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FINAL SITE ASSESSMENT AND SITE REHABILITATION COMPLETION REPORT FOR SITE
1596 NS MAYPORT FL
3/13/2013
TETRA TECH



March 13, 2013

Naval Facilities Engineering Command Southeast
ATTN: Mr. Andrew Cochran
PWD Mayport
Building 1966
PO Box 280073
Jacksonville, Florida 32228-0073

Reference: N69450-12-M-5084, Oily Wastewater Pipeline Leak Contamination Assessment

Subject: Final Site Assessment Report and Site Rehabilitation Completion Report for Site 1596,
Naval Station Mayport, Jacksonville, Florida 32228

Dear Mr. Cochran:

TriEco, LLC is pleased to submit two hardcopies and one electronic copy of the final Site Assessment and Site Rehabilitation Completion Report for Site 1596 at Naval Station Mayport, Jacksonville, Florida. This report was prepared for the United States Navy, Naval Facilities Engineering Command Southeast under Contract Number N69450-12-M-5084.

If you have any questions with regard to this submittal, please contact me at (904) 803-6353 or via e-mail at dfears@trieco.net.

Sincerely,

Diane R. Fears
Project Manager

DF/lc

Enclosure

c: Mark Peterson, Tetra Tech (1 hardcopy, CD)
RDM, Tetra Tech (unbound, CD)
TriEco 5084 Project File

CONTRACT NUMBER N69450-I2-M-5094



Rev. 0
03/13/13

Site Assessment Report and Site Rehabilitation Completion Report for Site 1596

Naval Station Mayport
Jacksonville, Florida

March 2013



NAS Jacksonville
Jacksonville, Florida 32212-0030



**SITE ASSESSMENT REPORT
AND
SITE REHABILITATION COMPLETION REPORT
FOR
SITE 1596**

**NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA**

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

**Submitted by:
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7710 Springvale Drive, Suite 201
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CONTRACT NUMBER N69450-12-M-5084

MARCH 2013

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The professional opinions rendered in this document identified as the Site Assessment Report and Site Rehabilitation Completion Report for Site 1596 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 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.

A handwritten signature in blue ink, appearing to read "Mark A. Peterson", is written over a horizontal line.

March 13, 2013
Mark A. Peterson, P.G.
Florida License Number PG-1852

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ACRONYMS

ALS	ALS Environmental, Inc.
bls	below land surface
°C	degree Celsius
F.A.C.	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FID	flame ionization detector
FL-PRO	Florida Residual Petroleum Organic
IDW	investigative derived waste
IAP-HILL	IAP-HILL, Inc.
µg/kg	microgram per kilogram
mgd	million gallon per day
mg/kg	milligram per kilogram
N/A	not applicable
NAVFAC SE	Naval Facilities Engineering Command Southeast
NAVSTA	Naval Station
NRCS	National Resource Conservation Service
OVA	organic vapor analyzer
PCB	polychlorinated biphenyl
ppm	part per million
PQL	Practical Quantitation Limit
SA	site assessment
SAR	Site Assessment Report
SCTL	Soil Cleanup Target Level
SOP	Standard Operating Procedure
SVOC	semivolatile organic compound
TOC	top-of-casing
TRPH	total recoverable petroleum hydrocarbons
TriEco	TriEco, LLC
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VOC	volatile organic compound

EXECUTIVE SUMMARY

TriEco, LLC (TriEco), in conjunction with Tetra Tech, Inc. has completed a site assessment (SA) at Site 1596, Naval Station (NAVSTA) Mayport, Jacksonville, Florida in accordance with the requirements of Chapter 62-770, Florida Administrative Code (F.A.C.). This Site Assessment Report is being submitted to the Florida Department of Environmental Protection for approval.

To complete this SA, TriEco performed the following:

- Reviewed available United States Navy documents to
 - Identify potential sources and receptors for petroleum hydrocarbons in the vicinity.
 - Identify private and municipal potable wells within a 1-mile radius of the site.
 - Locate nearby surface water bodies.
 - Evaluate surface hydrology and drainage.
- Advanced four soil borings on site using hand augering. Collected soil samples from the borings for analysis by fixed-base laboratory.
- Installed one piezometer and collected/analyzed groundwater samples to verify preliminary water quality data.
- Referenced and obtained appropriate aquifer data from the United States Geological Survey and National Resource Conservation Service to calculate aquifer characteristics at NAVSTA Mayport.

The investigation was centered on a release in 2008 from the oily wastewater pipeline near Building 1596 (McDonald's). The release occurred in the flower bed adjacent to the drive-through at McDonald's. The underground pipe was repaired, and impacted soil was replaced in the excavation.

The results of the SA revealed the following:

- Excessively contaminated soil, as defined by Chapter 62-770.200(12), F.A.C., was not identified at the site.
- No exceedance of Groundwater Cleanup Target Levels for the Gasoline Analytical Group/Kerosene Analytical Group constituents was documented

Based on current soil and groundwater analysis results and the action levels set in Chapter 62-770, F.A.C., no further action is recommended for Site 1596. It is requested a Site Rehabilitation Completion Order be issued for this site.

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

TriEco, LLC (TriEco), in conjunction with Tetra Tech, Inc., performed a site assessment (SA) at Site 1596, Naval Station (NAVSTA) Mayport, Jacksonville, Florida, for the Naval Facilities Engineering Command Southeast (NAVFAC SE) under Contract Number N69450-12-M-5084. The data collected during the investigation were used to prepare a Site Assessment Report (SAR). Information from the field investigation has been assimilated into this SAR to provide a characterization of site conditions from which to base future courses of action.

The purpose of the recently completed SA was to determine if subsurface soils and groundwater at Site 1596 had been impacted by a break in the oily wastewater pipeline at this location. This investigation was initiated due to a release that occurred July 19, 2008, during normal operations of the oily wastewater system. A summary of site investigative history is provided in Section 1.8.

The scope of the investigation included the following:

- Determine the presence or absence and vertical and horizontal extent of any soil impacts. Based on information provided by NAVSTA Mayport personnel, the release impacted the entire flower bed.
- Determine the presence/absence and extent of groundwater impacts (horizontal and vertical) through the installation of temporary monitoring well.
- Evaluate groundwater and soil quality through fixed-base laboratory analysis of soil and groundwater samples.
- Compile a SAR complete with recommendations for future courses of action, if needed.

A copy of the Site Assessment Summary Sheet for Site 1596 is presented in Appendix A.

1.2 FACILITY AND SITE LOCATION

NAVSTA Mayport is located within the corporate limits of the City of Jacksonville, Duval County, Florida and is approximately 12 miles to the east-northeast of downtown Jacksonville and adjacent to the Village of Mayport. 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 Village of Mayport, which is located to the west between the Station and the St. Johns River.

The area of investigation at NAVSTA Mayport is adjacent to Building 1596 (McDonald's) and is referred to as Site 1596. On July 19, 2008, according to the Post Spill Requirements Report dated July 23, 2008, (IAP-HILL, Inc. [IAP-HILL], 2008), less than 1,000 gallons of oily wastewater spilled into the parking lot next to Building 1596 near the entrance of the drive-through of the McDonald's restaurant. The investigation area is a relatively flat area located near the intersection of Maine Street and Lamp Avenue in the northwestern quadrant of NAVSTA Mayport. Figure 1-1 shows the location of the site on the NAVSTA Mayport facility.

1.3 REGIONAL GEOLOGY AND HYDROGEOLOGY

Northeastern Florida is underlain by 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).

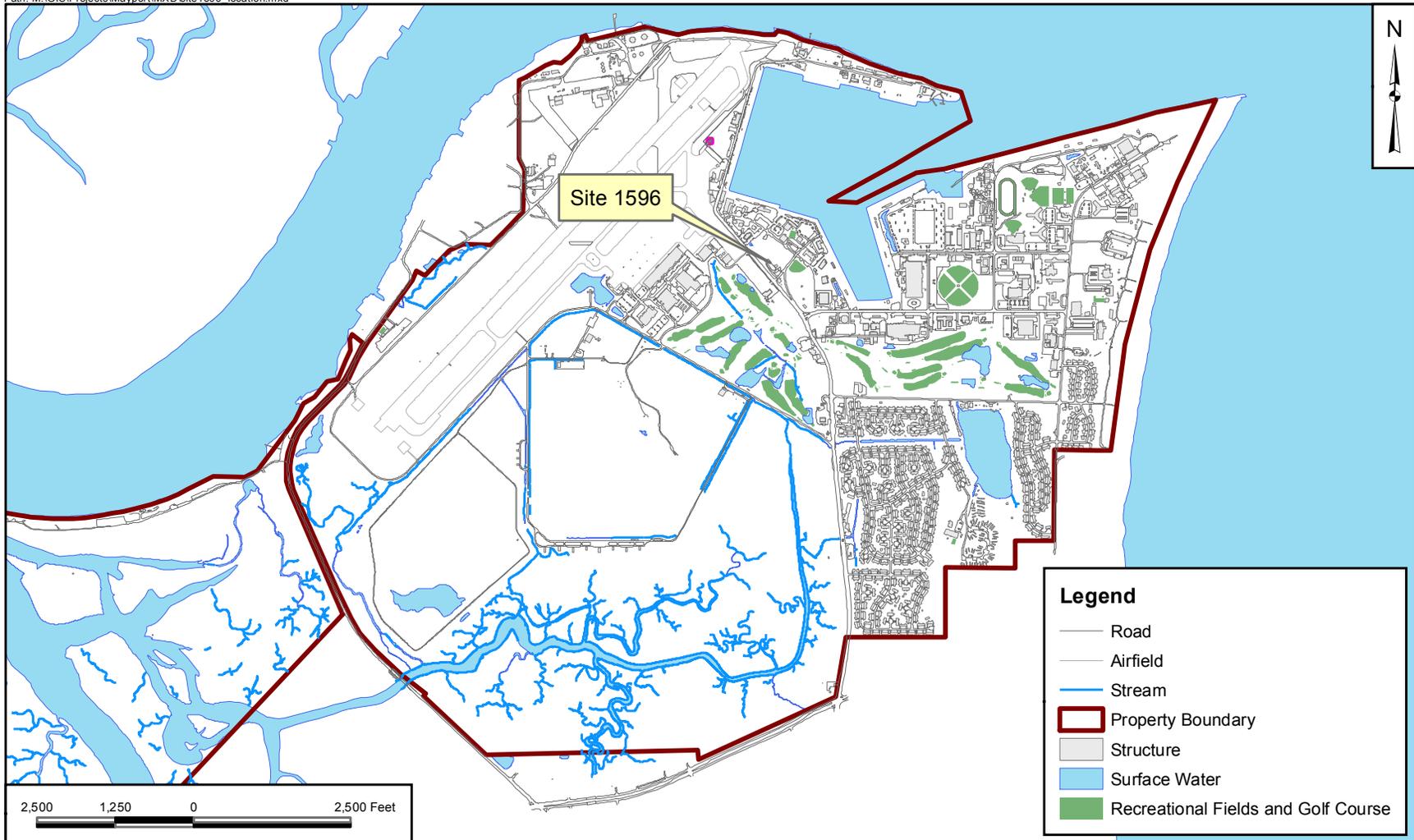
The surficial aquifer system consists of fine-grained sands near the surface interspersed with thin (less than 1 foot) clay lenses, and generally grades to a mixture of sand and coarse shell fragments from 30 to 50 feet bls. The base of the surficial aquifer system is its contact with the underlying 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 the St. Johns River Water Management District on-line database system. Potable well information is summarized on Table 1-1. The locations of the potable wells are depicted on Figure 1-2.

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Legend	
	Road
	Airfield
	Stream
	Property Boundary
	Structure
	Surface Water
	Recreational Fields and Golf Course

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SITE LOCATION MAP
SITE 1596
SITE ASSESSMENT REPORT
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

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FIGURE 1-1	0

**Table 1-1
Potable Water Well Survey Results**

Site Assessment Report, Site 1596
Naval Station Mayport
Jacksonville, Florida

Well Identification	Approximate Distance from Site (miles)	Diameter (inches)	Depth of Well (feet bls)	Status
#1	0.01	16	982	Abandoned
#2	0.32	6	1200	Active
#3	0.53	4	Unknown	Active
#4	0.58	16	988	Active
#5	0.96	8	Unknown	Active
#6	0.88	unknown	680	Active

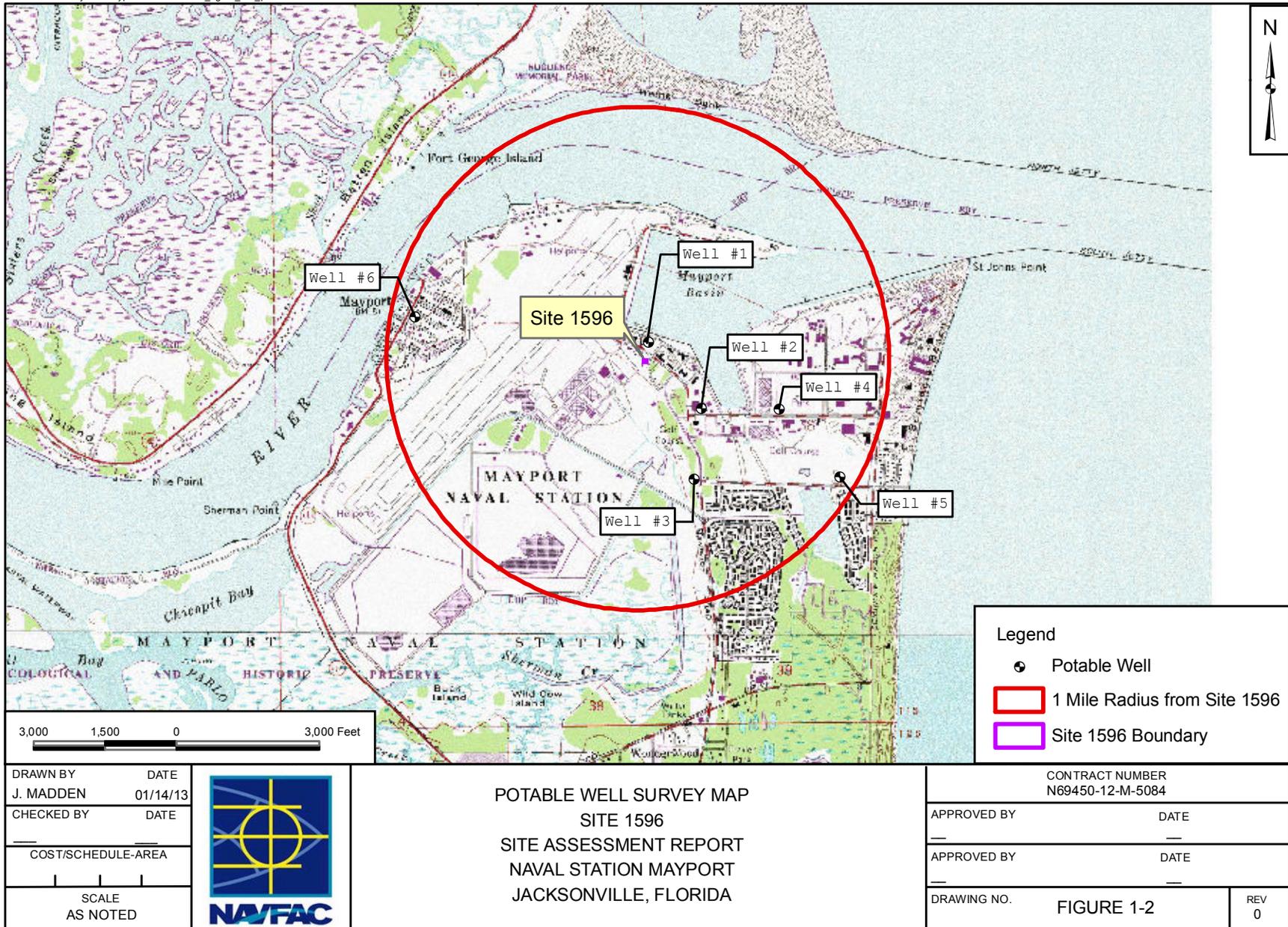
Five active potable water supply wells are located within a 1-mile radius of Site 1596. Potable water is supplied to the Village of Mayport by one supply well maintained by JEA. The well draws water from the Floridan aquifer and is part of the county-wide potable water supply system. Potable water is supplied to NAVSTA Mayport by four on-base supply wells. The closest active supply well, #1, is located approximately 0.32 mile to the southeast. On-base potable wells #1 through #4 draw water from the Floridan aquifer with well capacities ranging between 7,200 and 2.5 million gallons per day (mgd) and have a combined total pumping capacity of approximately 6.2 mgd. The water is treated by the Station water treatment plant prior to distribution.

1.5 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 and 10 feet above mean sea level (USGS, 1992).

Site 1596 is slightly sloped from Maine Street to the north. The stormwater detention pond located southeast of the parking area abuts the area of investigation. According to the Custom Soil Resource Report for Site 1596, obtained from the USDA Natural Resource Conservation Service (NRCS), the soil beneath the site is mainly Arents, nearly level, and similar soils (USDA, 2013). A copy of the NRCS report is provided in Appendix B.

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POTABLE WELL SURVEY MAP
SITE 1596
SITE ASSESSMENT REPORT
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

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Site 1596 is located near the center of NAVSTA Mayport, west of the lower section of the turning basin, on a parcel of land separating the St. Johns River from the Atlantic Ocean as shown on Figure 1-1.

1.6 LAND USE IN SITE VICINITY

Land uses near the site consist of the McDonald's restaurant to the north and northeast and flight operations and support to the west and southwest. Vehicle parking is to the east and southeast, and undeveloped land with a large storm water detention pond is located to the east and southeast beyond vehicle parking. A Site and Vicinity Map depicting Site 1596 and its nearby surroundings is provided as Figure 1-3.

1.7 SITE DESCRIPTION

Site 1596 is adjacent to Building 1596, the McDonald's restaurant. The investigation area is the oily wastewater pipeline that runs under the parking area and flower bed next to the drive-through lane. The investigation area is a relatively flat area of the Station located northwest of the intersection of Maine Street and Lamp Avenue, between the Mayport Turning Basin and the airfield. A Site Map of Site 1596 is presented as Figure 1-4.

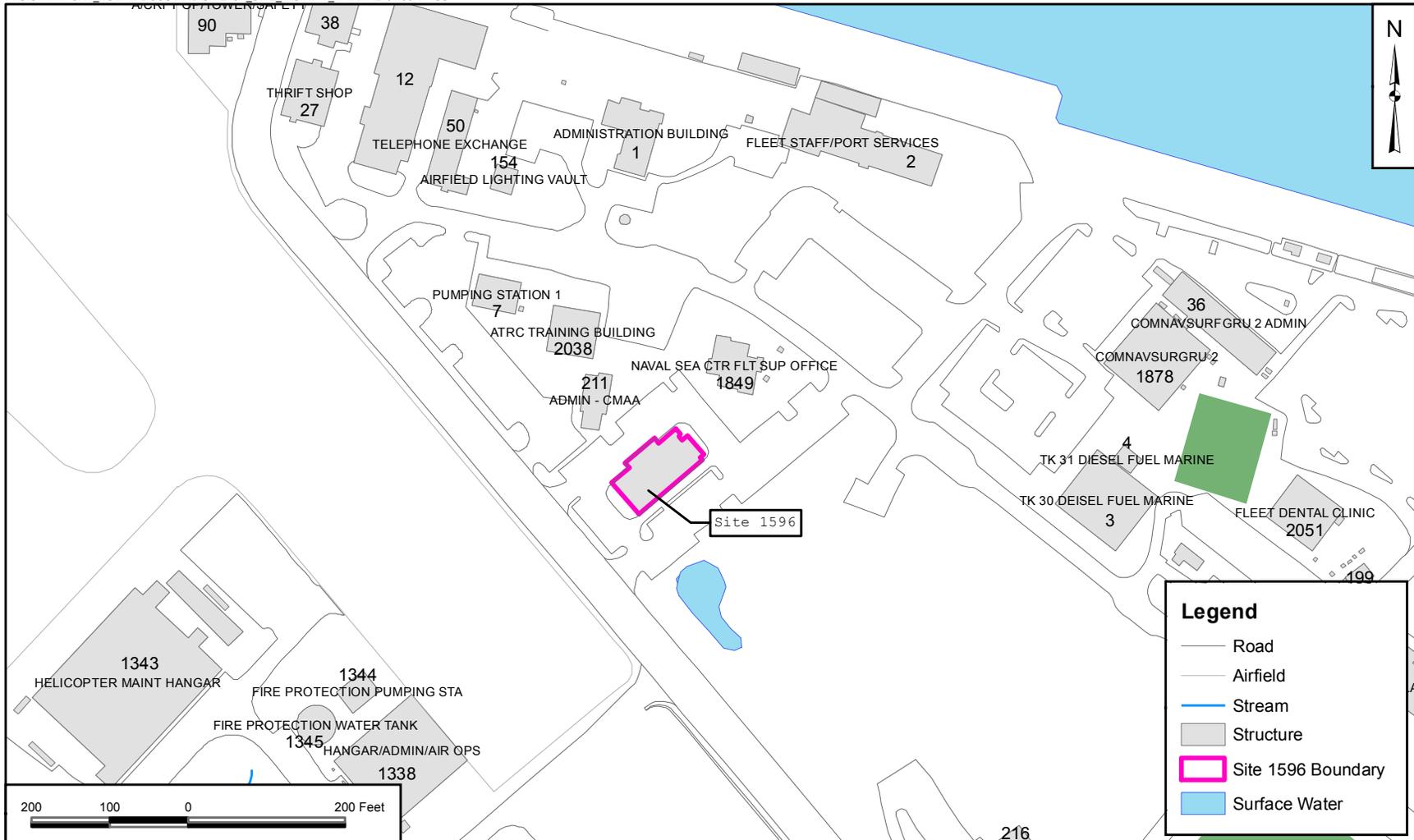
1.8 SITE HISTORY

A release of oily wastewater occurred on July 19, 2008, in the flower bed adjacent to the drive-through lane for the McDonald's restaurant, Building 1596. The cause of the release was determined to be from a corroded oily waste transfer line that transports oily wastewater from ships to the Oily Wastewater Treatment Plant on the northern side of NAVSTA Mayport. The spill was contained by the NAVSTA Mayport Fire Department and recovered by IAP-HILL. The pipeline was repaired by IAP-HILL. Impacted soil that had been excavated for the repair was containerized and given to the NAVSTA Mayport Part B permitted hazardous waste facility for disposal as non-hazardous waste. A copy of the spill report and photos of the repairs are shown in Appendix C.

1.9 PURPOSE OF CURRENT INVESTIGATION

The objective of the SA was to assess the extent and magnitude of soil and/or groundwater contamination, if present, at Site 1596. The data collected during the investigation 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.

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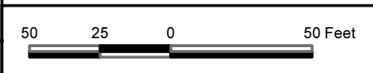
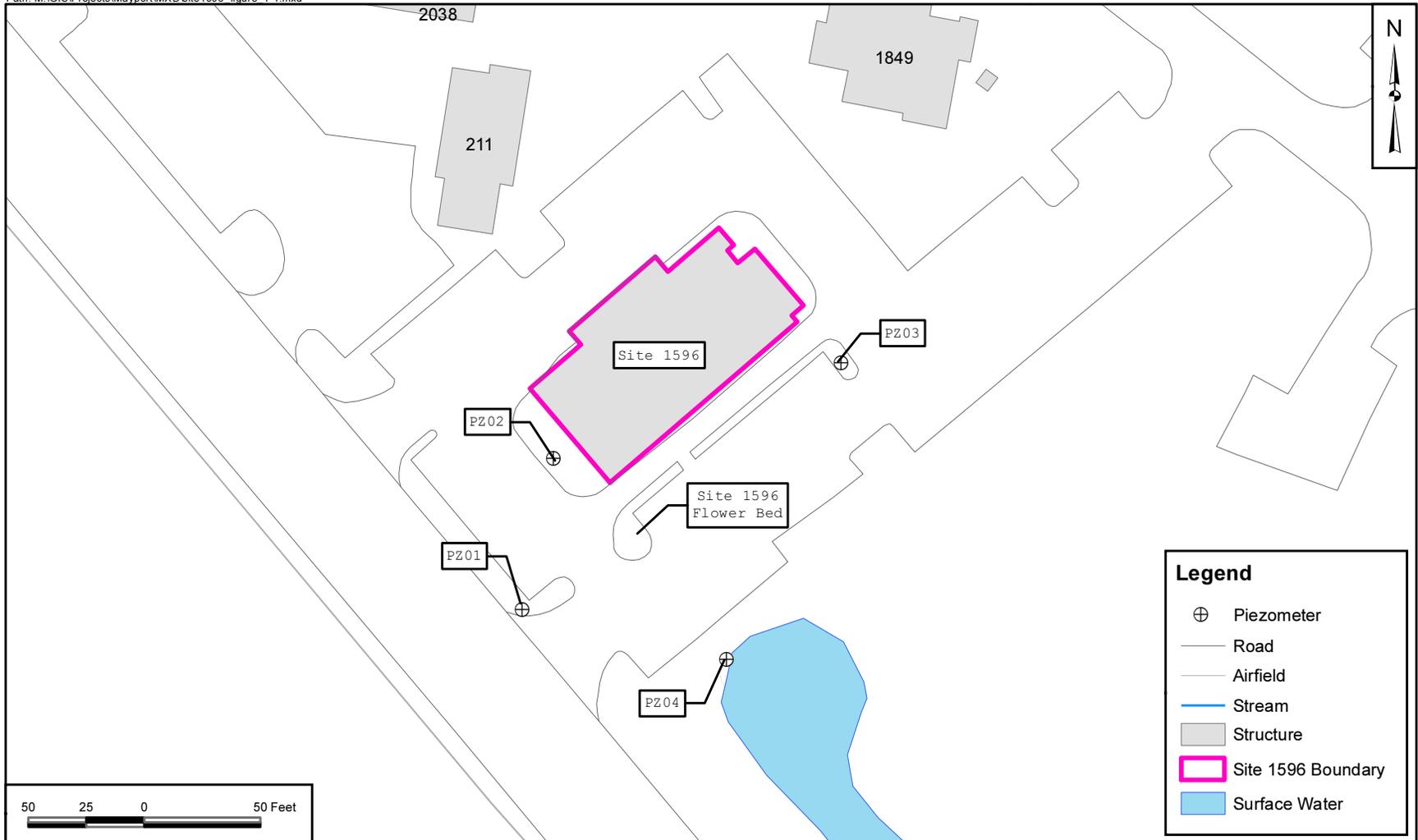
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SITE AND VICINITY MAP
SITE 1596
SITE ASSESSMENT REPORT
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

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Legend

- ⊕ Piezometer
- Road
- Airfield
- Stream
- Structure
- Site 1596 Boundary
- Surface Water

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PIEZOMETER MAP
SITE 1596
SITE ASSESSMENT REPORT
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

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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; United States Environmental Protection Agency (USEPA) Field Branches Quality System and Technical Procedures, dated November 1, 2007, Section 2.21 (USEPA, 2007); and FDEP SOPs 001/01: FS3000: *Soil Sampling* and FS1000: *General Sampling Procedures* (FDEP, 2008).

2.2 ASSESSMENT STRATEGY

For the purpose of this investigation, impacts to the soil and groundwater from the oily wastewater pipeline were considered “sole source” requiring analysis of three soil samples collected from locations representing low, medium, and high field screening responses (Chapter 62-770.600(3)(e), F.A.C.). Soil was assessed at the site in two phases: a screening phase (Phase I) in which soil grab samples were collected by hand auger methods and field screened with an organic vapor analyzer (OVA) equipped with a flame ionization detector (FID). The second phase (Phase II) consisted of collecting soil grab samples and installing a temporary monitoring well using hand auger. Soil samples were collected based on the screening results, and a groundwater sample was collected from the well. Samples were analyzed for the constituents listed in the used oil parameters in accordance with Table C in Chapter 62-770, F.A.C., at an FDEP approved fixed-base laboratory.

The soil investigation derived waste (IDW) was characterized for disposal using the analytical results from the collected soil samples, which included the volatile organic halocarbons and total metals (arsenic, cadmium, chromium, and lead), per Chapter 62-713, F.A.C.

2.3 DETERMINATION OF GROUNDWATER GRADIENT

In order to verify the direction of groundwater flow at this site, four piezometers (PZ1, PZ2, PZ3, and PZ4) were installed using hand auger on December 11, 2012. Each piezometer was constructed with sufficient screen interval to bracket the water table and penetrate at least 5 feet into the static water table. The top-of-casing (TOC) elevation for each piezometer was surveyed in reference to an on-site arbitrary benchmark with an assigned elevation of 20 feet. The vertical elevation of each piezometer casing was surveyed to the nearest 0.01 foot using standard rod and transit survey methods. Depth-to-water was measured from the TOC of each piezometer using an electronic water level indicator. The relative water table elevation at each location will be calculated by subtracting the depth-to-water measurement from the surveyed TOC elevation. All data was recorded in the appropriate site-specific field logbook and on

groundwater level measurement field forms. Depth to groundwater measurements, gradient, and flow direction are discussed in Sections 3.1.2 and 3.1.3.

2.4 SOIL QUALITY ASSESSMENT

2.4.1 Soil Borings

Locations of three soil borings completed during the assessment are shown on Figure 2-1. Soil borings were advanced to a depth of 5 feet bls using an stainless steel, 3-inch inside diameter hand auger assembly for the purpose of locating utilities and collecting soil screening samples.

2.4.2 Field Screening Procedures

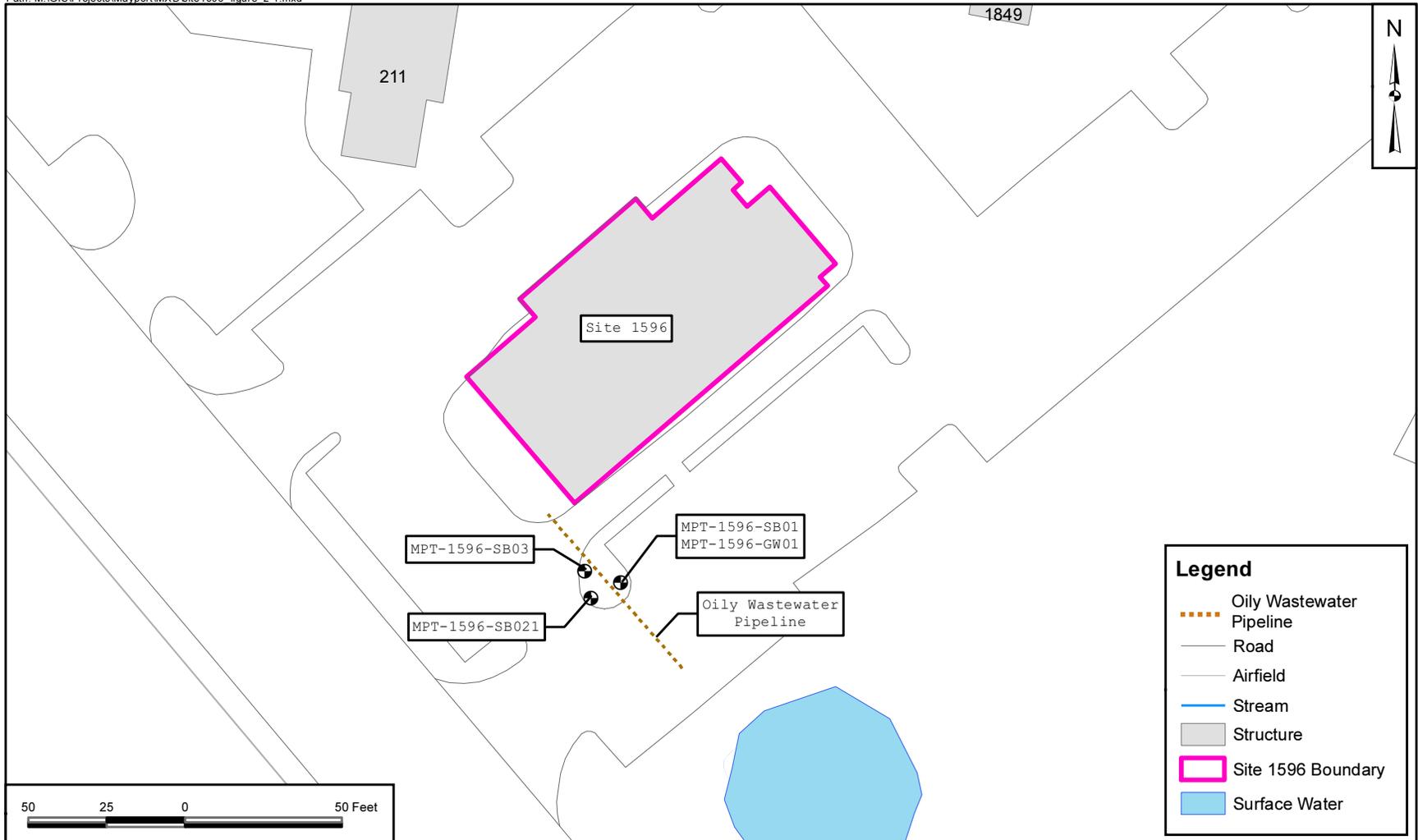
Soil samples were collected from each location at depths of 0 to 1 foot, 1 to 2 feet, 2 to 3 feet, 3 to 4 feet and 4 to 5 feet bls. Samples collected above the water table were screened in the field using an OVA equipped with a FID. Soil vapor analyses were performed in accordance with the headspace screening method described in Chapter 62-770.200 (2), F.A.C. Results of the soil vapor screening survey conducted at Site 1596 are discussed in Section 3.2. FID data is presented in Table 2-1.

