry	1.81	0.072 U	83	40-110			
3,3'-Dichlorobenzidine	1.1		0.36	mg/kg dry	1.81	0.059 U	60	10-130			
4-Bromophenyl-phenylether	1.8		0.36	mg/kg dry	1.81	0.054 U	97	45-115			
4-Chloro-3-methylphenol	1.6		0.36	mg/kg dry	1.81	0.064 U	86	45-115			
4-Chlorophenyl-phenylether	1.8		0.36	mg/kg dry	1.81	0.051 U	100	45-110			
4-Nitrophenol	1.7		0.36	mg/kg dry	1.81	0.036 U	93	15-140			
Benzidine	0.21	U	0.36	mg/kg dry	1.81	0.21 U		10-121			QM-07
Bis(2-chloroethoxy)methane	1.6		0.36	mg/kg dry	1.81	0.057 U	90	45-110			
Bis(2-chloroethyl)ether	1.9		0.36	mg/kg dry	1.81	0.061 U	107	40-105			QM-07
Bis(2-ethylhexyl)phthalate	1.9		0.36	mg/kg dry	1.81	0.12	96	45-125			
Butylbenzylphthalate	2.1		0.36	mg/kg dry	1.81	0.16	105	50-125			
Diethylphthalate	1.7		0.36	mg/kg dry	1.81	0.052 U	95	50-115			
Dimethylphthalate	1.8		0.36	mg/kg dry	1.81	0.050 U	100	50-110			
Di-n-butylphthalate	1.9		0.36	mg/kg dry	1.81	0.036 U	103	55-110			
Di-n-octylphthalate	1.7		0.36	mg/kg dry	1.81	0.036 U	95	40-130			
DPH (as Azobenzene)	1.7		0.36	mg/kg dry	1.81	0.11 U	91	0-200			
Hexachlorobenzene	1.8		0.36	mg/kg dry	1.81	0.045 U	99	45-120			
Hexachlorobutadiene	1.6		0.36	mg/kg dry	1.81	0.070 U	89	40-115			
Hexachloroethane	1.4		0.36	mg/kg dry	1.81	0.076 U	80	35-110			
Isophorone	1.6		0.36	mg/kg dry	1.81	0.052 U	87	45-110			
Nitrobenzene	1.6		0.36	mg/kg dry	1.81	0.052 U	86	40-115			
N-Nitrosodimethylamine	1.3		0.36	mg/kg dry	1.81	0.074 U	71	20-115			
N-Nitroso-di-n-propylamine	1.6		0.36	mg/kg dry	1.81	0.061 U	87	40-115			
N-nitrosodiphenylamine/Diphenylamine	1.5		0.36	mg/kg dry	1.81	0.088 U	85	50-115			
Phenol	1.4		0.36	mg/kg dry	1.81	0.069 U	79	40-100			
Surrogate: 2,4,6-Tribromophenol	*1.8*			*mg/kg dry*	*1.81*		*98*	*35-125*			
Surrogate: 2-Fluorobiphenyl	*1.5*			*mg/kg dry*	*1.81*		*80*	*45-105*			
Surrogate: 2-Fluorophenol	*1.4*			*mg/kg dry*	*1.81*		*78*	*35-105*			
Surrogate: Nitrobenzene-d5	*1.4*			*mg/kg dry*	*1.81*		*78*	*35-100*			
Surrogate: Phenol-d5	*1.5*			*mg/kg dry*	*1.81*		*82*	*40-100*			
Surrogate: Terphenyl-d14	*1.7*			*mg/kg dry*	*1.81*		*93*	*30-125*			

Matrix Spike Dup (9J20008-MSD1)

Prepared: 10/20/2009 08:38 Analyzed: 10/21/2009 20:02

Source: B904752-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	1.6		0.36	mg/kg dry	1.81	0.061 U	89	45-110	1	30	
2,4,6-Trichlorophenol	1.7		0.36	mg/kg dry	1.81	0.061 U	93	45-110	1	30	
2,4-Dichlorophenol	1.6		0.36	mg/kg dry	1.81	0.075 U	90	45-110	3	30	
2,4-Dimethylphenol	1.5		0.36	mg/kg dry	1.81	0.071 U	80	30-105	3	30	
2,4-Dinitrophenol	0.080	U	0.36	mg/kg dry	1.81	0.080 U		15-130		30	QM-07
2,4-Dinitrotoluene	1.7		0.36	mg/kg dry	1.81	0.054 U	94	50-115	0.5	30	

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 9J20008 - EPA 3545_MS

Matrix Spike Dup (9J20008-MSD1) Continued Prepared: 10/20/2009 08:38 Analyzed: 10/21/2009 20:02

Source: B904752-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,6-Dinitrotoluene	1.8		0.36	mg/kg dry	1.81	0.057 U	98	50-110	2	30	
2-Chloronaphthalene	1.3		0.36	mg/kg dry	1.81	0.055 U	72	45-105	0.8	30	
2-Chlorophenol	1.5		0.36	mg/kg dry	1.81	0.065 U	83	45-105	2	30	
2-Methyl-4,6-dinitrophenol	0.55		0.36	mg/kg dry	1.81	0.078 U	30	30-135	34	30	QM-11
2-Nitrophenol	1.5		0.36	mg/kg dry	1.81	0.072 U	85	40-110	2	30	
3,3'-Dichlorobenzidine	1.2		0.36	mg/kg dry	1.81	0.059 U	68	10-130	14	30	
4-Bromophenyl-phenylether	1.8		0.36	mg/kg dry	1.81	0.054 U	97	45-115	0.08	30	
4-Chloro-3-methylphenol	1.6		0.36	mg/kg dry	1.81	0.064 U	88	45-115	2	30	
4-Chlorophenyl-phenylether	1.8		0.36	mg/kg dry	1.81	0.051 U	100	45-110	0.8	30	
4-Nitrophenol	1.7		0.36	mg/kg dry	1.81	0.036 U	95	15-140	2	30	
Benzidine	0.21	U	0.36	mg/kg dry	1.81	0.21 U		10-121		30	QM-07
Bis(2-chloroethoxy)methane	1.7		0.36	mg/kg dry	1.81	0.057 U	92	45-110	2	30	
Bis(2-chloroethyl)ether	1.8		0.36	mg/kg dry	1.81	0.061 U	100	40-105	7	30	
Bis(2-ethylhexyl)phthalate	1.9		0.36	mg/kg dry	1.81	0.12	99	45-125	2	30	
Butylbenzylphthalate	2.0		0.36	mg/kg dry	1.81	0.16	101	50-125	3	30	
Diethylphthalate	1.8		0.36	mg/kg dry	1.81	0.052 U	97	50-115	2	30	
Dimethylphthalate	1.8		0.36	mg/kg dry	1.81	0.050 U	101	50-110	0.3	30	
Di-n-butylphthalate	1.8		0.36	mg/kg dry	1.81	0.036 U	101	55-110	2	30	
Di-n-octylphthalate	1.7		0.36	mg/kg dry	1.81	0.036 U	96	40-130	2	30	
DPH (as Azobenzene)	1.7		0.36	mg/kg dry	1.81	0.11 U	91	0-200	0.2	200	
Hexachlorobenzene	1.8		0.36	mg/kg dry	1.81	0.045 U	98	45-120	2	30	
Hexachlorobutadiene	1.6		0.36	mg/kg dry	1.81	0.070 U	89	40-115	0.1	30	
Hexachloroethane	1.4		0.36	mg/kg dry	1.81	0.076 U	79	35-110	1	30	
Isophorone	1.6		0.36	mg/kg dry	1.81	0.052 U	88	45-110	1	30	
Nitrobenzene	1.6		0.36	mg/kg dry	1.81	0.052 U	87	40-115	2	30	
N-Nitrosodimethylamine	1.3		0.36	mg/kg dry	1.81	0.074 U	71	20-115	1	30	
N-Nitroso-di-n-propylamine	1.6		0.36	mg/kg dry	1.81	0.061 U	87	40-115	0.2	30	
N-nitrosodiphenylamine/Diphenylamine	1.5		0.36	mg/kg dry	1.81	0.088 U	85	50-115	0.2	30	
Phenol	1.5		0.36	mg/kg dry	1.81	0.069 U	80	40-100	1	30	
Surrogate: 2,4,6-Tribromophenol	*1.9*			*mg/kg dry*	*1.81*		*102*	*35-125*			
Surrogate: 2-Fluorobiphenyl	*1.5*			*mg/kg dry*	*1.81*		*81*	*45-105*			
Surrogate: 2-Fluorophenol	*1.5*			*mg/kg dry*	*1.81*		*82*	*35-105*			
Surrogate: Nitrobenzene-d5	*1.5*			*mg/kg dry*	*1.81*		*82*	*35-100*			
Surrogate: Phenol-d5	*1.6*			*mg/kg dry*	*1.81*		*86*	*40-100*			
Surrogate: Terphenyl-d14	*1.7*			*mg/kg dry*	*1.81*		*93*	*30-125*			

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 9J22018 - EPA 3545_MS

Blank (9J22018-BLK1) Prepared: 10/22/2009 13:32 Analyzed: 10/23/2009 10:17

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	0.0030	U	0.046	mg/kg wet							
2-Methylnaphthalene	0.0032	U	0.046	mg/kg wet							
Acenaphthene	0.0027	U	0.046	mg/kg wet							
Acenaphthylene	0.0027	U	0.046	mg/kg wet							
Anthracene	0.0027	U	0.046	mg/kg wet							

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 9J22018 - EPA 3545_MS

Blank (9J22018-BLK1) Continued

Prepared: 10/22/2009 13:32 Analyzed: 10/23/2009 10:17

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzo(a)anthracene	0.0034	U	0.046	mg/kg wet							
Benzo(a)pyrene	0.0053	U	0.046	mg/kg wet							
Benzo(b)fluoranthene	0.0047	U	0.046	mg/kg wet							
Benzo(g,h,i)perylene	0.0038	U	0.046	mg/kg wet							
Benzo(k)fluoranthene	0.0032	U	0.046	mg/kg wet							
Chrysene	0.0030	U	0.046	mg/kg wet							
Dibenzo(a,h)anthracene	0.0036	U	0.046	mg/kg wet							
Fluoranthene	0.0036	U	0.046	mg/kg wet							
Fluorene	0.0036	U	0.046	mg/kg wet							
Indeno(1,2,3-cd)pyrene	0.0040	U	0.046	mg/kg wet							
Naphthalene	0.0037	U	0.046	mg/kg wet							
Phenanthrene	0.0032	U	0.046	mg/kg wet							
Pyrene	0.0033	U	0.046	mg/kg wet							
Surrogate: p-Terphenyl	*1.6*			*mg/kg wet*	*1.67*		*98*	*61-150*			

LCS (9J22018-BS1)

Prepared: 10/22/2009 13:32 Analyzed: 10/23/2009 10:35

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	0.59		0.046	mg/kg wet	0.667		89	60-120			
2-Methylnaphthalene	0.61		0.046	mg/kg wet	0.667		91	45-105			
Acenaphthene	0.62		0.046	mg/kg wet	0.667		92	35-110			
Acenaphthylene	0.61		0.046	mg/kg wet	0.667		91	35-115			
Anthracene	0.60		0.046	mg/kg wet	0.667		90	45-125			
Benzo(a)anthracene	0.62		0.046	mg/kg wet	0.667		92	50-105			
Benzo(a)pyrene	0.60		0.046	mg/kg wet	0.667		89	40-135			
Benzo(b)fluoranthene	0.62		0.046	mg/kg wet	0.667		93	55-120			
Benzo(g,h,i)perylene	0.68		0.046	mg/kg wet	0.667		102	55-115			
Benzo(k)fluoranthene	0.66		0.046	mg/kg wet	0.667		98	50-120			
Chrysene	0.65		0.046	mg/kg wet	0.667		98	55-120			
Dibenzo(a,h)anthracene	0.66		0.046	mg/kg wet	0.667		99	45-115			
Fluoranthene	0.60		0.046	mg/kg wet	0.667		90	40-135			
Fluorene	0.60		0.046	mg/kg wet	0.667		89	45-105			
Indeno(1,2,3-cd)pyrene	0.66		0.046	mg/kg wet	0.667		98	55-135			
Naphthalene	0.66		0.046	mg/kg wet	0.667		99	50-110			
Phenanthrene	0.65		0.046	mg/kg wet	0.667		97	55-125			
Pyrene	0.60		0.046	mg/kg wet	0.667		90	50-115			
Surrogate: p-Terphenyl	*1.5*			*mg/kg wet*	*1.67*		*89*	*61-150*			

Matrix Spike (9J22018-MS1)

Source: B904752-02

Prepared: 10/22/2009 13:32 Analyzed: 10/23/2009 10:54

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	0.62		0.048	mg/kg dry	0.701	0.0032 U	88	60-120			
2-Methylnaphthalene	0.63		0.048	mg/kg dry	0.701	0.0034 U	90	45-105			
Acenaphthene	0.66		0.048	mg/kg dry	0.701	0.0028 U	94	35-110			
Acenaphthylene	0.65		0.048	mg/kg dry	0.701	0.0028 U	93	35-115			
Anthracene	0.64		0.048	mg/kg dry	0.701	0.0028 U	91	45-125			

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 9J22018 - EPA 3545_MS

Matrix Spike (9J22018-MS1) Continued Prepared: 10/22/2009 13:32 Analyzed: 10/23/2009 10:54

Source: B904752-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzo(a)anthracene	0.67		0.048	mg/kg dry	0.701	0.0036 U	95	50-105			
Benzo(a)pyrene	0.66		0.048	mg/kg dry	0.701	0.0056 U	95	40-135			
Benzo(b)fluoranthene	0.67		0.048	mg/kg dry	0.701	0.0049 U	96	55-120			
Benzo(g,h,i)perylene	0.75		0.048	mg/kg dry	0.701	0.0040 U	107	55-115			
Benzo(k)fluoranthene	0.70		0.048	mg/kg dry	0.701	0.0034 U	100	50-120			
Chrysene	0.70		0.048	mg/kg dry	0.701	0.0032 U	100	55-120			
Dibenzo(a,h)anthracene	0.73		0.048	mg/kg dry	0.701	0.0038 U	104	45-115			
Fluoranthene	0.64		0.048	mg/kg dry	0.701	0.0038 U	92	40-135			
Fluorene	0.64		0.048	mg/kg dry	0.701	0.0038 U	91	45-105			
Indeno(1,2,3-cd)pyrene	0.72		0.048	mg/kg dry	0.701	0.0042 U	103	55-135			
Naphthalene	0.68		0.048	mg/kg dry	0.701	0.012	95	50-110			
Phenanthrene	0.70		0.048	mg/kg dry	0.701	0.0034 U	99	55-125			
Pyrene	0.65		0.048	mg/kg dry	0.701	0.0035 U	93	50-115			
Surrogate: p-Terphenyl	*1.5*			*mg/kg dry*	*1.75*		*87*	*61-150*			

Matrix Spike Dup (9J22018-MSD1) Prepared: 10/22/2009 13:32 Analyzed: 10/23/2009 11:12

Source: B904752-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	0.53		0.048	mg/kg dry	0.701	0.0032 U	76	60-120	15	20	
2-Methylnaphthalene	0.55		0.048	mg/kg dry	0.701	0.0034 U	78	45-105	14	30	
Acenaphthene	0.56		0.048	mg/kg dry	0.701	0.0028 U	79	35-110	17	30	
Acenaphthylene	0.55		0.048	mg/kg dry	0.701	0.0028 U	78	35-115	17	30	
Anthracene	0.54		0.048	mg/kg dry	0.701	0.0028 U	76	45-125	17	30	
Benzo(a)anthracene	0.56		0.048	mg/kg dry	0.701	0.0036 U	79	50-105	18	30	
Benzo(a)pyrene	0.55		0.048	mg/kg dry	0.701	0.0056 U	78	40-135	19	30	
Benzo(b)fluoranthene	0.55		0.048	mg/kg dry	0.701	0.0049 U	79	55-120	20	30	
Benzo(g,h,i)perylene	0.63		0.048	mg/kg dry	0.701	0.0040 U	89	55-115	18	30	
Benzo(k)fluoranthene	0.59		0.048	mg/kg dry	0.701	0.0034 U	84	50-120	18	30	
Chrysene	0.58		0.048	mg/kg dry	0.701	0.0032 U	83	55-120	18	30	
Dibenzo(a,h)anthracene	0.60		0.048	mg/kg dry	0.701	0.0038 U	86	45-115	19	30	
Fluoranthene	0.54		0.048	mg/kg dry	0.701	0.0038 U	77	40-135	18	30	
Fluorene	0.54		0.048	mg/kg dry	0.701	0.0038 U	77	45-105	17	30	
Indeno(1,2,3-cd)pyrene	0.60		0.048	mg/kg dry	0.701	0.0042 U	85	55-135	19	30	
Naphthalene	0.59		0.048	mg/kg dry	0.701	0.012	83	50-110	14	30	
Phenanthrene	0.59		0.048	mg/kg dry	0.701	0.0034 U	83	55-125	17	30	
Pyrene	0.54		0.048	mg/kg dry	0.701	0.0035 U	77	50-115	18	30	
Surrogate: p-Terphenyl	*1.3*			*mg/kg dry*	*1.75*		*74*	*61-150*			

Polychlorinated Biphenyls by GC - Quality Control

Batch 9J22017 - EPA 3545A

Blank (9J22017-BLK1) Prepared: 10/22/2009 13:29 Analyzed: 10/23/2009 13:17

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.0090	U	0.050	mg/kg wet							

QUALITY CONTROL

Polychlorinated Biphenyls by GC - Quality Control

Batch 9J22017 - EPA 3545A

Blank (9J22017-BLK1) Continued

Prepared: 10/22/2009 13:29 Analyzed: 10/23/2009 13:17

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1221	0.0090	U	0.050	mg/kg wet							
PCB-1232	0.0090	U	0.050	mg/kg wet							
PCB-1248	0.0090	U	0.050	mg/kg wet							
PCB-1254	0.0090	U	0.050	mg/kg wet							
PCB-1260	0.0090	U	0.050	mg/kg wet							
Surrogate: 2,4,5,6-TCMX	*0.037*			*mg/kg wet*	*0.0333*		*111*	*0-200*			
Surrogate: Decachlorobiphenyl	*0.037*			*mg/kg wet*	*0.0333*		*110*	*60-125*			