During field soil sampling, field observations were conducted to assist in the determination of the presence or absence of petroleum. Although the depth of the Oily Wastewater Pipeline was reported to be 3 to 4 feet bls and was of special importance since it was the cause of the release, the oily wastewater saturated the flower bed.

2.4.3 Soil Sampling Strategy for Laboratory Analysis

Based on the initial assessment (Phase I), three soil samples were submitted to a fixed-base laboratory, ALS Environmental, Inc. (ALS) of Jacksonville, Florida, for analysis of used oil constituents. Used oil constituents listed in Table C of Chapter 62-770, F.A.C., include volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), metals (arsenic, cadmium, chromium, and lead), and total recoverable petroleum hydrocarbons (TRPH). Soil samples submitted for fixed-base laboratory analysis are typically based on field screening results. Unfiltered FID readings at SB01 were slightly elevated, although the filtered readings were equal to background levels. The basis for the sample collection was then determined on possible location of contaminant release. Soil samples MPT-1596-SB01-0203-112812 and MPT-1596-SB01-0405-112812 were collected adjacent to and downgradient from the oily wastewater pipeline. The unfiltered FID analysis had slightly elevated readings at this location at these depths, while the filtered analysis did not have detectable readings. Soil sample MPT-1596-SB03-0203-112812 was collected in the area excavated to repair the oily wastewater pipeline.

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SOIL BORINGS MAP
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JACKSONVILLE, FLORIDA

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<p align="center">Table 2-1 FID Data Collected 11/27/2012</p> <p align="center">Site Assessment Report, Site 1596 Naval Station Mayport Jacksonville, Florida</p>						
FID Depth (feet)	Soil Boring MPT-1596-01		Soil Boring MPT-1596-02		Soil Boring MPT-1596-03	
	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
0 to 1	9.6	0.0	0.0	N/A	0.0	N/A
1 to 2	11.7	0.0	0.0	N/A	0.0	N/A
2 to 3	13.4	0.0	0.0	N/A	0.0	N/A
3 to 4	0.0	0.0	0.0	N/A	0.0	N/A
4 to 5	0.0	0.0	0.0	N/A	*	N/A

Notes:
N/A = not applicable
* groundwater encountered

2.5 GROUNDWATER ASSESSMENT METHODS

One temporary shallow monitoring well (MPT-1596-GW01) was installed at MPT-1596-SB01 on November 28, 2011. The temporary well location, as shown on Figure 2-1, was selected based upon FID results.

2.5.1 Temporary Monitoring Well Construction and Development

The temporary well was advanced by hand auger to a total depth of 15 feet bls and was constructed with 1-inch diameter, 0.010-inch mill slotted Schedule 40 polyvinyl chloride screen. The annular space was filled with 20/30 filter sand to land surface. The monitoring well was developed using a peristaltic pump until produced water was virtually clear. All development water was containerized for disposal in 250-gallon tote at NAVSTA Mayport IDW storage area.

2.5.2 Temporary Monitoring Well Groundwater Sampling

Groundwater samples were collected from the newly installed shallow temporary well on November 28, 2012. Groundwater sampling was conducted in general accordance with FDEP SOPs. A minimum one well volume was pumped from the well (partially submerged screen) using a peristaltic pump and the low flow quiescent purging method. The sample collection tubing was adjusted to remain approximately 1 foot below the top of the water column. After purging of these initial quantities, purging was continued and field parameters pH, specific conductance, dissolved oxygen, and temperature were measured periodically (minimum 3-minute intervals) using a YSI 556 instrument. Turbidity was measured using a Micro TPW turbidimeter.

Purging was considered complete when three consecutive measurements were within the following limits:

- Temperature \pm 0.2 degree Celsius ($^{\circ}$ C)
- pH \pm 0.2 Standard Unit
- 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 Turbidity Units

Groundwater sampling logs and low flow purge sheets compiled during purging and sampling are provided in the field notes in Appendix D.

After collection, samples were immediately placed on ice and delivered to ALS in Jacksonville, Florida under proper chain-of-custody and preservation (4 $^{\circ}$ C) protocol. Samples were analyzed for VOCs using USEPA Method 8260, SVOCs and PCBs using USEPA Method 8270, metals (arsenic, cadmium, chromium, and lead) using USEPA Method 6010, and TRPH using the Florida Residual Petroleum Organic (FL-PRO) method.

3.0 RESULTS OF INVESTIGATION

3.1 SITE GEOLOGY AND HYDROGEOLOGY

3.1.1 Lithology

Information regarding the soil beneath Site 1596 was obtained during soil sampling and temporary well installation on November 28, 2012, and consists of fine grain marine quartz sands with shell fragments to the maximum depth augered.

3.1.2 Groundwater Flow Direction

The direction of groundwater flow in the surficial aquifer underlying the site is to the north. The depth to water table elevation values for these three sets of measurements (December 13, 2012, at 0600, 0900, and 1400) are presented in Table 3-1 and equipotential contour lines have been added to depict groundwater flow direction in Figure 3-1.

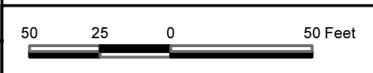
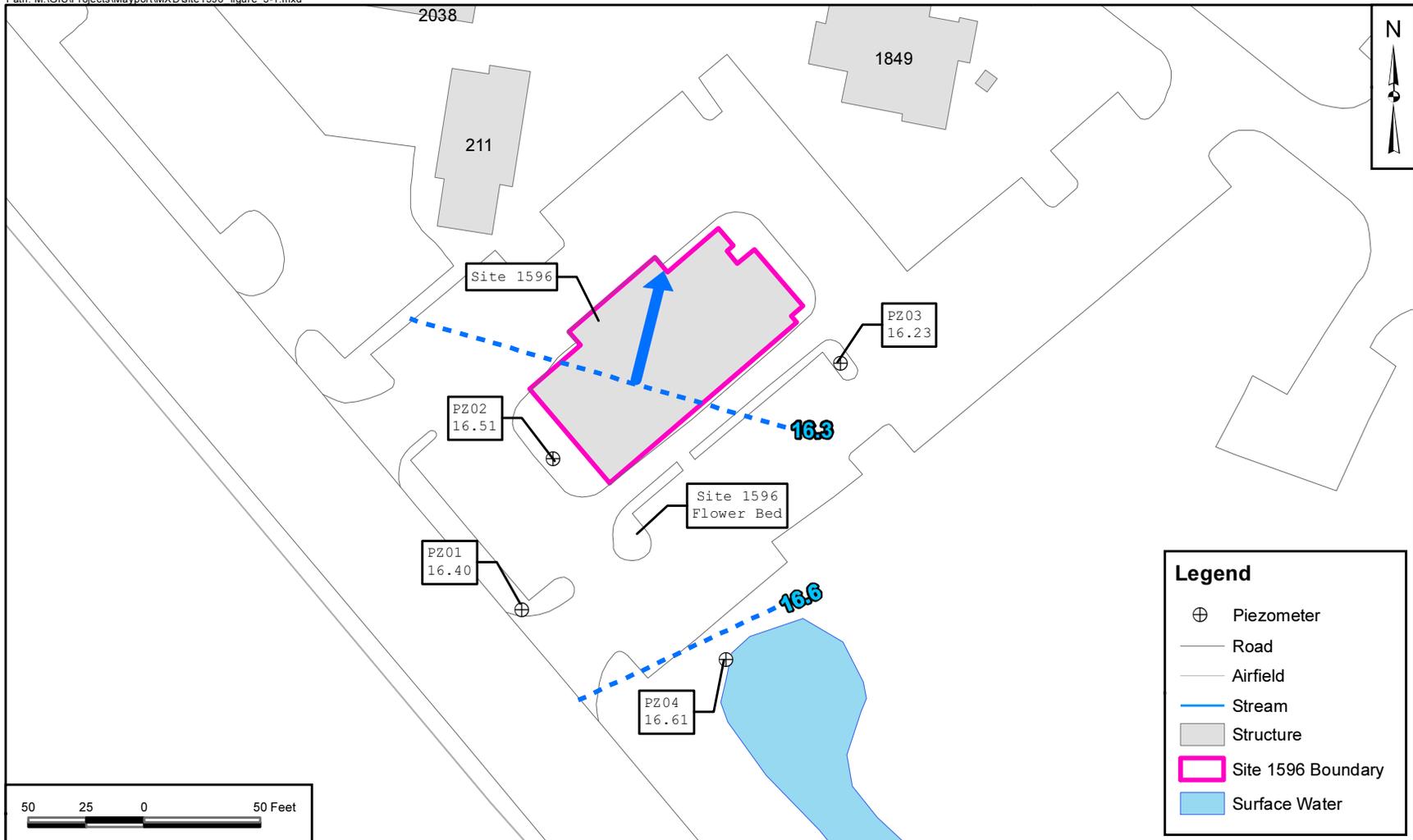
<p align="center">Table 3-1 Water Table Elevation Data Site Assessment Report, Site 1596 Naval Station Mayport Jacksonville, Florida</p>								
Well Identification Number MPT-1596-	Total Well Depth (feet)	TOC Elevation (feet)	12/13/2012 0645		12/13/2012 0900		12/13/2012 1400	
			Depth to Water Below TOC (feet)	Water Table Elevation (feet)	Depth to Water Below TOC (feet)	Water Table Elevation (feet)	Depth to Water Below TOC (feet)	Water Table Elevation (feet)
PZ01	9.88	24.32	7.92	16.40	8.90	15.42	7.91	16.41
PZ02	9.62	22.77	6.26	16.51	6.25	16.52	6.24	16.53
PZ03	8.32	21.71	5.48	16.23	5.45	16.26	5.45	16.26
PZ04	5.12	18.50	1.89	16.61	0.81	17.69	1.39	17.11

Notes:
TOC measurements were surveyed relative to each other and not the elevation above mean sea level.
All depth to water measurements may be subject to tidal influences.

3.1.3 Aquifer Classification and Characteristics

The State of Florida classifies the surficial aquifer underlying the site as G-II, although many areas of NAVSTA Mayport have been determined to be G-III (non-potable). According to the custom soil resource report for Site 1596, the average hydraulic conductivity of the surficial aquifer beneath the site is approximately 70.0 feet per day (USDA, 2013).

Path: M:\GIS\Projects\Mayport\MXD\Site1596_figure_3-1.mxd



Legend

- ⊕ Piezometer
- Road
- Airfield
- Stream
- Structure
- Site 1596 Boundary
- Surface Water

DRAWN BY J. MADDEN	DATE 01/14/13
CHECKED BY	DATE
COST/SCHEDULE-AREA	
SCALE AS NOTED	



GROUNDWATER FLOW MAP
SITE 1596
SITE ASSESSMENT REPORT
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA

CONTRACT NUMBER N69450-12-M-5084	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO.	FIGURE 3-1
	REV 0

The horizontal hydraulic gradient across the site was evaluated from the water level data listed in Table 3-1 and shown on Figure 3-1. The horizontal hydraulic gradient beneath the site was determined to be 0.00275 foot 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.

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 the average hydraulic conductivity of 70.0 feet per day, a hydraulic gradient of 0.00275 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 0.64 foot per day.

3.2 SOIL SCREENING RESULTS

Soil vapor screening methods and sampling locations for headspace analyses are discussed in Section 2.4.1. Fourteen samples were screened for organic vapors, five each from SB01 and SB02 and four from SB03. One location, SB01, produced an instrument response at a concentration of 9.6 parts per million (ppm) at the 0- to 1-foot depth, 11.7 ppm at the 1- to 2-foot depth, and 13.4 ppm at the 2- to 3-foot depth. No other detections were documented. The screening locations are shown on Figure 2-1.

3.3 SOIL SAMPLE ANALYTICAL RESULTS

Soil samples MPT-1596-SB01-0203-112812, MPT-1596-SB01-0405-112812, and MPT-1596-SB03-0203-112812 were submitted to ALS for VOC, SVOC, PCB, metals (arsenic, cadmium, chromium and lead), polynuclear aromatic hydrocarbon, and TRPH analysis. These samples were collected from the sample interval of 2 to 3 feet bls at MPT-1596-SB01 and MPT-1596-SB03 and 4 to 5 feet bls at MPT-1596-SB01. No stained soil or petroleum odor was identified during the soil sampling event. Detected concentrations reported by the laboratory are listed in Table 3-2. The laboratory report

submitted by ALS is provided as Appendix E. No Soil Cleanup Target Level (SCTL) exceedances were documented.

Table 3-2 Laboratory Soil Analytical Detection Results						
Site Assessment Report, Site 1596 Naval Station Mayport Jacksonville, Florida						
Compound	FDEP SCTL (mg/kg)			Sample Identification and Sample Date		
				MPT-1596-SB01-0203-112812	MPT-1596-SB01-0405-112812	MPT-1596-SB03-0203-112812
	Residential	Industrial	Leachability	11/28/2012	11/28/2012	11/28/2012
VOCs (USEPA Method 8260) (µg/kg)						
2-Butanone (MEK)	16,000,000	110,000,000	17,000	U	4.89 I	U
Acetone	11,000,000	68,000,000	25,000	U	40.8 I	19.0 I
Carbon Disulfide	270,000	1,500,000	5,600	U	3.2 I	U
m,p-Xylenes *	130,000	700,000	200	U	0.495 I	U
Methylene chloride	17,000	26,000	20	3.05 IV	2.64 IV	2.61 IV
o-Xylene *	130,000	700,000	200	U	0.472 I	U
Toluene	7,500,000	60,000,000	500	0.426 I	U	U
Petroleum Hydrocarbons (FL-PRO) (mg/kg)						
TRPH (C8-C40)	460	2,700	340	23.1 I	36.7	U
Metals (6010B) (mg/kg)						
Arsenic	2.1	12	NC	1.90	1.96	1.64
Cadmium	82	1,700	7.5	0.06 I	0.10 I	U
Chromium	210	470	NC	3.16	6.84	4.47
Lead	400	1,400	NC	1.50	9.67	1.69

Notes:

µg/kg = microgram per kilogram

mg/kg = milligram per kilogram

Bold values are in excess of SCTLs per Chapter 62-770, F.A.C. (April 13, 1999).

* = Criteria for xylenes, total used

I = reported value between the laboratory method detection limit and the laboratory Practical Quantification Limit (PQL)

V = analyte detected in the associated method blank

U = non-detected value

NC = no criteria

3.4 GROUNDWATER ANALYTICAL RESULTS

The only detected constituents reported by the laboratory was arsenic at 4 micrograms per liter with an “I” qualifier indicating that the reported value is between the laboratory detection limit and the laboratory PQL. The analytical report by ALS is presented in Appendix D.

A groundwater sample was collected from the temporary monitoring well MPT-1596-GW01 on November 28, 2012, concurrent with soil sampling and sampling efforts at Site 1241. Samples were collected and submitted to ALS for analysis using a single chain-of-custody. As a result, the laboratory analytical results for both sites are presented in one combined report.

The results for groundwater samples collected from MPT-1596-GW01 did not identify exceedances beyond laboratory method detection limits. A copy of the fixed-base analytical results is presented in Appendix E.

4.0 SUMMARY

On July 19, 2008, the oily wastewater was released from the underground oily wastewater pipeline adjacent to Building 1596. The release bubbled up through and saturated the flower bed next to the drive-through lane at the McDonald's restaurant. The pipeline was repaired and impacted soil was replaced in the excavation. NAVFAC SE contracted TriEco to characterize soil and groundwater contamination at Site 1596 and to determine remedial strategy. The focus of this investigation was centered on the soil and groundwater in the flower bed.

TriEco conducted a SA at Site 1596 in which three soil sample locations were screened with an OVA/FID for organic vapor content. Confirmatory soil and groundwater samples were submitted to a fixed-base laboratory to verify the preliminary findings. Groundwater samples were obtained through installation and groundwater sampling of a temporary monitoring well MPT-1596-GW01. The analytical results for the confirmatory soil and groundwater samples confirmed that none of the target analytes were detected at concentrations above FDEP SCTLs or Groundwater Cleanup Target Levels. The analytical findings were congruent with the field observations conducted while collecting soil screening samples. No petroleum odors or petroleum stained soil were reported.

Based on the results obtained during this investigation, the site meets the requirements of Chapter 62-770, F.A.C., for No Further Action.

5.0 RECOMMENDATIONS

Due to the lack of impact to soils and groundwater exceeding FDEP criteria, TriEco recommends No Further Action for Site 1596. It is requested that the FDEP issue a Site Rehabilitation Completion Order for Site 1596.

REFERENCES

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APPENDIX A
SITE ASSESSMENT SUMMARY SHEET

SITE ASSESSMENT REPORT SUMMARY SHEET

Facility Name: NAVSTA Mayport Site 1596 Reimbursement Site:

Location: Naval Station Mayport, Jacksonville FL State Contract Site:

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

Date Reviewed: _____ Local Government: _____

(1) Source of Spill: Oily wastewater pipeline release Date of Spill: 1/19/2008

(2) Type of Product:	Gasoline Group	Gallons Lost	Unknown	Kerosene Group	Gallons Lost
<input type="checkbox"/> Leaded	_____	_____		<input type="checkbox"/> Kerosene	_____
<input type="checkbox"/> Unleaded Regular	_____	_____		<input type="checkbox"/> Diesel	_____
<input type="checkbox"/> Unleaded Premium	_____	_____		<input type="checkbox"/> JP-4 Jet Fuel	_____
<input type="checkbox"/> Gasohol	_____	_____		<input type="checkbox"/> Heating Fuel	_____
<input checked="" type="checkbox"/> Undetermined		<u>< 1000</u>		Unknown	_____

(3) Description of IRA: Pipeline secured and repaired. Free product Removal: _____ (gals)
Soil excavated for pipeline repair was containerized and disposed. Soil Removal: 4 (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: _____ benzene: <0.21 U EDB: _____
 lead: < 4 U MTBE: <0.24 U other: _____

(6) Brief lithologic description: Fine grain marine quartz sands with shell fragments

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

Highest current soil concentration (OVA: 13.4 (FID) 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: 11/28/2012 Date of last soil sampling: 11/28/2012

(10) QAPP approved? (yes/no) Date: N/A

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

(12) Average depth to groundwater: 4-5 (ft)

(13) Observed range of seasonal groundwater fluctuations: 1 ft (ft) (Based on water level data collected during the CAR investigation)

(14) Estimated rate of groundwater flow: 0.58 (ft/day)

(15) Hydraulic gradient across site: 0.0025 (ft/ft)

(16) Aquifer characteristics:	Values	Units	Method
Hydraulic conductivity	<u>70.0</u>	<u>ft/day</u>	<u>USDA, 2013</u>
Storage coefficient	<u>-</u>	<u>ft/ft</u>	<u>-</u>
Aquifer thickness	_____	<u>ft</u>	_____
Effective soil porosity	_____	<u>%</u>	_____
Transmissivity	_____	<u>gal/day/ft</u>	_____

(17) Other remarks: _____

None

APPENDIX B
CUSTOM NRCS SOIL RESOURCE REPORT



United States
Department of
Agriculture



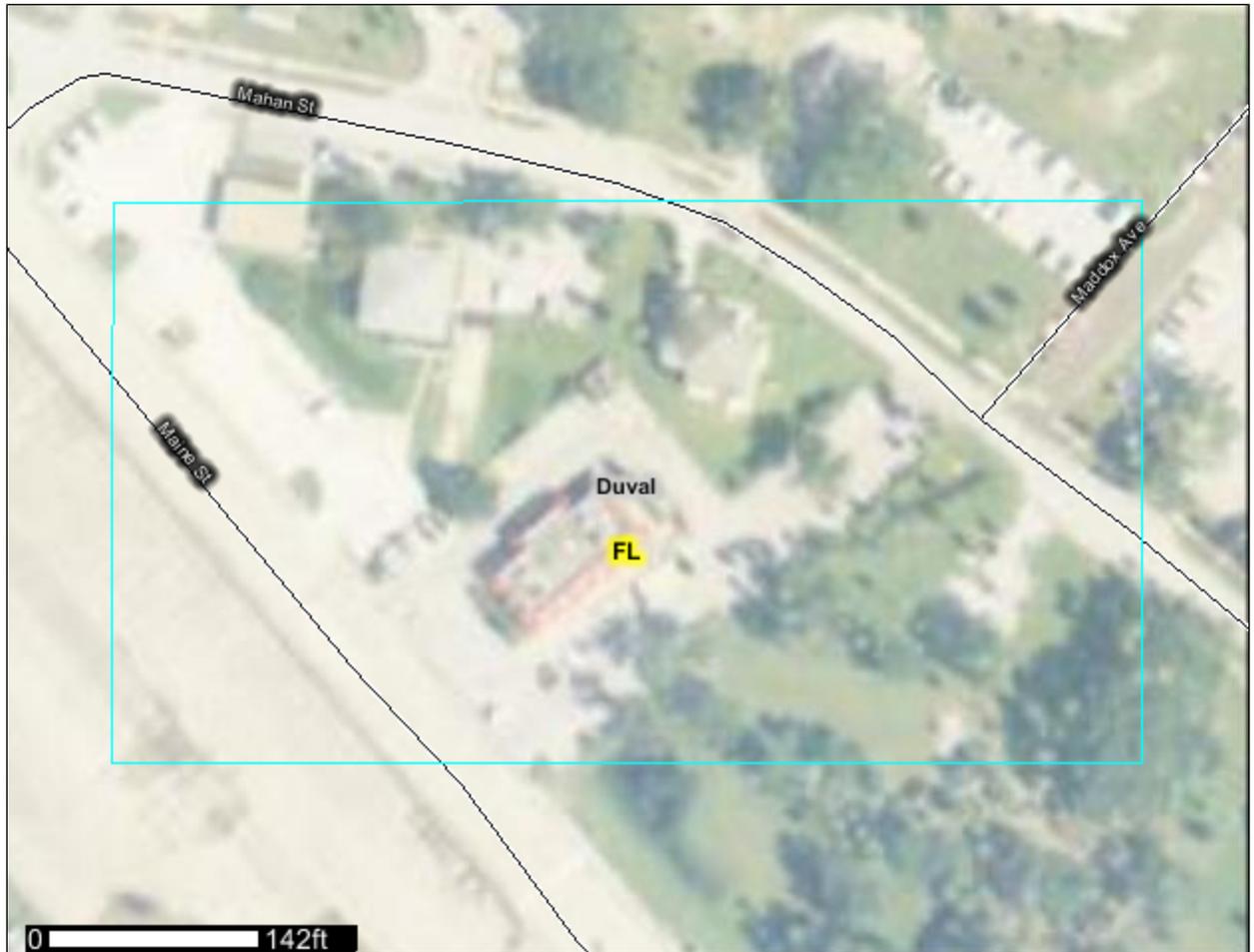
NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Duval County, Florida

Site 1596



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://soils.usda.gov/sqi/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nrsc>) or your NRCS State Soil Scientist (http://soils.usda.gov/contact/state_offices/).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

Custom Soil Resource Report

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Map Scale: 1:1,140 if printed on A size (8.5" x 11") sheet.



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot

 Very Stony Spot

 Wet Spot

 Other

Special Line Features

-  Gully
-  Short Steep Slope
-  Other

Political Features

 Cities

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

MAP INFORMATION

Map Scale: 1:1,140 if printed on A size (8.5" x 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 17N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Duval County, Florida
 Survey Area Data: Version 7, Jan 28, 2010

Date(s) aerial images were photographed: 10/13/2007

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Duval County, Florida (FL031)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
7	Arents, nearly level	3.6	60.4%
69	Urban land	2.3	39.6%
Totals for Area of Interest		5.9	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Custom Soil Resource Report

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Duval County, Florida

7—Arents, nearly level

Map Unit Setting

Landscape: Coastal plains

Elevation: 0 to 120 feet

Mean annual precipitation: 48 to 60 inches

Mean annual air temperature: 64 to 72 degrees F

Frost-free period: 240 to 293 days

Map Unit Composition

Arents and similar soils: 94 percent

Minor components: 6 percent

Description of Arents

Setting

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Altered marine deposits

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very high (19.98 to 50.02 in/hr)

Depth to water table: About 18 to 36 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Very low (about 2.4 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 6s

Hydrologic Soil Group: A

Typical profile

0 to 80 inches: Sand

Minor Components

Corolla

Percent of map unit: 6 percent

Landform: Rises on dunes on marine terraces

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

69—Urban land

Map Unit Setting

Landscape: Coastal plains

Elevation: 0 to 190 feet

Mean annual precipitation: 48 to 56 inches

Mean annual air temperature: 64 to 72 degrees F

Frost-free period: 263 to 293 days

Map Unit Composition

Urban land: 95 percent

Minor components: 5 percent

Description of Urban Land

Setting

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: No parent material

Minor Components

Albany

Percent of map unit: 1 percent

Landform: Knolls on marine terraces, ridges on marine terraces

Landform position (three-dimensional): Interfluve, talf

Down-slope shape: Convex

Across-slope shape: Linear

Ortega

Percent of map unit: 1 percent

Landform: Rises on marine terraces, knolls on marine terraces

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Leon

Percent of map unit: 1 percent

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Hurricane

Percent of map unit: 1 percent

Landform: Flats on marine terraces, rises on marine terraces

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

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Across-slope shape: Linear

Pelham, hydric

Percent of map unit: 1 percent

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Soil Information for All Uses

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Soil Physical Properties

This folder contains a collection of tabular reports that present soil physical properties. The reports (tables) include all selected map units and components for each map unit. Soil physical properties are measured or inferred from direct observations in the field or laboratory. Examples of soil physical properties include percent clay, organic matter, saturated hydraulic conductivity, available water capacity, and bulk density.

Physical Soil Properties

This table shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In this table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In this table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

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Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, saturated hydraulic conductivity (K_{sat}), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (oven-dry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Saturated hydraulic conductivity (K_{sat}) refers to the ease with which pores in a saturated soil transmit water. The estimates in the table are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity (K_{sat}) is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In this table, the estimated content of organic matter is expressed as

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a percentage, by weight, of the soil material that is less than 2 millimeters in diameter. The content of organic matter in a soil can be maintained by returning crop residue to the soil.

Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in the table as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and Ksat. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook."

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Reference:

United States Department of Agriculture, Natural Resources Conservation Service.
National soil survey handbook, title 430-VI. (<http://soils.usda.gov>)

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Physical Soil Properties— Duval County, Florida														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	<i>In</i>	<i>Pct</i>	<i>Pct</i>	<i>Pct</i>	<i>g/cc</i>	<i>micro m/sec</i>	<i>In/In</i>	<i>Pct</i>	<i>Pct</i>					
7—Arents, nearly level														
Arents	0-80	-94-	0- 3- 15	1- 3- 5	1.30-1.70	141.00-353.00	0.02-0.05	0.0-2.9	0.5-1.0	.10	.10	5	1	180
69—Urban land														
Urban land	—	—	—	—	—	—	—	—	—					

Soil Qualities and Features

This folder contains tabular reports that present various soil qualities and features. The reports (tables) include all selected map units and components for each map unit. Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Soil Features

This table gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A restrictive layer is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage, or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, saturated hydraulic conductivity (Ksat), content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel

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or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low*, *moderate*, or *high*, is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low*, *moderate*, or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

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Soil Features– Duval County, Florida									
Map symbol and soil name	Restrictive Layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		<i>In</i>	<i>In</i>		<i>In</i>	<i>In</i>			
7—Arents, nearly level									
Arents		—	—		0	—	None	High	Moderate
69—Urban land									
Urban land		—	—		0	—			

Water Features

This folder contains tabular reports that present soil hydrology information. The reports (tables) include all selected map units and components for each map unit. Water Features include ponding frequency, flooding frequency, and depth to water table.

Water Features

This table gives estimates of various soil water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

Surface runoff refers to the loss of water from an area by flow over the land surface. Surface runoff classes are based on slope, climate, and vegetative cover. The concept indicates relative runoff for very specific conditions. It is assumed that the surface of the soil is bare and that the retention of surface water resulting from irregularities in the ground surface is minimal. The classes are negligible, very low, low, medium, high, and very high.

The *months* in the table indicate the portion of the year in which a water table, ponding, and/or flooding is most likely to be a concern.

Water table refers to a saturated zone in the soil. The water features table indicates, by month, depth to the top (*upper limit*) and base (*lower limit*) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely

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grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. The table indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

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Water Features– Duval County, Florida										
Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Ft</i>	<i>Ft</i>	<i>Ft</i>				
7—Arents, nearly level										
Arents	A	Negligible	January	1.5-3.0	>6.0	—	—	None	—	None
	A	Negligible	February	1.5-3.0	>6.0	—	—	None	—	None
	A	Negligible	March	1.5-3.0	>6.0	—	—	None	—	None
	A	Negligible	April	1.5-3.0	>6.0	—	—	None	—	None
	A	Negligible	May	1.5-3.0	>6.0	—	—	None	—	None
	A	Negligible	June	1.5-3.0	>6.0	—	—	None	—	None
	A	Negligible	July	1.5-3.0	>6.0	—	—	None	—	None
	A	Negligible	August	1.5-3.0	>6.0	—	—	None	—	None
	A	Negligible	September	1.5-3.0	>6.0	—	—	None	—	None
	A	Negligible	October	1.5-3.0	>6.0	—	—	None	—	None
69—Urban land										
Urban land	—	—	Jan-Dec	—	—	—	—	None	—	—

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APPENDIX C
SITE 1596 POST SPILL REQUIREMENTS



Date: July 23, 2008
File No. 2301-263

Rhonda O'Connor
NAVFAC Southeast (IPT South Atlantic)
Box 30, Bldg 135 NAS JAX
Jacksonville, FL 32212-0030

Subject: Contract No. N62467-00-D-2451

Reference: Annex 4

Para 4.2.4.2a

Title Post Spill Requirements

Contract deliverable is forwarded pursuant to cited contract reference. Enclosed is the Site Specific Health and Safety Plan used for spill response. On Saturday, July 19, 2008, less than 1,000 gallons of oily waste water spilled into the parking lot at McDonalds (Bldg. 1596) near the entrance of the drive thru. The spill was determined to be oily waste water coming from a corroded oily waste transfer line. The Mayport Fire Department responded to contain the liquid and secure the south parking lot at McDonalds. IAP-HILL responded to recover oily waste water from the parking lot and repair the broken line. IAP-HILL returned on Monday, July 21, 2008 and again on Tuesday, July 22, 2008 to clean-up contaminated soil, install silt fence to prevent erosion, and clean out the storm drain basin. All wastewater recovered was discharged to an oily waste lift station and all contaminated soil was sent to the Part B Facility.

Advance notification was provided to Trish Loop of Station Environmental on July 19, 2008.

If you have any questions, please contact me at 707-4415.

Name: Julie Kaiser

Title: ES&H Manager, RBOS Jacksonville

Telephone: (904) 270-6761

(Signature)

Cc:

Mr. Jimmy Pacetti
NAS Jacksonville
P.O. Box 30, Bldg. 103
Jacksonville, FL 32212-0139

Mr. William Burns
NS Mayport
P.O. Box 2807, Bldg. 1966
Mayport, FL 32228-0157

IAP-H Contracts Manager



**OIL/HAZARDOUS SUBSTANCE SPILL RELEASE - LEVEL D PROTECTION
SITE SPECIFIC HEALTH AND SAFETY PLAN**

A. SITE DESCRIPTION:

*Actual Spill took place
7/19/08 ca 0656*

of Spill Cleanup

McDonalds Parking Lot (Entrance to Drive

1. Date: 07/21/08 2. Location: Through

3. Material Spilled: Oily Waste Water 4. Size of Spill: less than 1,000 gal

5. Hazard Class (a thru e):

(a) Fire (b) Reactive (c) Pressure Release (d) Acute Health

(e) Chronic Health

6. Quantity Estimated: less than 1,000 gal 7. Area Effected: McDonalds parking lot

8. Cause of Release (Be Specific): Vehicle ran over weak pipe (city wastewater) which caused it to break. Jam pipe leak due to age of piping, corrosion of pipe

9. Weather Conditions: Clear Temperature (F): 94°

Wind Direction: East

10. Topography/Terrain: Concrete, flower bed, Storm drain

B. ON-SCENE OPERATIONS TEAM (OSOT):

Title	Name	Time on Scene	Function / Assignment
Safety Officer	Patricia Kostic	1300	Safety, Security
OSOT Leader	Julie Kaiser	1300	Security, Cleanup-lead
OSOT Team Member	Ronnie Jackson	1300	Clean-Up
OSOT Team Member	Sam ARP	1300	Clean-Up
OSOT Team Member	Bob Blaess	1300	Clean-up
OSOT Team Member			
OSOT Team Member			

**OIL/HAZARDOUS SUBSTANCE SPILL RELEASE - LEVEL D PROTECTION
SITE SPECIFIC HEALTH AND SAFETY PLAN**

C. INITIAL ENTRANCE TO AFFECTED SITE (Specific Health and Safety Plan):

Initial Entrance Objective: The objective of the initial entrance to the contaminated area is to describe actions and tasks to be accomplished (i.e. identify contaminate, clean-up area, monitoring conditions, etc.):

Level dirt to just below the edge of the curb, to eliminate potential to erode. Excess dirt and shrubbery will be placed in triwalls and sent to part B facility for disposal as MIOGS. Silt fence to be installed around dirt and plastic sheet placed over it. Then the storm drain basin will be cleared out with the waste sent to Part B as MIOGS.

D. ON SITE CONTROL: Julie Kaiser OSOT Team Member

has been designated to coordinate access control and security on site. A safe perimeter has been established at (distance or description of the controlled area):

Rhino barricades + vehicles used to block

(No Unauthorized personnel should be in this area)

1. Exclusion Zone:

a. Time the Zone is Secured off: 1300 a.m. p.m.

b. Entrance Control Point: _____

c. Location and Marker Type: _____

2. Contamination Reduction Zone (If necessary): N/A

a. Time the Zone is Secured off: _____ a.m. p.m.

b. Entrance Control Point: _____

c. Location and Marker Type: _____

3. Support Zone:

a. FD/IAP-H Command Post Location (If established): B 12/SCRD

b. Time IAP-H Command Post Established: 1300 a.m. p.m.

4. Substances Involved:

a. Substance Known? Yes No

b. MSDS: Yes No

c. Substance Description: Oily waste water.

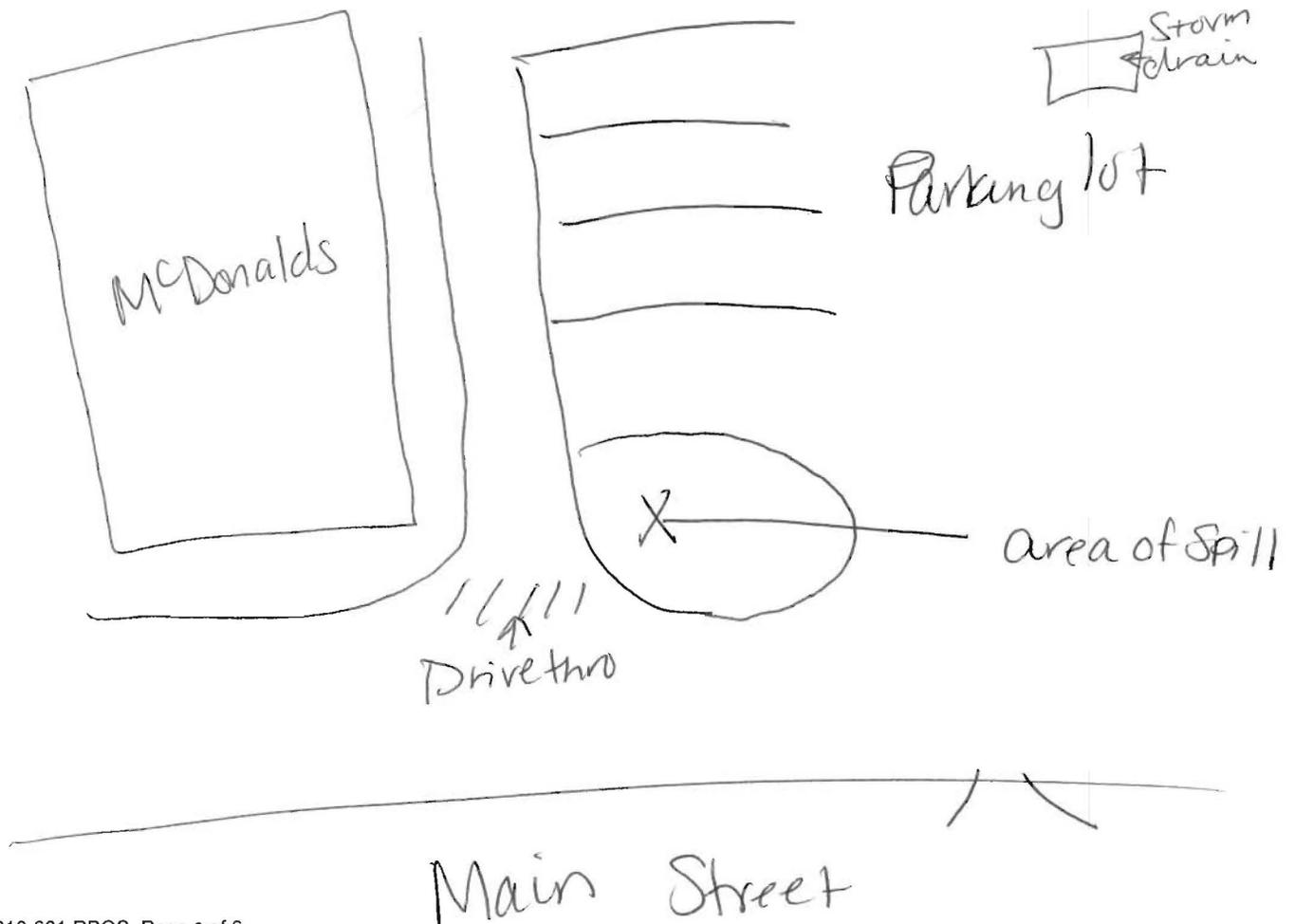
*Area initially secured 7/19/08 @ 0700
Resecured on 7/21/08 for employee safety*

**OIL/HAZARDOUS SUBSTANCE SPILL RELEASE - LEVEL D PROTECTION
SITE SPECIFIC HEALTH AND SAFETY PLAN**

E. HAZARDS:

- | | | | |
|-------------------|-----------------------------------------|----------------------------------------|-------------------------------------------|
| a. Flammable | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Flash Point: <u>>140^o</u> F |
| b. Explosive | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| c. Water Reactive | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| d. Corrosive | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | pH: _____ |
| e. Acid | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | pH: _____ |
| f. Base | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | pH: _____ |
| g. Toxic | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| h. Inhalation | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| i. Skin | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |

F. SITE PLAN (Sketch of Area):



**OIL/HAZARDOUS SUBSTANCE SPILL RELEASE - LEVEL D PROTECTION
SITE SPECIFIC HEALTH AND SAFETY PLAN**

G. DECON SITE PLAN (Sketch of Area):



Decon Officer: Julie Kaiser ^{decon site}

Decon Equipment: Soap + H₂O

Description of Decon: Remove gloves, wash hands
Knock dust off boots

- H. PERSONAL PROTECTION EQUIPMENT (PPE)- (LEVEL D FOR THIS FORM):**
- a. Exclusion Zone (Spill Area): AT A MINIMUM, PPE FOR LEVEL D IS: BOOTS, GLOVES, and TYVEK SUIT. Additional Level D PPE if needed: Hard Hat/Face Protection
 - b. Contamination Zone (DECON AREA): Eye protection, Steel toe, gloves
 - c. Reduction Zone: _____

- I. INSTALLATION RESTORATION (IR) SITE:**
- 1. Is the Site an Installation Restoration Site? Yes No
 - 2. If answer is YES, what is the known IR site contaminant? _____
 - 3. MSDS: Yes No



**OIL/HAZARDOUS SUBSTANCE SPILL RELEASE - LEVEL D PROTECTION
SITE SPECIFIC HEALTH AND SAFETY PLAN**

4. IR SITE HAZARDS:

- | | | | |
|-------------------|------------------------------|----------------------------------------|----------------------|
| a. Flammable | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Flash Point: _____ F |
| b. Explosive | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| c. Water Reactive | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| d. Corrosive | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | pH: _____ |
| e. Acid | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | pH: _____ |
| f. Base | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | pH: _____ |
| g. Toxic | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| h. Inhalation | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| i. Skin | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |

J. COMMUNICATION:

1. Contact Information

Name	Work Phone	Cell/Beeper Number	Home Phone
Julie Kaiser, ES&H Manager	270-6761 (MPT) 542-3962(JAX)	707-4415	306-0547
Wade Musgrave, JAX ES&H Manager	778-1452	707-4416	880-4646
MPT ES&H Manager	270-6761		
Fire Department/Ambulance (Jacksonville)	911 or 542-3333		
Fire Department/Ambulance (Mayport)	911 or 270-5333		
PWC CDO	509-5125	967-6767	
Jimmy Pacetti, COTR (NAS Jacksonville)	542-4558 x 520		
William Burns, COTR (NAVSTA Mayport)	270-6343		
"Emergency Treatment Facility"			
NAS Jacksonville: Naval Hospital	911 if an emergency		
NAVSTA Mayport: Medical Clinic	911 if an emergency		



**OIL/HAZARDOUS SUBSTANCE SPILL RELEASE - LEVEL D PROTECTION
SITE SPECIFIC HEALTH AND SAFETY PLAN**

- K. SAFETY BRIEF HELD?** Yes No
- a. Confined Space? Yes No (If yes, follow IAP-H confined space entry procedures)
- b. Heat stress can be a factor when temperatures are > 70° F and humidity is > 50%.
- c. Is a dig locate required? Yes No (trenches > 4 feet must have slope sides or shoring installed)
- d. Does the clean up site have adequate oxygen? Yes No (if not, level B or A PPE is required) Use IAP-H form 3010-600 if levels C, B, or A are required

Oxygen Level Detection Equipment Calibration Information: NIA

Equip. _____ MFR: _____ Model No.: _____

Date of Calibration: _____ Name of Calibrator: _____

- e. Where is the closest eye wash station? HAZ MAT Van
- f. What communication means is available? Cell Phone Radio Land Line
- g. Discuss the possible use of respirators. NIA
- h. Ensure newly arriving IAP-H OSOT members are briefed on the spill site clean up scenario.
- i. If in doubt, call the IAP-H Environmental Manager for assistance.

L. DISPOSAL METHOD:

- a. HW: Yes No
- b. Size of Disposal Containers: Gallons: 55 & 30 Other: 4 triwalls of Cont. dirt
- c. Number of Containers: 6
- d. Container Pick-Up Notification (NASJAX Only) Time/Date: 1000-7/23/08 POC: Jerome Jackson

Site and/or Area Clean-up Completed at (Specify Time of Day): 10:00 a.m. p.m. 7/22/08

OSOT Leader: [Signature] Date: 7/22/08
(Signature required)

Triwall Weight = 7368^{lbs} @ 45¢/lb
 Drum Weight = 484^{lbs} @ \$1.74/lb

Repair of oily wastewater pipeline (photos taken 7/21/2008)



APPENDIX D
FIELD NOTES

NAVSTA HAYPORT SITES 1596 + 1241

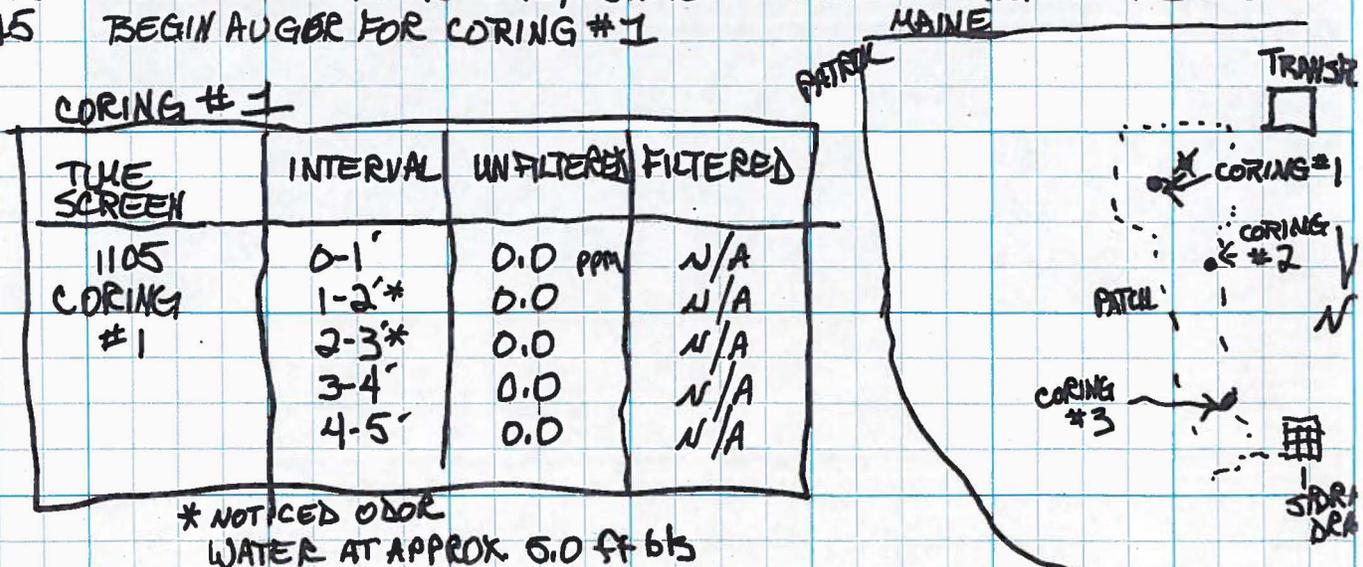
11204630

SOIL SAMPLING

11-27-12

PERSONNEL: D. FEARS, K. WACHERT (DF = FOL, SSO)
 TRUCK: RENTAL
 PPE: LEVEL "D"
 WEATHER: PARTLY CLOUDY, 62°, LIGHT BREEZE
 EQUIP: MICROFID, CORE SAW, GENERATOR
 OBJ: SCREEN + COLLECT SOIL SAMPLES AT SITES 1596 + 1241

- 0900 DF, KW MEET B. PRICE AT MCDONALDS (NAVFAQ PM) TO DISCUSS WORK - SITE HTS MEETING CONDUCTED
- 0910 DF BEGINS MARKING ADDITIONAL UTILITY LOCATES, IAD CALIBRATES FID - SEE FIELD CAL LOG SHEET
- 0940 KW+DF AT 1241 - BEGIN SETTING UP.
- 0950 BEGAN CORING THROUGH ASPHALT NEAREST TRANSFORMER
- 1005 COMPLETED FIRST CORE. ASPHALT APPROX. 3 IN THICK. FID=0.0
- 1015 BEGIN DRILLING SECOND CORE. SOIL FROM OIL WASTE TREATMENT PLANT (OWTP) ARRIVED AND DISCUSSED LOCATION OF PIPELINE. BEGAN DRILLING/CORING.
- 1025 COMPLETED SECOND CORE, SAME DEPTH OF ASPHALT. FID=0.0
- 1030 BEGIN CORING AT THIRD LOCATION AFTER REPOSITIONING TRUCK
- 1035 COMPLETED THIRD CORE, SAME DEPTH OF ASPHALT. FID=0.0
- 1045 BEGIN AUGER FOR CORING #1



CORING #1

TIME SCREEN	INTERVAL	UNFILTERED	FILTERED
1105 CORING #1	0-1'	0.0 ppm	N/A
	1-2'	0.0	N/A
	2-3'	0.0	N/A
	3-4'	0.0	N/A
	4-5'	0.0	N/A

* NOTICED ODOR WATER AT APPROX 5.0 FT BLS

1117 BEGIN AUGERING CORING #2				1148 BEGIN AUGER CORING #3			
TIME	INTERVAL	UNFILTERED	FILTERED	TIME	INTERVAL	UNFILTERED	FILTERED
1138 CORING #2	0-1'	0.0	N/A	1806 CORING #3	0-1'	0.0	N/A
	1-2'	0.0	N/A		1-2'	9.1	0.0
	2-3'	0.0	N/A		2-3'	12.9	0.0
	3-4'	0.0	N/A		3-4'	9.7	0.0
	4-5'	0.0	N/A		4-5'	12.2	0.0

WATER APPROX 4.9 FT BLS DIAMOND DRILL * STRONG ODOR

WATER APPROX 4.9 FT BLS PETROLEUM ODOR

Diane [Signature]

112004630

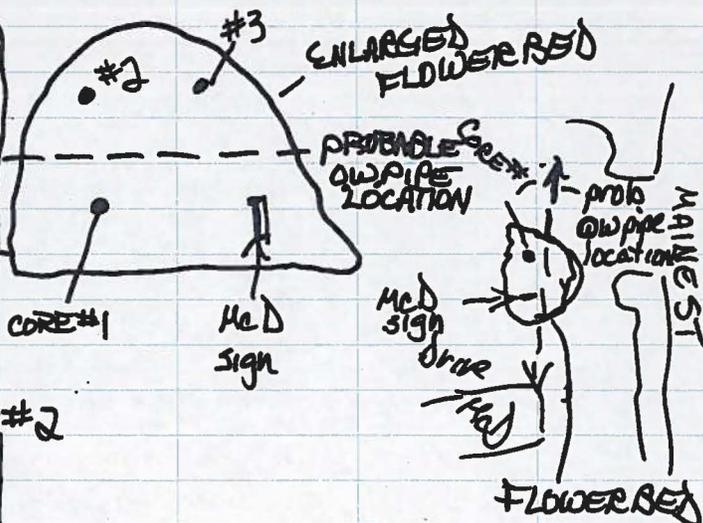
SOIL SAMPLING

11/27/2012

- 1220 BEGIN CLEANING UP SITE AND LOADING EQUIPMENT TO GOTO SITE 1596.
- 1240 ARRIVE AT McDONALDS, OBSERVING TRAFFIC AND WAITING FOR PARKED VEHICLES TO VACATE ADJACENT TO SAMPLING SITE. IDENTIFIED LOCATIONS FOR PIEZOMETERS FOR FUTURE INSTALLATION.
- 1335 MET WITH S.OIT TO IDENTIFY MOST PROBABLE LOCATION FOR OIL LINE (OILY WASTE)
- 1341 BEGIN AUGERING SAMPLE #1 CORE.

TIME	INTERVAL	UNFILTERED	FILTERED
1352 Core #1	0-1'	9.6	0.0
	1-2'	11.7	0.0
	2-3'	13.4	0.0
	3-4'	0.0	0.0
	4-5*	0.0	0.0

* SHELL, NATURAL FORMATION WATER @ APPROX 4.5 FT BLS



1410 BEGIN AUGERING SAMPLE CORE #2

TIME	INTERVAL	UNFILTERED	FILTERED
1430 Core #2	0-1	0.0	N/A
	1-2	0.0	N/A
	2-3	0.0	N/A
	3-4	0.0	N/A
	4-5*	0.0	N/A

* SHELL, NATURAL FORMATION WATER @ APPROX 4.5 FT BLS

1435 BEGIN AUGERING SAMPLE CORE #3

TIME	INTERVAL	UNFILTERED	FILTERED
1448 Core #3	0-1	0.0	N/A
	1-2	0.0	N/A
	2-3	0.0	N/A
	3-4	0.0	N/A

WATER @ APPROX 4 FT BLS

- 1455 LOADED EQUIPMENT, SECURED SITE
- 1500 KW TO RETURN RENTAL EQUIPMENT AND PREPARE FOR SAMPLING IN AM

FF

NAVSTA MAYPORT SITES 1241 & 1596

112CO463D

SOIL AND GROUNDWATER SAMPLING

11/28/2012

PERSONNEL: D. FEARS, K. WEICHAUT (DF = FOL, SSO)

TRUCK: RENTAL

PPE: LEVEL D

WEATHER: ~~PARTLY~~ OVERCAST, 56°, BREEZY

EQUIP: WSI SSG, MICRO TAW, KECK WATER LEVEL, BARNANT PORT SAMPLER

OBJ: COLLECT SOIL AND GROUNDWATER SAMPLES AT SITES 1241 and 1596

0815 DF and KW met at McDonalds PARKING LOT FOR TAIL GATE SAFETY MEETING

0830 DF TO VERIFY DIG PERMITS AT BLDG 1966 WITH STATION PERSONNEL, KW TO SITE 1241 TO PREPARE FOR SAMPLING

0900 DF MARKING PARKING LOT AREA AT 1241 FOR DIG PERMITS

0900 KW BEGINS SOIL SAMPLE AT CORE #3

0915 MPT-1241-SS03-0102-112812 COLLECTED *
- MILD PETROLEUM ODOR

0947 MPT-1241-SS03-0405-112812 COLLECTED *

1000 KW BEGINS AUGERING PIEZOMETER. HIGH TIDE @ 0815, LOW TIDE @ 1415

1020 TEMPORARY WELL INSTALLED TO 11 FT BGS. 20-30 SAND POURED AROUND WELL SCREEN, WATER @ APPROX 9 FT BGS.

~~1040 KW BEGINS~~

1045 MPT-1241-SS02-0102-112812 COLLECTED *
- PETROLEUM ODOR, MANY SHELLS

1100 BEGIN CALIBRATING EQUIPMENT FOR GW SAMPLING

1135 BEGIN PURGING WELL

1210 MPT-1241-GW03-112812 SAMPLE COLLECTED *

1245 WELL SCREEN REMOVED AND SITE CLEANUP COMPLETED

1300 DF TO BLDG 2021 TO OBTAIN KEY FOR IDW SITE.

1345 INITIATE SAMPLING AT SITE 1596.

1400 MPT-1596-SS01-⁰²⁰³~~0405~~-112812 COLLECTED *

1410 MPT-1596-SS01-0405-112812 COLLECTED *

1420 WELL POINT INSTALLED IN SS01. 20-30 SAND POURED IN ANNULAR SPACE

1435 INITIATE SAMPLING AT SS03

1445 MPT-1596-SS03-0203-^{DF}~~112812~~ COLLECTED *

1505 BEGIN DEVELOPING MPT-1596-GW01.

1555 MPT-1596-GW01-112812 COLLECTED *

1630 CLEANED UP SITE AND PACKED UP SAMPLES AND EQUIPMENT. TRANSFERRING IDW TO CENTRAL STORAGE AREA. TWO 5-GAL CONTAINERS OF SOIL, GW IDW INTO PETROLEUM TOTE.

1700 SECURE FROM SAMPLING AT NAVSTA MAYPORT. ALL CREW DEPARTS

* SEE FIELD DATA LOGS

Deane Fears

3



Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAUSTA MAYROCK
SITE 1241
 Project No.: 112004030

Sample ID No.: HPT-1241-9502-
0102-112812
 Sample Location: 1241-02
 Sampled By: KLW
 C.O.C. No.: 2640

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>11/28/12</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>1045</u>	<u>1-2'</u>	<u>BLK/BRN</u>	<u>FINE sand, some shell fragments</u>
Method: <u>GRAB</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

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

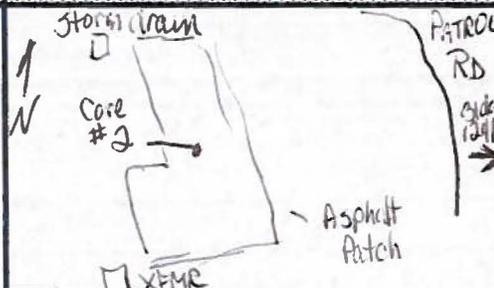
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>VOC</u>	<u>Term Core Kit</u> <u>1-8oz jar</u>	<input checked="" type="checkbox"/>	
<u>SVOC</u>		<input checked="" type="checkbox"/>	
<u>PCB</u>		<input checked="" type="checkbox"/>	
<u>TRPH</u>		<input checked="" type="checkbox"/>	
<u>Metals (As, Cd, Cr, Pb)</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:

Petroleum odor

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

KLW



Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: MAVSTA MAYPOET SITE 1241
 Project No.: 112C04103D

Sample ID No.: MPT-1241-5503-0102-112812
 Sample Location: 1241-03
 Sampled By: RW
 C.O.C. No.: 2640

Surface Soil
 Subsurface Soil
 Sediment
 Other:
 QA Sample Type:

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date: <u>11/28/2012</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>0915</u>	<u>01-02'</u>	<u>Lt BRN</u>	<u>Sand, moist, tiny clay lense</u>
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>VOC</u>	<u>Terra Core Kit</u>	<input checked="" type="checkbox"/>	
<u>SVOC</u>	<u>1- 8oz jar</u>	<input checked="" type="checkbox"/>	
<u>TRPH</u>		<input checked="" type="checkbox"/>	
<u>PCA</u>		<input checked="" type="checkbox"/>	
<u>Metals (As, Cd, Cr, Pb)</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:

Slight petroleum odor observed

Circle if Applicable: MS/MSD Duplicate ID No.:

Signature(s): R. W. L. L.



Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAVSTA MAYPORT
 Project No.: SITE 1241
112CO 41030

Sample ID No.: MPT-1241-5503
 Sample Location: 0405-112812
 Sampled By: 15W
 C.O.C. No.: 2640

Surface Soil
 Subsurface Soil
 Sediment
 Other:
 QA Sample Type:

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>11/28/12</u>	<u>04-05'</u>	<u>LT BRN</u>	<u>sand, moist, tiny clay lens</u>
Time: <u>0947</u>			
Method: <u>Grab</u>			
Monitor Reading (ppm):			

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

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>VOC</u>	<u>Terra Core Kit</u>	<input checked="" type="checkbox"/>	
<u>SVOC</u>	<u>1-8oz jar</u>	<input checked="" type="checkbox"/>	
<u>TRPH</u>		<input checked="" type="checkbox"/>	
<u>PCB</u>		<input checked="" type="checkbox"/>	
<u>Metals (As, Cr, Cd, Pb)</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:	MAP:
	<p>Storm drain Core #3 Asphalt Patch Petrel Roost 1241</p>

Circle if Applicable:

MS/MSD	Duplicate ID No.:
--------	-------------------

Signature(s): JL. U2LT



Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAVSTA MAYPORT
 Project No.: SITE 1596
112 0041030

Sample ID No.: MPT-1596-SB01-
0203-112812
 Sample Location: 1596-01
 Sampled By: RW
 C.O.C. No.: 2640

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

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>1128</u>	<u>02-03'</u>	<u>Brown</u>	<u>Fine sand</u>
Time: <u>1400</u>			
Method: <u>Grab</u>			
Monitor Reading (ppm):			

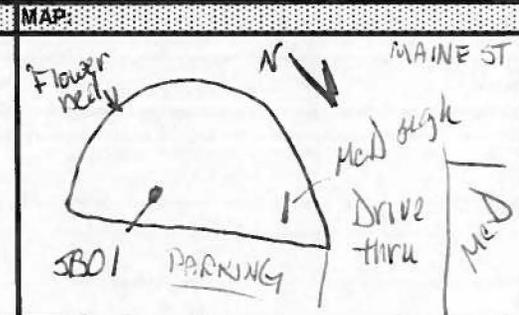
COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>VOC</u>	<u>Tetra Core Kit</u>	<input checked="" type="checkbox"/>	
<u>SVOC</u>		<input checked="" type="checkbox"/>	
<u>TRPH</u>	<u>1-8oz jar</u>	<input checked="" type="checkbox"/>	
<u>PCB</u>		<input checked="" type="checkbox"/>	
<u>Metals (As, Cd, Cr, Pb)</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:



Circle if Applicable:

MS/MSD Duplicate ID No.: _____

Signature(s): R. W. [Signature]



Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAVSTA MAYPORT
 Project No.: Site 1596
112C04630

Sample ID No.: MDT-1596-3801-
0405-112812
 Sample Location: 1596-01
 Sampled By: RW
 C.O.C. No.: 2640

Surface Soil
 Subsurface Soil
 Sediment
 Other:
 QA Sample Type:

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date: <u>11/28/12</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>1410</u>	<u>4-5</u>	<u>DK Gray/Brn</u>	<u>Fine sand with some shell fragment</u>
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>VOC</u>	<u>Terra Core kit</u>	<input checked="" type="checkbox"/>	
<u>SVOC</u>	<u>1-8oz jar</u>	<input checked="" type="checkbox"/>	
<u>TRPH</u>		<input checked="" type="checkbox"/>	
<u>PCB</u>		<input checked="" type="checkbox"/>	
<u>Metals (As, Cd, Cr, Pb)</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:

Water @ 4.5ft BGS
no odor

MAP:

Circle if Applicable: MS/MSD Duplicate ID No.:

Signature(s): R. W. [Signature]



Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: <u>NAVSTA MAYPORT</u>	Sample ID No.: <u>MPT-1596-5803-</u>
Project No.: <u>Site 1596</u>	Sample Location: <u>0203-112812</u>
	Sampled By: <u>KW</u>
	C.O.C. No.: <u>2640</u>
<input type="checkbox"/> Surface Soil <input checked="" type="checkbox"/> Subsurface Soil <input type="checkbox"/> Sediment <input type="checkbox"/> Other: _____ <input type="checkbox"/> QA Sample Type: _____	Type of Sample: <input type="checkbox"/> Low Concentration <input type="checkbox"/> High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>11/28/12</u>	<u>2-3ft</u>	<u>BRN Gray</u>	<u>Fine sand, some shell, moist</u>
Time: <u>1445</u>			
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>VOC</u>	<u>TerraCore Kit</u>	<input checked="" type="checkbox"/>	
<u>SVOC</u>	<u>1- 8oz jar</u>	<input checked="" type="checkbox"/>	
<u>TRPH</u>		<input checked="" type="checkbox"/>	
<u>PCB</u>		<input checked="" type="checkbox"/>	
<u>Metals (As, Cd, Cr, Pb)</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:		Signature(s): <u>K. Witt</u>
<input type="checkbox"/> MS/MSD	Duplicate ID No.:	