LCS (9J22017-BS1)

Prepared: 10/22/2009 13:29 Analyzed: 10/23/2009 13:29

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.34		0.050	mg/kg wet	0.333		102	40-140			
PCB-1260	0.36		0.050	mg/kg wet	0.333		108	60-130			
Surrogate: 2,4,5,6-TCMX	*0.037*			*mg/kg wet*	*0.0333*		*110*	*0-200*			
Surrogate: Decachlorobiphenyl	*0.038*			*mg/kg wet*	*0.0333*		*114*	*60-125*			

Matrix Spike (9J22017-MS1)

Source: B904752-01

Prepared: 10/22/2009 13:29 Analyzed: 10/23/2009 13:41

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.34		0.054	mg/kg dry	0.360	0.0098 U	94	40-140			
PCB-1260	0.39		0.054	mg/kg dry	0.360	0.030	100	60-130			
Surrogate: 2,4,5,6-TCMX	*0.037*			*mg/kg dry*	*0.0360*		*101*	*0-200*			
Surrogate: Decachlorobiphenyl	*0.040*			*mg/kg dry*	*0.0360*		*112*	*60-125*			

Matrix Spike Dup (9J22017-MSD1)

Source: B904752-01

Prepared: 10/22/2009 13:29 Analyzed: 10/23/2009 13:54

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.34		0.054	mg/kg dry	0.360	0.0098 U	95	40-140	2	30	
PCB-1260	0.40		0.054	mg/kg dry	0.360	0.030	103	60-130	3	30	
Surrogate: 2,4,5,6-TCMX	*0.035*			*mg/kg dry*	*0.0360*		*99*	*0-200*			
Surrogate: Decachlorobiphenyl	*0.041*			*mg/kg dry*	*0.0360*		*114*	*60-125*			

FL Petroleum Range Organics - Quality Control

Batch 9J20010 - EPA 3545A

Blank (9J20010-BLK1)

Prepared: 10/20/2009 08:42 Analyzed: 10/21/2009 17:48

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	0.83	U	10	mg/kg wet							
Surrogate: n-Nonatriacontane	*2.3*			*mg/kg wet*	*3.33*		*68*	*23-189*			
Surrogate: o-Terphenyl	*1.6*			*mg/kg wet*	*1.67*		*95*	*64-118*			

LCS (9J20010-BS1)

Prepared: 10/20/2009 08:42 Analyzed: 10/21/2009 18:12

QUALITY CONTROL

FL Petroleum Range Organics - Quality Control

Batch 9J20010 - EPA 3545A

LCS (9J20010-BS1) Continued Prepared: 10/20/2009 08:42 Analyzed: 10/21/2009 18:12

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	50		10	mg/kg wet	56.7		88	63-153			
Surrogate: n-Nonatriacontane	*1.4*			*mg/kg wet*	*3.33*		*43*	*60-118*			*QS-03*
Surrogate: o-Terphenyl	*1.6*			*mg/kg wet*	*1.67*		*98*	*62-109*			

Matrix Spike (9J20010-MS1) Prepared: 10/20/2009 08:42 Analyzed: 10/22/2009 02:29

Source: B904752-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	65	D	53	mg/kg dry	59.4	4.4 U	109	63-122			
Surrogate: n-Nonatriacontane	*3.1*			*mg/kg dry*	*3.49*		*89*	*23-189*			
Surrogate: o-Terphenyl	*1.8*			*mg/kg dry*	*1.75*		*105*	*64-118*			

Matrix Spike Dup (9J20010-MSD1) Prepared: 10/20/2009 08:42 Analyzed: 10/22/2009 02:53

Source: B904752-02

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	58	D	53	mg/kg dry	59.4	4.4 U	98	63-122	11	30	
Surrogate: n-Nonatriacontane	*2.9*			*mg/kg dry*	*3.49*		*82*	*23-189*			
Surrogate: o-Terphenyl	*1.6*			*mg/kg dry*	*1.75*		*93*	*64-118*			

TCLP Metals by 6000/7000 Series Methods - Quality Control

Batch 9J23002 - EPA 7470A

Blank (9J23002-BLK1) Prepared: 10/23/2009 13:59 Analyzed: 10/24/2009 12:10

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.000046	U	0.00020	mg/L							

Blank (9J23002-BLK2) Prepared: 10/21/2009 10:40 Analyzed: 10/21/2009 10:40

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.00046	U	0.00200	mg/L							

Blank (9J23002-BLK3) Prepared: 10/23/2009 13:59 Analyzed: 10/24/2009 12:11

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.00046	U	0.00200	mg/L							

LCS (9J23002-BS1) Prepared: 10/23/2009 13:59 Analyzed: 10/24/2009 12:13

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.00519		0.00020	mg/L	0.00500		104	85-115			

Matrix Spike (9J23002-MS1) Prepared: 10/23/2009 13:59 Analyzed: 10/24/2009 12:19

Source: B904752-01

QUALITY CONTROL

TCLP Metals by 6000/7000 Series Methods - Quality Control

Batch 9J23002 - EPA 7470A

Matrix Spike (9J23002-MS1) Continued

Source: B904752-01

Prepared: 10/23/2009 13:59 Analyzed: 10/24/2009 12:19

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.0577		0.00200	mg/L	0.0500	0.00046 U	115	85-115			

Matrix Spike Dup (9J23002-MSD1)

Source: B904752-01

Prepared: 10/23/2009 13:59 Analyzed: 10/24/2009 12:25

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.0565		0.00200	mg/L	0.0500	0.00046 U	113	85-115	2	25	

Batch 9J23017 - EPA 3010A

Blank (9J23017-BLK1)

Prepared: 10/23/2009 16:07 Analyzed: 10/26/2009 15:29

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.0290	U	0.0500	mg/L							
Barium	0.00195	U	0.500	mg/L							
Cadmium	0.00210	U	0.00500	mg/L							
Chromium	0.00400	U	0.0500	mg/L							
Lead	0.0120	U	0.0500	mg/L							
Selenium	0.0400	U	0.0500	mg/L							
Silver	0.00900	U	0.0500	mg/L							

Blank (9J23017-BLK2)

Prepared: 10/23/2009 16:07 Analyzed: 10/26/2009 15:32

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	0.0290	U	0.0500	mg/L							
Barium	**0.0135**	**J**	0.500	mg/L							
Cadmium	0.00210	U	0.00500	mg/L							
Chromium	0.00400	U	0.0500	mg/L							
Lead	0.0120	U	0.0500	mg/L							
Selenium	0.0400	U	0.0500	mg/L							
Silver	0.00900	U	0.0500	mg/L							

LCS (9J23017-BS1)

Prepared: 10/23/2009 16:07 Analyzed: 10/26/2009 15:35

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	4.90		0.0500	mg/L	5.00		98	85-115			
Barium	4.96	B	0.500	mg/L	5.00		99	85-115			
Cadmium	2.44		0.00500	mg/L	2.50		98	85-115			
Chromium	4.97		0.0500	mg/L	5.00		99	85-115			
Lead	5.00		0.0500	mg/L	5.00		100	85-115			
Selenium	4.96		0.0500	mg/L	5.00		99	85-115			
Silver	0.494		0.0500	mg/L	0.500		99	85-115			

Matrix Spike (9J23017-MS1)

Source: B904752-01

Prepared: 10/23/2009 16:07 Analyzed: 10/26/2009 15:37

QUALITY CONTROL

TCLP Metals by 6000/7000 Series Methods - Quality Control

Batch 9J23017 - EPA 3010A

Matrix Spike (9J23017-MS1) Continued Prepared: 10/23/2009 16:07 Analyzed: 10/26/2009 15:37

Source: B904752-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	4.98		0.0500	mg/L	5.00	0.0290 U	100	80-120			
Barium	4.94	B	0.500	mg/L	5.00	0.232	94	80-120			
Cadmium	2.37		0.00500	mg/L	2.50	0.00268	95	80-120			
Chromium	4.86		0.0500	mg/L	5.00	0.00400 U	97	80-120			
Lead	4.94		0.0500	mg/L	5.00	0.0156	98	80-120			
Selenium	5.05		0.0500	mg/L	5.00	0.0400 U	101	80-120			
Silver	0.493		0.0500	mg/L	0.500	0.00900 U	99	80-120			

Matrix Spike Dup (9J23017-MSD1) Prepared: 10/23/2009 16:07 Analyzed: 10/26/2009 15:39

Source: B904752-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	5.02		0.0500	mg/L	5.00	0.0290 U	100	80-120	0.9	30	
Barium	5.00	B	0.500	mg/L	5.00	0.232	95	80-120	1	30	
Cadmium	2.40		0.00500	mg/L	2.50	0.00268	96	80-120	1	30	
Chromium	4.91		0.0500	mg/L	5.00	0.00400 U	98	80-120	1	30	
Lead	4.97		0.0500	mg/L	5.00	0.0156	99	80-120	0.6	30	
Selenium	5.10		0.0500	mg/L	5.00	0.0400 U	102	80-120	1	30	
Silver	0.495		0.0500	mg/L	0.500	0.00900 U	99	80-120	0.4	30	

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM-11	Precision between duplicate matrix spikes of the same sample was outside acceptance limits.
QS-03	Surrogate recovery outside acceptance limits.
QS-04	Surrogate recovery not calculated. Surrogate diluted out of the calibration range.

B904752

TETRA TECH NUS, INC. CHAIN OF CUSTODY NUMBER 0923 PAGE ___ OF ___

PROJECT NO: 1120 1516	FACILITY: 1517	PROJECT MANAGER: Mark Peterson	PHONE NUMBER: 704 334 7260
SAMPLERS (SIGNATURE):		FIELD OPERATIONS LEADER: David Stephen	PHONE NUMBER: 704 334 7260
		CARRIER/WAYBILL NUMBER: Drop-off	

LABORATORY NAME AND CONTACT: ENCO / Chris
ADDRESS: 4810 Executive Ct. Ste 211
CITY, STATE: Jacksonville, FL 32216

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2007	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	8270 SIM	8082 PCB	TCLP Metals	TRPH	Fe Pb	8270 Full List				COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)									G	G	G	G	G					
PRESERVATIVE USED									-	-	-	-	-					
10/19	1010	MPT-1517-SB02-0.5		0.5	0.5	SO	G	2	X	X	X	X	X					Cool to 4°C
10/19	0945	MPT-1517-SB03-0.5		0.5	0.5	SO	G	2	X	X	X	X	X					
10/19	1030	MPT-1517-SB01-0.5		0.5	0.5	SO	G	2					X					

1. RELINQUISHED BY	DATE 10/19/09	TIME 1305	1. RECEIVED BY	DATE 10/19/09	TIME 13:05
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS: RH-08 @ 0°C

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

www.encolabs.com

Environmental Conservation Laboratories, Inc.
4810 Executive Park Court, Suite 211
Jacksonville FL, 32216-6069
Phone: 904.296.3007 FAX: 904.296.6210

www.encolabs.com

Tuesday, February 2, 2010

Tetra Tech NUS (BR006)

Attn: Mr. Dave Siefken

8640 Philips Highway Suite 16

Jacksonville, FL 32256

RE: Laboratory Results for
Project Number: 112601516, Project Name/Desc: CTO-118 Naval Station Mayport Site 1517
ENCO Workorder: B000432

Dear Mr. Dave Siefken,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Monday, January 25, 2010.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Jacksonville. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Chris Tompkins For Lorraine Strong
Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 8.

www.encolabs.com

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: MPT-1517-SB-01-0.5	Lab ID: 8000432-01	Sampled: 10/19/09 10:30	Received: 01/25/10 15:10

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	04/17/10	07/26/10	01/27/10	16:23	1/28/2010 11:44

Client ID: MPT-1517-SB-03-0.5	Lab ID: 8000432-02	Sampled: 10/19/09 09:45	Received: 01/25/10 15:10

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	04/17/10	07/26/10	01/27/10	16:23	1/28/2010 11:47

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SAMPLE DETECTION SUMMARY

Client ID: MPT-1517-SB-03-0.5 Lab ID: B000432-02

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Arsenic - SPLP	5.84	J	5.80	10.0	ug/L	EPA 6010C	

www.encolabs.com

ANALYTICAL RESULTS

Description: MPT-1517-SB-01-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B000432-01
Sampled: 10/19/09 10:30
Sampled By:

Received: 01/25/10 15:10
Work Order: B000432
% Solids:

SPLP Metals by 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	5.80	U	ug/L	1	5.80	10.0	0A27017	EPA 6010C	01/28/10 11:44	GMB	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

www.encolabs.com

Description: MPT-1517-SB-03-0.5
Matrix: Soil
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B000432-02
Sampled: 10/19/09 09:45
Sampled By:

Received: 01/25/10 15:10
Work Order: B000432
% Solids:

SPLP Metals by 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	5.84	J	ug/L	1	5.80	10.0	0A27017	EPA 6010C	01/28/10 11:47	GMB	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL

SPLP Metals by 6000/7000 Series Methods - Quality Control

Batch 0A27017 - EPA 3010A

Blank (0A27017-BLK1) Prepared: 01/27/2010 16:23 Analyzed: 01/28/2010 11:34

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	5.80	U	10.0	ug/L							
Cadmium	0.420	U	1.00	ug/L							
Chromium	0.800	U	10.0	ug/L							
Lead	2.40	U	10.0	ug/L							

Blank (0A27017-BLK2) Prepared: 01/27/2010 16:23 Analyzed: 01/28/2010 13:16

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	5.80	U	10.0	ug/L							
Cadmium	0.420	U	1.00	ug/L							
Chromium	0.800	U	10.0	ug/L							
Lead	**3.75**	**J**	10.0	ug/L							

Blank (0A27017-BLK3) Prepared: 01/27/2010 16:23 Analyzed: 01/28/2010 13:18

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	29.0	U	50.0	ug/L							
Cadmium	2.10	U	5.00	ug/L							
Chromium	4.00	U	50.0	ug/L							
Lead	**14.8**	**J**	50.0	ug/L							

Blank (0A27017-BLK4) Prepared: 01/27/2010 16:23 Analyzed: 01/28/2010 13:21

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	29.0	U	50.0	ug/L							
Cadmium	2.10	U	5.00	ug/L							
Chromium	4.00	U	50.0	ug/L							
Lead	12.0	U	50.0	ug/L							

LCS (0A27017-BS1) Prepared: 01/27/2010 16:23 Analyzed: 01/28/2010 11:37

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	490		10.0	ug/L	500		98	85-115			
Cadmium	49.5		1.00	ug/L	50.0		99	85-115			
Chromium	503		10.0	ug/L	500		101	85-115			
Lead	516	B	10.0	ug/L	500		103	85-115			

Matrix Spike (0A27017-MS1) Prepared: 01/27/2010 16:23 Analyzed: 01/28/2010 11:39

Source: B906045-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	2510		50.0	ug/L	2500	34.8	99	80-120			
Cadmium	321		5.00	ug/L	250	70.1	100	80-120			
Chromium	2890		50.0	ug/L	2500	412	99	80-120			
Lead	2610	B	50.0	ug/L	2500	24.9	103	80-120			

Matrix Spike Dup (0A27017-MSD1) Prepared: 01/27/2010 16:23 Analyzed: 01/28/2010 11:42

QUALITY CONTROL

SPLP Metals by 6000/7000 Series Methods - Quality Control

Batch 0A27017 - EPA 3010A

Matrix Spike Dup (0A27017-MSD1) Continued

Prepared: 01/27/2010 16:23 Analyzed: 01/28/2010 11:42

Source: B906045-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	2480		50.0	ug/L	2500	34.8	98	80-120	1	30	
Cadmium	313		5.00	ug/L	250	70.1	97	80-120	3	30	
Chromium	2870		50.0	ug/L	2500	412	98	80-120	0.5	30	
Lead	2560	B	50.0	ug/L	2500	24.9	101	80-120	2	30	

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.

Environmental Conservation Laboratories, Inc.
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www.encolabs.com

Friday, June 26, 2009

Tetra Tech NUS (BR006)

Attn: Mark Peterson

8640 Philips Highway Suite 16

Jacksonville, FL 32256

RE: Laboratory Results for
Project Number: 112601516, Project Name/Desc: CTO-118 Naval Station Mayport Site 1517
ENCO Workorder: B902860

Dear Mark Peterson,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Friday, June 12, 2009.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Jacksonville. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Lorraine Strong

Lorraine Strong
Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 29.