FS 2200 Groundwater Sampling
Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 1596	SITE LOCATION: NAVSTA MAY PORT
WELL NO: MPT-1596-GW01	SAMPLE ID: MPT-1596-GW-01-112812 DATE: 11-28-17

PURGING DATA

WELL DIAMETER (Inches): 1	TUBING DIAMETER (Inches): 3/16	WELL SCREEN INTERVAL DEPTH: 0 feet to 10 feet	STATIC DEPTH TO WATER (feet): 6.65	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY only fill out if applicable = ((10 - 6.65)) (1.16) (3.94 GAL) = 2.1 L X 5 = 10.5 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7.6'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 7.6'	PURGING INITIATED AT: 1505	PURGING ENDED AT: 1550	TOTAL VOLUME PURGED (gallons): 11.25 L
----------------------------------------------------------	--------------------------------------------------------	-----------------------------------	-------------------------------	-----------------------------------------------

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)
1505	-	-	ml250	6.65	-	-	-	-	-	-	-
1520	3.75	3.75	250	6.83	7.19	21.14	716	2.70	35.91	CLOUDY	-
1530	2.50	6.25	250	6.85	7.13	21.07	711	1.01	11.52	CLEAR	ORGANIC
1535	1.25	7.50	250	6.85	7.05	21.23	716	0.68	9.77	CLEAR	ORGANIC
1540	1.25	8.75	250	6.85	7.09	21.15	716	0.58	7.24	CLEAR	ORGANIC
1545	1.25	10.0	250	6.85	7.09	21.19	717	0.54	4.62	CLEAR	ORGANIC
1550	1.25	11.25	250	6.85	7.08	21.20	718	0.52	3.79	CLEAR	ORGANIC
1555	- SAMPLE TIME										

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: K. WELCHERT	SAMPLER(S) SIGNATURES: TL WELCHERT	SAMPLING INITIATED AT: 1555	SAMPLING ENDED AT: 1630
PUMP OR TUBING DEPTH IN WELL (feet): 7.6' / RFPP	SAMPLE PUMP FLOW RATE (mL per minute): 250	TUBING MATERIAL CODE: PE	
FIELD DECONTAMINATION: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	FILTER SIZE: _____ µm	DUPLICATE: Y <input type="checkbox"/> N <input checked="" type="checkbox"/>

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
1	3	CG	40ML	HCl	40ML		VOCs	
2	2	AG	1L	H2SO4	1L		TRPH	
3	1	P	250mL	HNO3	250mL		METALS	
4	1	AG	1L	-	1L		SVOCs	
5	1	AG	1L	-	1L		PCBS	

REMARKS: *** ~ 3' OF STICK UP**

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)

NAVSTA MAYPOET SITES 1241 + 1596

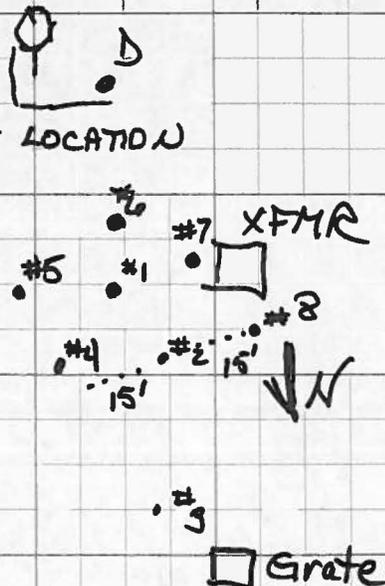
112C041030

SOIL SAMPLING/CORING

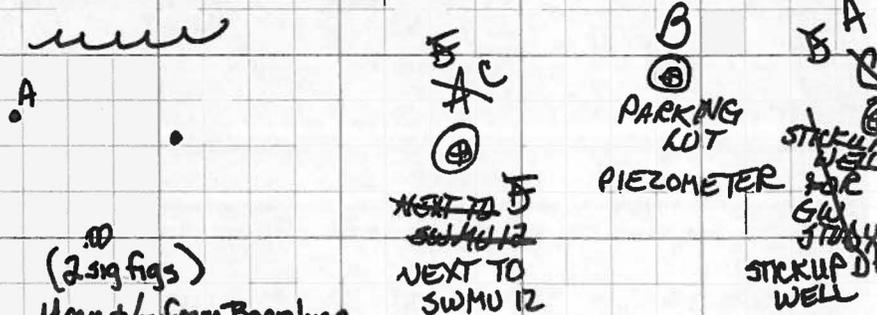
12/11/2012

PERSONNEL: DFEARS, K. WEICHERT (DF=FOL, 330)
 TRUCK: POV
 PPE: LEVEL D
 WEATHER: OVERCAST, PARTLY SUNNY, 68° LIGHT BREEZE
 EQUIP: CORE SAW, GENERATOR, KECK WATER LEVEL
 OBJ: COLLECT SOIL SAMPLES AND GROUNDWATER
 FLOW DATA AT SITES 1241 + 1596

- 0830 TAILGATE H+S MTA WITH DF+KW. DIG PERMITS FROM BLDG 1960
- 0845 PREPARE TO CORE THROUGH ASPHALT FOR SOIL SAMPLES AT SITE 1241 PARKING AREA
- 0900 CORE #4 COMPLETE
- 0915 CORE #5 COMPLETE
- 0930 SAM. OTT HERE TO DISCUSS AND VERIFY OW LINE LOCATION
- 0945 CORE #6 COMPLETED
- 1000 CORE #7 COMPLETED
- 1010 CORE #8
- 1030 MONITORING WELLS PREVIOUSLY INSTALLED WERE CHECKED AND DETERMINED TO BE VIABLE.
- 1045 BEGIN AUGERING PIEZOMETER SOUTH SIDE OF PARKING AREA NEAR STOP SIGN
- 1150 PIEZOMETER IN STALLED APPROX 15 FT WEST OF PATROL RD IN GRASSY AREA ^{NORTH OF} NEAR STOP SIGN
- 1230 SHOT IN MW + PIEZOMETERS WITH SURVEY SCOPE X IS CONSTANT ON NE CORNER OF TRANSFORMER (XFMR) PAD



	SHOT 1	SHOT 2
A	2.83'	2.93' (+.10)
B	5.44'	5.54' (+.10)
C	6.98'	7.07' (+.09)
D	1.18	1.27' (+.09)
X	3.16	3.25' (+.09)



+/- FROM BASELINE		Mean +/- from Baseline		Adjusted elevation per estimated sea level @ 17 ft
X	3.16	3.25		
A	+0.34	+0.33	+0.34	17.34
B	-2.28	-2.29	-2.29	14.71
C	-3.82	-3.82	-3.82	13.18
D	+1.98	+1.98	+1.98	18.98

* VERY ROUGH ESTIMATE

Diane Fears

NAVSTA MAYPORT SITES 1241 + 1596

PIEZOMETER INSTALLATION

12/11/12

112041630

1255 GW MEASUREMENTS AT SITE 1241

DEPTH TO GW	GW ELEVATION *	WELL SITES	TOTAL WELL DEPTH	TIME
5 13.77/12.57	4.77	A	14.95	12:55 12:58
9.76	4.95	B	15.99	13:00
9.49	4.69	C	17.00	13:01
13.77	5.21	D	14.95	12:55

*BASED ON ROUGH VISUAL ESTIMATE

1315 SECURE FROM SITE 1241

1345 BEGIN INSTALLING PIEZOMETERS @ SITE 1596

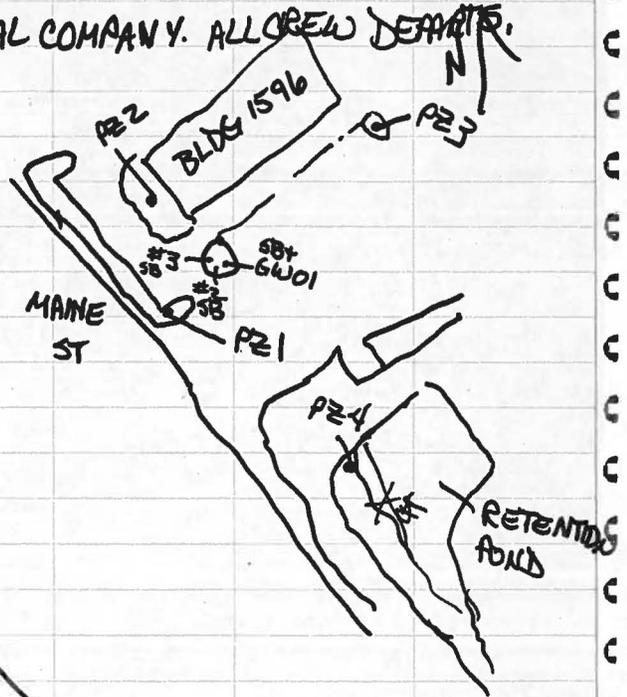
1405 PZ1 INSTALLED

1420 PZ2 INSTALLED

1450 PZ3 INSTALLED

1505 PZ4 INSTALLED

1510 KW TO RETURN EQUIPMENT TO RENTAL COMPANY. ALL CREW DEPART.



112 CO 4630

NAVSTA MAYPORT SITES 1241+1596
GW MONITORING + SOIL SAMPLING

12/12/2012

PERSONNEL : D FEARS, KWEICHERT (DF = FOL, 550)
 # PER TRUCK: POV
 PPE: LEVEL "D"
 WEATHER: OVERCAST, WINDY, SPRINKLES, 59°
 EQUIP: HAND AUGER
 OBJ: WATER LEVELS OF PIEZOMETERS AT BOTH SITES
 ADD SOIL SAMPLES AT SITE 1241

0715 ARRIVE @ 1241 SITE. HIGH TIDE AT LOW. SUNRISE 7:15AM

0730- GW ELEVATION MEASUREMENTS

	DEPTH TO GW	GW ELEV	EST
A	12.26	5.08	
B	9.72	4.99	
C	7.9	5.23	
D	12.78	6.20	

0810 MEET WITH KW @ 1596. HEAVY RAIN, ANTICIPATE LIGHTENING OF RAIN.

1010 RAIN CONTINUES, INTERMITTANTLY HEAVY. PAPERWORK COMPLETED AS MUCH AS POSSIBLE FOR SAMPLING.

1015 AT SITE 1241, TENT SET UP, BEGIN/PREPARE TO SAMPLE

1030 BEGIN AUGERING SB01

1035 MPT-1241-SB01-0103-121212 COLLECTED*

1040 MPT-1241-SB01-0305-121212 COLLECTED*

1050 MPT-1241-SB01-0507-121212 COLLECTED*

1105 BEGIN AUGERING SB02

1115 MPT-1241-SB02-0305-121212 COLLECTED*

1120 MPT-1241-SB02-0507-121212 COLLECTED*

1130 BEGIN AUGERING SB04

1150 MPT-1241-SB04-0103-121212 COLLECTED*

1200 MPT-1241-SB04-0305-121212 COLLECTED*

1205 MPT-1241-SB04-0507-121212 COLLECTED*

1225 BEGIN AUGERING SB05

1230 MPT-1241-SB05-0103-121212 COLLECTED*

1240 MPT-1241-SB05-0305-121212 COLLECTED*

1245 MPT-1241-SB05-0507-121212 COLLECTED*

1330 BEGIN AUGERING SB06

1340 MPT-1241-SB06-0103-121212 COLLECTED*

1345 MPT-1241-SB06-0305-121212 COLLECTED*

1350 MPT-1241-SB06-0507-121212 COLLECTED*

1405 BEGIN AUGERING SB07

1425 MPT-1241-SB07-0103-121212 COLLECTED*

Diane Fears

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NAVSTA MAYPORT SITES 1241 + 1596

SOIL SAMPLING

12/12/12

112004630

- 1430 MPT-1241-5B07-0305-121212 COLLECTED*
- 1435 MPT-1241-5B07-0507-121212 COLLECTED*
- 1450 BEGIN AUGERING 5B08
- 1505 MPT-1241-5B08-0103-121212 COLLECTED*
- 1510 MPT-1241-5B08-0305-121212 COLLECTED*
- 1515 MPT-1241-5B08-0507-121212 COLLECTED*
- 1545 SITE SECURED. ALL CREW DEPARTS.

* SEE FIELD DATA LOGS

NOTE: 0-1' INTERVAL IS ENTIRELY ROAD PACK/FILL MATERIAL, THEREFORE SAMPLING INITIATED AT 1' BLS AT ALL LOCATIONS.

AT

NAVSTA MAYPORT SITES 1241 + 1596

112C04630

GROUNDWATER LEVELS

12/13/12

PERSONNEL: DF, FEARNS, K WEICHAERT (DF = FOL, 950)
 TRUCK: FOV
 PPE: LEVEL "D"
 WEATHER: OVERCAST, DRIZZLING, 54°F
 EQUIP: KECK WATER LEVEL
 OBJ: COLLECT WATER LEVEL DATA AT SITES 1241 + 1596
 HIGH TIDE: 0752

0600 DF ARRIVE ON SITE 1241 TO MEASURE GW LEVELS

TIME	DEPTH TO GW	GW ELEV	ASSUMPTION + TWT
0615	A 12.23	5.11	17.34
	B 9.60	5.11	14.71
	C 7.86	5.52	13.18
0635	D 10.40	8.58	18.98

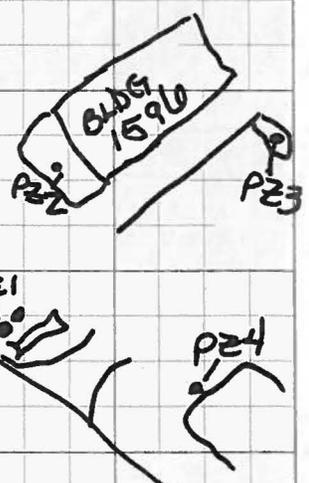
0640 DF ARRIVE AT SITE 1596 TO MEASURE GW LEVELS

TIME	DEPTH TO GW	WELL DEPTH	GW ELEV
0645	PZ1 7.92	9.88	16.40'
	PZ2 6.26	9.62	16.51'
	PZ3 5.48	8.32	16.23'
	PZ4 1.89	5.12	16.61'

0700 COMPLETED WATER LEVELS

0730 BEGAN SHOOTING IN PZ LOCATIONS WITH SCOPE.

	SHOT 1	SHOT 2	Δ	MEAN	ADJ SEA LEVEL +20'
X	5.04	4.84	-.20	4.94	5 24.32'
1	0.72	0.52	-.20	0.62	5 22.77' 24.32'
2	2.27	2.07	-.20	2.17	5 21.71' 22.77'
3	3.33	3.13	-.20	3.23	21.71'
4	6.54	6.34	-.20	6.44	18.50'



0930 RW TO SITE 1241 TOR MOVE PIEZOMETER "D". DF TO LAB.
 0945 ALL CREW DEPARTS.

Diane Fears



PROJECT NO: <u>112004630</u>	FACILITY: <u>NAUSTA MAYPORT</u>	PROJECT MANAGER <u>D. FEARS</u>	PHONE NUMBER <u>904-636-6125</u>	LABORATORY NAME AND CONTACT: <u>ALS</u>
SAMPLERS (SIGNATURE) <u>K. W. L. T.</u>		FIELD OPERATIONS LEADER <u>D. FEARS</u>	PHONE NUMBER <u>904-636-6125</u>	ADDRESS <u>9143 PHILIPS HWY STE 260</u>
		CARRIER/WAYBILL NUMBER		CITY, STATE <u>JACKSONVILLE, FL</u>

STANDARD TAT <input checked="" type="checkbox"/>	CONTAINER TYPE PLASTIC (P) or GLASS (G)
RUSH TAT <input type="checkbox"/>	PRESERVATIVE USED
<input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input type="checkbox"/> 72 hr. <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day	

DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS	COMMENTS
<u>12/12</u>	<u>10:35</u>	<u>MPT-1241-5801-0103-121212</u>		<u>1</u>	<u>3</u>	<u>50</u>	<u>G</u>	<u>1</u>	<u>TRPH - FL PRO</u>	
<u>12/12</u>	<u>10:40</u>	<u>MPT-1241-5801-0305-121212</u>		<u>3</u>	<u>5</u>	<u>50</u>	<u>G</u>	<u>1</u>	<u>5806</u>	
<u>12/12</u>	<u>10:50</u>	<u>MPT-1241-5801-0507-121212</u>		<u>5</u>	<u>7</u>	<u>50</u>	<u>G</u>	<u>1</u>	<u>PAHs</u>	
<u>12/12</u>	<u>11:15</u>	<u>MPT-1241-5802-0305-121212</u>		<u>3</u>	<u>5</u>	<u>50</u>	<u>G</u>	<u>1</u>	<u>SVOCs</u>	
<u>12/12</u>	<u>11:20</u>	<u>MPT-1241-5802-0507-121212</u>		<u>5</u>	<u>7</u>	<u>50</u>	<u>G</u>	<u>1</u>	<u>8270-SIM</u>	
<u>12/12</u>	<u>11:50</u>	<u>MPT-1241-5804-0103-121212</u>		<u>1</u>	<u>3</u>	<u>50</u>	<u>G</u>	<u>1</u>	<u>8270</u>	
<u>12/12</u>	<u>12:00</u>	<u>MPT-1241-5804-0305-121212</u>		<u>3</u>	<u>5</u>	<u>50</u>	<u>G</u>	<u>1</u>		
<u>12/12</u>	<u>12:05</u>	<u>MPT-1241-5804-0507-121212</u>		<u>5</u>	<u>7</u>	<u>50</u>	<u>G</u>	<u>1</u>		
<u>12/12</u>	<u>12:30</u>	<u>MPT-1241-5805-0103-121212</u>		<u>1</u>	<u>3</u>	<u>50</u>	<u>G</u>	<u>1</u>		
<u>12/12</u>	<u>12:40</u>	<u>MPT-1241-5805-0305-121212</u>		<u>3</u>	<u>5</u>	<u>50</u>	<u>G</u>	<u>1</u>		
<u>12/12</u>	<u>12:45</u>	<u>MPT-1241-5805-0507-121212</u>		<u>5</u>	<u>7</u>	<u>50</u>	<u>G</u>	<u>1</u>		

1. RELINQUISHED BY <u>David Fears</u>	DATE <u>12/13/12</u>	TIME <u>10:15</u>	1. RECEIVED BY <u>[Signature]</u>	DATE <u>12/13/12</u>	TIME <u>10:15</u>
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS ① RUN FULL SVOC RUSH TURNAROUND ON THESE 5 SAMPLES

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

② HOLD PAH SAMPLE UNTIL THE PREVIOUS SVOC ① SAMPLES ARE RUN



PROJECT NO: <u>112CD4630</u>	FACILITY: <u>NAVSTA MAY PORT</u>	PROJECT MANAGER <u>D. FEARS</u>	PHONE NUMBER <u>904-636-6125</u>	LABORATORY NAME AND CONTACT: <u>ALS</u>
SAMPLERS (SIGNATURE) <u>K. W. L.</u>		FIELD OPERATIONS LEADER <u>D. FEARS</u>	PHONE NUMBER <u>904-636-6125</u>	ADDRESS <u>9143 PHILIPS HWY STE 200</u>
		CARRIER/WAYBILL NUMBER		CITY, STATE <u>JACKSONVILLE, FL</u>

STANDARD TAT <input checked="" type="checkbox"/>	CONTAINER TYPE PLASTIC (P) or GLASS (G) <u>G G</u>
RUSH TAT <input type="checkbox"/>	PRESERVATIVE USED
<input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input type="checkbox"/> 72 hr. <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day	

DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS		COMMENTS
<u>12/12</u>	<u>1340</u>	<u>MPT-1241-SB06-D103-121212</u>		<u>1</u>	<u>3</u>	<u>50</u>	<u>G</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>COOL TO 4°C</u>
<u>12/12</u>	<u>1345</u>	<u>MPT-1241-SB06-D305-121212</u>		<u>3</u>	<u>5</u>	<u>50</u>	<u>G</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	
<u>12/12</u>	<u>1350</u>	<u>MPT-1241-SB06-D507-121212</u>		<u>5</u>	<u>7</u>	<u>50</u>	<u>G</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	
<u>12/12</u>	<u>1425</u>	<u>MPT-1241-SB07-0103-121212</u>		<u>1</u>	<u>3</u>	<u>50</u>	<u>G</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	
<u>12/12</u>	<u>1430</u>	<u>MPT-1241-SB07-0305-121212</u>		<u>3</u>	<u>5</u>	<u>50</u>	<u>G</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>(2)</u>
<u>12/12</u>	<u>1435</u>	<u>MPT-1241-SB07-0507-121212</u>		<u>5</u>	<u>7</u>	<u>50</u>	<u>G</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>- RUN ALL FOR TRPH - STANDARD</u>
<u>12/12</u>	<u>1505</u>	<u>MPT-1241-SB08-D103-121212</u>		<u>1</u>	<u>3</u>	<u>50</u>	<u>G</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>TAT</u>
<u>12/12</u>	<u>1510</u>	<u>MPT-1241-SB08-D305-121212</u>		<u>3</u>	<u>5</u>	<u>50</u>	<u>G</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	
<u>12/12</u>	<u>1515</u>	<u>MPT-1241-SB08-D507-121212</u>		<u>5</u>	<u>7</u>	<u>50</u>	<u>G</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	

1. RELINQUISHED BY <u>Dave Fears</u>	DATE <u>12/13/12</u>	TIME <u>1015</u>	1. RECEIVED BY <u>Chris Kelly</u>	DATE <u>12/13/12</u>	TIME <u>1015</u>
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS (2) SEE NOTE ON PAGE 1



Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAUSTA MAYPORT SITE 1241
Project No.: 112 C04630

Sample ID No.: MPT-1241-5801-
0103-121212
Sample Location: 5801
Sampled By: KW
C.O.C. No.: 21039

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>12/12/12</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>1035</u>	<u>01-03"</u>	<u>LT BRN</u>	<u>FINE TO MED Grain sand with shell fragments</u>
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	<u>10</u>			
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>5 SVOC PAH 8270 SIM</u>	<u>1-802 jar</u>	<input checked="" type="checkbox"/>	
<u>TPH FL PRO</u>		<input checked="" type="checkbox"/>	
<u>SVOC 8270</u>			

OBSERVATIONS / NOTES:

Light Petroleum odor

MAP:

01 XFR
W

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

K. W. L.



Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAVSTA MAYAGUET SITE 1241
Project No.: 11200 4630

Sample ID No.: MAP-1241-5801-0305-121212
Sample Location: 58A01
Sampled By: RW
C.O.C. No.: 2639

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
12/12/12	03-05'	LTBRN	LT to med grain sand with shell fragments
Time: 1040			
Method: Gmb			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

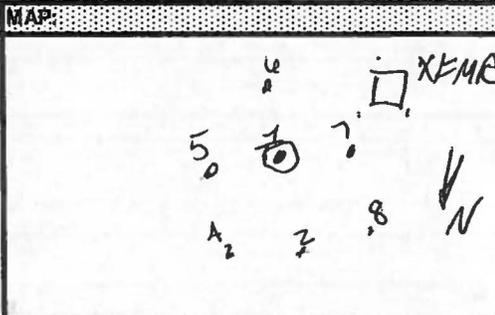
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
SVOC PAH 8270, 514	1-8oz jar	✓	
TPH 96 PRO		✓	
SVOC 8270			

OBSERVATIONS / NOTES:

very light petroleum odor



Circle # Applicable:

MS/MSD Duplicate ID No.: _____

Signature(s):

R. W. L.



Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAVSTA MAYPORT SITE 1241
Project No.: 112 CO 41030

Sample ID No.: 4PT-1241-5801-0507-1213131313
Sample Location: 5801
Sampled By: RW
C.O.C. No.: 2639

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>12/12/12</u>	<u>05-07'</u>	<u>LTBrn</u>	<u>Fine sand with shell fragments</u>
Time: <u>1050</u>			
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PAH 8270 SIM</u>	<u>1-8oz jar</u>	<input checked="" type="checkbox"/>	
<u>TPH FLPRO</u>		<input checked="" type="checkbox"/>	
<u>SVOC 8270</u>			

OBSERVATIONS / NOTES:

very light petroleum odor

MAP:

5801 XFMC
↓N

Circle if Applicable:

MS/MSD Duplicate ID No.: _____

Signature(s): L.W.L.



Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAVSTA MAYAORT SITE 124
Project No.: 112 CO 41030

Sample ID No.: MPT-1241-5802-0305-121212
Sample Location: 5802
Sampled By: RW
C.O.C. No.: 2639

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>12/12/12</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>1115</u>	<u>3-5'</u>	<u>Very light brown</u>	<u>Fine sand with shell fragments</u>
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PAH 8270 SIM pending</u>	<u>1-8oz jar</u>	<input checked="" type="checkbox"/>	
<u>TPH FLPRO</u>		<input checked="" type="checkbox"/>	
<u>SVOC 8270</u>			

OBSERVATIONS / NOTES:

<u>light petroleum odor</u>	<u>1</u> <input checked="" type="checkbox"/> <u>XHP</u> <u>02</u> <u>JR</u>
-----------------------------	--------------------------------------------------------------------------------

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s): <u>R.W.H.</u>
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Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAVSTA MAYAGORT SITE 1241
Project No.: 112 CD 4630

Sample ID No.: MPT-1241-5802-
0507-121212
Sample Location: 5802
Sampled By: RW
C.O.C. No.: 2639

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>12/12/12</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>1120</u>	<u>5-7'</u>	<u>white</u>	<u>Fine white sand</u>
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PAH 8270514</u>	<u>1-802 jar</u>		
<u>TPH FLPRO</u>			
<u>SVOC 8270</u>			

OBSERVATIONS / NOTES:

Light petroleum odor

MAP:

± XFR
⊙ ↓N

Circle # Applicable:

<input type="checkbox"/> MS/MSD	Duplicate ID No.:
---------------------------------	-------------------

Signature(s):

R. W. L. T.



Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAVSTA MAYPORT SITE 124
Project No.: 112C04030

Sample ID No.: MPT-1241-5804-
0103-121212
Sample Location: 5804
Sampled By: RW
C.O.C. No.: 2639

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>12/12/12</u>	<u>1-3'</u>	<u>LT-Med Brown</u>	<u>FINE-MED GRAIN SANDS</u>
Time: <u>1130</u>			<u>MANY SHELLS AND FRAGMENTS</u>
Method: <u>Grab</u>			
Monitor Reading (ppm):			

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

SAMPLE COLLECTION INFORMATION:				
Analysis	Container Requirements	Collected	Other	
<u>PAH 8270 SIM</u>	<u>1-802 jar</u>			
<u>TPH FLPRO</u>				

OBSERVATIONS / NOTES:	MAP:
	<u>NV</u> <u>04</u> <u>01</u> <u>02</u> <input type="checkbox"/> <u>XFMR</u> <u>NV</u>

Circle if Applicable:		Signature(s):
<input type="checkbox"/> MS/MSD	Duplicate ID No.:	<u>R. Wet</u>



Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAVSTA MAYPORT SITE 1241
Project No.: 112C04630

Sample ID No.: MPT-1241-5804-0305-121212
Sample Location: 5804
Sampled By: RW
C.O.C. No.: 2639

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>12/12/12</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>10:00</u>	<u>3-5'</u>	<u>LTBRN</u>	<u>FINE SAND</u> <u>FEW SHELL FRAGMENTS</u>
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PAH 8270 SIM</u>	<u>1-8oz jar</u>	<input checked="" type="checkbox"/>	
<u>TPH FL PRO</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:

MAP:

XFMR

1
2
NV

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):

JL. Wet



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SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAVSTA MAYPORT SITE 1241
Project No.: 112 CO 4630

Sample ID No.: MNT-1241-5804-0507-121212
Sample Location: 5804
Sampled By: RW
C.O.C. No.: 21039

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>12/12/12</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>1205</u>	<u>5-7'</u>	<u>LT BROWN-white</u>	<u>Fine sand with shell fragments</u>
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

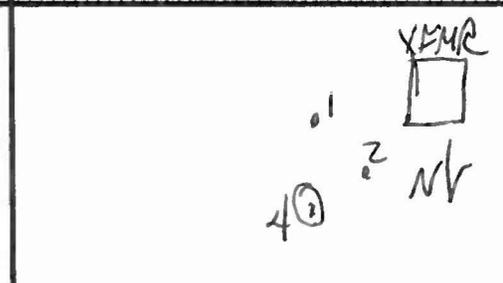
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PAH 827051M</u>	<u>1-8oz jar</u>	<input checked="" type="checkbox"/>	
<u>TPH FL PRO</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD Duplicate ID No.: _____

Signature(s): [Signature]



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SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAVSTA MAYAGUAY SITE 1241
Project No.: 112004630

Sample ID No.: MP7-1241-SB05²
Sample Location: SB05
Sampled By: RW
C.O.C. No.: 21639

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

Type of Sample:

- Low Concentration
- High Concentration

GRAB SAMPLE DATA:

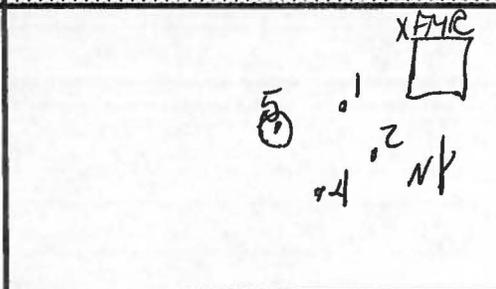
Date:	<u>12/12/12</u>	Depth Interval	<u>1-3'</u>	Color	<u>LT Brn Med Gray</u>	Description (Sand, Silt, Clay, Moisture, etc.)	<u>Medium-fine sand with shell fragments</u>
Time:	<u>1230</u>						
Method:	<u>Grab</u>						
Monitor Reading (ppm):							

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PAH 827031M</u>	<u>1.802 jar</u>	<input checked="" type="checkbox"/>	
<u>TPH EL PRO</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:**MAP:****Circle if Applicable:****Signature(s):**

MS/MSD Duplicate ID No.: _____

R. W. [Signature]



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SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAVSTA MAYPORT SITE 1241
Project No.: 112C04630

Sample ID No.: MPT-1241-5805-
0305-121212
Sample Location: 5805
Sampled By: KW
C.O.C. No.: 2639

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:			
Date: <u>12/12/12</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>1240</u>	<u>3-5'</u>	<u>WHITE WITH RED/GRAY</u>	<u>MOSTLY WHITE SAND WITH RED/GRAY CLAY LENSES WITH FEW SHELL FRAGMENTS</u>
Method: <u>Grab</u>			
Monitor Reading (ppm):			

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

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>PAH 8270 SIM</u>	<u>1-8oz jar</u>	<input checked="" type="checkbox"/>	
<u>TPH FLPRO</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:	MAP:

Circle if Applicable:		Signature(s):
<input type="checkbox"/> MS/MSD	Duplicate ID No.:	<u>[Signature]</u>



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SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAVSTA MAYPORT SITE 1241
Project No.: 112004630

Sample ID No.: MPT-1241-5805-0507-121212
Sample Location: 8805
Sampled By: KW
C.O.C. No.: 21039

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>12/18/12</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>1245</u>	<u>5-7'</u>	<u>WHITE</u>	<u>FINE WHITE SAND WITH SHELL FRAGMENTS</u>
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

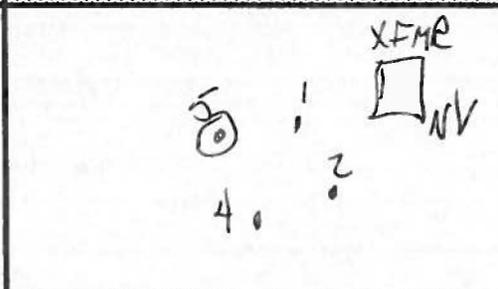
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PAH 8270 SIM</u>	<u>1-8oz jar</u>	<input checked="" type="checkbox"/>	
<u>TPH ELPRO</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:

K. Wilt



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SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAVSTA MAYAGORT SITE 1241
Project No.: 112CD 4630

Sample ID No.: MAT-1241-5806-
0103-121212
Sample Location: 5806
Sampled By: RW
C.O.C. No.: 2638

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>12/12/12</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>1340</u>	<u>1-3'</u>	<u>LT-Med Brn</u>	<u>fine to med grain sands with many shell fragments</u>
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PAH 827051M</u>	<u>1-8oz jar</u>	<input checked="" type="checkbox"/>	
<u>TPH FL PRO</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:

MAP: NV

60
X-146
5
1
2
4

Circle if Applicable: MS/MSD Duplicate ID No.: _____

Signature(s): RW



Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAVSTA MAYAGUET SITE 1241
Project No.: 112CO 4630

Sample ID No.: MAT-1241-5806-0305-121212
Sample Location: SB06
Sampled By: KW
C.O.C. No.: 2638

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>12/12/12</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>1345</u>	<u>3-5'</u>	<u>White-lt brn</u>	<u>Fine sand with few shells</u>
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PAH 827031M</u>	<u>1-8oz jar</u>	<input checked="" type="checkbox"/>	
<u>TPH FLPRO</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:

MAP

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s): <u>KW</u>
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Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAKSTAMAYADMT SITE 1241
Project No.: 112 CD 41030

Sample ID No.: MPT-1241-9806
Sample Location: 0507-121212
Sampled By: SB06
C.O.C. No.: KW
2638

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>12/12/12</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>1350</u>	<u>5-7</u>	<u>white</u>	<u>fine sands with few shells</u>
Method: <u>GMD</u>			
Monitor Reading (ppm):			

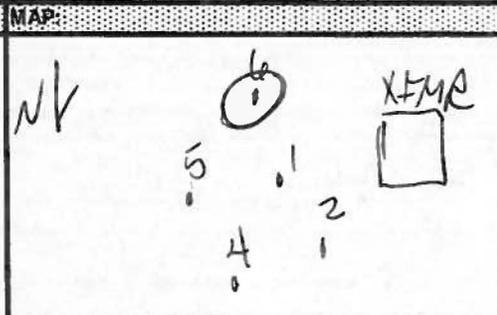
COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PAH 8270 SIM</u>	<u>1-802 jar</u>	<input checked="" type="checkbox"/>	
<u>TPH FL PRO</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:



Circle if Applicable:

MS/MSD Duplicate ID No.: _____

Signature(s): [Signature]



Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAVSTA MAYAGORT SITE 1241
Project No.: 112CD4630

Sample ID No.: MPT-1241-5807
Sample Location: 0103-121212
Sampled By: KLW
C.O.C. No.: 21638

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

Type of Sample:

- Low Concentration
- High Concentration

GRAB SAMPLE DATA:

Date: <u>12/12/12</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>1435</u>	<u>1-3'</u>	<u>Lt to Med BRN</u>	<u>Fine to med sands with many rocks + shells</u>
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

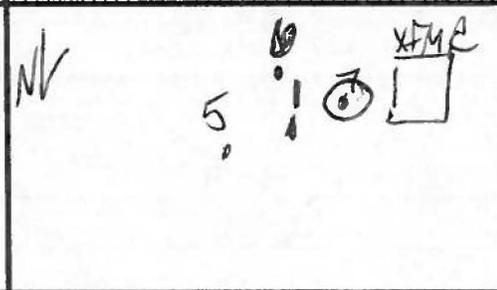
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PAH 827031M</u>	<u>1-8oz jar</u>	<input checked="" type="checkbox"/>	
<u>TPH FL RCD</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

Signature(s):

MS/MSD Duplicate ID No.: _____

KLW



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SOIL & SEDIMENT SAMPLE LOG SHEET

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Project Site Name: NAVSTA MAYAGUAY SITE 1241
Project No.: 112C04630

Sample ID No.: MPT-1241-5807-0305-121212
Sample Location: SB07
Sampled By: KW
C.O.C. No.: 2638

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>12/12/12</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>1430</u>	<u>3-5'</u>	<u>LT BRN to white</u>	<u>fine sand with very few shells</u>
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PAH 8270 SIM</u>	<u>1-80Z jar</u>	<input checked="" type="checkbox"/>	
<u>TPH FL PRO</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:

MAP:
nk
5.
6
!
2
XFMR

Circle if Applicable:

MS/MSD Duplicate ID No.: _____

Signature(s): JL. W. G.



Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAVSTA MAYPORT SITE 1241
Project No.: 11200 4630

Sample ID No.: MP-1241-5807-
Sample Location: 5A07
Sampled By: RW
C.O.C. No.: 2638

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>12/12/12</u>	Depth Interval: <u>5-7'</u>	Color: <u>white to Brn</u>	Description (Sand, Silt, Clay, Moisture, etc.): <u>white sand with brown sandy clay</u>
Time: <u>1435</u>			
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PAH 8270 SIM</u>	<u>1-8oz jar</u>	<input checked="" type="checkbox"/>	
<u>TPH FLPRO</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:

MAP:

(Observations/Notes area is blank)

(Map area contains handwritten "NK" and a diagram of a square with a circle inside, and some numbers like "5", "6", "1", "0")

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:

(Handwritten signature: RW)



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SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAVSTA MAYPORT SITE 1241
Project No.: 112C041030

Sample ID No.: MP-1241-5808-
0103-121212
Sample Location: 5808
Sampled By: RJ
C.O.C. No.: 2638

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>12/12/12</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>1505</u>	<u>1-3'</u>	<u>Lt to Med Brn</u>	<u>++tB Fine to med grain sand with many shell fragments</u>
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

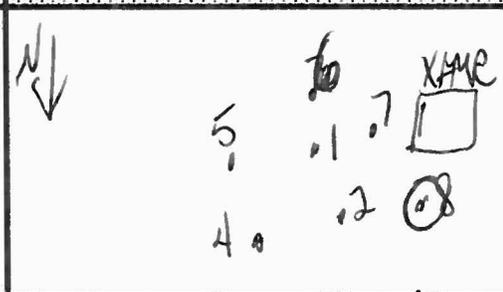
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PAH 8270314</u>	<u>1-8oz jar</u>		
<u>TPH FLPRO</u>			

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

MS/MSD Duplicate ID No.: _____

Signature(s):

R. Wick



Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAVSTA MAYPORT SITE 1241
Project No.: 112CO 4030

Sample ID No.: MPT-1241-5808
Sample Location: 0305-121212
Sampled By: SB08
C.O.C. No.: RW
2638

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date: <u>12/12/12</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>1510</u>	<u>3-5'</u>	<u>LT BRN</u>	<u>Fine sand with few shell fragments</u>
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

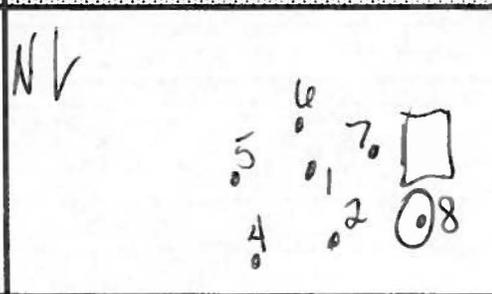
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PAH 8270 SIM</u>	<u>1-802 jar</u>	<input checked="" type="checkbox"/>	
<u>TPH FL PRO</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:

[Signature]



Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Page of

Project Site Name: NAVSTAMAYADCT SITE 1241
Project No.: 112 CO 7/1030

Sample ID No.: MAP-1241-5808
Sample Location: NSD7-121212
Sampled By: KW
C.O.C. No.: 2638

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>12/12/12</u>	Depth Interval: <u>5-7'</u>	Color: <u>WHITE to LT BROWN</u>	Description (Sand, Silt, Clay, Moisture, etc.): <u>Fine sand with light brown sandy clay interspersed</u>
Time: <u>1515</u>			
Method: <u>Grab</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

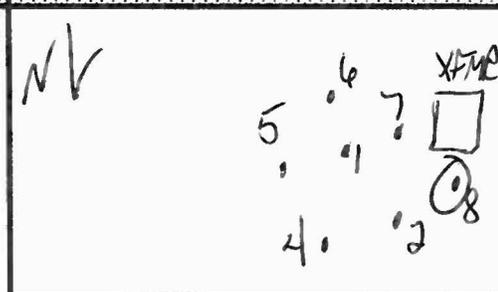
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PAH 8270 SIM</u>	<u>1-8oz jar</u>	<input checked="" type="checkbox"/>	
<u>TPH FL PRO</u>		<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.: _____

KW

APPENDIX E
LABORATORY ANALYTICAL RESULTS



December 07, 2012

Service Request No:J1205834

Diane Fears
TriEco, LLC
8640 Philips Highway
Suite 16
Jacksonville, FL 32256

Laboratory Results for: NS Mayport

Dear Diane,

Enclosed are the results of the sample(s) submitted to our laboratory November 29, 2012
For your reference, these analyses have been assigned our service request number **J1205834**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 4409. You may also contact me via email at Craig.Myers@alsglobal.com.

Respectfully submitted,

Columbia Analytical Services, Inc. dba ALS Environmental

Craig Myers
Project Manager

ADDRESS 9143 Philips Highway, Suite 200, Jacksonville, FL 32256

PHONE +1 904 739 2277 | FAX +1 904 739 2011

Columbia Analytical Services, Inc.

Part of the ALS Group A Campbell Brothers Limited Company



Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request: J1205834
Date Received: 11/29/12

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

Sample Receipt

Two water samples, six soil samples, and one trip blank were received for analysis at Columbia Analytical Services on 11/29/12. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at $\leq 6^{\circ}\text{C}$ upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

Volatile Organic Analyses:

Method 8260B: Method Blank JQ1207825-02 contained a low level of Methylene Chloride above the Method Detection Limit (MDL), but less than the Method Reporting Limit (MRL). All soil samples exhibited Methylene Chloride in approximately the same concentration as the method blank. The data is flagged with a qualifier to indicate the results are estimated values. The method blank results may indicate the potential for a false positive.

Semi-Volatile Organic Analyses:

Method 8270C: The upper control criterion was exceeded for the following surrogate in Method Blank JQ1207672-01: 2-Fluorophenol. No target analytes were detected in the Method Blank. Since the apparent problem equates to a high bias, the data quality is not significantly affected. No further corrective action was appropriate.

Method 8270C: The upper control criterion was exceeded for the following surrogate in sample J1205834-008: 2-Fluorophenol. No target analytes were detected in the sample. The error associated with an elevated recovery equates to a high bias. The quality of the sample data is not significantly affected and no further corrective action was appropriate.

Method 8270C: The control criterion was exceeded for the following surrogate in sample J1205834-003 due to suspected matrix interference: 2,4,6-Tribromophenol. The sample contained non-target background components that adversely affected the surrogate recovery. No further corrective action was appropriate.

Method 8270C: The reporting limit is elevated for all analytes in sample J1205834-002. The sample extract was diluted prior to instrumental analysis due to relatively high levels of non-target background components. The extract was highly colored and odorous, which indicated the need to perform a dilution prior to injection into the instrument.

Method 8082: The confirmation comparison criterion of 40% difference for Aroclor-1260 was exceeded in sample J1205834-003. The higher of the two values is reported because no evidence of matrix interference was observed.

Method 8082: The reporting limit is elevated for Aroclor-1016, Aroclor-1221, Aroclor-1232, and Aroclor-1242 in sample J1205834-008. The sample extract was diluted prior to instrumental analysis due to relatively high levels of non-target background

Approved by

Date 12/7/2012

2 of 111



components (Sulfur). Clean-up of the extract was performed within the scope of the method, but did not eliminate enough of the background components to prevent dilution.

Metals Analyses:

No significant data anomalies were noted with this analysis.

General Chemistry Analyses:

No significant data anomalies were noted with this analysis.

Approved by  Date 12/7/2012

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Florida Department of Health	E82502	6/30/2013
North Carolina Department of Environment and Natural Resources	527	12/31/2012
Virginia Environmental Accreditation Program	460191	12/14/2012
Louisiana Department of Environmental Quality	02086	6/30/2013
Georgia Department of Natural Resources	958	6/30/2013
Kentucky Division of Waste Management	63	7/5/2013
South Carolina Department of Health and Environmental Control	96021001	6/30/2013
Texas Commision on Environmental Quality	T104704197-09-TX	5/31/2013
Maine Department of Health and Human Services	2011006	2/3/2013
Department of Defense	66206	5/31/2013

Data Qualifiers

Florida-DEP

- ! Data deviates from historically established concentration ranges
- * Not reported due to interference
- ? Data is rejected and should not be used
- A Value reported is the arithmetic mean of two or more determinations
- B Results based upon colony counts outside the acceptable range.
- D Measurement was made in the field.
- E Extra samples were taken at composite stations
- H Value based on field kit determination; results may not be accurate.
- I The reported value is between the laboratory method detection limit and the laboratory PQL.
- J Estimated value.
- K Off scale low. The value is less than the lowest calibration standard.
- L Off scale high. The analyte is above the acceptable level of quantitation.
- M The MDL/MRL has been elevated because the analyte could not be accurately quantified.
- N Presumptive evidence of presence of material.
- O Sampled, but analysis lost or not performed
- Q Sample held beyond the acceptable holding time.
- R Significant rain in the past 48 hours (typically in excess of 0.5 inches)
- T Estimated value, less than the MDL
- 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.
- X Insufficient individuals were present in the sample to achieve a minimum of 280 organisms for identification (Stream Condition Index Analysis only)
- Y The laboratory analysis was from an unpreserved or improperly preserved sample.
- Z Too many colonies were present, the numeric value represents the filtration volume

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: TriEco, LLC
Project: NS Mayport/112CO4630

Service Request:J1205834

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
J1205834-001	MPT-1241-SS03-0102-112812	11/28/2012	0915
J1205834-002	MPT-1241-SB03-0405-112812	11/28/2012	0947
J1205834-003	MPT-1241-SS02-0102-112812	11/28/2012	1045
J1205834-004	MPT-1241-GW03-112812	11/28/2012	1210
J1205834-005	MPT-1596-SB01-0203-112812	11/28/2012	1400
J1205834-006	MPT-1596-SB01-0405-112812	11/28/2012	1410
J1205834-007	MPT-1596-SB03-0203-112812	11/28/2012	1445
J1205834-008	MPT-1596-GW01-112812	11/28/2012	1555
J1205834-009	Trip Blank	11/28/2012	0000

COLUMBIA ANALYTICAL SERVICES, INC.

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Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SS03-0102-112812
Lab Code: J1205834-001

Service Request: J1205834
Date Collected: 11/28/12 09:15
Date Received: 11/29/12 10:00

Units: ug/Kg**Basis:** Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,1,2-Tetrachloroethane	0.473 U	5.76	0.473	1	12/05/12 22:45	12/5/12	
1,1,1-Trichloroethane (TCA)	0.265 U	5.76	0.265	1	12/05/12 22:45	12/5/12	
1,1,2,2-Tetrachloroethane	0.265 U	5.76	0.265	1	12/05/12 22:45	12/5/12	
1,1,2-Trichloroethane	0.450 U	5.76	0.450	1	12/05/12 22:45	12/5/12	
1,1-Dichloroethane (1,1-DCA)	0.358 U	5.76	0.358	1	12/05/12 22:45	12/5/12	
1,1-Dichloroethene (1,1-DCE)	0.795 U	5.76	0.795	1	12/05/12 22:45	12/5/12	
1,2,3-Trichloropropane	0.876 U	5.76	0.876	1	12/05/12 22:45	12/5/12	
1,2-Dibromo-3-chloropropane (DBCP)	0.611 U	11.5	0.611	1	12/05/12 22:45	12/5/12	
1,2-Dibromoethane (EDB)	0.668 U	5.76	0.668	1	12/05/12 22:45	12/5/12	
1,2-Dichlorobenzene	0.369 U	5.76	0.369	1	12/05/12 22:45	12/5/12	
1,2-Dichloroethane	0.346 U	5.76	0.346	1	12/05/12 22:45	12/5/12	
1,2-Dichloropropane	0.473 U	5.76	0.473	1	12/05/12 22:45	12/5/12	
1,3-Dichlorobenzene	0.346 U	5.76	0.346	1	12/05/12 22:45	12/5/12	
1,4-Dichlorobenzene	0.116 U	5.76	0.116	1	12/05/12 22:45	12/5/12	
2-Butanone (MEK)	1.85 U	28.8	1.85	1	12/05/12 22:45	12/5/12	
2-Hexanone	2.54 U	11.5	2.54	1	12/05/12 22:45	12/5/12	
4-Methyl-2-pentanone (MIBK)	1.73 U	11.5	1.73	1	12/05/12 22:45	12/5/12	
Acetone	13.4 I	144	2.65	1	12/05/12 22:45	12/5/12	
Benzene	0.196 U	5.76	0.196	1	12/05/12 22:45	12/5/12	
Bromochloromethane	0.692 U	5.76	0.692	1	12/05/12 22:45	12/5/12	
Bromodichloromethane	0.427 U	5.76	0.427	1	12/05/12 22:45	12/5/12	
Bromoform	0.392 U	5.76	0.392	1	12/05/12 22:45	12/5/12	
Bromomethane	0.311 U	5.76	0.311	1	12/05/12 22:45	12/5/12	
Carbon Disulfide	0.922 U	11.5	0.922	1	12/05/12 22:45	12/5/12	
Carbon Tetrachloride	0.219 U	5.76	0.219	1	12/05/12 22:45	12/5/12	
Chlorobenzene	0.162 U	5.76	0.162	1	12/05/12 22:45	12/5/12	
Chloroethane	0.381 U	5.76	0.381	1	12/05/12 22:45	12/5/12	
Chloroform	0.208 U	5.76	0.208	1	12/05/12 22:45	12/5/12	
Chloromethane	0.242 U	5.76	0.242	1	12/05/12 22:45	12/5/12	
cis-1,2-Dichloroethene	0.381 U	5.76	0.381	1	12/05/12 22:45	12/5/12	
cis-1,3-Dichloropropene	0.162 U	5.76	0.162	1	12/05/12 22:45	12/5/12	
Dibromochloromethane	0.254 U	5.76	0.254	1	12/05/12 22:45	12/5/12	
Dibromomethane	0.450 U	5.76	0.450	1	12/05/12 22:45	12/5/12	
Dichlorodifluoromethane	0.208 U	23.0	0.208	1	12/05/12 22:45	12/5/12	
Ethylbenzene	0.139 U	5.76	0.139	1	12/05/12 22:45	12/5/12	
Iodomethane	1.27 U	11.5	1.27	1	12/05/12 22:45	12/5/12	
m,p-Xylenes	0.242 U	11.5	0.242	1	12/05/12 22:45	12/5/12	
Methyl tert-Butyl Ether	0.300 U	5.76	0.300	1	12/05/12 22:45	12/5/12	
Methylene Chloride	1.60 IV	11.5	0.358	1	12/05/12 22:45	12/5/12	
o-Xylene	0.185 U	5.76	0.185	1	12/05/12 22:45	12/5/12	
Styrene	0.311 U	5.76	0.311	1	12/05/12 22:45	12/5/12	
Tetrachloroethene (PCE)	0.288 U	5.76	0.288	1	12/05/12 22:45	12/5/12	
Toluene	0.311 U	5.76	0.311	1	12/05/12 22:45	12/5/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SS03-0102-112812
Lab Code: J1205834-001

Service Request: J1205834
Date Collected: 11/28/12 09:15
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
trans-1,2-Dichloroethene	0.450 U	5.76	0.450	1	12/05/12 22:45	12/5/12	
trans-1,3-Dichloropropene	0.254 U	5.76	0.254	1	12/05/12 22:45	12/5/12	
trans-1,4-Dichloro-2-butene	0.622 U	23.0	0.622	1	12/05/12 22:45	12/5/12	
Trichloroethene (TCE)	0.288 U	5.76	0.288	1	12/05/12 22:45	12/5/12	
Trichlorofluoromethane	0.242 U	23.0	0.242	1	12/05/12 22:45	12/5/12	
Vinyl Acetate	1.39 U	11.5	1.39	1	12/05/12 22:45	12/5/12	
Vinyl Chloride	0.300 U	5.76	0.300	1	12/05/12 22:45	12/5/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	103	80 - 120	12/05/12 22:45	
4-Bromofluorobenzene	99	64 - 135	12/05/12 22:45	
Dibromofluoromethane	101	74 - 125	12/05/12 22:45	
Toluene-d8	99	46 - 156	12/05/12 22:45	

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Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SS03-0102-112812
Lab Code: J1205834-001

Service Request: J1205834
Date Collected: 11/28/12 09:15
Date Received: 11/29/12 10:00

Units: ug/Kg

Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	68.4 U	184	68.4	1	12/05/12 07:07	12/3/12	
1,2-Dichlorobenzene	34.8 U	184	34.8	1	12/05/12 07:07	12/3/12	
1,3-Dichlorobenzene	41.3 U	184	41.3	1	12/05/12 07:07	12/3/12	
1,4-Dichlorobenzene	44.5 U	184	44.5	1	12/05/12 07:07	12/3/12	
1-Methylnaphthalene	71.7 U	184	71.7	1	12/05/12 07:07	12/3/12	
2,4,5-Trichlorophenol	61.9 U	184	61.9	1	12/05/12 07:07	12/3/12	
2,4,6-Trichlorophenol	54.3 U	184	54.3	1	12/05/12 07:07	12/3/12	
2,4-Dichlorophenol	68.4 U	184	68.4	1	12/05/12 07:07	12/3/12	
2,4-Dimethylphenol	90.1 U	184	90.1	1	12/05/12 07:07	12/3/12	
2,4-Dinitrophenol	25.0 U	727	25.0	1	12/05/12 07:07	12/3/12	
2,4-Dinitrotoluene	44.5 U	184	44.5	1	12/05/12 07:07	12/3/12	
2,6-Dinitrotoluene	52.1 U	184	52.1	1	12/05/12 07:07	12/3/12	
2-Chloronaphthalene	46.7 U	184	46.7	1	12/05/12 07:07	12/3/12	
2-Chlorophenol	38.0 U	184	38.0	1	12/05/12 07:07	12/3/12	
2-Methylnaphthalene	64.1 U	184	64.1	1	12/05/12 07:07	12/3/12	
2-Methylphenol	52.1 U	184	52.1	1	12/05/12 07:07	12/3/12	
2-Nitroaniline	55.4 U	184	55.4	1	12/05/12 07:07	12/3/12	
2-Nitrophenol	56.5 U	727	56.5	1	12/05/12 07:07	12/3/12	
3- and 4-Methylphenol Coelution	46.7 U	184	46.7	1	12/05/12 07:07	12/3/12	
3,3'-Dichlorobenzidine	92.3 U	727	92.3	1	12/05/12 07:07	12/3/12	
3-Nitroaniline	55.4 U	184	55.4	1	12/05/12 07:07	12/3/12	
4,6-Dinitro-2-methylphenol	52.1 U	184	52.1	1	12/05/12 07:07	12/3/12	
4-Bromophenyl Phenyl Ether	56.5 U	184	56.5	1	12/05/12 07:07	12/3/12	
4-Chloro-3-methylphenol	57.6 U	184	57.6	1	12/05/12 07:07	12/3/12	
4-Chloroaniline	74.9 U	184	74.9	1	12/05/12 07:07	12/3/12	
4-Chlorophenyl Phenyl Ether	56.5 U	184	56.5	1	12/05/12 07:07	12/3/12	
4-Nitroaniline	59.7 U	184	59.7	1	12/05/12 07:07	12/3/12	
4-Nitrophenol	60.8 U	727	60.8	1	12/05/12 07:07	12/3/12	
Acenaphthene	57.6 U	184	57.6	1	12/05/12 07:07	12/3/12	
Acenaphthylene	51.1 U	184	51.1	1	12/05/12 07:07	12/3/12	
Acetophenone	50.0 U	369	50.0	1	12/05/12 07:07	12/3/12	
Anthracene	46.7 U	184	46.7	1	12/05/12 07:07	12/3/12	
Benz(a)anthracene	51.1 U	184	51.1	1	12/05/12 07:07	12/3/12	
Benzo(a)pyrene	40.2 U	184	40.2	1	12/05/12 07:07	12/3/12	
Benzo(b)fluoranthene	28.3 U	184	28.3	1	12/05/12 07:07	12/3/12	
Benzo(g,h,i)perylene	56.5 U	184	56.5	1	12/05/12 07:07	12/3/12	
Benzo(k)fluoranthene	64.1 U	184	64.1	1	12/05/12 07:07	12/3/12	
Benzyl Alcohol	41.3 U	369	41.3	1	12/05/12 07:07	12/3/12	
Bis(2-chloroethoxy)methane	57.6 U	184	57.6	1	12/05/12 07:07	12/3/12	
Bis(2-chloroethyl) Ether	45.6 U	184	45.6	1	12/05/12 07:07	12/3/12	
Bis(2-chloroisopropyl) Ether	38.0 U	184	38.0	1	12/05/12 07:07	12/3/12	
Bis(2-ethylhexyl) Phthalate	47.8 U	184	47.8	1	12/05/12 07:07	12/3/12	
Butyl Benzyl Phthalate	51.1 U	369	51.1	1	12/05/12 07:07	12/3/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SS03-0102-112812
Lab Code: J1205834-001

Service Request: J1205834
Date Collected: 11/28/12 09:15
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	61.9 U	184	61.9	1	12/05/12 07:07	12/3/12	
Chrysene	48.9 U	184	48.9	1	12/05/12 07:07	12/3/12	
Dibenz(a,h)anthracene	50.0 U	184	50.0	1	12/05/12 07:07	12/3/12	
Dibenzofuran	50.0 U	184	50.0	1	12/05/12 07:07	12/3/12	
Diethyl Phthalate	55.4 U	184	55.4	1	12/05/12 07:07	12/3/12	
Dimethyl Phthalate	57.6 U	184	57.6	1	12/05/12 07:07	12/3/12	
Di-n-butyl Phthalate	36.9 U	184	36.9	1	12/05/12 07:07	12/3/12	
Di-n-octyl Phthalate	56.5 U	184	56.5	1	12/05/12 07:07	12/3/12	
Diphenylamine + n-Nitrosodiphenylamine	40.2 U	184	40.2	1	12/05/12 07:07	12/3/12	
Fluoranthene	52.1 U	184	52.1	1	12/05/12 07:07	12/3/12	
Fluorene	51.1 U	184	51.1	1	12/05/12 07:07	12/3/12	
Hexachlorobenzene	52.1 U	184	52.1	1	12/05/12 07:07	12/3/12	
Hexachlorobutadiene	59.7 U	184	59.7	1	12/05/12 07:07	12/3/12	
Hexachlorocyclopentadiene	36.9 U	184	36.9	1	12/05/12 07:07	12/3/12	
Hexachloroethane	33.7 U	184	33.7	1	12/05/12 07:07	12/3/12	
Indeno(1,2,3-cd)pyrene	44.5 U	184	44.5	1	12/05/12 07:07	12/3/12	
Isophorone	63.0 U	184	63.0	1	12/05/12 07:07	12/3/12	
Naphthalene	53.2 U	184	53.2	1	12/05/12 07:07	12/3/12	
Nitrobenzene	42.4 U	184	42.4	1	12/05/12 07:07	12/3/12	
N-Nitrosodi-n-propylamine	54.3 U	184	54.3	1	12/05/12 07:07	12/3/12	
Pentachlorophenol (PCP)	38.0 U	727	38.0	1	12/05/12 07:07	12/3/12	
Phenanthrene	45.6 U	184	45.6	1	12/05/12 07:07	12/3/12	
Phenol	50.0 U	184	50.0	1	12/05/12 07:07	12/3/12	
Pyrene	50.0 U	184	50.0	1	12/05/12 07:07	12/3/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	82	28 - 164	12/05/12 07:07	
2-Fluorobiphenyl	61	33 - 133	12/05/12 07:07	
2-Fluorophenol	77	10 - 126	12/05/12 07:07	
Nitrobenzene-d5	56	25 - 138	12/05/12 07:07	
Phenol-d6	63	10 - 170	12/05/12 07:07	
p-Terphenyl-d14	78	16 - 168	12/05/12 07:07	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SS03-0102-112812
Lab Code: J1205834-001

Service Request: J1205834
Date Collected: 11/28/12 09:15
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082
Prep Method: EPA 3550B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	9.06 U	32.2	9.06	1	12/04/12 05:01	12/1/12	
Aroclor 1221	6.68 U	32.2	6.68	1	12/04/12 05:01	12/1/12	
Aroclor 1232	21.6 U	32.2	21.6	1	12/04/12 05:01	12/1/12	
Aroclor 1242	8.89 U	32.2	8.89	1	12/04/12 05:01	12/1/12	
Aroclor 1248	16.1 U	32.2	16.1	1	12/04/12 05:01	12/1/12	
Aroclor 1254	12.2 U	32.2	12.2	1	12/04/12 05:01	12/1/12	
Aroclor 1260	9.30 U	32.2	9.30	1	12/04/12 05:01	12/1/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	92	10 - 258	12/04/12 05:01	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SS03-0102-112812
Lab Code: J1205834-001

Service Request: J1205834
Date Collected: 11/28/12 09:15
Date Received: 11/29/12 10:00

Units: mg/Kg
Basis: Dry

Petroleum-Range Organics by GC-FID for State of Florida

Analysis Method: FL-PRO
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
FL-PRO (C8 - C40)	2.04 U	20.3	2.04	1	12/04/12 22:09	12/4/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	90	62 - 109	12/04/12 22:09	
n-Nonatriacontane	98	60 - 118	12/04/12 22:09	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SS03-0102-112812
Lab Code: J1205834-001

Service Request: J1205834
Date Collected: 11/28/12 09:15
Date Received: 11/29/12 10:00

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total Recoverable	6010B	0.88	mg/Kg	0.49	0.12	1	12/04/12 17:46	12/3/12	
Cadmium, Total Recoverable	6010B	0.007 U	mg/Kg	0.24	0.007	1	12/04/12 17:46	12/3/12	
Chromium, Total Recoverable	6010B	1.36	mg/Kg	0.49	0.02	1	12/04/12 17:46	12/3/12	
Lead, Total Recoverable	6010B	0.68	mg/Kg	0.49	0.13	1	12/04/12 17:46	12/3/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SB03-0405-112812
Lab Code: J1205834-002

Service Request: J1205834
Date Collected: 11/28/12 09:47
Date Received: 11/29/12 10:00

Units: ug/Kg**Basis:** Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,1,2-Tetrachloroethane	0.483 U	5.89	0.483	1	12/05/12 23:14	12/5/12	
1,1,1-Trichloroethane (TCA)	0.271 U	5.89	0.271	1	12/05/12 23:14	12/5/12	
1,1,2,2-Tetrachloroethane	0.271 U	5.89	0.271	1	12/05/12 23:14	12/5/12	
1,1,2-Trichloroethane	0.460 U	5.89	0.460	1	12/05/12 23:14	12/5/12	
1,1-Dichloroethane (1,1-DCA)	0.366 U	5.89	0.366	1	12/05/12 23:14	12/5/12	
1,1-Dichloroethene (1,1-DCE)	0.813 U	5.89	0.813	1	12/05/12 23:14	12/5/12	
1,2,3-Trichloropropane	0.896 U	5.89	0.896	1	12/05/12 23:14	12/5/12	
1,2-Dibromo-3-chloropropane (DBCP)	0.625 U	11.8	0.625	1	12/05/12 23:14	12/5/12	
1,2-Dibromoethane (EDB)	0.684 U	5.89	0.684	1	12/05/12 23:14	12/5/12	
1,2-Dichlorobenzene	0.377 U	5.89	0.377	1	12/05/12 23:14	12/5/12	
1,2-Dichloroethane	0.354 U	5.89	0.354	1	12/05/12 23:14	12/5/12	
1,2-Dichloropropane	0.483 U	5.89	0.483	1	12/05/12 23:14	12/5/12	
1,3-Dichlorobenzene	0.354 U	5.89	0.354	1	12/05/12 23:14	12/5/12	
1,4-Dichlorobenzene	0.118 U	5.89	0.118	1	12/05/12 23:14	12/5/12	
2-Butanone (MEK)	1.89 U	29.5	1.89	1	12/05/12 23:14	12/5/12	
2-Hexanone	2.60 U	11.8	2.60	1	12/05/12 23:14	12/5/12	
4-Methyl-2-pentanone (MIBK)	1.77 U	11.8	1.77	1	12/05/12 23:14	12/5/12	
Acetone	2.71 U	147	2.71	1	12/05/12 23:14	12/5/12	
Benzene	0.201 U	5.89	0.201	1	12/05/12 23:14	12/5/12	
Bromochloromethane	0.707 U	5.89	0.707	1	12/05/12 23:14	12/5/12	
Bromodichloromethane	0.436 U	5.89	0.436	1	12/05/12 23:14	12/5/12	
Bromoform	0.401 U	5.89	0.401	1	12/05/12 23:14	12/5/12	
Bromomethane	0.319 U	5.89	0.319	1	12/05/12 23:14	12/5/12	
Carbon Disulfide	0.943 U	11.8	0.943	1	12/05/12 23:14	12/5/12	
Carbon Tetrachloride	0.224 U	5.89	0.224	1	12/05/12 23:14	12/5/12	
Chlorobenzene	0.165 U	5.89	0.165	1	12/05/12 23:14	12/5/12	
Chloroethane	0.389 U	5.89	0.389	1	12/05/12 23:14	12/5/12	
Chloroform	0.213 U	5.89	0.213	1	12/05/12 23:14	12/5/12	
Chloromethane	0.248 U	5.89	0.248	1	12/05/12 23:14	12/5/12	
cis-1,2-Dichloroethene	0.389 U	5.89	0.389	1	12/05/12 23:14	12/5/12	
cis-1,3-Dichloropropene	0.165 U	5.89	0.165	1	12/05/12 23:14	12/5/12	
Dibromochloromethane	0.260 U	5.89	0.260	1	12/05/12 23:14	12/5/12	
Dibromomethane	0.460 U	5.89	0.460	1	12/05/12 23:14	12/5/12	
Dichlorodifluoromethane	0.213 U	23.6	0.213	1	12/05/12 23:14	12/5/12	
Ethylbenzene	0.142 U	5.89	0.142	1	12/05/12 23:14	12/5/12	
Iodomethane	1.30 U	11.8	1.30	1	12/05/12 23:14	12/5/12	
m,p-Xylenes	0.248 U	11.8	0.248	1	12/05/12 23:14	12/5/12	
Methyl tert-Butyl Ether	0.307 U	5.89	0.307	1	12/05/12 23:14	12/5/12	
Methylene Chloride	4.75 IV	11.8	0.366	1	12/05/12 23:14	12/5/12	
o-Xylene	0.189 U	5.89	0.189	1	12/05/12 23:14	12/5/12	
Styrene	0.319 U	5.89	0.319	1	12/05/12 23:14	12/5/12	
Tetrachloroethene (PCE)	0.295 U	5.89	0.295	1	12/05/12 23:14	12/5/12	
Toluene	0.389 I	5.89	0.319	1	12/05/12 23:14	12/5/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SB03-0405-112812
Lab Code: J1205834-002

Service Request: J1205834
Date Collected: 11/28/12 09:47
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
trans-1,2-Dichloroethene	0.460 U	5.89	0.460	1	12/05/12 23:14	12/5/12	
trans-1,3-Dichloropropene	0.260 U	5.89	0.260	1	12/05/12 23:14	12/5/12	
trans-1,4-Dichloro-2-butene	0.637 U	23.6	0.637	1	12/05/12 23:14	12/5/12	
Trichloroethene (TCE)	0.295 U	5.89	0.295	1	12/05/12 23:14	12/5/12	
Trichlorofluoromethane	0.248 U	23.6	0.248	1	12/05/12 23:14	12/5/12	
Vinyl Acetate	1.42 U	11.8	1.42	1	12/05/12 23:14	12/5/12	
Vinyl Chloride	0.307 U	5.89	0.307	1	12/05/12 23:14	12/5/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	102	80 - 120	12/05/12 23:14	
4-Bromofluorobenzene	100	64 - 135	12/05/12 23:14	
Dibromofluoromethane	100	74 - 125	12/05/12 23:14	
Toluene-d8	100	46 - 156	12/05/12 23:14	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SB03-0405-112812
Lab Code: J1205834-002

Service Request: J1205834
Date Collected: 11/28/12 09:47
Date Received: 11/29/12 10:00

Units: ug/Kg**Basis:** Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	406 U	1090	406	5	12/05/12 07:45	12/3/12	
1,2-Dichlorobenzene	206 U	1090	206	5	12/05/12 07:45	12/3/12	
1,3-Dichlorobenzene	245 U	1090	245	5	12/05/12 07:45	12/3/12	
1,4-Dichlorobenzene	264 U	1090	264	5	12/05/12 07:45	12/3/12	
1-Methylnaphthalene	425 U	1090	425	5	12/05/12 07:45	12/3/12	
2,4,5-Trichlorophenol	367 U	1090	367	5	12/05/12 07:45	12/3/12	
2,4,6-Trichlorophenol	322 U	1090	322	5	12/05/12 07:45	12/3/12	
2,4-Dichlorophenol	406 U	1090	406	5	12/05/12 07:45	12/3/12	
2,4-Dimethylphenol	534 U	1090	534	5	12/05/12 07:45	12/3/12	
2,4-Dinitrophenol	148 U	4310	148	5	12/05/12 07:45	12/3/12	
2,4-Dinitrotoluene	264 U	1090	264	5	12/05/12 07:45	12/3/12	
2,6-Dinitrotoluene	309 U	1090	309	5	12/05/12 07:45	12/3/12	
2-Chloronaphthalene	277 U	1090	277	5	12/05/12 07:45	12/3/12	
2-Chlorophenol	226 U	1090	226	5	12/05/12 07:45	12/3/12	
2-Methylnaphthalene	380 U	1090	380	5	12/05/12 07:45	12/3/12	
2-Methylphenol	309 U	1090	309	5	12/05/12 07:45	12/3/12	
2-Nitroaniline	328 U	1090	328	5	12/05/12 07:45	12/3/12	
2-Nitrophenol	335 U	4310	335	5	12/05/12 07:45	12/3/12	
3- and 4-Methylphenol Coelution	277 U	1090	277	5	12/05/12 07:45	12/3/12	
3,3'-Dichlorobenzidine	547 U	4310	547	5	12/05/12 07:45	12/3/12	
3-Nitroaniline	328 U	1090	328	5	12/05/12 07:45	12/3/12	
4,6-Dinitro-2-methylphenol	309 U	1090	309	5	12/05/12 07:45	12/3/12	
4-Bromophenyl Phenyl Ether	335 U	1090	335	5	12/05/12 07:45	12/3/12	
4-Chloro-3-methylphenol	341 U	1090	341	5	12/05/12 07:45	12/3/12	
4-Chloroaniline	444 U	1090	444	5	12/05/12 07:45	12/3/12	
4-Chlorophenyl Phenyl Ether	335 U	1090	335	5	12/05/12 07:45	12/3/12	
4-Nitroaniline	354 U	1090	354	5	12/05/12 07:45	12/3/12	
4-Nitrophenol	361 U	4310	361	5	12/05/12 07:45	12/3/12	
Acenaphthene	341 U	1090	341	5	12/05/12 07:45	12/3/12	
Acenaphthylene	303 U	1090	303	5	12/05/12 07:45	12/3/12	
Acetophenone	296 U	2190	296	5	12/05/12 07:45	12/3/12	
Anthracene	277 U	1090	277	5	12/05/12 07:45	12/3/12	
Benz(a)anthracene	303 U	1090	303	5	12/05/12 07:45	12/3/12	
Benzo(a)pyrene	238 U	1090	238	5	12/05/12 07:45	12/3/12	
Benzo(b)fluoranthene	168 U	1090	168	5	12/05/12 07:45	12/3/12	
Benzo(g,h,i)perylene	335 U	1090	335	5	12/05/12 07:45	12/3/12	
Benzo(k)fluoranthene	380 U	1090	380	5	12/05/12 07:45	12/3/12	
Benzyl Alcohol	245 U	2190	245	5	12/05/12 07:45	12/3/12	
Bis(2-chloroethoxy)methane	341 U	1090	341	5	12/05/12 07:45	12/3/12	
Bis(2-chloroethyl) Ether	271 U	1090	271	5	12/05/12 07:45	12/3/12	
Bis(2-chloroisopropyl) Ether	226 U	1090	226	5	12/05/12 07:45	12/3/12	
Bis(2-ethylhexyl) Phthalate	283 U	1090	283	5	12/05/12 07:45	12/3/12	
Butyl Benzyl Phthalate	303 U	2190	303	5	12/05/12 07:45	12/3/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SB03-0405-112812
Lab Code: J1205834-002

Service Request: J1205834
Date Collected: 11/28/12 09:47
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	367 U	1090	367	5	12/05/12 07:45	12/3/12	
Chrysene	290 U	1090	290	5	12/05/12 07:45	12/3/12	
Dibenz(a,h)anthracene	296 U	1090	296	5	12/05/12 07:45	12/3/12	
Dibenzofuran	296 U	1090	296	5	12/05/12 07:45	12/3/12	
Diethyl Phthalate	328 U	1090	328	5	12/05/12 07:45	12/3/12	
Dimethyl Phthalate	341 U	1090	341	5	12/05/12 07:45	12/3/12	
Di-n-butyl Phthalate	219 U	1090	219	5	12/05/12 07:45	12/3/12	
Di-n-octyl Phthalate	335 U	1090	335	5	12/05/12 07:45	12/3/12	
Diphenylamine + n-Nitrosodiphenylamine	238 U	1090	238	5	12/05/12 07:45	12/3/12	
Fluoranthene	309 U	1090	309	5	12/05/12 07:45	12/3/12	
Fluorene	303 U	1090	303	5	12/05/12 07:45	12/3/12	
Hexachlorobenzene	309 U	1090	309	5	12/05/12 07:45	12/3/12	
Hexachlorobutadiene	354 U	1090	354	5	12/05/12 07:45	12/3/12	
Hexachlorocyclopentadiene	219 U	1090	219	5	12/05/12 07:45	12/3/12	
Hexachloroethane	200 U	1090	200	5	12/05/12 07:45	12/3/12	
Indeno(1,2,3-cd)pyrene	264 U	1090	264	5	12/05/12 07:45	12/3/12	
Isophorone	373 U	1090	373	5	12/05/12 07:45	12/3/12	
Naphthalene	316 U	1090	316	5	12/05/12 07:45	12/3/12	
Nitrobenzene	251 U	1090	251	5	12/05/12 07:45	12/3/12	
N-Nitrosodi-n-propylamine	322 U	1090	322	5	12/05/12 07:45	12/3/12	
Pentachlorophenol (PCP)	226 U	4310	226	5	12/05/12 07:45	12/3/12	
Phenanthrene	271 U	1090	271	5	12/05/12 07:45	12/3/12	
Phenol	296 U	1090	296	5	12/05/12 07:45	12/3/12	
Pyrene	296 U	1090	296	5	12/05/12 07:45	12/3/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	65	28 - 164	12/05/12 07:45	
2-Fluorobiphenyl	60	33 - 133	12/05/12 07:45	
2-Fluorophenol	61	10 - 126	12/05/12 07:45	
Nitrobenzene-d5	48	25 - 138	12/05/12 07:45	
Phenol-d6	50	10 - 170	12/05/12 07:45	
p-Terphenyl-d14	63	16 - 168	12/05/12 07:45	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SB03-0405-112812
Lab Code: J1205834-002

Service Request: J1205834
Date Collected: 11/28/12 09:47
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082
Prep Method: EPA 3550B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	9.93 U	36.2	9.93	1	12/04/12 05:27	12/1/12	
Aroclor 1221	7.32 U	36.2	7.32	1	12/04/12 05:27	12/1/12	
Aroclor 1232	23.7 U	36.2	23.7	1	12/04/12 05:27	12/1/12	
Aroclor 1242	9.75 U	36.2	9.75	1	12/04/12 05:27	12/1/12	
Aroclor 1248	17.7 U	36.2	17.7	1	12/04/12 05:27	12/1/12	
Aroclor 1254	13.4 U	36.2	13.4	1	12/04/12 05:27	12/1/12	
Aroclor 1260	10.2 U	36.2	10.2	1	12/04/12 05:27	12/1/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	50	10 - 258	12/04/12 05:27	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SB03-0405-112812
Lab Code: J1205834-002

Service Request: J1205834
Date Collected: 11/28/12 09:47
Date Received: 11/29/12 10:00

Units: mg/Kg
Basis: Dry

Petroleum-Range Organics by GC-FID for State of Florida

Analysis Method: FL-PRO
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
FL-PRO (C8 - C40)	220	24.1	2.41	1	12/04/12 22:37	12/4/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	97	62 - 109	12/04/12 22:37	
n-Nonatriacontane	102	60 - 118	12/04/12 22:37	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SB03-0405-112812
Lab Code: J1205834-002

Service Request: J1205834
Date Collected: 11/28/12 09:47
Date Received: 11/29/12 10:00

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total Recoverable	6010B	1.40	mg/Kg	0.58	0.14	1	12/04/12 17:55	12/3/12	
Cadmium, Total Recoverable	6010B	0.009 U	mg/Kg	0.29	0.009	1	12/04/12 17:55	12/3/12	
Chromium, Total Recoverable	6010B	4.83	mg/Kg	0.58	0.03	1	12/04/12 17:55	12/3/12	
Lead, Total Recoverable	6010B	8.04	mg/Kg	0.58	0.16	1	12/04/12 17:55	12/3/12	

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Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SS02-0102-112812
Lab Code: J1205834-003

Service Request: J1205834
Date Collected: 11/28/12 10:45
Date Received: 11/29/12 10:00

Units: ug/Kg**Basis:** Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,1,2-Tetrachloroethane	0.410 U	4.89	0.410	1	12/05/12 23:42	12/5/12	
1,1,1-Trichloroethane (TCA)	0.230 U	4.89	0.230	1	12/05/12 23:42	12/5/12	
1,1,2,2-Tetrachloroethane	0.230 U	4.89	0.230	1	12/05/12 23:42	12/5/12	
1,1,2-Trichloroethane	0.390 U	4.89	0.390	1	12/05/12 23:42	12/5/12	
1,1-Dichloroethane (1,1-DCA)	0.310 U	4.89	0.310	1	12/05/12 23:42	12/5/12	
1,1-Dichloroethene (1,1-DCE)	0.690 U	4.89	0.690	1	12/05/12 23:42	12/5/12	
1,2,3-Trichloropropane	0.760 U	4.89	0.760	1	12/05/12 23:42	12/5/12	
1,2-Dibromo-3-chloropropane (DBCP)	0.530 U	9.77	0.530	1	12/05/12 23:42	12/5/12	
1,2-Dibromoethane (EDB)	0.580 U	4.89	0.580	1	12/05/12 23:42	12/5/12	
1,2-Dichlorobenzene	0.320 U	4.89	0.320	1	12/05/12 23:42	12/5/12	
1,2-Dichloroethane	0.300 U	4.89	0.300	1	12/05/12 23:42	12/5/12	
1,2-Dichloropropane	0.410 U	4.89	0.410	1	12/05/12 23:42	12/5/12	
1,3-Dichlorobenzene	0.300 U	4.89	0.300	1	12/05/12 23:42	12/5/12	
1,4-Dichlorobenzene	0.100 U	4.89	0.100	1	12/05/12 23:42	12/5/12	
2-Butanone (MEK)	1.60 U	24.4	1.60	1	12/05/12 23:42	12/5/12	
2-Hexanone	2.20 U	9.77	2.20	1	12/05/12 23:42	12/5/12	
4-Methyl-2-pentanone (MIBK)	1.50 U	9.77	1.50	1	12/05/12 23:42	12/5/12	
Acetone	13.4 I	122	2.30	1	12/05/12 23:42	12/5/12	
Benzene	0.170 U	4.89	0.170	1	12/05/12 23:42	12/5/12	
Bromochloromethane	0.600 U	4.89	0.600	1	12/05/12 23:42	12/5/12	
Bromodichloromethane	0.370 U	4.89	0.370	1	12/05/12 23:42	12/5/12	
Bromoform	0.340 U	4.89	0.340	1	12/05/12 23:42	12/5/12	
Bromomethane	0.270 U	4.89	0.270	1	12/05/12 23:42	12/5/12	
Carbon Disulfide	0.800 U	9.77	0.800	1	12/05/12 23:42	12/5/12	
Carbon Tetrachloride	0.190 U	4.89	0.190	1	12/05/12 23:42	12/5/12	
Chlorobenzene	0.140 U	4.89	0.140	1	12/05/12 23:42	12/5/12	
Chloroethane	0.330 U	4.89	0.330	1	12/05/12 23:42	12/5/12	
Chloroform	0.180 U	4.89	0.180	1	12/05/12 23:42	12/5/12	
Chloromethane	0.210 U	4.89	0.210	1	12/05/12 23:42	12/5/12	
cis-1,2-Dichloroethene	0.330 U	4.89	0.330	1	12/05/12 23:42	12/5/12	
cis-1,3-Dichloropropene	0.140 U	4.89	0.140	1	12/05/12 23:42	12/5/12	
Dibromochloromethane	0.220 U	4.89	0.220	1	12/05/12 23:42	12/5/12	
Dibromomethane	0.390 U	4.89	0.390	1	12/05/12 23:42	12/5/12	
Dichlorodifluoromethane	0.180 U	19.5	0.180	1	12/05/12 23:42	12/5/12	
Ethylbenzene	0.120 U	4.89	0.120	1	12/05/12 23:42	12/5/12	
Iodomethane	1.10 U	9.77	1.10	1	12/05/12 23:42	12/5/12	
m,p-Xylenes	0.210 U	9.77	0.210	1	12/05/12 23:42	12/5/12	
Methyl tert-Butyl Ether	0.260 U	4.89	0.260	1	12/05/12 23:42	12/5/12	
Methylene Chloride	2.31 IV	9.77	0.310	1	12/05/12 23:42	12/5/12	
o-Xylene	0.160 U	4.89	0.160	1	12/05/12 23:42	12/5/12	
Styrene	0.270 U	4.89	0.270	1	12/05/12 23:42	12/5/12	
Tetrachloroethene (PCE)	0.250 U	4.89	0.250	1	12/05/12 23:42	12/5/12	
Toluene	0.270 U	4.89	0.270	1	12/05/12 23:42	12/5/12	

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Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SS02-0102-112812
Lab Code: J1205834-003

Service Request: J1205834
Date Collected: 11/28/12 10:45
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
trans-1,2-Dichloroethene	0.390 U	4.89	0.390	1	12/05/12 23:42	12/5/12	
trans-1,3-Dichloropropene	0.220 U	4.89	0.220	1	12/05/12 23:42	12/5/12	
trans-1,4-Dichloro-2-butene	0.540 U	19.5	0.540	1	12/05/12 23:42	12/5/12	
Trichloroethene (TCE)	0.250 U	4.89	0.250	1	12/05/12 23:42	12/5/12	
Trichlorofluoromethane	0.210 U	19.5	0.210	1	12/05/12 23:42	12/5/12	
Vinyl Acetate	1.20 U	9.77	1.20	1	12/05/12 23:42	12/5/12	
Vinyl Chloride	0.260 U	4.89	0.260	1	12/05/12 23:42	12/5/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	103	80 - 120	12/05/12 23:42	
4-Bromofluorobenzene	97	64 - 135	12/05/12 23:42	
Dibromofluoromethane	98	74 - 125	12/05/12 23:42	
Toluene-d8	104	46 - 156	12/05/12 23:42	

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Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SS02-0102-112812
Lab Code: J1205834-003

Service Request: J1205834
Date Collected: 11/28/12 10:45
Date Received: 11/29/12 10:00

Units: ug/Kg**Basis:** Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	68.6 U	185	68.6	1	12/05/12 08:24	12/3/12	
1,2-Dichlorobenzene	34.9 U	185	34.9	1	12/05/12 08:24	12/3/12	
1,3-Dichlorobenzene	41.4 U	185	41.4	1	12/05/12 08:24	12/3/12	
1,4-Dichlorobenzene	44.7 U	185	44.7	1	12/05/12 08:24	12/3/12	
1-Methylnaphthalene	71.9 U	185	71.9	1	12/05/12 08:24	12/3/12	
2,4,5-Trichlorophenol	62.1 U	185	62.1	1	12/05/12 08:24	12/3/12	
2,4,6-Trichlorophenol	54.5 U	185	54.5	1	12/05/12 08:24	12/3/12	
2,4-Dichlorophenol	68.6 U	185	68.6	1	12/05/12 08:24	12/3/12	
2,4-Dimethylphenol	90.4 U	185	90.4	1	12/05/12 08:24	12/3/12	
2,4-Dinitrophenol	25.1 U	730	25.1	1	12/05/12 08:24	12/3/12	
2,4-Dinitrotoluene	44.7 U	185	44.7	1	12/05/12 08:24	12/3/12	
2,6-Dinitrotoluene	52.3 U	185	52.3	1	12/05/12 08:24	12/3/12	
2-Chloronaphthalene	46.9 U	185	46.9	1	12/05/12 08:24	12/3/12	
2-Chlorophenol	38.2 U	185	38.2	1	12/05/12 08:24	12/3/12	
2-Methylnaphthalene	64.3 U	185	64.3	1	12/05/12 08:24	12/3/12	
2-Methylphenol	52.3 U	185	52.3	1	12/05/12 08:24	12/3/12	
2-Nitroaniline	55.6 U	185	55.6	1	12/05/12 08:24	12/3/12	
2-Nitrophenol	56.7 U	730	56.7	1	12/05/12 08:24	12/3/12	
3- and 4-Methylphenol Coelution	46.9 U	185	46.9	1	12/05/12 08:24	12/3/12	
3,3'-Dichlorobenzidine	92.6 U	730	92.6	1	12/05/12 08:24	12/3/12	
3-Nitroaniline	55.6 U	185	55.6	1	12/05/12 08:24	12/3/12	
4,6-Dinitro-2-methylphenol	52.3 U	185	52.3	1	12/05/12 08:24	12/3/12	
4-Bromophenyl Phenyl Ether	56.7 U	185	56.7	1	12/05/12 08:24	12/3/12	
4-Chloro-3-methylphenol	57.8 U	185	57.8	1	12/05/12 08:24	12/3/12	
4-Chloroaniline	75.2 U	185	75.2	1	12/05/12 08:24	12/3/12	
4-Chlorophenyl Phenyl Ether	56.7 U	185	56.7	1	12/05/12 08:24	12/3/12	
4-Nitroaniline	59.9 U	185	59.9	1	12/05/12 08:24	12/3/12	
4-Nitrophenol	61.0 U	730	61.0	1	12/05/12 08:24	12/3/12	
Acenaphthene	57.8 U	185	57.8	1	12/05/12 08:24	12/3/12	
Acenaphthylene	51.2 U	185	51.2	1	12/05/12 08:24	12/3/12	
Acetophenone	50.1 U	370	50.1	1	12/05/12 08:24	12/3/12	
Anthracene	46.9 U	185	46.9	1	12/05/12 08:24	12/3/12	
Benz(a)anthracene	51.2 U	185	51.2	1	12/05/12 08:24	12/3/12	
Benzo(a)pyrene	40.3 U	185	40.3	1	12/05/12 08:24	12/3/12	
Benzo(b)fluoranthene	28.4 U	185	28.4	1	12/05/12 08:24	12/3/12	
Benzo(g,h,i)perylene	56.7 U	185	56.7	1	12/05/12 08:24	12/3/12	
Benzo(k)fluoranthene	64.3 U	185	64.3	1	12/05/12 08:24	12/3/12	
Benzyl Alcohol	41.4 U	370	41.4	1	12/05/12 08:24	12/3/12	
Bis(2-chloroethoxy)methane	57.8 U	185	57.8	1	12/05/12 08:24	12/3/12	
Bis(2-chloroethyl) Ether	45.8 U	185	45.8	1	12/05/12 08:24	12/3/12	
Bis(2-chloroisopropyl) Ether	38.2 U	185	38.2	1	12/05/12 08:24	12/3/12	
Bis(2-ethylhexyl) Phthalate	166 I	185	48.0	1	12/05/12 08:24	12/3/12	
Butyl Benzyl Phthalate	51.2 U	370	51.2	1	12/05/12 08:24	12/3/12	

COLUMBIA ANALYTICAL SERVICES, INC.

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Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SS02-0102-112812
Lab Code: J1205834-003

Service Request: J1205834
Date Collected: 11/28/12 10:45
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	62.1 U	185	62.1	1	12/05/12 08:24	12/3/12	
Chrysene	49.0 U	185	49.0	1	12/05/12 08:24	12/3/12	
Dibenz(a,h)anthracene	50.1 U	185	50.1	1	12/05/12 08:24	12/3/12	
Dibenzofuran	50.1 U	185	50.1	1	12/05/12 08:24	12/3/12	
Diethyl Phthalate	55.6 U	185	55.6	1	12/05/12 08:24	12/3/12	
Dimethyl Phthalate	57.8 U	185	57.8	1	12/05/12 08:24	12/3/12	
Di-n-butyl Phthalate	37.1 U	185	37.1	1	12/05/12 08:24	12/3/12	
Di-n-octyl Phthalate	56.7 U	185	56.7	1	12/05/12 08:24	12/3/12	
Diphenylamine + n-Nitrosodiphenylamine	40.3 U	185	40.3	1	12/05/12 08:24	12/3/12	
Fluoranthene	52.3 U	185	52.3	1	12/05/12 08:24	12/3/12	
Fluorene	51.2 U	185	51.2	1	12/05/12 08:24	12/3/12	
Hexachlorobenzene	52.3 U	185	52.3	1	12/05/12 08:24	12/3/12	
Hexachlorobutadiene	59.9 U	185	59.9	1	12/05/12 08:24	12/3/12	
Hexachlorocyclopentadiene	37.1 U	185	37.1	1	12/05/12 08:24	12/3/12	
Hexachloroethane	33.8 U	185	33.8	1	12/05/12 08:24	12/3/12	
Indeno(1,2,3-cd)pyrene	44.7 U	185	44.7	1	12/05/12 08:24	12/3/12	
Isophorone	63.2 U	185	63.2	1	12/05/12 08:24	12/3/12	
Naphthalene	53.4 U	185	53.4	1	12/05/12 08:24	12/3/12	
Nitrobenzene	42.5 U	185	42.5	1	12/05/12 08:24	12/3/12	
N-Nitrosodi-n-propylamine	54.5 U	185	54.5	1	12/05/12 08:24	12/3/12	
Pentachlorophenol (PCP)	38.2 U	730	38.2	1	12/05/12 08:24	12/3/12	
Phenanthrene	45.8 U	185	45.8	1	12/05/12 08:24	12/3/12	
Phenol	50.1 U	185	50.1	1	12/05/12 08:24	12/3/12	
Pyrene	644	185	50.1	1	12/05/12 08:24	12/3/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	190	28 - 164	12/05/12 08:24	*
2-Fluorobiphenyl	117	33 - 133	12/05/12 08:24	
2-Fluorophenol	82	10 - 126	12/05/12 08:24	
Nitrobenzene-d5	68	25 - 138	12/05/12 08:24	
Phenol-d6	67	10 - 170	12/05/12 08:24	
p-Terphenyl-d14	152	16 - 168	12/05/12 08:24	

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Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SS02-0102-112812
Lab Code: J1205834-003

Service Request: J1205834
Date Collected: 11/28/12 10:45
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082
Prep Method: EPA 3550B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	9.38 U	34.1	9.38	1	12/04/12 05:53	12/1/12	
Aroclor 1221	6.92 U	34.1	6.92	1	12/04/12 05:53	12/1/12	
Aroclor 1232	22.4 U	34.1	22.4	1	12/04/12 05:53	12/1/12	
Aroclor 1242	9.20 U	34.1	9.20	1	12/04/12 05:53	12/1/12	
Aroclor 1248	16.7 U	34.1	16.7	1	12/04/12 05:53	12/1/12	
Aroclor 1254	12.6 U	34.1	12.6	1	12/04/12 05:53	12/1/12	
Aroclor 1260	13.4 I	34.1	9.63	1	12/04/12 05:53	12/1/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	43	10 - 258	12/04/12 05:53	

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Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SS02-0102-112812
Lab Code: J1205834-003

Service Request: J1205834
Date Collected: 11/28/12 10:45
Date Received: 11/29/12 10:00

Units: mg/Kg
Basis: Dry

Petroleum-Range Organics by GC-FID for State of Florida

Analysis Method: FL-PRO
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
FL-PRO (C8 - C40)	2970	98.9	10.0	5	12/05/12 13:04	12/4/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	66	62 - 109	12/04/12 23:06	
n-Nonatriacontane	84	60 - 118	12/04/12 23:06	

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Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1241-SS02-0102-112812
Lab Code: J1205834-003

Service Request: J1205834
Date Collected: 11/28/12 10:45
Date Received: 11/29/12 10:00
Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total Recoverable	6010B	0.81	mg/Kg	0.39	0.12	1	12/04/12 18:12	12/3/12	
Cadmium, Total Recoverable	6010B	0.007 U	mg/Kg	0.19	0.007	1	12/04/12 18:12	12/3/12	
Chromium, Total Recoverable	6010B	3.82	mg/Kg	0.39	0.02	1	12/04/12 18:12	12/3/12	
Lead, Total Recoverable	6010B	4.63	mg/Kg	0.39	0.13	1	12/04/12 18:12	12/3/12	

COLUMBIA ANALYTICAL SERVICES, INC.