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: MPT 1517-MW01s **Lab ID:** B902860-01 **Sampled:** 06/11/09 15:50 **Received:** 06/12/09 12:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010B	12/08/09		06/12/09	14:49	6/15/2009 19:40
EPA 8082	06/11/10	06/15/10	06/15/09	10:01	6/15/2009 15:23
EPA 8260B	06/25/09		06/17/09	11:06	6/20/2009 11:38
EPA 8270C	06/18/09	07/25/09	06/15/09	08:15	6/18/2009 16:44
FLPRO	06/18/09	07/25/09	06/15/09	10:07	6/16/2009 17:03

Client ID: MPT 1517-MW01s **Lab ID:** B902860-01RE1 **Sampled:** 06/11/09 15:50 **Received:** 06/12/09 12:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8270C	06/18/09	07/25/09	06/15/09	10:10	6/18/2009 12:22

Client ID: MPT 18a-MW01s **Lab ID:** B902860-02 **Sampled:** 06/11/09 18:35 **Received:** 06/12/09 12:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010B	12/08/09		06/12/09	14:49	6/15/2009 19:42
EPA 8011	06/25/09	06/29/09	06/15/09	13:30	6/18/2009 11:31
EPA 8260B	06/25/09		06/17/09	11:06	6/20/2009 12:17
FLPRO	06/18/09	07/25/09	06/15/09	10:07	6/16/2009 17:26

Client ID: MPT 18a-MW01s **Lab ID:** B902860-02RE1 **Sampled:** 06/11/09 18:35 **Received:** 06/12/09 12:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8270C	06/18/09	07/25/09	06/15/09	10:10	6/18/2009 12:43

Client ID: Trip Blank **Lab ID:** B902860-03 **Sampled:** 06/11/09 00:00 **Received:** 06/12/09 12:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	06/25/09		06/17/09	11:06	6/20/2009 09:42

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SAMPLE DETECTION SUMMARY

Client ID: MPT 1517-MW01s **Lab ID:** 8902860-01RE1

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Phenanthrene	0.035	J	0.030	0.10	ug/L	EPA 8270C	

Client ID: Trip Blank **Lab ID:** 8902860-03

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Methylene chloride	2.0	B	1.0	2.0	ug/L	EPA 8260B	J-01, O-01

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ANALYTICAL RESULTS

Description: MPT 1517-MW01s
Matrix: Ground Water
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B902860-01
Sampled: 06/11/09 15:50
Sampled By: Curtis Odom

Received: 06/12/09 12:20
Work Order: B902860

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
1,1,2,2-Tetrachloroethane [79-34-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
1,1,2-Trichloroethane [79-00-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
1,1-Dichloroethane [75-34-3] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
1,1-Dichloroethene [75-35-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
1,2,4-Trichlorobenzene [120-82-1] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
1,2-Dichlorobenzene [95-50-1] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
1,2-Dichloroethane [107-06-2] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
1,2-Dichloropropane [78-87-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
1,3-Dichlorobenzene [541-73-1] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
1,4-Dichlorobenzene [106-46-7] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
2-Chloroethyl Vinyl Ether [110-75-8] ^	5.0	U	ug/L	1	5.0	10	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Benzene [71-43-2] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Bromodichloromethane [75-27-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Bromoform [75-25-2] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Bromomethane [74-83-9] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Carbon tetrachloride [56-23-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Chlorobenzene [108-90-7] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Chloroethane [75-00-3] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Chloroform [67-66-3] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Chloromethane [74-87-3] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
cis-1,2-Dichloroethene [156-59-2] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
cis-1,3-Dichloropropene [10061-01-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Dibromochloromethane [124-48-1] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Dichlorodifluoromethane [75-71-8] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Ethylbenzene [100-41-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Methylene chloride [75-09-2] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Methyl-tert-Butyl Ether [1634-04-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Tetrachloroethene [127-18-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Toluene [108-88-3] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
trans-1,2-Dichloroethene [156-60-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
trans-1,3-Dichloropropene [10061-02-6] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Trichloroethene [79-01-6] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Trichlorofluoromethane [75-69-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Vinyl chloride [75-01-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	
Xylenes (Total) [1330-20-7] ^	2.0	U	ug/L	1	2.0	2.0	9F17008	EPA 8260B	06/20/09 11:38	JAL	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*99 %*	*75-120*	*9F17008*	*EPA 8260B*	*06/20/09 11:38*	*JAL*	
Dibromofluoromethane	*49*	*1*	*50.0*	*97 %*	*85-115*	*9F17008*	*EPA 8260B*	*06/20/09 11:38*	*JAL*	
Toluene-d8	*52*	*1*	*50.0*	*104 %*	*85-120*	*9F17008*	*EPA 8260B*	*06/20/09 11:38*	*JAL*	

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Description: MPT 1517-MW01s
Matrix: Ground Water
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B902860-01
Sampled: 06/11/09 15:50
Sampled By: Curtis Odom

Received: 06/12/09 12:20
Work Order: B902860

Tentatively Identified Compounds by Volatile GCMS

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
Tentatively Identified Compounds [NA]	0.0	U	ug/L	1			9F17008	EPA 8260B	06/20/09 11:38	JAL	

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Description: MPT 1517-MW01s
Matrix: Ground Water
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B902860-01
Sampled: 06/11/09 15:50
Sampled By: Curtis Odom

Received: 06/12/09 12:20
Work Order: B902860

Semivolatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
1,2,4-Trichlorobenzene [120-82-1] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
2,4,5-Trichlorophenol [95-95-4] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
2,4-Dichlorophenol [120-83-2] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
2,4-Dimethylphenol [105-67-9] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
2,4-Dinitrotoluene [121-14-2] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
2,6-Dinitrotoluene [606-20-2] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
2-Chloronaphthalene [91-58-7] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
2-Chlorophenol [95-57-8] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
2-Methyl-4,6-dinitrophenol [534-52-1] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
2-Nitrophenol [88-75-5] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
3,3'-Dichlorobenzidine [91-94-1] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
4-Bromophenyl-phenylether [101-55-3] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
4-Chloro-3-methylphenol [59-50-7] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
4-Chlorophenyl-phenylether [7005-72-3] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
4-Nitrophenol [100-02-7] ^	15	U	ug/L	1	15	30	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
Benzidine [92-87-5] ^	5.0	U	ug/L	1	5.0	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
Bis(2-chloroethoxy)methane [111-91-1] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
Bis(2-chloroethyl)ether [111-44-4] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
Bis(2-ethylhexyl)phthalate [117-81-7] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
Butylbenzylphthalate [85-68-7] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
Diethylphthalate [84-66-2] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
Dimethylphthalate [131-11-3] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
Di-n-butylphthalate [84-74-2] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
Di-n-octylphthalate [117-84-0] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
DPH (as Azobenzene) [103-33-3] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
Hexachlorobenzene [118-74-1] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
Hexachlorobutadiene [87-68-3] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
Hexachlorocyclopentadiene [77-47-4] ^	2.4	U	ug/L	1	2.4	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
Hexachloroethane [67-72-1] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
Isophorone [78-59-1] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
Nitrobenzene [98-95-3] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
N-Nitrosodimethylamine [62-75-9] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
N-Nitroso-di-n-propylamine [621-64-7] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
N-nitrosodiphenylamine/Diphenylamine [86-30-6/122-39-4]	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
Pentachlorophenol [87-86-5] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	
Phenol [108-95-2] ^	2.5	U	ug/L	1	2.5	10	9F15005	EPA 8270C	06/18/09 16:44	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,6-Tribromophenol	*39*	*1*	*50.0*	*78 %*	*40-125*	*9F15005*	*EPA 8270C*	*06/18/09 16:44*	*JWJ*	
2-Fluorobiphenyl	*41*	*1*	*50.0*	*82 %*	*50-110*	*9F15005*	*EPA 8270C*	*06/18/09 16:44*	*JWJ*	
2-Fluorophenol	*22*	*1*	*50.0*	*45 %*	*20-110*	*9F15005*	*EPA 8270C*	*06/18/09 16:44*	*JWJ*	
Nitrobenzene-d5	*41*	*1*	*50.0*	*82 %*	*40-110*	*9F15005*	*EPA 8270C*	*06/18/09 16:44*	*JWJ*	
Phenol-d5	*15*	*1*	*50.0*	*30 %*	*10-115*	*9F15005*	*EPA 8270C*	*06/18/09 16:44*	*JWJ*	
Terphenyl-d14	*52*	*1*	*50.0*	*104 %*	*50-135*	*9F15005*	*EPA 8270C*	*06/18/09 16:44*	*JWJ*	

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Description: MPT 1517-MW01s
Matrix: Ground Water
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B902860-01
Sampled: 06/11/09 15:50
Sampled By: Curtis Odom

Received: 06/12/09 12:20
Work Order: B902860

Tentatively Identified Compounds by Semivolatile GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
Tentatively Identified Compounds [NA] ^	0.0	U	ug/L	1			9F15005	EPA 8270C	06/18/09 16:44	JWJ	

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
1-Methylnaphthalene [90-12-0]	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	
2-Methylnaphthalene [91-57-6] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	
Acenaphthene [83-32-9] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	
Acenaphthylene [208-96-8] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	
Anthracene [120-12-7] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	
Benzo(a)anthracene [56-55-3] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	
Benzo(a)pyrene [50-32-8] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	
Benzo(b)fluoranthene [205-99-2] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	
Benzo(g,h,i)perylene [191-24-2] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	
Benzo(k)fluoranthene [207-08-9] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	
Chrysene [218-01-9] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	
Dibenzo(a,h)anthracene [53-70-3] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	
[illegible]oranthene [206-44-0] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	
[illegible]orene [86-73-7] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	
Naphthalene [91-20-3] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	
Phenanthrene [85-01-8] ^	**0.035**	J	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	
Pyrene [129-00-0] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:22	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*3.7*	*1*	*5.00*	*75 %*	*39-148*	*9F15004*	*EPA 8270C*	*06/18/09 12:22*	*JWJ*	

Polychlorinated Biphenyls by GC

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
PCB-1016/1242 [12674-11-2/53469-21-9] ^	0.50	U	ug/L	1	0.50	1.0	9F15002	EPA 8082	06/15/09 15:23	LJC	
PCB-1221 [11104-28-2] ^	0.50	U	ug/L	1	0.50	1.0	9F15002	EPA 8082	06/15/09 15:23	LJC	
PCB-1232 [11141-16-5] ^	0.50	U	ug/L	1	0.50	1.0	9F15002	EPA 8082	06/15/09 15:23	LJC	
PCB-1248 [12672-29-6] ^	0.50	U	ug/L	1	0.50	1.0	9F15002	EPA 8082	06/15/09 15:23	LJC	
PCB-1254 [11097-69-1] ^	0.50	U	ug/L	1	0.50	1.0	9F15002	EPA 8082	06/15/09 15:23	LJC	
PCB-1260 [11096-82-5] ^	0.50	U	ug/L	1	0.50	1.0	9F15002	EPA 8082	06/15/09 15:23	LJC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*1.0*	*1*	*1.00*	*102 %*	*0-200*	*9F15002*	*EPA 8082*	*06/15/09 15:23*	*LJC*	
Decachlorobiphenyl	*0.79*	*1*	*1.00*	*79 %*	*40-135*	*9F15002*	*EPA 8082*	*06/15/09 15:23*	*LJC*	

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Description: MPT 1517-MW01s
Matrix: Ground Water
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B902860-01
Sampled: 06/11/09 15:50
Sampled By: Curtis Odom

Received: 06/12/09 12:20
Work Order: B902860

FL Petroleum Range Organics

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
TPH (C8-C40) [ECL-0175] ^	0.035	U	mg/L	1	0.035	0.17	9F15003	FLPRO	06/16/09 17:03	PDG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
n-Nonatriacontane	*0.087*	*1*	*0.100*	*87 %*	*37-189*	*9F15003*	*FLPRO*	*06/16/09 17:03*	*PDG*	
o-Terphenyl	*0.048*	*1*	*0.0500*	*96 %*	*68-118*	*9F15003*	*FLPRO*	*06/16/09 17:03*	*PDG*	

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Description: MPT 1517-MW01s
Matrix: Ground Water
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B902860-01
Sampled: 06/11/09 15:50
Sampled By: Curtis Odom

Received: 06/12/09 12:20
Work Order: B902860

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
Arsenic [7440-38-2] ^	5.0	U	ug/L	1	5.0	10.0	9F12010	EPA 6010B	06/15/09 19:40	ACV	
Cadmium [7440-43-9] ^	0.500	U	ug/L	1	0.500	1	9F12010	EPA 6010B	06/15/09 19:40	ACV	
Chromium [7440-47-3] ^	5.0	U	ug/L	1	5.0	10.0	9F12010	EPA 6010B	06/15/09 19:40	ACV	
Lead [7439-92-1] ^	5.0	U	ug/L	1	5.0	10.0	9F12010	EPA 6010B	06/15/09 19:40	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: MPT 18a-MW01s
Matrix: Ground Water
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B902860-02
Sampled: 06/11/09 18:35
Sampled By: Curtis Odom

Received: 06/12/09 12:20
Work Order: B902860

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
1,1,2,2-Tetrachloroethane [79-34-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
1,1,2-Trichloroethane [79-00-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
1,1-Dichloroethane [75-34-3] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
1,1-Dichloroethene [75-35-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
1,2,4-Trichlorobenzene [120-82-1] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
1,2-Dichlorobenzene [95-50-1] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
1,2-Dichloroethane [107-06-2] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
1,2-Dichloropropane [78-87-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
1,3-Dichlorobenzene [541-73-1] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
1,4-Dichlorobenzene [106-46-7] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
2-Chloroethyl Vinyl Ether [110-75-8] ^	5.0	U	ug/L	1	5.0	10	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Benzene [71-43-2] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Bromodichloromethane [75-27-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Bromoform [75-25-2] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Bromomethane [74-83-9] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Carbon tetrachloride [56-23-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Chlorobenzene [108-90-7] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Chloroethane [75-00-3] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Chloroform [67-66-3] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Chloromethane [74-87-3] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
cis-1,2-Dichloroethene [156-59-2] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
cis-1,3-Dichloropropene [10061-01-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Dibromochloromethane [124-48-1] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Dichlorodifluoromethane [75-71-8] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Ethylbenzene [100-41-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Methylene chloride [75-09-2] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Methyl-tert-Butyl Ether [1634-04-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Tetrachloroethene [127-18-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Toluene [108-88-3] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
trans-1,2-Dichloroethene [156-60-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
trans-1,3-Dichloropropene [10061-02-6] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Trichloroethene [79-01-6] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Trichlorofluoromethane [75-69-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Vinyl chloride [75-01-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	
Xylenes (Total) [1330-20-7] ^	2.0	U	ug/L	1	2.0	2.0	9F17008	EPA 8260B	06/20/09 12:17	JAL	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*46*	*1*	*50.0*	*92 %*	*75-120*	*9F17008*	*EPA 8260B*	*06/20/09 12:17*	*JAL*	
Dibromofluoromethane	*51*	*1*	*50.0*	*102 %*	*85-115*	*9F17008*	*EPA 8260B*	*06/20/09 12:17*	*JAL*	
Toluene-d8	*50*	*1*	*50.0*	*100 %*	*85-120*	*9F17008*	*EPA 8260B*	*06/20/09 12:17*	*JAL*	

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
1-Methylnaphthalene [90-12-0]	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	
2-Methylnaphthalene [91-57-6] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	
Acenaphthene [83-32-9] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	
Acenaphthylene [208-96-8] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	

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Description: MPT 18a-MW01s
Matrix: Ground Water
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B902860-02
Sampled: 06/11/09 18:35
Sampled By: Curtis Odom

Received: 06/12/09 12:20
Work Order: B902860

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
Anthracene [120-12-7] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	
Benzo(a)anthracene [56-55-3] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	
Benzo(a)pyrene [50-32-8] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	
Benzo(b)fluoranthene [205-99-2] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	
Benzo(g,h,i)perylene [191-24-2] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	
Benzo(k)fluoranthene [207-08-9] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	
Chrysene [218-01-9] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	
Dibenzo(a,h)anthracene [53-70-3] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	
Fluoranthene [206-44-0] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	
Fluorene [86-73-7] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	
Naphthalene [91-20-3] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	
Phenanthrene [85-01-8] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	
Pyrene [129-00-0] ^	0.030	U	ug/L	1	0.030	0.10	9F15004	EPA 8270C	06/18/09 12:43	JWJ	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*3.7*	*1*	*5.00*	*73 %*	*39-148*	*9F15004*	*EPA 8270C*	*06/18/09 12:43*	*JWJ*	

Semivolatile Organic Compounds by GC

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
1,2-Dibromoethane [106-93-4] ^	0.020	U	ug/L	1	0.020	0.040	9F15010	EPA 8011	06/18/09 11:31	LJC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
1,1,1,2-Tetrachloroethane	*0.23*	*1*	*0.250*	*93 %*	*70-130*	*9F15010*	*EPA 8011*	*06/18/09 11:31*	*LJC*	

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Description: MPT 18a-MW01s
Matrix: Ground Water
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B902860-02
Sampled: 06/11/09 18:35
Sampled By: Curtis Odom

Received: 06/12/09 12:20
Work Order: B902860

FL Petroleum Range Organics

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
TPH (C8-C40) [ECL-0175] ^	0.035	U	mg/L	1	0.035	0.17	9F15003	FLPRO	06/16/09 17:26	PDG	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
n-Nonatriacontane	*0.094*	*1*	*0.100*	*94 %*	*37-189*	*9F15003*	*FLPRO*	*06/16/09 17:26*	*PDG*	
o-Terphenyl	*0.049*	*1*	*0.0500*	*97 %*	*68-118*	*9F15003*	*FLPRO*	*06/16/09 17:26*	*PDG*	

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Description: MPT 18a-MW01s
Matrix: Ground Water
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B902860-02
Sampled: 06/11/09 18:35
Sampled By: Curtis Odom

Received: 06/12/09 12:20
Work Order: B902860

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
Lead [7439-92-1] ^	5.0	U	ug/L	1	5.0	10.0	9F12010	EPA 6010B	06/15/09 19:42	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description: Trip Blank
Matrix: Water
Project: CTO-118 Naval Station Mayport Site 1517