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Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water
Sample Name: MPT-1241-GW03-112812
Lab Code: J1205834-004

Service Request: J1205834
Date Collected: 11/28/12 12:10
Date Received: 11/29/12 10:00

Units: ug/L**Basis:** NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	1.0	0.19	1	12/01/12 03:51	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/01/12 03:51	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/01/12 03:51	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/01/12 03:51	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/01/12 03:51	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/01/12 03:51	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	12/01/12 03:51	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	5.0	2.3	1	12/01/12 03:51	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	12/01/12 03:51	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/01/12 03:51	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/01/12 03:51	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/01/12 03:51	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/01/12 03:51	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/01/12 03:51	
2-Butanone (MEK)	3.8 U	10	3.8	1	12/01/12 03:51	
2-Hexanone	2.2 U	25	2.2	1	12/01/12 03:51	
4-Methyl-2-pentanone (MIBK)	1.1 U	25	1.1	1	12/01/12 03:51	
Acetone	5.6 U	50	5.6	1	12/01/12 03:51	
Benzene	0.21 U	1.0	0.21	1	12/01/12 03:51	
Bromochloromethane	0.27 U	5.0	0.27	1	12/01/12 03:51	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/01/12 03:51	
Bromoform	0.42 U	2.0	0.42	1	12/01/12 03:51	
Bromomethane	0.23 U	5.0	0.23	1	12/01/12 03:51	
Carbon Disulfide	2.4 U	10	2.4	1	12/01/12 03:51	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/01/12 03:51	
Chlorobenzene	0.16 U	1.0	0.16	1	12/01/12 03:51	
Chloroethane	0.52 U	5.0	0.52	1	12/01/12 03:51	
Chloroform	0.35 U	1.0	0.35	1	12/01/12 03:51	
Chloromethane	0.36 U	1.0	0.36	1	12/01/12 03:51	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/01/12 03:51	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/01/12 03:51	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/01/12 03:51	
Dibromomethane	0.36 U	5.0	0.36	1	12/01/12 03:51	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/01/12 03:51	
Ethylbenzene	0.21 U	1.0	0.21	1	12/01/12 03:51	
Iodomethane	2.7 U	5.0	2.7	1	12/01/12 03:51	
m,p-Xylenes	0.31 U	2.0	0.31	1	12/01/12 03:51	
Methyl tert-Butyl Ether	0.24 U	2.0	0.24	1	12/01/12 03:51	
Methylene Chloride	0.21 U	5.0	0.21	1	12/01/12 03:51	
o-Xylene	0.14 U	1.0	0.14	1	12/01/12 03:51	
Styrene	0.29 U	1.0	0.29	1	12/01/12 03:51	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/01/12 03:51	
Toluene	0.19 U	1.0	0.19	1	12/01/12 03:51	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water
Sample Name: MPT-1241-GW03-112812
Lab Code: J1205834-004

Service Request: J1205834
Date Collected: 11/28/12 12:10
Date Received: 11/29/12 10:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/01/12 03:51	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/01/12 03:51	
trans-1,4-Dichloro-2-butene	2.2 U	20	2.2	1	12/01/12 03:51	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/01/12 03:51	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/01/12 03:51	
Vinyl Acetate	1.9 U	10	1.9	1	12/01/12 03:51	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/01/12 03:51	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	101	72 - 121	12/01/12 03:51	
4-Bromofluorobenzene	107	86 - 113	12/01/12 03:51	
Dibromofluoromethane	100	86 - 112	12/01/12 03:51	
Toluene-d8	107	88 - 115	12/01/12 03:51	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water
Sample Name: MPT-1241-GW03-112812
Lab Code: J1205834-004

Service Request: J1205834
Date Collected: 11/28/12 12:10
Date Received: 11/29/12 10:00

Units: ug/L**Basis:** NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	0.625 U	5.21	0.625	1	12/01/12 12:45	11/29/12	
1,2-Dichlorobenzene	0.667 U	5.21	0.667	1	12/01/12 12:45	11/29/12	
1,3-Dichlorobenzene	0.959 U	5.21	0.959	1	12/01/12 12:45	11/29/12	
1,4-Dichlorobenzene	0.948 U	5.21	0.948	1	12/01/12 12:45	11/29/12	
1-Methylnaphthalene	0.761 U	5.21	0.761	1	12/01/12 12:45	11/29/12	
2,4,5-Trichlorophenol	1.36 U	5.21	1.36	1	12/01/12 12:45	11/29/12	
2,4,6-Trichlorophenol	0.928 U	5.21	0.928	1	12/01/12 12:45	11/29/12	
2,4-Dichlorophenol	1.25 U	5.21	1.25	1	12/01/12 12:45	11/29/12	
2,4-Dimethylphenol	1.57 U	5.21	1.57	1	12/01/12 12:45	11/29/12	
2,4-Dinitrophenol	0.792 U	20.8	0.792	1	12/01/12 12:45	11/29/12	
2,4-Dinitrotoluene	1.36 U	5.21	1.36	1	12/01/12 12:45	11/29/12	
2,6-Dinitrotoluene	1.15 U	5.21	1.15	1	12/01/12 12:45	11/29/12	
2-Chloronaphthalene	4.80 U	5.21	4.80	1	12/01/12 12:45	11/29/12	
2-Chlorophenol	1.25 U	5.21	1.25	1	12/01/12 12:45	11/29/12	
2-Methylnaphthalene	0.657 U	5.21	0.657	1	12/01/12 12:45	11/29/12	
2-Methylphenol	1.36 U	5.21	1.36	1	12/01/12 12:45	11/29/12	
2-Nitroaniline	1.57 U	5.21	1.57	1	12/01/12 12:45	11/29/12	
2-Nitrophenol	1.46 U	20.8	1.46	1	12/01/12 12:45	11/29/12	
3- and 4-Methylphenol Coelution	1.05 U	5.21	1.05	1	12/01/12 12:45	11/29/12	
3,3'-Dichlorobenzidine	1.46 U	20.8	1.46	1	12/01/12 12:45	11/29/12	
3-Nitroaniline	1.15 U	5.21	1.15	1	12/01/12 12:45	11/29/12	
4,6-Dinitro-2-methylphenol	1.05 U	20.8	1.05	1	12/01/12 12:45	11/29/12	
4-Bromophenyl Phenyl Ether	1.36 U	5.21	1.36	1	12/01/12 12:45	11/29/12	
4-Chloro-3-methylphenol	1.88 U	5.21	1.88	1	12/01/12 12:45	11/29/12	
4-Chloroaniline	1.46 U	5.21	1.46	1	12/01/12 12:45	11/29/12	
4-Chlorophenyl Phenyl Ether	1.00 U	5.21	1.00	1	12/01/12 12:45	11/29/12	
4-Nitroaniline	1.05 U	5.21	1.05	1	12/01/12 12:45	11/29/12	
4-Nitrophenol	1.88 U	20.8	1.88	1	12/01/12 12:45	11/29/12	
Acenaphthene	4.38 U	5.21	4.38	1	12/01/12 12:45	11/29/12	
Acenaphthylene	1.04 U	5.21	1.04	1	12/01/12 12:45	11/29/12	
Acetophenone	1.67 U	10.4	1.67	1	12/01/12 12:45	11/29/12	
Anthracene	1.67 U	5.21	1.67	1	12/01/12 12:45	11/29/12	
Benz(a)anthracene	1.05 U	5.21	1.05	1	12/01/12 12:45	11/29/12	
Benzo(a)pyrene	1.25 U	5.21	1.25	1	12/01/12 12:45	11/29/12	
Benzo(b)fluoranthene	1.05 U	5.21	1.05	1	12/01/12 12:45	11/29/12	
Benzo(g,h,i)perylene	1.46 U	5.21	1.46	1	12/01/12 12:45	11/29/12	
Benzo(k)fluoranthene	1.88 U	5.21	1.88	1	12/01/12 12:45	11/29/12	
Benzyl Alcohol	1.46 U	5.21	1.46	1	12/01/12 12:45	11/29/12	
Bis(2-chloroethoxy)methane	1.25 U	5.21	1.25	1	12/01/12 12:45	11/29/12	
Bis(2-chloroethyl) Ether	1.98 U	5.21	1.98	1	12/01/12 12:45	11/29/12	
Bis(2-chloroisopropyl) Ether	1.57 U	5.21	1.57	1	12/01/12 12:45	11/29/12	
Bis(2-ethylhexyl) Phthalate	1.57 U	5.21	1.57	1	12/01/12 12:45	11/29/12	
Butyl Benzyl Phthalate	0.896 U	10.4	0.896	1	12/01/12 12:45	11/29/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water
Sample Name: MPT-1241-GW03-112812
Lab Code: J1205834-004

Service Request: J1205834
Date Collected: 11/28/12 12:10
Date Received: 11/29/12 10:00

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	1.88 U	5.21	1.88	1	12/01/12 12:45	11/29/12	
Chrysene	1.25 U	5.21	1.25	1	12/01/12 12:45	11/29/12	
Dibenz(a,h)anthracene	1.57 U	5.21	1.57	1	12/01/12 12:45	11/29/12	
Dibenzofuran	1.36 U	5.21	1.36	1	12/01/12 12:45	11/29/12	
Diethyl Phthalate	1.78 U	5.21	1.78	1	12/01/12 12:45	11/29/12	
Dimethyl Phthalate	1.36 U	5.21	1.36	1	12/01/12 12:45	11/29/12	
Di-n-butyl Phthalate	2.30 U	5.21	2.30	1	12/01/12 12:45	11/29/12	
Di-n-octyl Phthalate	2.92 U	5.21	2.92	1	12/01/12 12:45	11/29/12	
Diphenylamine + n-Nitrosodiphenylamine	1.15 U	5.21	1.15	1	12/01/12 12:45	11/29/12	
Fluoranthene	1.46 U	5.21	1.46	1	12/01/12 12:45	11/29/12	
Fluorene	0.875 U	5.21	0.875	1	12/01/12 12:45	11/29/12	
Hexachlorobenzene	1.78 U	5.21	1.78	1	12/01/12 12:45	11/29/12	
Hexachlorobutadiene	1.25 U	5.21	1.25	1	12/01/12 12:45	11/29/12	
Hexachlorocyclopentadiene	0.521 U	5.21	0.521	1	12/01/12 12:45	11/29/12	
Hexachloroethane	0.844 U	5.21	0.844	1	12/01/12 12:45	11/29/12	
Indeno(1,2,3-cd)pyrene	1.78 U	5.21	1.78	1	12/01/12 12:45	11/29/12	
Isophorone	1.88 U	5.21	1.88	1	12/01/12 12:45	11/29/12	
Naphthalene	0.553 U	5.21	0.553	1	12/01/12 12:45	11/29/12	
Nitrobenzene	2.19 U	5.21	2.19	1	12/01/12 12:45	11/29/12	
N-Nitrosodi-n-propylamine	2.30 U	5.21	2.30	1	12/01/12 12:45	11/29/12	
Pentachlorophenol (PCP)	1.15 U	20.8	1.15	1	12/01/12 12:45	11/29/12	
Phenanthrene	1.46 U	5.21	1.46	1	12/01/12 12:45	11/29/12	
Phenol	0.615 U	5.21	0.615	1	12/01/12 12:45	11/29/12	
Pyrene	0.771 U	5.21	0.771	1	12/01/12 12:45	11/29/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	85	13 - 133	12/01/12 12:45	
2-Fluorobiphenyl	73	22 - 105	12/01/12 12:45	
2-Fluorophenol	60	10 - 69	12/01/12 12:45	*
Nitrobenzene-d5	66	10 - 123	12/01/12 12:45	
Phenol-d6	42	10 - 59	12/01/12 12:45	
p-Terphenyl-d14	80	20 - 128	12/01/12 12:45	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water

Service Request: J1205834
Date Collected: 11/28/12 12:10
Date Received: 11/29/12 10:00

Sample Name: MPT-1241-GW03-112812
Lab Code: J1205834-004

Units: ug/L
Basis: NA

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.131 U	0.503	0.131	1	12/04/12 09:45	12/3/12	
Aroclor 1221	0.292 U	0.503	0.292	1	12/04/12 09:45	12/3/12	
Aroclor 1232	0.202 U	0.503	0.202	1	12/04/12 09:45	12/3/12	
Aroclor 1242	0.131 U	0.503	0.131	1	12/04/12 09:45	12/3/12	
Aroclor 1248	0.262 U	0.503	0.262	1	12/04/12 09:45	12/3/12	
Aroclor 1254	0.332 U	0.503	0.332	1	12/04/12 09:45	12/3/12	
Aroclor 1260	0.269 U	0.503	0.269	1	12/04/12 09:45	12/3/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	99	10 - 151	12/04/12 09:45	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water

Service Request: J1205834
Date Collected: 11/28/12 12:10
Date Received: 11/29/12 10:00

Sample Name: MPT-1241-GW03-112812
Lab Code: J1205834-004

Units: mg/L
Basis: NA

Petroleum-Range Organics by GC-FID for State of Florida

Analysis Method: FL-PRO
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
FL-PRO (C8 - C40)	0.126 U	0.412	0.126	1	12/04/12 16:23	12/4/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	100	82 - 142	12/04/12 16:23	
n-Nonatriacontane	109	42 - 193	12/04/12 16:23	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water
Sample Name: MPT-1241-GW03-112812
Lab Code: J1205834-004

Service Request: J1205834
Date Collected: 11/28/12 12:10
Date Received: 11/29/12 10:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total Recoverable	6010B	7 I	ug/L	10	4	1	12/01/12 16:23	11/30/12	
Cadmium, Total Recoverable	6010B	0.2 U	ug/L	5.0	0.2	1	12/01/12 16:23	11/30/12	
Chromium, Total Recoverable	6010B	0.5 U	ug/L	10	0.5	1	12/01/12 16:23	11/30/12	
Lead, Total Recoverable	6010B	4 U	ug/L	10	4	1	12/01/12 16:23	11/30/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB01-0203-112812
Lab Code: J1205834-005

Service Request: J1205834
Date Collected: 11/28/12 14:00
Date Received: 11/29/12 10:00

Units: ug/Kg**Basis:** Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,1,2-Tetrachloroethane	0.473 U	5.76	0.473	1	12/06/12 00:11	12/5/12	
1,1,1-Trichloroethane (TCA)	0.266 U	5.76	0.266	1	12/06/12 00:11	12/5/12	
1,1,2,2-Tetrachloroethane	0.266 U	5.76	0.266	1	12/06/12 00:11	12/5/12	
1,1,2-Trichloroethane	0.450 U	5.76	0.450	1	12/06/12 00:11	12/5/12	
1,1-Dichloroethane (1,1-DCA)	0.358 U	5.76	0.358	1	12/06/12 00:11	12/5/12	
1,1-Dichloroethene (1,1-DCE)	0.796 U	5.76	0.796	1	12/06/12 00:11	12/5/12	
1,2,3-Trichloropropane	0.877 U	5.76	0.877	1	12/06/12 00:11	12/5/12	
1,2-Dibromo-3-chloropropane (DBCP)	0.611 U	11.5	0.611	1	12/06/12 00:11	12/5/12	
1,2-Dibromoethane (EDB)	0.669 U	5.76	0.669	1	12/06/12 00:11	12/5/12	
1,2-Dichlorobenzene	0.369 U	5.76	0.369	1	12/06/12 00:11	12/5/12	
1,2-Dichloroethane	0.346 U	5.76	0.346	1	12/06/12 00:11	12/5/12	
1,2-Dichloropropane	0.473 U	5.76	0.473	1	12/06/12 00:11	12/5/12	
1,3-Dichlorobenzene	0.346 U	5.76	0.346	1	12/06/12 00:11	12/5/12	
1,4-Dichlorobenzene	0.116 U	5.76	0.116	1	12/06/12 00:11	12/5/12	
2-Butanone (MEK)	1.85 U	28.8	1.85	1	12/06/12 00:11	12/5/12	
2-Hexanone	2.54 U	11.5	2.54	1	12/06/12 00:11	12/5/12	
4-Methyl-2-pentanone (MIBK)	1.73 U	11.5	1.73	1	12/06/12 00:11	12/5/12	
Acetone	2.66 U	144	2.66	1	12/06/12 00:11	12/5/12	
Benzene	0.196 U	5.76	0.196	1	12/06/12 00:11	12/5/12	
Bromochloromethane	0.692 U	5.76	0.692	1	12/06/12 00:11	12/5/12	
Bromodichloromethane	0.427 U	5.76	0.427	1	12/06/12 00:11	12/5/12	
Bromoform	0.392 U	5.76	0.392	1	12/06/12 00:11	12/5/12	
Bromomethane	0.312 U	5.76	0.312	1	12/06/12 00:11	12/5/12	
Carbon Disulfide	0.923 U	11.5	0.923	1	12/06/12 00:11	12/5/12	
Carbon Tetrachloride	0.220 U	5.76	0.220	1	12/06/12 00:11	12/5/12	
Chlorobenzene	0.162 U	5.76	0.162	1	12/06/12 00:11	12/5/12	
Chloroethane	0.381 U	5.76	0.381	1	12/06/12 00:11	12/5/12	
Chloroform	0.208 U	5.76	0.208	1	12/06/12 00:11	12/5/12	
Chloromethane	0.243 U	5.76	0.243	1	12/06/12 00:11	12/5/12	
cis-1,2-Dichloroethene	0.381 U	5.76	0.381	1	12/06/12 00:11	12/5/12	
cis-1,3-Dichloropropene	0.162 U	5.76	0.162	1	12/06/12 00:11	12/5/12	
Dibromochloromethane	0.254 U	5.76	0.254	1	12/06/12 00:11	12/5/12	
Dibromomethane	0.450 U	5.76	0.450	1	12/06/12 00:11	12/5/12	
Dichlorodifluoromethane	0.208 U	23.1	0.208	1	12/06/12 00:11	12/5/12	
Ethylbenzene	0.139 U	5.76	0.139	1	12/06/12 00:11	12/5/12	
Iodomethane	1.27 U	11.5	1.27	1	12/06/12 00:11	12/5/12	
m,p-Xylenes	0.243 U	11.5	0.243	1	12/06/12 00:11	12/5/12	
Methyl tert-Butyl Ether	0.300 U	5.76	0.300	1	12/06/12 00:11	12/5/12	
Methylene Chloride	3.05 IV	11.5	0.358	1	12/06/12 00:11	12/5/12	
o-Xylene	0.185 U	5.76	0.185	1	12/06/12 00:11	12/5/12	
Styrene	0.312 U	5.76	0.312	1	12/06/12 00:11	12/5/12	
Tetrachloroethene (PCE)	0.289 U	5.76	0.289	1	12/06/12 00:11	12/5/12	
Toluene	0.426 I	5.76	0.312	1	12/06/12 00:11	12/5/12	

COLUMBIA ANALYTICAL SERVICES, INC.

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Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB01-0203-112812
Lab Code: J1205834-005

Service Request: J1205834
Date Collected: 11/28/12 14:00
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
trans-1,2-Dichloroethene	0.450 U	5.76	0.450	1	12/06/12 00:11	12/5/12	
trans-1,3-Dichloropropene	0.254 U	5.76	0.254	1	12/06/12 00:11	12/5/12	
trans-1,4-Dichloro-2-butene	0.623 U	23.1	0.623	1	12/06/12 00:11	12/5/12	
Trichloroethene (TCE)	0.289 U	5.76	0.289	1	12/06/12 00:11	12/5/12	
Trichlorofluoromethane	0.243 U	23.1	0.243	1	12/06/12 00:11	12/5/12	
Vinyl Acetate	1.39 U	11.5	1.39	1	12/06/12 00:11	12/5/12	
Vinyl Chloride	0.300 U	5.76	0.300	1	12/06/12 00:11	12/5/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	102	80 - 120	12/06/12 00:11	
4-Bromofluorobenzene	99	64 - 135	12/06/12 00:11	
Dibromofluoromethane	97	74 - 125	12/06/12 00:11	
Toluene-d8	101	46 - 156	12/06/12 00:11	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB01-0203-112812
Lab Code: J1205834-005

Service Request: J1205834
Date Collected: 11/28/12 14:00
Date Received: 11/29/12 10:00

Units: ug/Kg

Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	70.3 U	190	70.3	1	12/05/12 09:03	12/3/12	
1,2-Dichlorobenzene	35.7 U	190	35.7	1	12/05/12 09:03	12/3/12	
1,3-Dichlorobenzene	42.4 U	190	42.4	1	12/05/12 09:03	12/3/12	
1,4-Dichlorobenzene	45.8 U	190	45.8	1	12/05/12 09:03	12/3/12	
1-Methylnaphthalene	73.7 U	190	73.7	1	12/05/12 09:03	12/3/12	
2,4,5-Trichlorophenol	63.6 U	190	63.6	1	12/05/12 09:03	12/3/12	
2,4,6-Trichlorophenol	55.8 U	190	55.8	1	12/05/12 09:03	12/3/12	
2,4-Dichlorophenol	70.3 U	190	70.3	1	12/05/12 09:03	12/3/12	
2,4-Dimethylphenol	92.6 U	190	92.6	1	12/05/12 09:03	12/3/12	
2,4-Dinitrophenol	25.7 U	747	25.7	1	12/05/12 09:03	12/3/12	
2,4-Dinitrotoluene	45.8 U	190	45.8	1	12/05/12 09:03	12/3/12	
2,6-Dinitrotoluene	53.6 U	190	53.6	1	12/05/12 09:03	12/3/12	
2-Chloronaphthalene	48.0 U	190	48.0	1	12/05/12 09:03	12/3/12	
2-Chlorophenol	39.1 U	190	39.1	1	12/05/12 09:03	12/3/12	
2-Methylnaphthalene	65.9 U	190	65.9	1	12/05/12 09:03	12/3/12	
2-Methylphenol	53.6 U	190	53.6	1	12/05/12 09:03	12/3/12	
2-Nitroaniline	56.9 U	190	56.9	1	12/05/12 09:03	12/3/12	
2-Nitrophenol	58.1 U	747	58.1	1	12/05/12 09:03	12/3/12	
3- and 4-Methylphenol Coelution	48.0 U	190	48.0	1	12/05/12 09:03	12/3/12	
3,3'-Dichlorobenzidine	94.9 U	747	94.9	1	12/05/12 09:03	12/3/12	
3-Nitroaniline	56.9 U	190	56.9	1	12/05/12 09:03	12/3/12	
4,6-Dinitro-2-methylphenol	53.6 U	190	53.6	1	12/05/12 09:03	12/3/12	
4-Bromophenyl Phenyl Ether	58.1 U	190	58.1	1	12/05/12 09:03	12/3/12	
4-Chloro-3-methylphenol	59.2 U	190	59.2	1	12/05/12 09:03	12/3/12	
4-Chloroaniline	77.0 U	190	77.0	1	12/05/12 09:03	12/3/12	
4-Chlorophenyl Phenyl Ether	58.1 U	190	58.1	1	12/05/12 09:03	12/3/12	
4-Nitroaniline	61.4 U	190	61.4	1	12/05/12 09:03	12/3/12	
4-Nitrophenol	62.5 U	747	62.5	1	12/05/12 09:03	12/3/12	
Acenaphthene	59.2 U	190	59.2	1	12/05/12 09:03	12/3/12	
Acenaphthylene	52.5 U	190	52.5	1	12/05/12 09:03	12/3/12	
Acetophenone	51.4 U	379	51.4	1	12/05/12 09:03	12/3/12	
Anthracene	48.0 U	190	48.0	1	12/05/12 09:03	12/3/12	
Benz(a)anthracene	52.5 U	190	52.5	1	12/05/12 09:03	12/3/12	
Benzo(a)pyrene	41.3 U	190	41.3	1	12/05/12 09:03	12/3/12	
Benzo(b)fluoranthene	29.1 U	190	29.1	1	12/05/12 09:03	12/3/12	
Benzo(g,h,i)perylene	58.1 U	190	58.1	1	12/05/12 09:03	12/3/12	
Benzo(k)fluoranthene	65.9 U	190	65.9	1	12/05/12 09:03	12/3/12	
Benzyl Alcohol	42.4 U	379	42.4	1	12/05/12 09:03	12/3/12	
Bis(2-chloroethoxy)methane	59.2 U	190	59.2	1	12/05/12 09:03	12/3/12	
Bis(2-chloroethyl) Ether	46.9 U	190	46.9	1	12/05/12 09:03	12/3/12	
Bis(2-chloroisopropyl) Ether	39.1 U	190	39.1	1	12/05/12 09:03	12/3/12	
Bis(2-ethylhexyl) Phthalate	49.1 U	190	49.1	1	12/05/12 09:03	12/3/12	
Butyl Benzyl Phthalate	52.5 U	379	52.5	1	12/05/12 09:03	12/3/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB01-0203-112812
Lab Code: J1205834-005

Service Request: J1205834
Date Collected: 11/28/12 14:00
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	63.6 U	190	63.6	1	12/05/12 09:03	12/3/12	
Chrysene	50.2 U	190	50.2	1	12/05/12 09:03	12/3/12	
Dibenz(a,h)anthracene	51.4 U	190	51.4	1	12/05/12 09:03	12/3/12	
Dibenzofuran	51.4 U	190	51.4	1	12/05/12 09:03	12/3/12	
Diethyl Phthalate	56.9 U	190	56.9	1	12/05/12 09:03	12/3/12	
Dimethyl Phthalate	59.2 U	190	59.2	1	12/05/12 09:03	12/3/12	
Di-n-butyl Phthalate	38.0 U	190	38.0	1	12/05/12 09:03	12/3/12	
Di-n-octyl Phthalate	58.1 U	190	58.1	1	12/05/12 09:03	12/3/12	
Diphenylamine + n-Nitrosodiphenylamine	41.3 U	190	41.3	1	12/05/12 09:03	12/3/12	
Fluoranthene	53.6 U	190	53.6	1	12/05/12 09:03	12/3/12	
Fluorene	52.5 U	190	52.5	1	12/05/12 09:03	12/3/12	
Hexachlorobenzene	53.6 U	190	53.6	1	12/05/12 09:03	12/3/12	
Hexachlorobutadiene	61.4 U	190	61.4	1	12/05/12 09:03	12/3/12	
Hexachlorocyclopentadiene	38.0 U	190	38.0	1	12/05/12 09:03	12/3/12	
Hexachloroethane	34.6 U	190	34.6	1	12/05/12 09:03	12/3/12	
Indeno(1,2,3-cd)pyrene	45.8 U	190	45.8	1	12/05/12 09:03	12/3/12	
Isophorone	64.7 U	190	64.7	1	12/05/12 09:03	12/3/12	
Naphthalene	54.7 U	190	54.7	1	12/05/12 09:03	12/3/12	
Nitrobenzene	43.6 U	190	43.6	1	12/05/12 09:03	12/3/12	
N-Nitrosodi-n-propylamine	55.8 U	190	55.8	1	12/05/12 09:03	12/3/12	
Pentachlorophenol (PCP)	39.1 U	747	39.1	1	12/05/12 09:03	12/3/12	
Phenanthrene	46.9 U	190	46.9	1	12/05/12 09:03	12/3/12	
Phenol	51.4 U	190	51.4	1	12/05/12 09:03	12/3/12	
Pyrene	51.4 U	190	51.4	1	12/05/12 09:03	12/3/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	81	28 - 164	12/05/12 09:03	
2-Fluorobiphenyl	55	33 - 133	12/05/12 09:03	
2-Fluorophenol	64	10 - 126	12/05/12 09:03	
Nitrobenzene-d5	49	25 - 138	12/05/12 09:03	
Phenol-d6	53	10 - 170	12/05/12 09:03	
p-Terphenyl-d14	59	16 - 168	12/05/12 09:03	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB01-0203-112812
Lab Code: J1205834-005

Service Request: J1205834
Date Collected: 11/28/12 14:00
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082
Prep Method: EPA 3550B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	10.5 U	38.2	10.5	1	12/04/12 06:19	12/1/12	
Aroclor 1221	7.74 U	38.2	7.74	1	12/04/12 06:19	12/1/12	
Aroclor 1232	25.0 U	38.2	25.0	1	12/04/12 06:19	12/1/12	
Aroclor 1242	10.3 U	38.2	10.3	1	12/04/12 06:19	12/1/12	
Aroclor 1248	18.7 U	38.2	18.7	1	12/04/12 06:19	12/1/12	
Aroclor 1254	14.1 U	38.2	14.1	1	12/04/12 06:19	12/1/12	
Aroclor 1260	10.8 U	38.2	10.8	1	12/04/12 06:19	12/1/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	80	10 - 258	12/04/12 06:19	

COLUMBIA ANALYTICAL SERVICES, INC.

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Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB01-0203-112812
Lab Code: J1205834-005

Service Request: J1205834
Date Collected: 11/28/12 14:00
Date Received: 11/29/12 10:00

Units: mg/Kg
Basis: Dry

Petroleum-Range Organics by GC-FID for State of Florida

Analysis Method: FL-PRO
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
FL-PRO (C8 - C40)	23.1 I	25.4	2.55	1	12/04/12 23:35	12/4/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	96	62 - 109	12/04/12 23:35	
n-Nonatriacontane	107	60 - 118	12/04/12 23:35	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB01-0203-112812
Lab Code: J1205834-005

Service Request: J1205834
Date Collected: 11/28/12 14:00
Date Received: 11/29/12 10:00
Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total Recoverable	6010B	1.90	mg/Kg	0.58	0.14	1	12/04/12 18:55	12/3/12	
Cadmium, Total Recoverable	6010B	0.06 I	mg/Kg	0.29	0.008	1	12/04/12 18:55	12/3/12	
Chromium, Total Recoverable	6010B	3.16	mg/Kg	0.58	0.03	1	12/04/12 18:55	12/3/12	
Lead, Total Recoverable	6010B	1.50	mg/Kg	0.58	0.15	1	12/04/12 18:55	12/3/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB01-0405-112812
Lab Code: J1205834-006

Service Request: J1205834
Date Collected: 11/28/12 14:10
Date Received: 11/29/12 10:00

Units: ug/Kg**Basis:** Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,1,2-Tetrachloroethane	0.473 U	5.76	0.473	1	12/06/12 00:40	12/5/12	
1,1,1-Trichloroethane (TCA)	0.265 U	5.76	0.265	1	12/06/12 00:40	12/5/12	
1,1,2,2-Tetrachloroethane	0.265 U	5.76	0.265	1	12/06/12 00:40	12/5/12	
1,1,2-Trichloroethane	0.450 U	5.76	0.450	1	12/06/12 00:40	12/5/12	
1,1-Dichloroethane (1,1-DCA)	0.358 U	5.76	0.358	1	12/06/12 00:40	12/5/12	
1,1-Dichloroethene (1,1-DCE)	0.795 U	5.76	0.795	1	12/06/12 00:40	12/5/12	
1,2,3-Trichloropropane	0.876 U	5.76	0.876	1	12/06/12 00:40	12/5/12	
1,2-Dibromo-3-chloropropane (DBCP)	0.611 U	11.5	0.611	1	12/06/12 00:40	12/5/12	
1,2-Dibromoethane (EDB)	0.668 U	5.76	0.668	1	12/06/12 00:40	12/5/12	
1,2-Dichlorobenzene	0.369 U	5.76	0.369	1	12/06/12 00:40	12/5/12	
1,2-Dichloroethane	0.346 U	5.76	0.346	1	12/06/12 00:40	12/5/12	
1,2-Dichloropropane	0.473 U	5.76	0.473	1	12/06/12 00:40	12/5/12	
1,3-Dichlorobenzene	0.346 U	5.76	0.346	1	12/06/12 00:40	12/5/12	
1,4-Dichlorobenzene	0.116 U	5.76	0.116	1	12/06/12 00:40	12/5/12	
2-Butanone (MEK)	4.89 I	28.8	1.85	1	12/06/12 00:40	12/5/12	
2-Hexanone	2.54 U	11.5	2.54	1	12/06/12 00:40	12/5/12	
4-Methyl-2-pentanone (MIBK)	1.73 U	11.5	1.73	1	12/06/12 00:40	12/5/12	
Acetone	40.8 I	144	2.65	1	12/06/12 00:40	12/5/12	
Benzene	0.196 U	5.76	0.196	1	12/06/12 00:40	12/5/12	
Bromochloromethane	0.691 U	5.76	0.691	1	12/06/12 00:40	12/5/12	
Bromodichloromethane	0.427 U	5.76	0.427	1	12/06/12 00:40	12/5/12	
Bromoform	0.392 U	5.76	0.392	1	12/06/12 00:40	12/5/12	
Bromomethane	0.311 U	5.76	0.311	1	12/06/12 00:40	12/5/12	
Carbon Disulfide	3.22 I	11.5	0.922	1	12/06/12 00:40	12/5/12	
Carbon Tetrachloride	0.219 U	5.76	0.219	1	12/06/12 00:40	12/5/12	
Chlorobenzene	0.162 U	5.76	0.162	1	12/06/12 00:40	12/5/12	
Chloroethane	0.381 U	5.76	0.381	1	12/06/12 00:40	12/5/12	
Chloroform	0.208 U	5.76	0.208	1	12/06/12 00:40	12/5/12	
Chloromethane	0.242 U	5.76	0.242	1	12/06/12 00:40	12/5/12	
cis-1,2-Dichloroethene	0.381 U	5.76	0.381	1	12/06/12 00:40	12/5/12	
cis-1,3-Dichloropropene	0.162 U	5.76	0.162	1	12/06/12 00:40	12/5/12	
Dibromochloromethane	0.254 U	5.76	0.254	1	12/06/12 00:40	12/5/12	
Dibromomethane	0.450 U	5.76	0.450	1	12/06/12 00:40	12/5/12	
Dichlorodifluoromethane	0.208 U	23.0	0.208	1	12/06/12 00:40	12/5/12	
Ethylbenzene	0.139 U	5.76	0.139	1	12/06/12 00:40	12/5/12	
Iodomethane	1.27 U	11.5	1.27	1	12/06/12 00:40	12/5/12	
m,p-Xylenes	0.495 I	11.5	0.242	1	12/06/12 00:40	12/5/12	
Methyl tert-Butyl Ether	0.300 U	5.76	0.300	1	12/06/12 00:40	12/5/12	
Methylene Chloride	2.64 IV	11.5	0.358	1	12/06/12 00:40	12/5/12	
o-Xylene	0.472 I	5.76	0.185	1	12/06/12 00:40	12/5/12	
Styrene	0.311 U	5.76	0.311	1	12/06/12 00:40	12/5/12	
Tetrachloroethene (PCE)	0.288 U	5.76	0.288	1	12/06/12 00:40	12/5/12	
Toluene	0.311 U	5.76	0.311	1	12/06/12 00:40	12/5/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB01-0405-112812
Lab Code: J1205834-006