Lab Sample ID: B902860-03
Sampled: 06/11/09 00:00
Sampled By: Curtis Odom

Received: 06/12/09 12:20
Work Order: B902860

Volatile Organic Compounds by GCMS

^ - ENCO Jacksonville certified analyte [NELAC E82277]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
1,1,1-Trichloroethane [71-55-6] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
1,1,2,2-Tetrachloroethane [79-34-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
1,1,2-Trichloroethane [79-00-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
1,1-Dichloroethane [75-34-3] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
1,1-Dichloroethene [75-35-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
1,2,4-Trichlorobenzene [120-82-1] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
1,2-Dichlorobenzene [95-50-1] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
1,2-Dichloroethane [107-06-2] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
1,2-Dichloropropane [78-87-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
1,3-Dichlorobenzene [541-73-1] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
1,4-Dichlorobenzene [106-46-7] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
2-Chloroethyl Vinyl Ether [110-75-8] ^	5.0	U	ug/L	1	5.0	10	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Benzene [71-43-2] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Bromodichloromethane [75-27-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Bromoform [75-25-2] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Bromomethane [74-83-9] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Carbon tetrachloride [56-23-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Chlorobenzene [108-90-7] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Chloroethane [75-00-3] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Chloroform [67-66-3] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Chloromethane [74-87-3] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
cis-1,2-Dichloroethene [156-59-2] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
cis-1,3-Dichloropropene [10061-01-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Dibromochloromethane [124-48-1] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Dichlorodifluoromethane [75-71-8] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Ethylbenzene [100-41-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Methylene chloride [75-09-2] ^	**2.0**	B	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	J-01, O-01
Methyl-tert-Butyl Ether [1634-04-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Tetrachloroethene [127-18-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Toluene [108-88-3] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
trans-1,2-Dichloroethene [156-60-5] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
trans-1,3-Dichloropropene [10061-02-6] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Trichloroethene [79-01-6] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Trichlorofluoromethane [75-69-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Vinyl chloride [75-01-4] ^	1.0	U	ug/L	1	1.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	
Xylenes (Total) [1330-20-7] ^	2.0	U	ug/L	1	2.0	2.0	9F17008	EPA 8260B	06/20/09 09:42	JAL	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*49*	*1*	*50.0*	*98 %*	*75-120*	*9F17008*	*EPA 8260B*	*06/20/09 09:42*	*JAL*	
Dibromofluoromethane	*51*	*1*	*50.0*	*102 %*	*85-115*	*9F17008*	*EPA 8260B*	*06/20/09 09:42*	*JAL*	
Toluene-d8	*50*	*1*	*50.0*	*99 %*	*85-120*	*9F17008*	*EPA 8260B*	*06/20/09 09:42*	*JAL*	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 9F17008 - EPA 5030B_MS

Blank (9F17008-BLK1) Prepared: 06/17/2009 11:06 Analyzed: 06/20/2009 05:50

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	1.0	U	2.0	ug/L							
1,1,2,2-Tetrachloroethane	1.0	U	2.0	ug/L							
1,1,2-Trichloroethane	1.0	U	2.0	ug/L							
1,1-Dichloroethane	1.0	U	2.0	ug/L							
1,1-Dichloroethene	1.0	U	2.0	ug/L							
1,2,3-Trichlorobenzene	1.0	U	2.0	ug/L							
1,2-Dichlorobenzene	1.0	U	2.0	ug/L							
1,2-Dichloroethane	1.0	U	2.0	ug/L							
1,2-Dichloropropane	1.0	U	2.0	ug/L							
1,3-Dichlorobenzene	1.0	U	2.0	ug/L							
1,4-Dichlorobenzene	1.0	U	2.0	ug/L							
2-Chloroethyl Vinyl Ether	5.0	U	10	ug/L							
Benzene	1.0	U	2.0	ug/L							
Bromodichloromethane	1.0	U	2.0	ug/L							
Bromoform	1.0	U	2.0	ug/L							
Bromomethane	1.0	U	2.0	ug/L							
Carbon tetrachloride	1.0	U	2.0	ug/L							
Chlorobenzene	1.0	U	2.0	ug/L							
Chloroethane	1.0	U	2.0	ug/L							
Chloroform	1.0	U	2.0	ug/L							
Chloromethane	1.0	U	2.0	ug/L							
cis-1,2-Dichloroethene	1.0	U	2.0	ug/L							
cis-1,3-Dichloropropene	1.0	U	2.0	ug/L							
Dibromochloromethane	1.0	U	2.0	ug/L							
Dichlorodifluoromethane	1.0	U	2.0	ug/L							
Ethylbenzene	1.0	U	2.0	ug/L							
Methylene chloride	**4.4**		2.0	ug/L							
Methyl-tert-Butyl Ether	1.0	U	2.0	ug/L							
Tetrachloroethene	1.0	U	2.0	ug/L							
Toluene	1.0	U	2.0	ug/L							
trans-1,2-Dichloroethene	1.0	U	2.0	ug/L							
trans-1,3-Dichloropropene	1.0	U	2.0	ug/L							
Trichloroethene	1.0	U	2.0	ug/L							
Trichlorofluoromethane	1.0	U	2.0	ug/L							
Vinyl chloride	1.0	U	2.0	ug/L							
Xylenes (Total)	2.0	U	2.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*96*	*75-120*			
Surrogate: Dibromofluoromethane	*49*			*ug/L*	*50.0*		*98*	*85-115*			
Surrogate: Toluene-d8	*52*			*ug/L*	*50.0*		*104*	*85-120*			

LCS (9F17008-BS1) Prepared: 06/17/2009 11:06 Analyzed: 06/20/2009 06:29

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	17		2.0	ug/L	20.0		86	65-130			
1,1,2,2-Tetrachloroethane	17		2.0	ug/L	20.0		85	65-130			
1,1,2-Trichloroethane	17		2.0	ug/L	20.0		86	75-125			
1,1-Dichloroethane	18		2.0	ug/L	20.0		92	70-135			
1,1-Dichloroethene	16		2.0	ug/L	20.0		80	70-130			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 9F17008 - EPA 5030B_MS

LCS (9F17008-BS1) Continued Prepared: 06/17/2009 11:06 Analyzed: 06/20/2009 06:29

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,3-Trichlorobenzene	17		2.0	ug/L	20.0		86	55-140			
1,2-Dichlorobenzene	19		2.0	ug/L	20.0		96	70-120			
1,2-Dichloroethane	16		2.0	ug/L	20.0		82	70-130			
1,2-Dichloropropane	17		2.0	ug/L	20.0		83	75-125			
1,3-Dichlorobenzene	19		2.0	ug/L	20.0		94	75-125			
1,4-Dichlorobenzene	18		2.0	ug/L	20.0		91	75-125			
2-Chloroethyl Vinyl Ether	96		10	ug/L	100		96	10-200			
Benzene	19		2.0	ug/L	20.0		95	80-120			
Bromodichloromethane	17		2.0	ug/L	20.0		85	75-120			
Bromoform	17		2.0	ug/L	20.0		86	70-130			
Bromomethane	18		2.0	ug/L	20.0		89	30-145			
Carbon tetrachloride	17		2.0	ug/L	20.0		83	65-140			
Chlorobenzene	18		2.0	ug/L	20.0		90	80-120			
Chloroethane	15		2.0	ug/L	20.0		77	60-135			
Chloroform	17		2.0	ug/L	20.0		84	65-135			
Chloromethane	15		2.0	ug/L	20.0		73	40-125			
cis-1,2-Dichloroethene	17		2.0	ug/L	20.0		83	70-125			
cis-1,3-Dichloropropene	17		2.0	ug/L	20.0		86	70-130			
Dibromochloromethane	17		2.0	ug/L	20.0		86	60-135			
Dichlorodifluoromethane	15		2.0	ug/L	20.0		76	30-155			
Ethylbenzene	16		2.0	ug/L	20.0		78	75-125			
m,p-Xylenes	36		4.0	ug/L	40.0		90	75-130			
Methylene chloride	21	8	2.0	ug/L	20.0		107	55-140			
Methyl-tert-Butyl Ether	16		2.0	ug/L	20.0		82	65-125			
o-Xylene	18		2.0	ug/L	20.0		90	80-120			
Tetrachloroethene	17		2.0	ug/L	20.0		87	45-150			
Toluene	18		2.0	ug/L	20.0		89	75-120			
trans-1,2-Dichloroethene	18		2.0	ug/L	20.0		89	60-140			
trans-1,3-Dichloropropene	18		2.0	ug/L	20.0		92	55-140			
Trichloroethene	19		2.0	ug/L	20.0		93	70-125			
Trichlorofluoromethane	15		2.0	ug/L	20.0		75	60-145			
Vinyl chloride	16		2.0	ug/L	20.0		79	50-145			
Surrogate: 4-Bromofluorobenzene	*51*			*ug/L*	*50.0*		*103*	*75-120*			
Surrogate: Dibromofluoromethane	*49*			*ug/L*	*50.0*		*98*	*85-115*			
Surrogate: Toluene-d8	*48*			*ug/L*	*50.0*		*95*	*85-120*			

Matrix Spike (9F17008-MS1) Prepared: 06/17/2009 11:06 Analyzed: 06/20/2009 07:46

Source: B902860-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	26		2.0	ug/L	20.0	1.0 U	128	65-130			
1,1,2,2-Tetrachloroethane	25		2.0	ug/L	20.0	1.0 U	126	65-130			
1,1,2-Trichloroethane	23		2.0	ug/L	20.0	1.0 U	114	75-125			
1,1-Dichloroethane	26		2.0	ug/L	20.0	1.0 U	130	70-135			
1,1-Dichloroethene	25		2.0	ug/L	20.0	1.0 U	127	70-130			
1,2,3-Trichlorobenzene	23		2.0	ug/L	20.0	1.0 U	117	55-140			
1,2-Dichlorobenzene	26		2.0	ug/L	20.0	1.0 U	129	70-120			QM-07
1,2-Dichloroethane	24		2.0	ug/L	20.0	1.0 U	118	70-130			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 9F17008 - EPA 5030B_MS

Matrix Spike (9F17008-MS1) Continued

Prepared: 06/17/2009 11:06 Analyzed: 06/20/2009 07:46

Source: B902860-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2-Dichloropropane	24		2.0	ug/L	20.0	1.0 U	122	75-125			
1,3-Dichlorobenzene	25		2.0	ug/L	20.0	1.0 U	125	75-125			
1,4-Dichlorobenzene	25		2.0	ug/L	20.0	1.0 U	126	75-125			QM-07
2-Chloroethyl Vinyl Ether	0.0	U	10	ug/L	100	5.0 U		10-200			
Benzene	27		2.0	ug/L	20.0	1.0 U	133	80-120			QM-07
Bromodichloromethane	25		2.0	ug/L	20.0	1.0 U	125	75-120			QM-07
Bromoform	23		2.0	ug/L	20.0	1.0 U	114	70-130			
Bromomethane	26		2.0	ug/L	20.0	1.0 U	131	30-145			
Carbon tetrachloride	28		2.0	ug/L	20.0	1.0 U	138	65-140			
Chlorobenzene	25		2.0	ug/L	20.0	1.0 U	127	80-120			QM-07
Chloroethane	24		2.0	ug/L	20.0	1.0 U	120	60-135			
Chloroform	25		2.0	ug/L	20.0	1.0 U	125	65-135			
Chloromethane	23		2.0	ug/L	20.0	-1.6	121	40-125			
cis-1,2-Dichloroethene	25		2.0	ug/L	20.0	1.0 U	123	70-125			
cis-1,3-Dichloropropene	24		2.0	ug/L	20.0	1.0 U	121	70-130			
Dibromochloromethane	25		2.0	ug/L	20.0	1.0 U	123	60-135			
Dichlorodifluoromethane	25		2.0	ug/L	20.0	1.0 U	127	30-155			
Ethylbenzene	25		2.0	ug/L	20.0	1.0 U	126	75-125			QM-07
m,p-Xylenes	49		4.0	ug/L	40.0	2.0 U	123	75-130			
Methylene chloride	23	8	2.0	ug/L	20.0	1.0 U	115	55-140			
Methyl-tert-Butyl Ether	23		2.0	ug/L	20.0	1.0 U	116	65-125			
o-Xylene	24		2.0	ug/L	20.0	1.0 U	121	80-120			QM-07
Tetrachloroethene	23		2.0	ug/L	20.0	1.0 U	116	45-150			
Toluene	25		2.0	ug/L	20.0	1.0 U	126	75-120			QM-07
trans-1,2-Dichloroethene	25		2.0	ug/L	20.0	1.0 U	126	60-140			
trans-1,3-Dichloropropene	25		2.0	ug/L	20.0	1.0 U	127	55-140			
Trichloroethene	25		2.0	ug/L	20.0	1.0 U	123	70-125			
Trichlorofluoromethane	24		2.0	ug/L	20.0	1.0 U	119	60-145			
Vinyl chloride	25		2.0	ug/L	20.0	1.0 U	125	50-145			
Surrogate: 4-Bromofluorobenzene	*48*			*ug/L*	*50.0*		*96*	*75-120*			
Surrogate: Dibromofluoromethane	*51*			*ug/L*	*50.0*		*103*	*85-115*			
Surrogate: Toluene-d8	*50*			*ug/L*	*50.0*		*99*	*85-120*			

Matrix Spike Dup (9F17008-MSD1)

Prepared: 06/17/2009 11:06 Analyzed: 06/20/2009 08:25

Source: B902860-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	19		2.0	ug/L	20.0	1.0 U	95	65-130	30	30	
1,1,2,2-Tetrachloroethane	19		2.0	ug/L	20.0	1.0 U	93	65-130	30	30	
1,1,2-Trichloroethane	17		2.0	ug/L	20.0	1.0 U	84	75-125	29	30	
1,1-Dichloroethane	19		2.0	ug/L	20.0	1.0 U	94	70-135	32	30	QM-11
1,1-Dichloroethene	17		2.0	ug/L	20.0	1.0 U	87	70-130	37	30	QM-11
1,2,3-Trichlorobenzene	19		2.0	ug/L	20.0	1.0 U	96	55-140	19	30	
1,2-Dichlorobenzene	20		2.0	ug/L	20.0	1.0 U	98	70-120	27	30	
1,2-Dichloroethane	17		2.0	ug/L	20.0	1.0 U	85	70-130	32	30	QM-11
1,2-Dichloropropane	17		2.0	ug/L	20.0	1.0 U	87	75-125	34	30	QM-11
1,3-Dichlorobenzene	19		2.0	ug/L	20.0	1.0 U	97	75-125	25	30	

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 9F17008 - EPA 5030B_MS

Matrix Spike Dup (9F17008-MSD1) Continued Prepared: 06/17/2009 11:06 Analyzed: 06/20/2009 08:25

Source: B902860-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	20		2.0	ug/L	20.0	1.0 U	98	75-125	25	30	
2-Chloroethyl Vinyl Ether	0.0	U	10	ug/L	100	5.0 U		10-200		50	
Benzene	19		2.0	ug/L	20.0	1.0 U	96	80-120	32	30	QM-11
Bromodichloromethane	17		2.0	ug/L	20.0	1.0 U	84	75-120	39	30	QM-11
Bromoform	17		2.0	ug/L	20.0	1.0 U	83	70-130	31	30	QM-11
Bromomethane	21		2.0	ug/L	20.0	1.0 U	103	30-145	24	30	
Carbon tetrachloride	19		2.0	ug/L	20.0	1.0 U	93	65-140	38	30	QM-11
Chlorobenzene	19		2.0	ug/L	20.0	1.0 U	96	80-120	28	30	
Chloroethane	18		2.0	ug/L	20.0	1.0 U	88	60-135	31	30	QM-11
Chloroform	18		2.0	ug/L	20.0	1.0 U	88	65-135	35	30	QM-11
Chloromethane	16		2.0	ug/L	20.0	-1.6	86	40-125	36	30	QM-11
cis-1,2-Dichloroethene	18		2.0	ug/L	20.0	1.0 U	90	70-125	31	30	QM-11
cis-1,3-Dichloropropene	18		2.0	ug/L	20.0	1.0 U	90	70-130	30	30	
Dibromochloromethane	18		2.0	ug/L	20.0	1.0 U	88	60-135	33	30	QM-11
Dichlorodifluoromethane	18		2.0	ug/L	20.0	1.0 U	91	30-155	33	30	QM-11
Ethylbenzene	19		2.0	ug/L	20.0	1.0 U	95	75-125	28	30	
m,p-Xylenes	38		4.0	ug/L	40.0	2.0 U	94	75-130	27	30	
Methylene chloride	17	8	2.0	ug/L	20.0	1.0 U	84	55-140	32	30	QM-11
Methyl-tert-Butyl Ether	16		2.0	ug/L	20.0	1.0 U	82	65-125	34	30	QM-11
o-Xylene	19		2.0	ug/L	20.0	1.0 U	94	80-120	25	30	
Tetrachloroethene	18		2.0	ug/L	20.0	1.0 U	88	45-150	27	30	
Toluene	18		2.0	ug/L	20.0	1.0 U	89	75-120	34	30	QM-11
trans-1,2-Dichloroethene	18		2.0	ug/L	20.0	1.0 U	92	60-140	31	30	QM-11
trans-1,3-Dichloropropene	19		2.0	ug/L	20.0	1.0 U	94	55-140	31	30	QM-11
Trichloroethene	18		2.0	ug/L	20.0	1.0 U	88	70-125	34	30	QM-11
Trichlorofluoromethane	17		2.0	ug/L	20.0	1.0 U	86	60-145	32	30	QM-11
Vinyl chloride	18		2.0	ug/L	20.0	1.0 U	92	50-145	31	30	QM-11
Surrogate: 4-Bromofluorobenzene	*49*			*ug/L*	*50.0*		*98*	*75-120*			
Surrogate: Dibromofluoromethane	*50*			*ug/L*	*50.0*		*100*	*85-115*			
Surrogate: Toluene-d8	*52*			*ug/L*	*50.0*		*103*	*85-120*			

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 9F15005 - EPA 3510C_MS

Blank (9F15005-BLK1) Prepared: 06/15/2009 08:15 Analyzed: 06/18/2009 14:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	2.5	U	10	ug/L							
2,4,5-Trichlorophenol	2.5	U	10	ug/L							
2,4-Dimethylphenol	2.5	U	10	ug/L							
2,4-Dinitrotoluene	2.5	U	10	ug/L							
2,6-Dinitrotoluene	2.5	U	10	ug/L							
2-Chloronaphthalene	2.5	U	10	ug/L							
2-Chlorophenol	2.5	U	10	ug/L							
2-Methyl-4,6-dinitrophenol	2.5	U	10	ug/L							
2-Nitrophenol	2.5	U	10	ug/L							
3,3'-Dichlorobenzidine	2.5	U	10	ug/L							

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 9F15005 - EPA 3510C_MS

Blank (9F15005-BLK1) Continued

Prepared: 06/15/2009 08:15 Analyzed: 06/18/2009 14:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4-Bromophenyl-phenylether	2.5	U	10	ug/L							
4-Chloro-3-methylphenol	2.5	U	10	ug/L							
4-Chlorophenyl-phenylether	2.5	U	10	ug/L							
4-Nitrophenol	15	U	30	ug/L							
Benzidine	5.0	U	10	ug/L							
Bis(2-chloroethoxy)methane	2.5	U	10	ug/L							
Bis(2-chloroethyl)ether	2.5	U	10	ug/L							
Bis(2-ethylhexyl)phthalate	2.5	U	10	ug/L							
Butylbenzylphthalate	2.5	U	10	ug/L							
Diethylphthalate	2.5	U	10	ug/L							
Dimethylphthalate	2.5	U	10	ug/L							
Di-n-butylphthalate	2.5	U	10	ug/L							
Di-n-octylphthalate	2.5	U	10	ug/L							
DPH (as Azobenzene)	2.5	U	10	ug/L							
Hexachlorobenzene	2.5	U	10	ug/L							
Hexachlorobutadiene	2.5	U	10	ug/L							
Hexachlorocyclopentadiene	2.4	U	10	ug/L							
Hexachloroethane	2.5	U	10	ug/L							
Isophorone	2.5	U	10	ug/L							
Nitrobenzene	2.5	U	10	ug/L							
N-Nitrosodimethylamine	2.5	U	10	ug/L							
N-Nitroso-di-n-propylamine	2.5	U	10	ug/L							
N-nitrosodiphenylamine/Diphenylamine	2.5	U	10	ug/L							
Pentachlorophenol	2.5	U	10	ug/L							
Phenol	2.5	U	10	ug/L							
Surrogate: 2,4,6-Tribromophenol	*36*			*ug/L*	*50.0*		*72*	*40-125*			
Surrogate: 2-Fluorobiphenyl	*44*			*ug/L*	*50.0*		*87*	*50-110*			
Surrogate: 2-Fluorophenol	*23*			*ug/L*	*50.0*		*46*	*20-110*			
Surrogate: Nitrobenzene-d5	*46*			*ug/L*	*50.0*		*91*	*40-110*			
Surrogate: Phenol-d5	*17*			*ug/L*	*50.0*		*35*	*10-115*			
Surrogate: Terphenyl-d14	*53*			*ug/L*	*50.0*		*105*	*50-135*			

LCS (9F15005-BS1)

Prepared: 06/15/2009 08:15 Analyzed: 06/18/2009 15:18

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	26		10	ug/L	50.0		53	35-105			
2,4,5-Trichlorophenol	43		10	ug/L	50.0		86	50-110			
2,4-Dimethylphenol	30		10	ug/L	50.0		61	30-110			
2,4-Dinitrotoluene	50		10	ug/L	50.0		100	50-120			
2,6-Dinitrotoluene	49		10	ug/L	50.0		98	50-115			
2-Chloronaphthalene	26		10	ug/L	50.0		52	50-105			
2-Chlorophenol	34		10	ug/L	50.0		68	35-105			
2-Methyl-4,6-dinitrophenol	46		10	ug/L	50.0		93	40-130			
2-Nitrophenol	40		10	ug/L	50.0		80	40-115			
3,3'-Dichlorobenzidine	37		10	ug/L	50.0		75	20-110			
4-Bromophenyl-phenylether	39		10	ug/L	50.0		77	50-115			
4-Chloro-3-methylphenol	37		10	ug/L	50.0		74	45-110			
4-Chlorophenyl-phenylether	36		10	ug/L	50.0		71	50-110			

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 9F15005 - EPA 3510C_MS

LCS (9F15005-BS1) Continued Prepared: 06/15/2009 08:15 Analyzed: 06/18/2009 15:18

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Bis(2-chloroethoxy)methane	47		10	ug/L	50.0		94	45-105			
Bis(2-chloroethyl)ether	47		10	ug/L	50.0		93	35-110			
Bis(2-ethylhexyl)phthalate	50		10	ug/L	50.0		100	40-125			
Butylbenzylphthalate	56		10	ug/L	50.0		113	45-115			
Diethylphthalate	49		10	ug/L	50.0		97	40-120			
Dimethylphthalate	51		10	ug/L	50.0		101	25-125			
Di-n-butylphthalate	54		10	ug/L	50.0		108	55-115			
Di-n-octylphthalate	50		10	ug/L	50.0		100	35-135			
DPH (as Azobenzene)	40		10	ug/L	50.0		81	50-150			
Hexachlorobenzene	43		10	ug/L	50.0		87	50-110			
Hexachlorobutadiene	20		10	ug/L	50.0		41	25-105			
Hexachlorocyclopentadiene	21		10	ug/L	50.0		41	10-120			
Hexachloroethane	22		10	ug/L	50.0		44	30-95			
Isophorone	46		10	ug/L	50.0		92	50-110			
Nitrobenzene	43		10	ug/L	50.0		87	45-110			
N-Nitrosodimethylamine	28		10	ug/L	50.0		56	25-110			
N-Nitroso-di-n-propylamine	50		10	ug/L	50.0		100	35-130			
N-nitrosodiphenylamine/Diphenylamine	47		10	ug/L	50.0		93	50-110			
Pentachlorophenol	36		10	ug/L	50.0		73	40-115			
Phenol	15		10	ug/L	50.0		30	0-115			
Surrogate: 2,4,6-Tribromophenol	*41*			*ug/L*	*50.0*		*83*	*40-125*			
Surrogate: 2-Fluorobiphenyl	*38*			*ug/L*	*50.0*		*76*	*50-110*			
Surrogate: 2-Fluorophenol	*23*			*ug/L*	*50.0*		*46*	*20-110*			
Surrogate: Nitrobenzene-d5	*42*			*ug/L*	*50.0*		*85*	*40-110*			
Surrogate: Phenol-d5	*16*			*ug/L*	*50.0*		*32*	*10-115*			
Surrogate: Terphenyl-d14	*54*			*ug/L*	*50.0*		*108*	*50-135*			

Matrix Spike (9F15005-MS1) Prepared: 06/15/2009 08:15 Analyzed: 06/18/2009 15:47

Source: B902860-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	33		10	ug/L	50.0	2.5 U	66	35-105			
2,4,5-Trichlorophenol	46		10	ug/L	50.0	2.5 U	91	50-110			
2,4-Dimethylphenol	34		10	ug/L	50.0	2.5 U	67	30-110			
2,4-Dinitrotoluene	52		10	ug/L	50.0	2.5 U	105	50-120			
2,6-Dinitrotoluene	52		10	ug/L	50.0	2.5 U	105	50-115			
2-Chloronaphthalene	32		10	ug/L	50.0	2.5 U	64	50-105			
2-Chlorophenol	36		10	ug/L	50.0	2.5 U	72	35-105			
2-Methyl-4,6-dinitrophenol	49		10	ug/L	50.0	2.5 U	98	40-130			
2-Nitrophenol	43		10	ug/L	50.0	2.5 U	86	40-115			
3,3'-Dichlorobenzidine	44		10	ug/L	50.0	2.5 U	87	20-110			
4-Bromophenyl-phenylether	46		10	ug/L	50.0	2.5 U	92	50-115			
4-Chloro-3-methylphenol	40		10	ug/L	50.0	2.5 U	80	45-110			
4-Chlorophenyl-phenylether	44		10	ug/L	50.0	2.5 U	87	50-110			
Bis(2-chloroethoxy)methane	50		10	ug/L	50.0	2.5 U	100	45-105			
Bis(2-chloroethyl)ether	49		10	ug/L	50.0	2.5 U	98	35-110			
Bis(2-ethylhexyl)phthalate	50		10	ug/L	50.0	2.5 U	101	40-125			
Butylbenzylphthalate	57		10	ug/L	50.0	2.5 U	115	45-115			

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 9F15005 - EPA 3510C_MS

Matrix Spike (9F15005-MS1) Continued Prepared: 06/15/2009 08:15 Analyzed: 06/18/2009 15:47

Source: B902860-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Diethylphthalate	50		10	ug/L	50.0	2.5 U	100	40-120			
Dimethylphthalate	53		10	ug/L	50.0	2.5 U	105	25-125			
Di-n-butylphthalate	55		10	ug/L	50.0	2.5 U	111	55-115			
Di-n-octylphthalate	50		10	ug/L	50.0	2.5 U	100	35-135			
DPH (as Azobenzene)	45		10	ug/L	50.0	2.5 U	89	50-150			
Hexachlorobenzene	51		10	ug/L	50.0	2.5 U	102	50-110			
Hexachlorobutadiene	26		10	ug/L	50.0	2.5 U	52	25-105			
Hexachlorocyclopentadiene	26		10	ug/L	50.0	2.4 U	53	10-120			
Hexachloroethane	27		10	ug/L	50.0	2.5 U	53	30-95			
Isophorone	49		10	ug/L	50.0	2.5 U	98	50-110			
Nitrobenzene	47		10	ug/L	50.0	2.5 U	93	45-110			
N-Nitrosodimethylamine	27		10	ug/L	50.0	2.5 U	55	25-110			
N-Nitroso-di-n-propylamine	53		10	ug/L	50.0	2.5 U	106	35-130			
N-nitrosodiphenylamine/Diphenylamine	49		10	ug/L	50.0	2.5 U	97	50-110			
Pentachlorophenol	40		10	ug/L	50.0	2.5 U	79	40-115			
Phenol	16		10	ug/L	50.0	2.5 U	31	0-115			
Surrogate: 2,4,6-Tribromophenol	*43*			*ug/L*	*50.0*		*86*	*40-125*			
Surrogate: 2-Fluorobiphenyl	*42*			*ug/L*	*50.0*		*85*	*50-110*			
Surrogate: 2-Fluorophenol	*22*			*ug/L*	*50.0*		*44*	*20-110*			
Surrogate: Nitrobenzene-d5	*42*			*ug/L*	*50.0*		*84*	*40-110*			
Surrogate: Phenol-d5	*16*			*ug/L*	*50.0*		*32*	*10-115*			
Surrogate: Terphenyl-d14	*52*			*ug/L*	*50.0*		*105*	*50-135*			

Matrix Spike Dup (9F15005-MSD1) Prepared: 06/15/2009 08:15 Analyzed: 06/18/2009 16:16

Source: B902860-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2,4-Trichlorobenzene	30		10	ug/L	50.0	2.5 U	60	35-105	9	30	
2,4,5-Trichlorophenol	46		10	ug/L	50.0	2.5 U	92	50-110	0.7	30	
2,4-Dimethylphenol	43		10	ug/L	50.0	2.5 U	86	30-110	24	30	
2,4-Dinitrotoluene	53		10	ug/L	50.0	2.5 U	105	50-120	0.1	30	
2,6-Dinitrotoluene	52		10	ug/L	50.0	2.5 U	104	50-115	1	30	
2-Chloronaphthalene	30		10	ug/L	50.0	2.5 U	61	50-105	6	30	
2-Chlorophenol	36		10	ug/L	50.0	2.5 U	72	35-105	0.07	30	
2-Methyl-4,6-dinitrophenol	49		10	ug/L	50.0	2.5 U	98	40-130	0.6	30	
2-Nitrophenol	44		10	ug/L	50.0	2.5 U	88	40-115	2	30	
3,3'-Dichlorobenzidine	44		10	ug/L	50.0	2.5 U	88	20-110	0.9	30	
4-Bromophenyl-phenylether	47		10	ug/L	50.0	2.5 U	95	50-115	3	30	
4-Chloro-3-methylphenol	40		10	ug/L	50.0	2.5 U	80	45-110	0.6	30	
4-Chlorophenyl-phenylether	43		10	ug/L	50.0	2.5 U	87	50-110	0.7	30	
Bis(2-chloroethoxy)methane	50		10	ug/L	50.0	2.5 U	100	45-105	0.08	30	
Bis(2-chloroethyl)ether	49		10	ug/L	50.0	2.5 U	97	35-110	1	30	
Bis(2-ethylhexyl)phthalate	51		10	ug/L	50.0	2.5 U	102	40-125	2	30	
Butylbenzylphthalate	58		10	ug/L	50.0	2.5 U	116	45-115	0.7	30	QM-07
Diethylphthalate	50		10	ug/L	50.0	2.5 U	100	40-120	0.4	30	
Dimethylphthalate	52		10	ug/L	50.0	2.5 U	105	25-125	0.5	30	
Di-n-butylphthalate	56		10	ug/L	50.0	2.5 U	111	55-115	0.2	30	

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 9F15005 - EPA 3510C_MS

Matrix Spike Dup (9F15005-MSD1) Continued Prepared: 06/15/2009 08:15 Analyzed: 06/18/2009 16:16

Source: B902860-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Di-n-octylphthalate	51		10	ug/L	50.0	2.5 U	102	35-135	2	30	
DPH (as Azobenzene)	44		10	ug/L	50.0	2.5 U	88	50-150	0.7	30	
Hexachlorobenzene	52		10	ug/L	50.0	2.5 U	104	50-110	2	30	
Hexachlorobutadiene	21		10	ug/L	50.0	2.5 U	43	25-105	20	30	
Hexachlorocyclopentadiene	24		10	ug/L	50.0	2.4 U	47	10-120	11	39	
Hexachloroethane	22		10	ug/L	50.0	2.5 U	44	30-95	19	30	
Isophorone	49		10	ug/L	50.0	2.5 U	98	50-110	0.02	30	
Nitrobenzene	46		10	ug/L	50.0	2.5 U	93	45-110	0.3	30	
N-Nitrosodimethylamine	29		10	ug/L	50.0	2.5 U	58	25-110	5	30	
N-Nitroso-di-n-propylamine	52		10	ug/L	50.0	2.5 U	103	35-130	2	30	
N-nitrosodiphenylamine/Diphenylamine	48		10	ug/L	50.0	2.5 U	97	50-110	0.9	30	
Pentachlorophenol	41		10	ug/L	50.0	2.5 U	82	40-115	3	30	
Phenol	16		10	ug/L	50.0	2.5 U	31	0-115	0.8	30	
Surrogate: 2,4,6-Tribromophenol	*44*			*ug/L*	*50.0*		*87*	*40-125*			
Surrogate: 2-Fluorobiphenyl	*43*			*ug/L*	*50.0*		*87*	*50-110*			
Surrogate: 2-Fluorophenol	*23*			*ug/L*	*50.0*		*46*	*20-110*			
Surrogate: Nitrobenzene-d5	*44*			*ug/L*	*50.0*		*88*	*40-110*			
Surrogate: Phenol-d5	*16*			*ug/L*	*50.0*		*32*	*10-115*			
Surrogate: Terphenyl-d14	*55*			*ug/L*	*50.0*		*110*	*50-135*			

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 9F15004 - EPA 3510C_MS

Blank (9F15004-BLK1) Prepared: 06/15/2009 10:10 Analyzed: 06/17/2009 15:12

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	0.030	U	0.10	ug/L							
2-Methylnaphthalene	0.030	U	0.10	ug/L							
Acenaphthene	0.030	U	0.10	ug/L							
Acenaphthylene	0.030	U	0.10	ug/L							
Anthracene	0.030	U	0.10	ug/L							
Benzo(a)anthracene	0.030	U	0.10	ug/L							
Benzo(a)pyrene	0.030	U	0.10	ug/L							
Benzo(b)fluoranthene	0.030	U	0.10	ug/L							
Benzo(g,h,i)perylene	0.030	U	0.10	ug/L							
Benzo(k)fluoranthene	0.030	U	0.10	ug/L							
Chrysene	0.030	U	0.10	ug/L							
Dibenzo(a,h)anthracene	0.030	U	0.10	ug/L							
Fluoranthene	0.030	U	0.10	ug/L							
Fluorene	0.030	U	0.10	ug/L							
Indeno(1,2,3-cd)pyrene	0.030	U	0.10	ug/L							
Naphthalene	0.030	U	0.10	ug/L							
Phenanthrene	0.030	U	0.10	ug/L							
Pyrene	0.030	U	0.10	ug/L							
Surrogate: p-Terphenyl	*4.6*			*ug/L*	*5.00*		*92*	*39-148*			

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 9F15004 - EPA 3510C_MS

LCS (9F15004-BS1)

Prepared: 06/15/2009 10:10 Analyzed: 06/17/2009 15:32

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	1.1		0.10	ug/L	2.00		57	41-120			
2-Methylnaphthalene	1.0		0.10	ug/L	2.00		51	45-105			
Acenaphthene	1.5		0.10	ug/L	2.00		74	35-105			
Acenaphthylene	1.4		0.10	ug/L	2.00		71	35-115			
Anthracene	1.4		0.10	ug/L	2.00		71	40-110			
Benzo(a)anthracene	1.8		0.10	ug/L	2.00		90	50-110			
Benzo(a)pyrene	1.5		0.10	ug/L	2.00		73	45-115			
Benzo(b)fluoranthene	1.7		0.10	ug/L	2.00		86	50-110			
Benzo(g,h,i)perylene	1.8		0.10	ug/L	2.00		88	35-120			
Benzo(k)fluoranthene	1.7		0.10	ug/L	2.00		85	50-110			
Chrysene	1.8		0.10	ug/L	2.00		88	50-115			
Dibenzo(a,h)anthracene	1.7		0.10	ug/L	2.00		83	20-110			
Fluoranthene	1.9		0.10	ug/L	2.00		96	50-115			
Fluorene	1.7		0.10	ug/L	2.00		83	35-105			
Indeno(1,2,3-cd)pyrene	1.8		0.10	ug/L	2.00		89	45-110			
Naphthalene	1.1		0.10	ug/L	2.00		56	35-105			
Phenanthrene	1.8		0.10	ug/L	2.00		88	40-120			
Pyrene	1.8		0.10	ug/L	2.00		91	50-110			
Surrogate: p-Terphenyl	*3.7*			*ug/L*	*5.00*		*74*	*39-148*			

Matrix Spike (9F15004-MS1)

Source: B902860-01

Prepared: 06/15/2009 10:10 Analyzed: 06/17/2009 15:57

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	1.6		0.10	ug/L	2.00	0.030 U	78	41-120			
2-Methylnaphthalene	1.5		0.10	ug/L	2.00	0.030 U	73	45-105			
Acenaphthene	1.7		0.10	ug/L	2.00	0.030 U	86	35-105			
Acenaphthylene	1.6		0.10	ug/L	2.00	0.030 U	79	35-115			
Anthracene	1.6		0.10	ug/L	2.00	0.030 U	78	40-110			
Benzo(a)anthracene	1.9		0.10	ug/L	2.00	0.030 U	94	50-110			
Benzo(a)pyrene	1.5		0.10	ug/L	2.00	0.030 U	77	45-115			
Benzo(b)fluoranthene	1.8		0.10	ug/L	2.00	0.030 U	89	50-110			
Benzo(g,h,i)perylene	1.9		0.10	ug/L	2.00	0.030 U	97	35-120			
Benzo(k)fluoranthene	1.7		0.10	ug/L	2.00	0.030 U	84	50-110			
Chrysene	1.8		0.10	ug/L	2.00	0.030 U	92	50-115			
Dibenzo(a,h)anthracene	1.9		0.10	ug/L	2.00	0.030 U	97	20-110			
Fluoranthene	2.0		0.10	ug/L	2.00	0.030 U	99	50-115			
Fluorene	1.8		0.10	ug/L	2.00	0.030 U	90	35-105			
Indeno(1,2,3-cd)pyrene	1.9		0.10	ug/L	2.00	0.030 U	93	45-110			
Naphthalene	1.6		0.10	ug/L	2.00	0.030 U	80	35-105			
Phenanthrene	1.9		0.10	ug/L	2.00	0.039	91	40-120			
Pyrene	1.9		0.10	ug/L	2.00	0.030 U	94	50-110			
Surrogate: p-Terphenyl	*3.6*			*ug/L*	*5.00*		*73*	*39-148*			

Matrix Spike Dup (9F15004-MSD1)

Source: B902860-01

Prepared: 06/15/2009 10:10 Analyzed: 06/17/2009 16:18

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 9F15004 - EPA 3510C_MS

Matrix Spike Dup (9F15004-MSD1) Continued Prepared: 06/15/2009 10:10 Analyzed: 06/17/2009 16:18

Source: B902860-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	1.5		0.10	ug/L	2.00	0.030 U	77	41-120	0.8	30	
2-Methylnaphthalene	1.5		0.10	ug/L	2.00	0.030 U	73	45-105	0.1	30	
Acenaphthene	1.7		0.10	ug/L	2.00	0.030 U	83	35-105	4	30	
Acenaphthylene	1.6		0.10	ug/L	2.00	0.030 U	78	35-115	1	30	
Anthracene	1.5		0.10	ug/L	2.00	0.030 U	76	40-110	3	30	
Benzo(a)anthracene	1.9		0.10	ug/L	2.00	0.030 U	93	50-110	1	30	
Benzo(a)pyrene	1.5		0.10	ug/L	2.00	0.030 U	76	45-115	1	30	
Benzo(b)fluoranthene	1.7		0.10	ug/L	2.00	0.030 U	84	50-110	5	30	
Benzo(g,h,i)perylene	1.9		0.10	ug/L	2.00	0.030 U	96	35-120	1	30	
Benzo(k)fluoranthene	1.7		0.10	ug/L	2.00	0.030 U	86	50-110	2	30	
Chrysene	1.8		0.10	ug/L	2.00	0.030 U	89	50-115	3	30	
Dibenzo(a,h)anthracene	1.9		0.10	ug/L	2.00	0.030 U	95	20-110	1	30	
Fluoranthene	2.0		0.10	ug/L	2.00	0.030 U	98	50-115	2	30	
Fluorene	1.8		0.10	ug/L	2.00	0.030 U	89	35-105	1	30	
Indeno(1,2,3-cd)pyrene	1.9		0.10	ug/L	2.00	0.030 U	93	45-110	0.5	30	
Naphthalene	1.6		0.10	ug/L	2.00	0.030 U	80	35-105	0.4	30	
Phenanthrene	1.8		0.10	ug/L	2.00	0.039	89	40-120	2	30	
Pyrene	1.9		0.10	ug/L	2.00	0.030 U	94	50-110	0.7	30	
Surrogate: p-Terphenyl	*3.8*			*ug/L*	*5.00*		*76*	*39-148*			

Polychlorinated Biphenyls by GC - Quality Control

Batch 9F15002 - EPA 3510C

Blank (9F15002-BLK1) Prepared: 06/15/2009 10:01 Analyzed: 06/15/2009 14:33

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	0.50	U	1.0	ug/L							
PCB-1221	0.50	U	1.0	ug/L							
PCB-1232	0.50	U	1.0	ug/L							
PCB-1248	0.50	U	1.0	ug/L							
PCB-1254	0.50	U	1.0	ug/L							
PCB-1260	0.50	U	1.0	ug/L							
Surrogate: 2,4,5,6-TCMX	*0.50*			*ug/L*	*1.00*		*50*	*0-200*			
Surrogate: Decachlorobiphenyl	*0.98*			*ug/L*	*1.00*		*98*	*40-135*			

LCS (9F15002-BS1) Prepared: 06/15/2009 10:01 Analyzed: 06/15/2009 14:46

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	9.1		1.0	ug/L	10.0		91	25-145			
PCB-1260	9.4		1.0	ug/L	10.0		94	30-145			
Surrogate: 2,4,5,6-TCMX	*0.68*			*ug/L*	*1.00*		*68*	*0-200*			
Surrogate: Decachlorobiphenyl	*0.90*			*ug/L*	*1.00*		*90*	*40-135*			

Matrix Spike (9F15002-MS1) Prepared: 06/15/2009 10:01 Analyzed: 06/15/2009 14:58

Source: B902860-01

QUALITY CONTROL

Polychlorinated Biphenyls by GC - Quality Control

Batch 9F15002 - EPA 3510C

Matrix Spike (9F15002-MS1) Continued Prepared: 06/15/2009 10:01 Analyzed: 06/15/2009 14:58

Source: B902860-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	9.3		1.0	ug/L	10.0	0.50 U	93	25-145			
PCB-1260	9.7		1.0	ug/L	10.0	0.50 U	97	30-145			
Surrogate: 2,4,5,6-TCMX	*0.99*			*ug/L*	*1.00*		*99*	*0-200*			
Surrogate: Decachlorobiphenyl	*0.90*			*ug/L*	*1.00*		*90*	*40-135*			

Matrix Spike Dup (9F15002-MSD1) Prepared: 06/15/2009 10:01 Analyzed: 06/15/2009 15:10

Source: B902860-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016/1242	9.2		1.0	ug/L	10.0	0.50 U	92	25-145	1	30	
PCB-1260	9.4		1.0	ug/L	10.0	0.50 U	94	30-145	4	30	
Surrogate: 2,4,5,6-TCMX	*0.98*			*ug/L*	*1.00*		*98*	*0-200*			
Surrogate: Decachlorobiphenyl	*0.92*			*ug/L*	*1.00*		*92*	*40-135*			

Semivolatile Organic Compounds by GC - Quality Control

Batch 9F15010 - EPA 8011

Blank (9F15010-BLK1) Prepared: 06/15/2009 13:30 Analyzed: 06/18/2009 10:31

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2-Dibromoethane	0.020	U	0.040	ug/L							
Surrogate: 1,1,1,2-Tetrachloroethane	*0.21*			*ug/L*	*0.250*		*86*	*70-130*			

LCS (9F15010-BS1) Prepared: 06/15/2009 13:30 Analyzed: 06/18/2009 10:43

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2-Dibromoethane	0.23		0.040	ug/L	0.250		94	49-154			
Surrogate: 1,1,1,2-Tetrachloroethane	*0.22*			*ug/L*	*0.250*		*88*	*70-130*			

Matrix Spike (9F15010-MS1) Prepared: 06/15/2009 13:30 Analyzed: 06/18/2009 10:55

Source: B902889-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2-Dibromoethane	0.25		0.040	ug/L	0.250	0.020 U	101	49-154			
Surrogate: 1,1,1,2-Tetrachloroethane	*0.22*			*ug/L*	*0.250*		*89*	*70-130*			

Matrix Spike Dup (9F15010-MSD1) Prepared: 06/15/2009 13:30 Analyzed: 06/18/2009 11:07

Source: B902889-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2-Dibromoethane	0.27		0.040	ug/L	0.250	0.020 U	107	49-154	5	30	
Surrogate: 1,1,1,2-Tetrachloroethane	*0.23*			*ug/L*	*0.250*		*92*	*70-130*			

QUALITY CONTROL

FL Petroleum Range Organics - Quality Control

Batch 9F15003 - EPA 3510C

Blank (9F15003-BLK1) Prepared: 06/15/2009 10:07 Analyzed: 06/16/2009 15:29

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	0.035	U	0.17	mg/L							
Surrogate: n-Nonatriacontane	*0.088*			*mg/L*	*0.100*		*88*	*37-189*			
Surrogate: o-Terphenyl	*0.047*			*mg/L*	*0.0500*		*93*	*68-118*			

LCS (9F15003-BS1) Prepared: 06/15/2009 10:07 Analyzed: 06/16/2009 15:52

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	1.6		0.17	mg/L	1.70		92	55-118			
Surrogate: n-Nonatriacontane	*0.069*			*mg/L*	*0.100*		*69*	*42-193*			
Surrogate: o-Terphenyl	*0.052*			*mg/L*	*0.0500*		*104*	*82-142*			

Matrix Spike (9F15003-MS1) Prepared: 06/15/2009 10:07 Analyzed: 06/16/2009 16:16

Source: B902860-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	1.5		0.17	mg/L	1.70	0.035 U	91	65-126			
Surrogate: n-Nonatriacontane	*0.076*			*mg/L*	*0.100*		*76*	*37-189*			
Surrogate: o-Terphenyl	*0.048*			*mg/L*	*0.0500*		*95*	*68-118*			

Matrix Spike Dup (9F15003-MSD1) Prepared: 06/15/2009 10:07 Analyzed: 06/16/2009 16:39

Source: B902860-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPH (C8-C40)	1.6		0.17	mg/L	1.70	0.035 U	94	65-126	3	15	
Surrogate: n-Nonatriacontane	*0.079*			*mg/L*	*0.100*		*79*	*37-189*			
Surrogate: o-Terphenyl	*0.051*			*mg/L*	*0.0500*		*103*	*68-118*			

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 9F12010 - EPA 3005A

Blank (9F12010-BLK1) Prepared: 06/12/2009 14:49 Analyzed: 06/15/2009 15:55

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	5.0	U	10.0	ug/L							
Cadmium	0.500	U	1	ug/L							
Chromium	5.0	U	10.0	ug/L							
Lead	5.0	U	10.0	ug/L							

LCS (9F12010-BS1) Prepared: 06/12/2009 14:49 Analyzed: 06/15/2009 19:45

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	998		10.0	ug/L	1000		100	80-120			
Cadmium	488		1	ug/L	500		98	80-120			
Chromium	993		10.0	ug/L	1000		99	80-120			
Lead	992		10.0	ug/L	1000		99	80-120			

QUALITY CONTROL

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 9F12010 - EPA 3005A

Matrix Spike (9F12010-MS1)

Source: B902860-01

Prepared: 06/12/2009 14:49 Analyzed: 06/15/2009 19:47

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	1060		10.0	ug/L	1000	5.0 U	106	80-120			
Cadmium	497		1	ug/L	500	0.500 U	99	80-120			
Chromium	1020		10.0	ug/L	1000	5.0 U	102	80-120			
Lead	1010		10.0	ug/L	1000	5.0 U	101	80-120			

Matrix Spike Dup (9F12010-MSD1)

Source: B902860-01

Prepared: 06/12/2009 14:49 Analyzed: 06/15/2009 19:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	1070		10.0	ug/L	1000	5.0 U	107	80-120	0.4	30	
Cadmium	495		1	ug/L	500	0.500 U	99	80-120	0.5	30	
Chromium	1020		10.0	ug/L	1000	5.0 U	102	80-120	0.9	30	
Lead	1010		10.0	ug/L	1000	5.0 U	101	80-120	0.1	30	

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
J-01	Result is estimated due to positive results in the associated method blank.
O-01	This compound is a common laboratory contaminant.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM-11	Precision between duplicate matrix spikes of the same sample was outside acceptance limits.

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

10775 Central Port Dr
Orlando, FL 32824
(407) 826-5314 Fax (407) 850-6945

4810 Executive Park Court, Suite 211
Jacksonville, FL 32241-9560
(904) 296-3007 Fax (904) 296-6210

102 A Woodwinds Industrial Ct
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Page ____ of ____

Client Name: Tetra Tech NUS (SP0000)	Project Number: 112G9515
Address: 9500 Philips Highway, Suite 15	Project Name/Desc: Site 18 Phase I Work Plan - Report Sampling
City/ST/Zip: Jacksonville, FL 32256	PO # / Billing info
Tel: (904) 636-6125 / Fax: (904) 636-6165	Reporting Contact: Mark Peterson
Sampler(s) Name Affiliation (Print): Curtis Odom Tetra-Tech NUS	Billing Contact: Accounts Payable
Sampler(s) Signature: [signature]	Facility # (if required)

Requested Analyses: 8011 DCE; 8260B DCE; 8260B DCE 8260B THCs; 8270C PAH SIM; 8270C PAH SIM DCE; 8270C PAH SIM Analytes; As; CrCO; FLPRO; TR

Requested Turnaround Times

Note: Rush requests subject to acceptance by the facility

✓ Standard

___ Expedited

Due __/__/__

Lab Workorder: B902860

Preservation (See Codes) (Capture as necessary)

Item #	Sample ID (Field Identification)	2005 Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8011 DCE		8260B DCE	8260B DCE 8260B THCs	8270C PAH SIM	8270C PAH SIM DCE	8270C PAH SIM Analytes	As; CrCO	FLPRO	TR	Sample Comments
	MPT 15[illegible]-MW01s	6-11	1550	Grab	GW	9		X		X			X	X	X		
	MPT 18[illegible]-MW01s	6-11	1835	Grab	GW	9	X		X		X	X			X	X	
	ms/msd	6-11	1550	Grab	GW	20	X	X	X		X			X	X		
	Trip Blank				GW	2			X								

<-- Total # of Containers

Sample(s) Delivered By	Date/Time	Received By	Date/Time	Received By	Date/Time
[signature]	6/10/09 13:40	[signature]	6/10/09 13:40		
[signature]	6-11-09 / 1000	C. Tayl[illegible]	6/12/09 12:20pm		

Comments: All samples labled "1516" Should be 1517

Cooler #'s & Temps (in degrees): C-103 @ 3.3°C GE @ 2.7°C

Condition Upon Receipt: ___ Acceptable ___ Unacceptable

Matrix: GW Groundwater SO Soil SE Sediment SW Surface Water WW Wastewater A Air O Other (detail in comments)

Preservation: I Ice H HCl N HNO3 S H2SO4 NO NaOH O Other (detail in comments)

Note: All samples submitted to ENCO are subject to the terms and conditions listed on the reverse of this form unless prior written agreements exist.

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APPENDIX G

MOBILE LABORATORY ANALYTICAL RESULTS

KB LABS, INC.
25132 SW 1st Ave
Newberry, Florida 32669
***Telephone* (352) 367-0073**
***Fax* (352) 472-5832**
Email: info@kbmobilelabs.com

June 12, 2009

Dave Siefken
TtNUS
8640 Phillips Highway, Suite 16
Jacksonville, FL 32256

RE: NS Mayport, Mayport, FL - Final Data Report
KB Labs Project # 09-91

Dear Mr. Siefken:

Enclosed is the final report of the on-site analysis performed by KB Labs, Inc. at the above referenced site. Samples were collected and analyzed from June 8 to 10, 2009. Included are a brief project narrative, data report narrative, tables listing quality control results, final analytical results, and sample chain-of-custody form.

KB Labs' mobile laboratories have been inspected by the FDOH Bureau of Laboratories and are NELAP Certified as of April 1, 2003. Our personnel, methodology, proficiency testing, and quality assurance requirements comply with the guidelines of Chapter 62-160 of the Florida Administrative Code and with the consensus standards adopted at the National Environmental Laboratory Accreditation Conference (NELAC). Data for the site referenced above were determined in accordance with published procedures under Test Methods for Evaluating Solid Waste (EPA SW-846, Update III Revised May 1997). Unless otherwise indicated on the quality control narrative accompanying the data report, the quality assurance and quality control procedures performed in conjunction with analysis of groundwater samples demonstrated that the reported data met our requirements for accuracy and precision under NELAC Standards.

If you have any questions, please do not hesitate to call me or Kelly Bergdoll, President of KB Labs, at (352) 367-0073.

Sincerely,

KB Labs, Inc.

Todd Romero
Director of Operations

"KB Labs is a small, woman-owned business enterprise."

KB Labs, Inc.
6821 SW Archer Road
Gainesville, FL 32608
Phone: 352-367-0073
Fax: 352-367-0073
Email: info@kbmobilelabs.com

PROJECT NARRATIVE

Project Scope

From June 8 to 10, 2009, a total of 40 samples (23 water and 17 soils) were analyzed for TtNUS at NS Mayport, Mayport, FL. The samples were analyzed for mtbe, benzene, toluene, ethylbenzene, xylenes, naphthalene, and 1&2 methylnaphthalene.

NELAP Certification

KB Mobile Labs Unit KB3: FDOH NELAP Certification Number E82816

Analytical Procedure

All samples were analyzed using SW846 Method 5030/8260 for waters. Ten (10) milliliters (mL) of water or air (air samples) were purged with helium and the volatile organic compounds (VOCs) were collected on a solid-phase adsorption trap. The adsorption trap was heated and back-purged with helium. The components were then separated by capillary column gas chromatography and measured with a mass spectrometer (GC/MS) operated in the electron impact full-scan mode. The individual VOCs in the samples were measured against corresponding VOC standards.

The soil samples were analyzed using SW846 Method 5030/8260. One (1) gram (g) of soil sample was added to 10 mL of laboratory reagent water, heated and analyzed like a water sample as described above.

Unless otherwise indicated, soil data is calculated based on the matrix received (i.e. wet weight basis).

Analytical Results

Laboratory results were provided to the client on an as-completed or next-day basis. Final results of the on-site analyses are provided in a hardcopy report. The data produced and reported in the field has been reviewed and approved for this final report by the Director of Operations for KB Labs.

KB Labs, Inc.
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Gainesville, FL 32608
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Email: info@kbmobilelabs.com

Uncertainty of Reported Values

All measurement data presented in this report are subject to a degree of uncertainty and the degree of uncertainty varies with each compound of interest. KB Labs estimates the uncertainty of each measurement using a statistical evaluation of the standard deviation from the mean percent recovery of a number of trials of a given measurement. More specifically, KB Labs maintains historical percent recovery control limits at the 99% confidence level for each analyte of interest. These are calculated as ± 3 times the standard deviation from the mean of historical measurements of the percent recovery of spikes of the analytes of interest into actual and control sample matrices. For example, if the lower and upper percent recovery control limits for a specific analyte of interest have been determined to be 70 and 100 percent respectively, a reported value of 10.0 ug/L will be with 99% confidence 7.0 to 13.0 ug/L.For more information about KB Labs estimation of uncertainty, contact KB Labs' quality assurance officer and/or request a copy of KB Labs' SOP for determining measurement uncertainty.

Quality Control (QC) Data

Surrogate Recoveries – Table 1 lists the daily analytical sequence and percent recovery results for surrogate compounds, which were added to all analyses. Four (4) surrogate compounds were added to each analysis in order to continually monitor general method performance.

VOC Spike Recoveries – Table 2 lists the percent recovery results for matrix spike and laboratory control samples. A known amount of each target compound was added to selected field samples and to laboratory reagent water in order to monitor the performance of each of the target compounds in the actual matrix and in laboratory reagent water.

Method Blanks – Daily analysis of laboratory reagent water samples was performed in order to monitor the cleanliness of the analytical system.

DATA REPORT NARRATIVE

1. All sample data has been reviewed and, if required, updated in the Final Data Report for rounding and significant figures.

KB LABS, INC.

Table 1: Analytical Run Sequence/Surrogate Percent Recoveries

Client: Tetra Tech NUS	**Driller/Sampler:** Tetra Tech NUS	**Analyst:** Herb Kelly
Site: NS Mayport	**KB Labs Project Manager:** Kelly Bergdoll	**KB Labs Project No:** 09-91
On-site Dates: 6/8/09-6/10/09	**Client Project Manager:** Dave Siefken	**Matrix:** Water/Soil

Sample ID	Date of Analysis	Surrogate % Recovery				Surrogate Control Limits			
		S1*	S2*	S3*	S4*	S1*	S2*	S3*	S4*
BLANK	06/08/09	93	69	92	72	Pass	Pass	Pass	Pass
1 VSTD	06/08/09	90	64	101	71	Pass	Pass	Pass	Pass
1 VSTD	06/08/09	95	77	84	74	Pass	Pass	Pass	Pass
5 VSTD	06/08/09	89	64	93	69	Pass	Pass	Pass	< LCL
10VSTD	06/08/09	96	78	106	79	Pass	Pass	Pass	Pass
20 VSTD	06/08/09	103	87	87	83	Pass	Pass	Pass	Pass
50 VSTD	06/08/09	105	96	102	87	Pass	Pass	Pass	Pass
100 VSTD	06/08/09	101	95	107	88	Pass	Pass	Pass	Pass
BLANK	06/08/09	100	100	97	102	Pass	Pass	Pass	Pass
20 RSTD	06/08/09	102	101	95	101	Pass	Pass	Pass	Pass
BLANK	06/08/09	102	105	94	101	Pass	Pass	Pass	Pass
BLANK	06/08/09	103	104	96	97	Pass	Pass	Pass	Pass
BLANK	06/08/09	103	106	95	101	Pass	Pass	Pass	Pass
10 VSTD	06/08/09	98	100	99	103	Pass	Pass	Pass	Pass
20 VSTD	06/08/09	101	95	98	101	Pass	Pass	Pass	Pass
10 VSTD	06/08/09	96	94	100	100	Pass	Pass	Pass	Pass
20 VSTD	06/08/09	108	104	95	101	Pass	Pass	Pass	Pass
20 RSTD	06/08/09	107	101	94	104	Pass	Pass	Pass	Pass
BLANK	06/08/09	100	105	95	106	Pass	Pass	Pass	Pass
BLANK	06/08/09	107	107	96	107	Pass	Pass	Pass	Pass
BLANK	06/08/09	100	100	98	103	Pass	Pass	Pass	Pass
1517-GW-01	06/08/09	98	103	96	104	Pass	Pass	Pass	Pass
BLANK	06/08/09	97	100	97	105	Pass	Pass	Pass	Pass
18-GW-PZ01	06/08/09	112	118	93	104	Pass	Pass	Pass	Pass
18-GW-PZ02	06/08/09	104	110	92	106	Pass	Pass	Pass	Pass
18-GW-PZ03	06/08/09	110	117	93	105	Pass	Pass	Pass	Pass
18-GW-PZ04	06/08/09	105	112	92	107	Pass	Pass	Pass	Pass
18-GW-SB01-07	06/08/09	101	106	115	105	Pass	Pass	Pass	Pass
18-GW-SB02-08	06/08/09	101	112	91	104	Pass	Pass	Pass	Pass
18-SB01-04	06/08/09	101	101	94	108	Pass	Pass	Pass	Pass
18-SB02-05	06/08/09	104	107	92	107	Pass	Pass	Pass	Pass
18-SB03-05	06/08/09	102	106	93	106	Pass	Pass	Pass	Pass
18-SB08-05	06/08/09	98	106	96	109	Pass	Pass	Pass	Pass
18-SB11-05	06/08/09	104	108	94	106	Pass	Pass	Pass	Pass
18-SB09-05	06/08/09	103	111	94	101	Pass	Pass	Pass	Pass
18-SB07-05	06/08/09	99	111	94	105	Pass	Pass	Pass	Pass
18-SB08-05 MS	06/08/09	106	113	101	110	Pass	Pass	Pass	Pass
18-SB08-05 MSD	06/08/09	99	118	94	111	Pass	Pass	Pass	Pass

***Surrogate Compounds:**
S1 = Dibromofluoromethane (61% - 144%)
S2 = 1,2- Dichloroethane-D4 (64% - 138%)
S3 = Toluene-D8 (80% - 119%)
S4 = 4-Bromofluorobenzene (71% - 132%)

KB LABS, INC.

Table 1: Analytical Run Sequence/Surrogate Percent Recoveries

Client: Tetra Tech NUS	**Driller/Sampler:** Tetra Tech NUS	**Analyst:** Herb Kelly
Site: NS Mayport	**KB Labs Project Manager:** Kelly Bergdoll	**KB Labs Project No:** 09-91
On-site Dates: 6/8/09-6/10/09	**Client Project Manager:** Dave Siefken	**Matrix:** Water/Soil

Sample ID	Date of Analysis	Surrogate % Recovery				Surrogate Control Limits			
		S1*	S2*	S3*	S4*	S1*	S2*	S3*	S4*
VSTD 20	06/08/09	105	110	96	110	Pass	Pass	Pass	Pass
RSTD 20	06/08/09	106	105	99	107	Pass	Pass	Pass	Pass
BLANK	06/08/09	107	113	94	104	Pass	Pass	Pass	Pass
VSTD 20	06/08/09	103	110	94	106	Pass	Pass	Pass	Pass
RSTD 20	06/08/09	105	110	94	105	Pass	Pass	Pass	Pass
BLANK	06/08/09	106	110	93	103	Pass	Pass	Pass	Pass
BLANK	06/08/09	105	111	93	104	Pass	Pass	Pass	Pass
18-GW-SB03-08	06/08/09	93	94	97	102	Pass	Pass	Pass	Pass
18-GW-SB08-08	06/08/09	104	111	93	103	Pass	Pass	Pass	Pass
18-GW-SB11-08	06/08/09	97	100	96	104	Pass	Pass	Pass	Pass
18-GW-SB07-08	06/09/09	111	102	98	108	Pass	Pass	Pass	Pass
18-GW-SB09-08	06/09/09	106	110	95	103	Pass	Pass	Pass	Pass
18-GW-SB07-08 MS	06/09/09	101	108	96	106	Pass	Pass	Pass	Pass
18-GW-SB07-08 MSD	06/09/09	105	108	94	109	Pass	Pass	Pass	Pass
VSTD 20	06/09/09	105	110	95	112	Pass	Pass	Pass	Pass
RSTD 20	06/09/09	104	113	93	107	Pass	Pass	Pass	Pass
BLANK	06/09/09	102	101	96	107	Pass	Pass	Pass	Pass
VSTD 20	06/09/09	106	110	92	109	Pass	Pass	Pass	Pass
RSTD 20	06/09/09	108	110	93	111	Pass	Pass	Pass	Pass
BLANK	06/09/09	102	115	92	110	Pass	Pass	Pass	Pass
BLANK	06/09/09	114	115	93	111	Pass	Pass	Pass	Pass
18-GW-SB06-08	06/09/09	95	104	96	113	Pass	Pass	Pass	Pass
18-GW-SB10-08	06/09/09	104	121	93	111	Pass	Pass	Pass	Pass
18-GW-SB12-08	06/09/09	96	119	94	111	Pass	Pass	Pass	Pass
18-GW-SB13-08	06/09/09	96	124	95	114	Pass	Pass	Pass	Pass
18-SB06-05	06/09/09	99	128	95	116	Pass	Pass	Pass	Pass
18-SB10-05	06/09/09	109	132	95	114	Pass	Pass	Pass	Pass
18-SB12-05	06/09/09	101	137	94	114	Pass	Pass	Pass	Pass
18-SB13-05	06/09/09	109	141	94	112	Pass	> UCL	Pass	Pass
BLANK	06/10/09	99	103	98	104	Pass	Pass	Pass	Pass
VSTD 20	06/10/09	99	98	96	104	Pass	Pass	Pass	Pass
RSTD 20	06/10/09	94	94	96	105	Pass	Pass	Pass	Pass
BLANK	06/10/09	100	104	94	104	Pass	Pass	Pass	Pass
BLANK	06/10/09	100	106	93	103	Pass	Pass	Pass	Pass
18-SB04-05	06/10/09	91	82	100	107	Pass	Pass	Pass	Pass
18-SB05-05	06/10/09	101	109	94	105	Pass	Pass	Pass	Pass
18-SB14-05	06/10/09	100	102	94	106	Pass	Pass	Pass	Pass
18-SB15-05	06/10/09	104	113	94	106	Pass	Pass	Pass	Pass

***Surrogate Compounds:**

S1 = Dibromofluoromethane (61% - 144%)
S2 = 1,2- Dichloroethane-D4 (64% - 138%)
S3 = Toluene-D8 (80% - 119%)
S4 = 4-Bromofluorobenzene (71% - 132%)

Table 1: Analytical Run Sequence/Surrogate Percent Recoveries

Client: Tetra Tech NUS	**Driller/Sampler:** Tetra Tech NUS	**Analyst:** Herb Kelly
Site: NS Mayport	**KB Labs Project Manager:** Kelly Bergdoll	**KB Labs Project No:** 09-91
On-site Dates: 6/8/09-6/10/09	**Client Project Manager:** Dave Siefken	**Matrix:** Water/Soil

Sample ID	Date of Analysis	Surrogate % Recovery				Surrogate Control Limits			
		S1*	S2*	S3*	S4*	S1*	S2*	S3*	S4*
18-SB16-05	06/10/09	99	109	95	103	Pass	Pass	Pass	Pass
18-SB17-05	06/10/09	110	108	93	103	Pass	Pass	Pass	Pass
18-GW-SB04-08	06/10/09	104	110	93	103	Pass	Pass	Pass	Pass
18-GW-SB05-08	06/10/09	106	115	93	105	Pass	Pass	Pass	Pass
18-GW-SB14-08	06/10/09	103	110	93	105	Pass	Pass	Pass	Pass
18-GW-SB15-08	06/10/09	102	111	92	104	Pass	Pass	Pass	Pass
18-GW-SB16-08	06/10/09	103	113	90	103	Pass	Pass	Pass	Pass
18-GW-SB17-08	06/10/09	104	115	92	104	Pass	Pass	Pass	Pass
18-GW-SB07-24	06/10/09	112	118	91	107	Pass	Pass	Pass	Pass
18-GW-SB16-08 MS	06/10/09	103	110	92	110	Pass	Pass	Pass	Pass
18-GW-SB16-08 MSD	06/10/09	106	114	91	110	Pass	Pass	Pass	Pass
VSTD 20	06/10/09	99	115	93	111	Pass	Pass	Pass	Pass
RSTD 20	06/10/09	105	111	93	108	Pass	Pass	Pass	Pass
Comments:	Although some surrogates may be out of the control percent recovery range, other supporting QC, such as matrix spikes, matrix spike duplicates, method blanks, and laboratory control samples, are performed by KB Labs to further validate reported data.								

***Surrogate Compounds:**
S1 = Dibromofluoromethane (61% - 144%)
S2 = 1,2- Dichloroethane-D4 (64% - 138%)
S3 = Toluene-D8 (80% - 119%)
S4 = 4-Bromofluorobenzene (71% - 132%)

KB LABS, INC.

Table 2: VOC Spike Compound Percent Recoveries

Client: Tetra Tech NUS	**Driller/Sampler:** Tetra Tech NUS	**Analyst:** Herb Kelly
Site: NS Mayport	**KB Labs Project Manager:** Kelly Bergdoll	**KB Labs Project No.:** 09-91
Onsite Dates: 6/8/09-6/10/09	**Client Project Manager:** Dave Siefken	**Matrix:** Water/Soil

Matrix Spike/Matrix Spike Duplicate (MS/MSD):

Samples: 18-SB08-05 **Date of Analysis:** 6/8/2009

Matrix Spike Compounds	Control Limits			Percent Recoveries			Control Limit Checks		
	Lower	Upper	RPD	MS	MSD	RPD	MS	MSD	RPD
MtBE	61	170	20	119	90	28	Pass	Pass	> RPDL
Benzene	70	134	20	110	99	10	Pass	Pass	Pass
Toluene	69	129	20	110	93	17	Pass	Pass	Pass
Ethylbenzene	64	136	20	117	99	17	Pass	Pass	Pass
m,p-Xylene	69	134	20	116	101	14	Pass	Pass	Pass
o-Xylene	65	137	20	115	103	12	Pass	Pass	Pass
Naphthalene	47	158	20	123	116	6	Pass	Pass	Pass
2-Methylnaphthalene	39	194	20	125	117	7	Pass	Pass	Pass
1-Methylnaphthalene	42	194	20	126	120	4	Pass	Pass	Pass

Note: Control Limits are based on a semi-annual historical evaluation of mobile unit and method guidelines.

Samples: 18-GW-SB07-08 **Date of Analysis:** 6/9/2009

Matrix Spike Compounds	Control Limits			Percent Recoveries			Control Limit Checks		
	Lower	Upper	RPD	MS	MSD	RPD	MS	MSD	RPD
MtBE	61	170	20	86	89	4	Pass	Pass	Pass
Benzene	70	134	20	97	101	5	Pass	Pass	Pass
Toluene	69	129	20	91	96	5	Pass	Pass	Pass
Ethylbenzene	64	136	20	97	105	7	Pass	Pass	Pass
m,p-Xylene	69	134	20	99	105	6	Pass	Pass	Pass
o-Xylene	65	137	20	97	105	8	Pass	Pass	Pass
Naphthalene	47	158	20	92	110	18	Pass	Pass	Pass
2-Methylnaphthalene	39	194	20	94	121	25	Pass	Pass	> RPDL
1-Methylnaphthalene	42	194	20	96	121	23	Pass	Pass	> RPDL

Note: Control Limits are based on a semi-annual historical evaluation of mobile unit and method guidelines.

Samples: 18-GW-SB16-08 **Date of Analysis:** 6/10/2008

Matrix Spike Compounds	Control Limits			Percent Recoveries			Control Limit Checks		
	Lower	Upper	RPD	MS	MSD	RPD	MS	MSD	RPD
MtBE	61	170	20	106	127	18	Pass	Pass	Pass
Benzene	70	134	20	91	109	18	Pass	Pass	Pass
Toluene	69	129	20	83	100	19	Pass	Pass	Pass
Ethylbenzene	64	136	20	87	106	20	Pass	Pass	> RPDL
m,p-Xylene	69	134	20	88	106	19	Pass	Pass	Pass
o-Xylene	65	137	20	88	107	20	Pass	Pass	Pass
Naphthalene	47	158	20	101	132	27	Pass	Pass	> RPDL
2-Methylnaphthalene	39	194	20	114	147	25	Pass	Pass	> RPDL
1-Methylnaphthalene	42	194	20	114	146	25	Pass	Pass	> RPDL

Note: Control Limits are based on a semi-annual historical evaluation of mobile unit and method guidelines.

KB LABS, INC.

Table 2: VOC Spike Compound Percent Recoveries

Client: Tetra Tech NUS	**Driller/Sampler:** Tetra Tech NUS	**Analyst:** Herb Kelly
Site: NS Mayport	**KB Labs Project Manager:** Kelly Bergdoll	**KB Labs Project No.:** 09-91
Onsite Dates: 6/8/09-6/10/09	**Client Project Manager:** Dave Siefken	**Matrix:** Water/Soil

Laboratory Control Spikes (LCS):

Samples: LCS 1, LCS 2, LCS 3 — **Date of Analysis:** 6/8/2009, 6/8/2009, 6/8/2009

Spike Compounds	Control Limits			Percent Recoveries			Control Limit Checks		
	Lower		Upper	LCS#1	LCS#2	LCS#3	LCS#1	LCS#2	LCS#3
MtBE	64	to	165	108	90	92	Pass	Pass	Pass
Benzene	64	to	128	105	94	101	Pass	Pass	Pass
Toluene	63	to	131	100	91	93	Pass	Pass	Pass
Ethylbenzene	67	to	134	110	97	104	Pass	Pass	Pass
m,p-Xylene	65	to	135	111	97	106	Pass	Pass	Pass
o-Xylene	71	to	130	108	94	103	Pass	Pass	Pass
Naphthalene	52	to	150	114	84	102	Pass	Pass	Pass

Note: Control Limits are based on a semi-annual historical evaluation of mobile unit and method guidelines.

Samples: LCS 4, LCS 5, LCS 6 — **Date of Analysis:** 6/8/2009, 6/8/2009, 6/9/2009

Spike Compounds	Control Limits			Percent Recoveries			Control Limit Checks		
	Lower		Upper	LCS#4	LCS#5	LCS#6	LCS#4	LCS#5	LCS#6
MtBE	64	to	165	97	92	97	Pass	Pass	Pass
Benzene	64	to	128	99	101	99	Pass	Pass	Pass
Toluene	63	to	131	96	93	96	Pass	Pass	Pass
Ethylbenzene	67	to	134	100	104	100	Pass	Pass	Pass
m,p-Xylene	65	to	135	100	106	100	Pass	Pass	Pass
o-Xylene	71	to	130	100	103	100	Pass	Pass	Pass
Naphthalene	52	to	150	110	102	110	Pass	Pass	Pass

Note: Control Limits are based on a semi-annual historical evaluation of mobile unit and method guidelines.

Samples: LCS 7, LCS 8, LCS 9 — **Date of Analysis:** 6/8/2009, 6/9/2009, 6/9/2009

Spike Compounds	Control Limits			Percent Recoveries			Control Limit Checks		
	Lower		Upper	LCS#7	LCS#8	LCS#9	LCS#7	LCS#8	LCS#9
MtBE	64	to	165	90	94	102	Pass	Pass	Pass
Benzene	64	to	128	98	97	100	Pass	Pass	Pass
Toluene	63	to	131	90	90	91	Pass	Pass	Pass
Ethylbenzene	67	to	134	95	94	96	Pass	Pass	Pass
m,p-Xylene	65	to	135	97	96	100	Pass	Pass	Pass
o-Xylene	71	to	130	96	94	99	Pass	Pass	Pass
Naphthalene	52	to	150	105	108	111	Pass	Pass	Pass

Note: Control Limits are based on a semi-annual historical evaluation of mobile unit and method guidelines.

KB LABS, INC.

Table 2: VOC Spike Compound Percent Recoveries

Client: Tetra Tech NUS	**Driller/Sampler:** Tetra Tech NUS	**Analyst:** Herb Kelly
Site: NS Mayport	**KB Labs Project Manager:** Kelly Bergdoll	**KB Labs Project No.:** 09-91
Onsite Dates: 6/8/09-6/10/09	**Client Project Manager:** Dave Siefken	**Matrix:** Water/Soil

Samples: LCS 10 — **Date of Analysis:** 6/10/2009
LCS 11 — 6/10/2009

Spike Compounds	Control Limits			Percent Recoveries			Control Limit Checks		
	Lower		Upper	LCS#10	LCS#11		LCS#10	LCS#11	
MtBE	64	to	165	76	104		Pass	Pass	
Benzene	64	to	128	90	103		Pass	Pass	
Toluene	63	to	131	90	97		Pass	Pass	
Ethylbenzene	67	to	134	101	102		Pass	Pass	
m,p-Xylene	65	to	135	101	104		Pass	Pass	
o-Xylene	71	to	130	99	103		Pass	Pass	
Naphthalene	52	to	150	97	120		Pass	Pass	

Note: Control Limits are based on a semi-annual historical evaluation of mobile unit and method guidelines.

KB LABS, INC.

Final Data Report

Project Number : 09-91

NS Mayport

Mayport, FL

Prepared for:Tetra Tech NUS

Sample ID	Analysis Date	Matrix	Dilution Factor	MtBE	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Naphthalene	2-Methylnaphthalene	1-Methylnaphthalene
1517-GW-01	6/8/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-PZ01	6/8/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-PZ02	6/8/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-PZ03	6/8/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-PZ04	6/8/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-SB01-07	6/8/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-SB02-08	6/8/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-SB03-08	6/8/09	Water	1	<5.0	<1.0	<1.0	**1.0**	**2.2**	<1.0	<5.0	<5.0	<5.0
18-GW-SB08-08	6/8/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-SB11-08	6/8/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-SB07-08	6/9/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-SB09-08	6/9/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-SB06-08	6/9/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-SB10-08	6/9/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-SB12-08	6/9/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-SB13-08	6/9/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-SB04-08	6/10/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-SB05-08	6/10/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0

Reporting units for waters are ug/L and for soils are mg/kg.

KB LABS, INC.

Final Data Report

Project Number : 09-91

NS Mayport

Mayport, FL

Prepared for:Tetra Tech NUS

Sample1 ID	Analysis Date	Matrix	Dilution Factor	MtBE	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Naphthalene	2-Methylnaphthalene	1-Methylnaphthalene
18-GW-SB14-08	6/10/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-SB15-08	6/10/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-SB16-08	6/10/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-SB17-08	6/10/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-GW-SB07-24	6/10/09	Water	1	<5.0	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<5.0	<5.0
18-SB-01-04	6/8/09	soil	1	<0.050	<0.007	<0.010	<0.010	<0.020	<0.010	<0.050	<0.050	<0.050
18-SB-02-05	6/8/09	soil	1	<0.050	<0.007	<0.010	<0.010	<0.020	<0.010	<0.050	<0.050	<0.050
18-SB-03-05	6/8/09	soil	1	<0.050	<0.007	<0.010	<0.010	<0.020	<0.010	<0.050	<0.050	<0.050
18-SB-08-05	6/8/09	soil	1	<0.050	<0.007	<0.010	<0.010	<0.020	<0.010	<0.050	<0.050	<0.050
18-SB-11-05	6/8/09	soil	1	<0.050	<0.007	<0.010	<0.010	<0.020	<0.010	<0.050	<0.050	<0.050
18-SB-09-05	6/8/09	soil	1	<0.050	<0.007	<0.010	<0.010	<0.020	<0.010	<0.050	<0.050	<0.050
18-SB-07-05	6/8/09	soil	1	<0.050	<0.007	<0.010	<0.010	<0.020	<0.010	<0.050	<0.050	<0.050
18-SB-06-05	6/9/09	soil	1	<0.050	<0.007	<0.010	<0.010	<0.020	<0.010	<0.050	<0.050	<0.050
18-SB-10-05	6/9/09	soil	1	<0.050	<0.007	<0.010	<0.010	<0.020	<0.010	<0.050	<0.050	<0.050
18-SB-12-05	6/9/09	soil	1	<0.050	<0.007	<0.010	<0.010	<0.020	<0.010	<0.050	<0.050	<0.050
18-SB-13-05	6/9/09	soil	1	<0.050	<0.007	<0.010	<0.010	<0.020	<0.010	<0.050	<0.050	<0.050
18-SB-04-05	6/10/09	soil	1	<0.050	<0.007	<0.010	<0.010	<0.020	<0.010	<0.050	<0.050	<0.050
18-SB-05-05	6/10/09	soil	1	<0.050	<0.007	<0.010	<0.010	<0.020	<0.010	<0.050	<0.050	<0.050

Reporting units for waters are ug/L and for soils are mg/kg.

KB LABS, INC.

Final Data Report

Project Number : 09-91

NS Mayport

Mayport, FL

Prepared for:Tetra Tech NUS

Sample1 ID	Analysis Date	Matrix	Dilution Factor	MtBE	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Naphthalene	2-Methylnaphthalene	1-Methylnaphthalene
18-SB-14-05	6/10/09	soil	1	<0.050	<0.007	<0.010	<0.010	<0.020	<0.010	<0.050	<0.050	<0.050
18-SB-15-05	6/10/09	soil	1	<0.050	<0.007	<0.010	<0.010	<0.020	<0.010	<0.050	<0.050	<0.050
18-SB-16-05	6/10/09	soil	1	<0.050	<0.007	<0.010	<0.010	<0.020	<0.010	<0.050	<0.050	<0.050
18-SB-17-05	6/10/09	soil	1	<0.050	<0.007	<0.010	<0.010	<0.020	<0.010	<0.050	<0.050	<0.050

Reporting units for waters are ug/L and for soils are mg/kg.

CHAIN-OF-CUSTODY RECORD

Mobile Laboratory Services

☐ 6821 SW Archer Road
Gainesville, FL 32608
TEL (352) 367-0073
FAX (352) 367-0074

☐ 200 Quade Drive
Cary, NC 27513
TEL (919) 678-0030

MOBILE UNIT #

CLIENT NAME: TTNUS

PROJECT NAME & ADDRESS: CTO 118

SAMPLERS: Curtis Odom

CONTACT PERSON: Dave Siefkin ~~Curtis Odom~~

BATCH # (Lab Use Only):

PRESERVATION: C Chilled; H HCL; Ot Other (see Remarks)

SAMPLE FIELD ID.\ NUMBER	DATE SAMPLED	TIME SAMPLED	COMP.	GRAB	DATE REC'D	TIME REC'D	STATION LOCATION / No.	SAMPLE MATRIX	NUMBER OF CONTAINERS	VOLATILES				COMMENT / SAMPLE PRE FIX
1517-GW-01	6-08-09	0940		✓				GW	2	2				
18-GW-PZ01	6-08-09	1250		✓				GW	2	2				
18-GW-PZ02	6-08-09	1300		✓				GW	2	2				
18-GW-PZ03	6-08-09	1305		✓				GW	2	2				
18-GW-PZ04	6-08-09	1310		✓				GW	2	2				
18-SB01-04	6-08-09	1340		✓				SO	1	1				
18-SB02-05	6-8-9	1405		✓				SO	1	1				
18-GW-SB01-07	6-8-9	1410		✓				GW	2	2				
18-GW-SB02-08	6-8-09	1420		✓				GW	2	2				
18-SB03-05	6-8-09	1525		✓				~~GW~~ SO	1	1				
18-SB08-~~07~~ 08 05	6-8-09	1540 ~~1530~~		✓				SO	1	1				
18-GW-SB03-08	6-8-09	1530		✓				GW	2	2				
18-GW-SB08-08	6-8-9	1550		✓				GW	2	2				
18-SB11-05	6-8-9	1615		✓				SO	1	1				
18-SB09-05	6-8-09	1650		✓				SO	1	1				

Precleaned Containers	Date / Time	Received by: (Signature)	Date / Time	Remarks and Observations
Relinquished by: (Signature) [signature]	2009 6-8 1035	[signature]	6/8/09 1700	
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	

Matrix Types S Soil SW Surface Water GW Ground Water SG Soil Gas

CHAIN-OF-CUSTODY RECORD

Mobile Laboratory Services

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Gainesville, FL 32608
TEL (352) 367-0073
FAX (352) 367-0074

☐ 200 Quade Drive
Cary, NC 27513
TEL (919) 678-0030

MOBILE UNIT #

CLIENT NAME	PROJECT NAME & ADDRESS
TTNUS	CTO 118
SAMPLERS: Curtis Odom	CONTACT PERSON: Dave Siefkin

BATCH # (Lab Use Only)

PRESERVATION: C Chilled; H HCL; Ot Other (see Remarks)

SAMPLE FIELD ID.\ NUMBER	DATE SAMPLED	TIME SAMPLED	COMP.	GRAB	DATE REC'D	TIME REC'D	STATION LOCATION / No.	SAMPLE MATRIX	NUMBER OF CONTAINERS	VOLATILES (IDENTIFY PARAMETERS DESIRED AND NO. OF CONTAINERS)					COMMENT / SAMPLE PRE FIX
18-GW-SB09-08	6-08-09	1655		✓				GW	2	2					
18-SB07-05	6-08-09	1720		✓				SO	1	1					
18-GW-SB07-08	6-08-09	1730		✓				GW	2	2					

Precleaned Containers Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Remarks and Observations
[signature]	6-8-09	[signature]	6/8/09 1750	
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	

Matrix Types S Soil SW Surface Water GW Ground Water SG Soil Gas

CHAIN-OF-CUSTODY RECORD

Mobile Laboratory Services

☐ 6821 SW Archer Road
Gainesville, FL 32608
TEL (352) 367-0073
FAX (352) 367-0074

☐ 200 Quade Drive
Cary, NC 27513
TEL (919) 678-0030

MOBILE UNIT #

CLIENT NAME	PROJECT NAME & ADDRESS
TTNUS	CTO 118
SAMPLERS	**CONTACT PERSON**
Curtis Odom	Dave Siefkin

BATCH # (Lab Use Only)

PRESERVATION: C Chilled; H HCL; Ot Other (see Remarks)

SAMPLE FIELD ID.\ NUMBER	DATE SAMPLED 2009	TIME SAMPLED	COMP.	GRAB	DATE REC'D	TIME REC'D	STATION LOCATION / No.	SAMPLE MATRIX	NUMBER OF CONTAINERS	VOLATILES					COMMENT / SAMPLE PRE FIX
18-SB06-05	6-9	0825		✓				SO	1	1					
18-GW-SB06-08	6-9	0910		✓				GW	2	2					
18-SB10-05	6-9	0945		✓				SO	1	1					
18-GW-SB10-08	6-9	0950		✓				GW	2	2					
18-SB12-05	6-9	1020		✓				SO	1	1					
18-GW-SB12-08	6-9	1030		✓				GW	2	2					
18-SB13-05	6-9	1100		✓				SO	1	1					
18-GW-SB13-08	6-9	1110		✓				GW	2	2					
18-SB14-05	6-9	1215		✓				SO	1	1					
18-GW-SB14-08	6-9	1225		✓				GW	2	2					
18-SB04-05	6-9	1255		✓				SO	1	1					
18-GW-SB04-08	6-9	1305		✓				GW	2	2					
18-SB05-05	6-9	1330		✓				SO	1	1					
18-GW-SB05-08	6-9	1340		✓				GW	2	2					
18-SB15-05	6-9	1410		✓				SO	1	1					

Precleaned Containers Relinquished by: (Signature)	Date / Time 2009 6-9	Received by: (Signature)	Date / Time 6/9/09 1415
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time

Remarks and Observations

Matrix Types S Soil SW Surface Water GW Ground Water SG Soil Gas

CHAIN-OF-CUSTODY RECORD

Mobile Laboratory Services

☐ 6821 SW Archer Road
Gainesville, FL 32608
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FAX (352) 367-0074

☐ 200 Quade Drive
Cary, NC 27513
TEL (919) 678-0030

MOBILE UNIT #

CLIENT NAME: TTNUS

PROJECT NAME & ADDRESS: CT0118

SAMPLERS: Curtis Odom

CONTACT PERSON: Dave Siefkin

BATCH # (Lab Use Only)

PRESERVATION: C Chilled; H HCL; Ot Other (see Remarks)

SAMPLE FIELD ID.\ NUMBER	DATE SAMPLED 2009	TIME SAMPLED	COMP.	GRAB	DATE REC'D	TIME REC'D	STATION LOCATION / No.	SAMPLE MATRIX	NUMBER OF CONTAINERS	VOLATILES					COMMENT / SAMPLE PRE FIX
18-GW-SB15-08	6-9	1420		✓				GW	2	2					
18-SB16-05	6-9	1505		✓				SO	1	1					
18-GW-SB16-08	6-9	1520		✓				GW	2	2					
18-SB17-05	6-9	1705		✓				SO	1	1					
18-GW-SB17-08	6-9	1720		✓				GW	2	2					
18-GW-SB07-24	6-9	1745		✓				GW	2	2					

Precleaned Containers Relinquished by: (Signature)	Date / Time 2009 6 9	Received by: (Signature)	Date / Time 6/9/09 1800	Remarks and Observations
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	

Matrix Types S Soil SW Surface Water GW Ground Water SG Soil Gas

CHAIN-OF-CUSTODY RECORD

Mobile Laboratory Services

☐ 25132 SW 1st Avenue
Newberry, FL 32669
TEL (352) 367-0073
FAX (352) 472-5832

☐ 200 Quade Drive
Cary, NC 27513
TEL (919) 678-0030

MOBILE UNIT #

CLIENT NAME: TTNUS

PROJECT NAME & ADDRESS: CT0118

SAMPLERS

CONTACT PERSON: Dave Siefkin

BATCH # (Lab Use Only)

IDENTIFY PARAMETERS DESIRED AND NO. OF CONTAINERS: VOLATILES

PRESERVATION: C Chilled; H HCL; Ot Other (see Remarks)

SAMPLE FIELD ID.\ NUMBER	DATE SAMPLED	TIME SAMPLED	COMP.	GRAB	DATE REC'D	TIME REC'D	STATION LOCATION / No.	SAMPLE MATRIX	NUMBER OF CONTAINERS	VOLATILES				COMMENT / SAMPLE PRE FIX
18-GW-SB11-08								W						

Precleaned Containers Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Date / Time
Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Date / Time

Remarks and Observations

COC in HB Office
Christine Priest

Matrix Types S Soil SW Surface Water GW Ground Water SG Soil Gas