Service Request: J1205834
Date Collected: 11/28/12 14:10
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
trans-1,2-Dichloroethene	0.450 U	5.76	0.450	1	12/06/12 00:40	12/5/12	
trans-1,3-Dichloropropene	0.254 U	5.76	0.254	1	12/06/12 00:40	12/5/12	
trans-1,4-Dichloro-2-butene	0.622 U	23.0	0.622	1	12/06/12 00:40	12/5/12	
Trichloroethene (TCE)	0.288 U	5.76	0.288	1	12/06/12 00:40	12/5/12	
Trichlorofluoromethane	0.242 U	23.0	0.242	1	12/06/12 00:40	12/5/12	
Vinyl Acetate	1.39 U	11.5	1.39	1	12/06/12 00:40	12/5/12	
Vinyl Chloride	0.300 U	5.76	0.300	1	12/06/12 00:40	12/5/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	101	80 - 120	12/06/12 00:40	
4-Bromofluorobenzene	116	64 - 135	12/06/12 00:40	
Dibromofluoromethane	100	74 - 125	12/06/12 00:40	
Toluene-d8	105	46 - 156	12/06/12 00:40	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB01-0405-112812
Lab Code: J1205834-006

Service Request: J1205834
Date Collected: 11/28/12 14:10
Date Received: 11/29/12 10:00

Units: ug/Kg**Basis:** Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	78.3 U	211	78.3	1	12/05/12 09:41	12/3/12	
1,2-Dichlorobenzene	39.8 U	211	39.8	1	12/05/12 09:41	12/3/12	
1,3-Dichlorobenzene	47.3 U	211	47.3	1	12/05/12 09:41	12/3/12	
1,4-Dichlorobenzene	51.0 U	211	51.0	1	12/05/12 09:41	12/3/12	
1-Methylnaphthalene	82.1 U	211	82.1	1	12/05/12 09:41	12/3/12	
2,4,5-Trichlorophenol	70.9 U	211	70.9	1	12/05/12 09:41	12/3/12	
2,4,6-Trichlorophenol	62.2 U	211	62.2	1	12/05/12 09:41	12/3/12	
2,4-Dichlorophenol	78.3 U	211	78.3	1	12/05/12 09:41	12/3/12	
2,4-Dimethylphenol	104 U	211	104	1	12/05/12 09:41	12/3/12	
2,4-Dinitrophenol	28.6 U	833	28.6	1	12/05/12 09:41	12/3/12	
2,4-Dinitrotoluene	51.0 U	211	51.0	1	12/05/12 09:41	12/3/12	
2,6-Dinitrotoluene	59.7 U	211	59.7	1	12/05/12 09:41	12/3/12	
2-Chloronaphthalene	53.5 U	211	53.5	1	12/05/12 09:41	12/3/12	
2-Chlorophenol	43.5 U	211	43.5	1	12/05/12 09:41	12/3/12	
2-Methylnaphthalene	73.4 U	211	73.4	1	12/05/12 09:41	12/3/12	
2-Methylphenol	59.7 U	211	59.7	1	12/05/12 09:41	12/3/12	
2-Nitroaniline	63.4 U	211	63.4	1	12/05/12 09:41	12/3/12	
2-Nitrophenol	64.7 U	833	64.7	1	12/05/12 09:41	12/3/12	
3- and 4-Methylphenol Coelution	53.5 U	211	53.5	1	12/05/12 09:41	12/3/12	
3,3'-Dichlorobenzidine	106 U	833	106	1	12/05/12 09:41	12/3/12	
3-Nitroaniline	63.4 U	211	63.4	1	12/05/12 09:41	12/3/12	
4,6-Dinitro-2-methylphenol	59.7 U	211	59.7	1	12/05/12 09:41	12/3/12	
4-Bromophenyl Phenyl Ether	64.7 U	211	64.7	1	12/05/12 09:41	12/3/12	
4-Chloro-3-methylphenol	65.9 U	211	65.9	1	12/05/12 09:41	12/3/12	
4-Chloroaniline	85.8 U	211	85.8	1	12/05/12 09:41	12/3/12	
4-Chlorophenyl Phenyl Ether	64.7 U	211	64.7	1	12/05/12 09:41	12/3/12	
4-Nitroaniline	68.4 U	211	68.4	1	12/05/12 09:41	12/3/12	
4-Nitrophenol	69.6 U	833	69.6	1	12/05/12 09:41	12/3/12	
Acenaphthene	65.9 U	211	65.9	1	12/05/12 09:41	12/3/12	
Acenaphthylene	58.5 U	211	58.5	1	12/05/12 09:41	12/3/12	
Acetophenone	57.2 U	423	57.2	1	12/05/12 09:41	12/3/12	
Anthracene	53.5 U	211	53.5	1	12/05/12 09:41	12/3/12	
Benz(a)anthracene	58.5 U	211	58.5	1	12/05/12 09:41	12/3/12	
Benzo(a)pyrene	46.0 U	211	46.0	1	12/05/12 09:41	12/3/12	
Benzo(b)fluoranthene	32.4 U	211	32.4	1	12/05/12 09:41	12/3/12	
Benzo(g,h,i)perylene	64.7 U	211	64.7	1	12/05/12 09:41	12/3/12	
Benzo(k)fluoranthene	73.4 U	211	73.4	1	12/05/12 09:41	12/3/12	
Benzyl Alcohol	47.3 U	423	47.3	1	12/05/12 09:41	12/3/12	
Bis(2-chloroethoxy)methane	65.9 U	211	65.9	1	12/05/12 09:41	12/3/12	
Bis(2-chloroethyl) Ether	52.2 U	211	52.2	1	12/05/12 09:41	12/3/12	
Bis(2-chloroisopropyl) Ether	43.5 U	211	43.5	1	12/05/12 09:41	12/3/12	
Bis(2-ethylhexyl) Phthalate	54.7 U	211	54.7	1	12/05/12 09:41	12/3/12	
Butyl Benzyl Phthalate	58.5 U	423	58.5	1	12/05/12 09:41	12/3/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB01-0405-112812
Lab Code: J1205834-006

Service Request: J1205834
Date Collected: 11/28/12 14:10
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	70.9 U	211	70.9	1	12/05/12 09:41	12/3/12	
Chrysene	56.0 U	211	56.0	1	12/05/12 09:41	12/3/12	
Dibenz(a,h)anthracene	57.2 U	211	57.2	1	12/05/12 09:41	12/3/12	
Dibenzofuran	57.2 U	211	57.2	1	12/05/12 09:41	12/3/12	
Diethyl Phthalate	63.4 U	211	63.4	1	12/05/12 09:41	12/3/12	
Dimethyl Phthalate	65.9 U	211	65.9	1	12/05/12 09:41	12/3/12	
Di-n-butyl Phthalate	42.3 U	211	42.3	1	12/05/12 09:41	12/3/12	
Di-n-octyl Phthalate	64.7 U	211	64.7	1	12/05/12 09:41	12/3/12	
Diphenylamine + n-Nitrosodiphenylamine	46.0 U	211	46.0	1	12/05/12 09:41	12/3/12	
Fluoranthene	59.7 U	211	59.7	1	12/05/12 09:41	12/3/12	
Fluorene	58.5 U	211	58.5	1	12/05/12 09:41	12/3/12	
Hexachlorobenzene	59.7 U	211	59.7	1	12/05/12 09:41	12/3/12	
Hexachlorobutadiene	68.4 U	211	68.4	1	12/05/12 09:41	12/3/12	
Hexachlorocyclopentadiene	42.3 U	211	42.3	1	12/05/12 09:41	12/3/12	
Hexachloroethane	38.6 U	211	38.6	1	12/05/12 09:41	12/3/12	
Indeno(1,2,3-cd)pyrene	51.0 U	211	51.0	1	12/05/12 09:41	12/3/12	
Isophorone	72.1 U	211	72.1	1	12/05/12 09:41	12/3/12	
Naphthalene	60.9 U	211	60.9	1	12/05/12 09:41	12/3/12	
Nitrobenzene	48.5 U	211	48.5	1	12/05/12 09:41	12/3/12	
N-Nitrosodi-n-propylamine	62.2 U	211	62.2	1	12/05/12 09:41	12/3/12	
Pentachlorophenol (PCP)	43.5 U	833	43.5	1	12/05/12 09:41	12/3/12	
Phenanthrene	52.2 U	211	52.2	1	12/05/12 09:41	12/3/12	
Phenol	57.2 U	211	57.2	1	12/05/12 09:41	12/3/12	
Pyrene	57.2 U	211	57.2	1	12/05/12 09:41	12/3/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	109	28 - 164	12/05/12 09:41	
2-Fluorobiphenyl	69	33 - 133	12/05/12 09:41	
2-Fluorophenol	83	10 - 126	12/05/12 09:41	
Nitrobenzene-d5	63	25 - 138	12/05/12 09:41	
Phenol-d6	67	10 - 170	12/05/12 09:41	
p-Terphenyl-d14	70	16 - 168	12/05/12 09:41	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB01-0405-112812
Lab Code: J1205834-006

Service Request: J1205834
Date Collected: 11/28/12 14:10
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082
Prep Method: EPA 3550B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	11.4 U	41.3	11.4	1	12/04/12 06:44	12/1/12	
Aroclor 1221	8.36 U	41.3	8.36	1	12/04/12 06:44	12/1/12	
Aroclor 1232	27.1 U	41.3	27.1	1	12/04/12 06:44	12/1/12	
Aroclor 1242	11.2 U	41.3	11.2	1	12/04/12 06:44	12/1/12	
Aroclor 1248	20.2 U	41.3	20.2	1	12/04/12 06:44	12/1/12	
Aroclor 1254	15.3 U	41.3	15.3	1	12/04/12 06:44	12/1/12	
Aroclor 1260	11.7 U	41.3	11.7	1	12/04/12 06:44	12/1/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	73	10 - 258	12/04/12 06:44	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB01-0405-112812
Lab Code: J1205834-006

Service Request: J1205834
Date Collected: 11/28/12 14:10
Date Received: 11/29/12 10:00

Units: mg/Kg
Basis: Dry

Petroleum-Range Organics by GC-FID for State of Florida

Analysis Method: FL-PRO
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
FL-PRO (C8 - C40)	36.7	25.7	2.58	1	12/05/12 00:04	12/4/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	93	62 - 109	12/05/12 00:04	
n-Nonatriacontane	102	60 - 118	12/05/12 00:04	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB01-0405-112812
Lab Code: J1205834-006

Service Request: J1205834
Date Collected: 11/28/12 14:10
Date Received: 11/29/12 10:00

Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total Recoverable	6010B	1.96	mg/Kg	0.48	0.12	1	12/04/12 18:59	12/3/12	
Cadmium, Total Recoverable	6010B	0.10 I	mg/Kg	0.24	0.007	1	12/04/12 18:59	12/3/12	
Chromium, Total Recoverable	6010B	6.84	mg/Kg	0.48	0.02	1	12/04/12 18:59	12/3/12	
Lead, Total Recoverable	6010B	9.67	mg/Kg	0.48	0.13	1	12/04/12 18:59	12/3/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB03-0203-112812
Lab Code: J1205834-007

Service Request: J1205834
Date Collected: 11/28/12 14:45
Date Received: 11/29/12 10:00

Units: ug/Kg**Basis:** Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,1,2-Tetrachloroethane	0.429 U	5.23	0.429	1	12/06/12 01:08	12/5/12	
1,1,1-Trichloroethane (TCA)	0.241 U	5.23	0.241	1	12/06/12 01:08	12/5/12	
1,1,2,2-Tetrachloroethane	0.241 U	5.23	0.241	1	12/06/12 01:08	12/5/12	
1,1,2-Trichloroethane	0.408 U	5.23	0.408	1	12/06/12 01:08	12/5/12	
1,1-Dichloroethane (1,1-DCA)	0.325 U	5.23	0.325	1	12/06/12 01:08	12/5/12	
1,1-Dichloroethene (1,1-DCE)	0.722 U	5.23	0.722	1	12/06/12 01:08	12/5/12	
1,2,3-Trichloropropane	0.795 U	5.23	0.795	1	12/06/12 01:08	12/5/12	
1,2-Dibromo-3-chloropropane (DBCP)	0.555 U	10.5	0.555	1	12/06/12 01:08	12/5/12	
1,2-Dibromoethane (EDB)	0.607 U	5.23	0.607	1	12/06/12 01:08	12/5/12	
1,2-Dichlorobenzene	0.335 U	5.23	0.335	1	12/06/12 01:08	12/5/12	
1,2-Dichloroethane	0.314 U	5.23	0.314	1	12/06/12 01:08	12/5/12	
1,2-Dichloropropane	0.429 U	5.23	0.429	1	12/06/12 01:08	12/5/12	
1,3-Dichlorobenzene	0.314 U	5.23	0.314	1	12/06/12 01:08	12/5/12	
1,4-Dichlorobenzene	0.105 U	5.23	0.105	1	12/06/12 01:08	12/5/12	
2-Butanone (MEK)	1.68 U	26.1	1.68	1	12/06/12 01:08	12/5/12	
2-Hexanone	2.31 U	10.5	2.31	1	12/06/12 01:08	12/5/12	
4-Methyl-2-pentanone (MIBK)	1.57 U	10.5	1.57	1	12/06/12 01:08	12/5/12	
Acetone	19.0 I	131	2.41	1	12/06/12 01:08	12/5/12	
Benzene	0.178 U	5.23	0.178	1	12/06/12 01:08	12/5/12	
Bromochloromethane	0.628 U	5.23	0.628	1	12/06/12 01:08	12/5/12	
Bromodichloromethane	0.387 U	5.23	0.387	1	12/06/12 01:08	12/5/12	
Bromoform	0.356 U	5.23	0.356	1	12/06/12 01:08	12/5/12	
Bromomethane	0.283 U	5.23	0.283	1	12/06/12 01:08	12/5/12	
Carbon Disulfide	0.837 U	10.5	0.837	1	12/06/12 01:08	12/5/12	
Carbon Tetrachloride	0.199 U	5.23	0.199	1	12/06/12 01:08	12/5/12	
Chlorobenzene	0.147 U	5.23	0.147	1	12/06/12 01:08	12/5/12	
Chloroethane	0.346 U	5.23	0.346	1	12/06/12 01:08	12/5/12	
Chloroform	0.189 U	5.23	0.189	1	12/06/12 01:08	12/5/12	
Chloromethane	0.220 U	5.23	0.220	1	12/06/12 01:08	12/5/12	
cis-1,2-Dichloroethene	0.346 U	5.23	0.346	1	12/06/12 01:08	12/5/12	
cis-1,3-Dichloropropene	0.147 U	5.23	0.147	1	12/06/12 01:08	12/5/12	
Dibromochloromethane	0.231 U	5.23	0.231	1	12/06/12 01:08	12/5/12	
Dibromomethane	0.408 U	5.23	0.408	1	12/06/12 01:08	12/5/12	
Dichlorodifluoromethane	0.189 U	20.9	0.189	1	12/06/12 01:08	12/5/12	
Ethylbenzene	0.126 U	5.23	0.126	1	12/06/12 01:08	12/5/12	
Iodomethane	1.16 U	10.5	1.16	1	12/06/12 01:08	12/5/12	
m,p-Xylenes	0.220 U	10.5	0.220	1	12/06/12 01:08	12/5/12	
Methyl tert-Butyl Ether	0.272 U	5.23	0.272	1	12/06/12 01:08	12/5/12	
Methylene Chloride	2.61 IV	10.5	0.325	1	12/06/12 01:08	12/5/12	
o-Xylene	0.168 U	5.23	0.168	1	12/06/12 01:08	12/5/12	
Styrene	0.283 U	5.23	0.283	1	12/06/12 01:08	12/5/12	
Tetrachloroethene (PCE)	0.262 U	5.23	0.262	1	12/06/12 01:08	12/5/12	
Toluene	0.283 U	5.23	0.283	1	12/06/12 01:08	12/5/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB03-0203-112812
Lab Code: J1205834-007

Service Request: J1205834
Date Collected: 11/28/12 14:45
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
trans-1,2-Dichloroethene	0.408 U	5.23	0.408	1	12/06/12 01:08	12/5/12	
trans-1,3-Dichloropropene	0.231 U	5.23	0.231	1	12/06/12 01:08	12/5/12	
trans-1,4-Dichloro-2-butene	0.565 U	20.9	0.565	1	12/06/12 01:08	12/5/12	
Trichloroethene (TCE)	0.262 U	5.23	0.262	1	12/06/12 01:08	12/5/12	
Trichlorofluoromethane	0.220 U	20.9	0.220	1	12/06/12 01:08	12/5/12	
Vinyl Acetate	1.26 U	10.5	1.26	1	12/06/12 01:08	12/5/12	
Vinyl Chloride	0.272 U	5.23	0.272	1	12/06/12 01:08	12/5/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	103	80 - 120	12/06/12 01:08	
4-Bromofluorobenzene	101	64 - 135	12/06/12 01:08	
Dibromofluoromethane	100	74 - 125	12/06/12 01:08	
Toluene-d8	102	46 - 156	12/06/12 01:08	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB03-0203-112812
Lab Code: J1205834-007

Service Request: J1205834
Date Collected: 11/28/12 14:45
Date Received: 11/29/12 10:00

Units: ug/Kg

Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	68.9 U	186	68.9	1	12/05/12 10:20	12/3/12	
1,2-Dichlorobenzene	35.0 U	186	35.0	1	12/05/12 10:20	12/3/12	
1,3-Dichlorobenzene	41.6 U	186	41.6	1	12/05/12 10:20	12/3/12	
1,4-Dichlorobenzene	44.9 U	186	44.9	1	12/05/12 10:20	12/3/12	
1-Methylnaphthalene	72.2 U	186	72.2	1	12/05/12 10:20	12/3/12	
2,4,5-Trichlorophenol	62.4 U	186	62.4	1	12/05/12 10:20	12/3/12	
2,4,6-Trichlorophenol	54.7 U	186	54.7	1	12/05/12 10:20	12/3/12	
2,4-Dichlorophenol	68.9 U	186	68.9	1	12/05/12 10:20	12/3/12	
2,4-Dimethylphenol	90.8 U	186	90.8	1	12/05/12 10:20	12/3/12	
2,4-Dinitrophenol	25.2 U	733	25.2	1	12/05/12 10:20	12/3/12	
2,4-Dinitrotoluene	44.9 U	186	44.9	1	12/05/12 10:20	12/3/12	
2,6-Dinitrotoluene	52.5 U	186	52.5	1	12/05/12 10:20	12/3/12	
2-Chloronaphthalene	47.1 U	186	47.1	1	12/05/12 10:20	12/3/12	
2-Chlorophenol	38.3 U	186	38.3	1	12/05/12 10:20	12/3/12	
2-Methylnaphthalene	64.6 U	186	64.6	1	12/05/12 10:20	12/3/12	
2-Methylphenol	52.5 U	186	52.5	1	12/05/12 10:20	12/3/12	
2-Nitroaniline	55.8 U	186	55.8	1	12/05/12 10:20	12/3/12	
2-Nitrophenol	56.9 U	733	56.9	1	12/05/12 10:20	12/3/12	
3- and 4-Methylphenol Coelution	47.1 U	186	47.1	1	12/05/12 10:20	12/3/12	
3,3'-Dichlorobenzidine	93.0 U	733	93.0	1	12/05/12 10:20	12/3/12	
3-Nitroaniline	55.8 U	186	55.8	1	12/05/12 10:20	12/3/12	
4,6-Dinitro-2-methylphenol	52.5 U	186	52.5	1	12/05/12 10:20	12/3/12	
4-Bromophenyl Phenyl Ether	56.9 U	186	56.9	1	12/05/12 10:20	12/3/12	
4-Chloro-3-methylphenol	58.0 U	186	58.0	1	12/05/12 10:20	12/3/12	
4-Chloroaniline	75.5 U	186	75.5	1	12/05/12 10:20	12/3/12	
4-Chlorophenyl Phenyl Ether	56.9 U	186	56.9	1	12/05/12 10:20	12/3/12	
4-Nitroaniline	60.2 U	186	60.2	1	12/05/12 10:20	12/3/12	
4-Nitrophenol	61.3 U	733	61.3	1	12/05/12 10:20	12/3/12	
Acenaphthene	58.0 U	186	58.0	1	12/05/12 10:20	12/3/12	
Acenaphthylene	51.4 U	186	51.4	1	12/05/12 10:20	12/3/12	
Acetophenone	50.4 U	372	50.4	1	12/05/12 10:20	12/3/12	
Anthracene	47.1 U	186	47.1	1	12/05/12 10:20	12/3/12	
Benz(a)anthracene	51.4 U	186	51.4	1	12/05/12 10:20	12/3/12	
Benzo(a)pyrene	40.5 U	186	40.5	1	12/05/12 10:20	12/3/12	
Benzo(b)fluoranthene	28.5 U	186	28.5	1	12/05/12 10:20	12/3/12	
Benzo(g,h,i)perylene	56.9 U	186	56.9	1	12/05/12 10:20	12/3/12	
Benzo(k)fluoranthene	64.6 U	186	64.6	1	12/05/12 10:20	12/3/12	
Benzyl Alcohol	41.6 U	372	41.6	1	12/05/12 10:20	12/3/12	
Bis(2-chloroethoxy)methane	58.0 U	186	58.0	1	12/05/12 10:20	12/3/12	
Bis(2-chloroethyl) Ether	46.0 U	186	46.0	1	12/05/12 10:20	12/3/12	
Bis(2-chloroisopropyl) Ether	38.3 U	186	38.3	1	12/05/12 10:20	12/3/12	
Bis(2-ethylhexyl) Phthalate	48.2 U	186	48.2	1	12/05/12 10:20	12/3/12	
Butyl Benzyl Phthalate	51.4 U	372	51.4	1	12/05/12 10:20	12/3/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB03-0203-112812
Lab Code: J1205834-007

Service Request: J1205834
Date Collected: 11/28/12 14:45
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	62.4 U	186	62.4	1	12/05/12 10:20	12/3/12	
Chrysene	49.3 U	186	49.3	1	12/05/12 10:20	12/3/12	
Dibenz(a,h)anthracene	50.4 U	186	50.4	1	12/05/12 10:20	12/3/12	
Dibenzofuran	50.4 U	186	50.4	1	12/05/12 10:20	12/3/12	
Diethyl Phthalate	55.8 U	186	55.8	1	12/05/12 10:20	12/3/12	
Dimethyl Phthalate	58.0 U	186	58.0	1	12/05/12 10:20	12/3/12	
Di-n-butyl Phthalate	37.2 U	186	37.2	1	12/05/12 10:20	12/3/12	
Di-n-octyl Phthalate	56.9 U	186	56.9	1	12/05/12 10:20	12/3/12	
Diphenylamine + n-Nitrosodiphenylamine	40.5 U	186	40.5	1	12/05/12 10:20	12/3/12	
Fluoranthene	52.5 U	186	52.5	1	12/05/12 10:20	12/3/12	
Fluorene	51.4 U	186	51.4	1	12/05/12 10:20	12/3/12	
Hexachlorobenzene	52.5 U	186	52.5	1	12/05/12 10:20	12/3/12	
Hexachlorobutadiene	60.2 U	186	60.2	1	12/05/12 10:20	12/3/12	
Hexachlorocyclopentadiene	37.2 U	186	37.2	1	12/05/12 10:20	12/3/12	
Hexachloroethane	33.9 U	186	33.9	1	12/05/12 10:20	12/3/12	
Indeno(1,2,3-cd)pyrene	44.9 U	186	44.9	1	12/05/12 10:20	12/3/12	
Isophorone	63.5 U	186	63.5	1	12/05/12 10:20	12/3/12	
Naphthalene	53.6 U	186	53.6	1	12/05/12 10:20	12/3/12	
Nitrobenzene	42.7 U	186	42.7	1	12/05/12 10:20	12/3/12	
N-Nitrosodi-n-propylamine	54.7 U	186	54.7	1	12/05/12 10:20	12/3/12	
Pentachlorophenol (PCP)	38.3 U	733	38.3	1	12/05/12 10:20	12/3/12	
Phenanthrene	46.0 U	186	46.0	1	12/05/12 10:20	12/3/12	
Phenol	50.4 U	186	50.4	1	12/05/12 10:20	12/3/12	
Pyrene	50.4 U	186	50.4	1	12/05/12 10:20	12/3/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	95	28 - 164	12/05/12 10:20	
2-Fluorobiphenyl	64	33 - 133	12/05/12 10:20	
2-Fluorophenol	78	10 - 126	12/05/12 10:20	
Nitrobenzene-d5	59	25 - 138	12/05/12 10:20	
Phenol-d6	62	10 - 170	12/05/12 10:20	
p-Terphenyl-d14	74	16 - 168	12/05/12 10:20	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB03-0203-112812
Lab Code: J1205834-007

Service Request: J1205834
Date Collected: 11/28/12 14:45
Date Received: 11/29/12 10:00

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082
Prep Method: EPA 3550B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	11.7 U	42.3	11.7	1	12/04/12 07:10	12/1/12	
Aroclor 1221	8.57 U	42.3	8.57	1	12/04/12 07:10	12/1/12	
Aroclor 1232	27.7 U	42.3	27.7	1	12/04/12 07:10	12/1/12	
Aroclor 1242	11.5 U	42.3	11.5	1	12/04/12 07:10	12/1/12	
Aroclor 1248	20.7 U	42.3	20.7	1	12/04/12 07:10	12/1/12	
Aroclor 1254	15.6 U	42.3	15.6	1	12/04/12 07:10	12/1/12	
Aroclor 1260	12.0 U	42.3	12.0	1	12/04/12 07:10	12/1/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	76	10 - 258	12/04/12 07:10	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB03-0203-112812
Lab Code: J1205834-007

Service Request: J1205834
Date Collected: 11/28/12 14:45
Date Received: 11/29/12 10:00

Units: mg/Kg
Basis: Dry

Petroleum-Range Organics by GC-FID for State of Florida

Analysis Method: FL-PRO
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
FL-PRO (C8 - C40)	2.34 U	23.3	2.34	1	12/05/12 01:01	12/4/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	93	62 - 109	12/05/12 01:01	
n-Nonatriacontane	103	60 - 118	12/05/12 01:01	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: MPT-1596-SB03-0203-112812
Lab Code: J1205834-007

Service Request: J1205834
Date Collected: 11/28/12 14:45
Date Received: 11/29/12 10:00
Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total Recoverable	6010B	1.64	mg/Kg	0.42	0.12	1	12/04/12 19:02	12/3/12	
Cadmium, Total Recoverable	6010B	0.007 U	mg/Kg	0.21	0.007	1	12/04/12 19:02	12/3/12	
Chromium, Total Recoverable	6010B	4.47	mg/Kg	0.42	0.02	1	12/04/12 19:02	12/3/12	
Lead, Total Recoverable	6010B	1.69	mg/Kg	0.42	0.13	1	12/04/12 19:02	12/3/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water
Sample Name: MPT-1596-GW01-112812
Lab Code: J1205834-008

Service Request: J1205834
Date Collected: 11/28/12 15:55
Date Received: 11/29/12 10:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	1.0	0.19	1	12/01/12 03:20	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/01/12 03:20	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/01/12 03:20	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/01/12 03:20	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/01/12 03:20	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/01/12 03:20	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	12/01/12 03:20	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	5.0	2.3	1	12/01/12 03:20	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	12/01/12 03:20	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/01/12 03:20	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/01/12 03:20	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/01/12 03:20	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/01/12 03:20	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/01/12 03:20	
2-Butanone (MEK)	3.8 U	10	3.8	1	12/01/12 03:20	
2-Hexanone	2.2 U	25	2.2	1	12/01/12 03:20	
4-Methyl-2-pentanone (MIBK)	1.1 U	25	1.1	1	12/01/12 03:20	
Acetone	5.6 U	50	5.6	1	12/01/12 03:20	
Benzene	0.21 U	1.0	0.21	1	12/01/12 03:20	
Bromochloromethane	0.27 U	5.0	0.27	1	12/01/12 03:20	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/01/12 03:20	
Bromoform	0.42 U	2.0	0.42	1	12/01/12 03:20	
Bromomethane	0.23 U	5.0	0.23	1	12/01/12 03:20	
Carbon Disulfide	2.4 U	10	2.4	1	12/01/12 03:20	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/01/12 03:20	
Chlorobenzene	0.16 U	1.0	0.16	1	12/01/12 03:20	
Chloroethane	0.52 U	5.0	0.52	1	12/01/12 03:20	
Chloroform	0.35 U	1.0	0.35	1	12/01/12 03:20	
Chloromethane	0.36 U	1.0	0.36	1	12/01/12 03:20	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/01/12 03:20	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/01/12 03:20	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/01/12 03:20	
Dibromomethane	0.36 U	5.0	0.36	1	12/01/12 03:20	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/01/12 03:20	
Ethylbenzene	0.21 U	1.0	0.21	1	12/01/12 03:20	
Iodomethane	2.7 U	5.0	2.7	1	12/01/12 03:20	
m,p-Xylenes	0.31 U	2.0	0.31	1	12/01/12 03:20	
Methyl tert-Butyl Ether	0.24 U	2.0	0.24	1	12/01/12 03:20	
Methylene Chloride	0.21 U	5.0	0.21	1	12/01/12 03:20	
o-Xylene	0.14 U	1.0	0.14	1	12/01/12 03:20	
Styrene	0.29 U	1.0	0.29	1	12/01/12 03:20	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/01/12 03:20	
Toluene	0.19 U	1.0	0.19	1	12/01/12 03:20	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water
Sample Name: MPT-1596-GW01-112812
Lab Code: J1205834-008

Service Request: J1205834
Date Collected: 11/28/12 15:55
Date Received: 11/29/12 10:00

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/01/12 03:20	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/01/12 03:20	
trans-1,4-Dichloro-2-butene	2.2 U	20	2.2	1	12/01/12 03:20	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/01/12 03:20	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/01/12 03:20	
Vinyl Acetate	1.9 U	10	1.9	1	12/01/12 03:20	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/01/12 03:20	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	102	72 - 121	12/01/12 03:20	
4-Bromofluorobenzene	107	86 - 113	12/01/12 03:20	
Dibromofluoromethane	101	86 - 112	12/01/12 03:20	
Toluene-d8	109	88 - 115	12/01/12 03:20	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water

Service Request: J1205834
Date Collected: 11/28/12 15:55
Date Received: 11/29/12 10:00

Sample Name: MPT-1596-GW01-112812
Lab Code: J1205834-008

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	0.625 U	5.21	0.625	1	12/05/12 12:17	11/29/12	
1,2-Dichlorobenzene	0.667 U	5.21	0.667	1	12/05/12 12:17	11/29/12	
1,3-Dichlorobenzene	0.959 U	5.21	0.959	1	12/05/12 12:17	11/29/12	
1,4-Dichlorobenzene	0.948 U	5.21	0.948	1	12/05/12 12:17	11/29/12	
1-Methylnaphthalene	0.761 U	5.21	0.761	1	12/05/12 12:17	11/29/12	
2,4,5-Trichlorophenol	1.36 U	5.21	1.36	1	12/05/12 12:17	11/29/12	
2,4,6-Trichlorophenol	0.928 U	5.21	0.928	1	12/05/12 12:17	11/29/12	
2,4-Dichlorophenol	1.25 U	5.21	1.25	1	12/05/12 12:17	11/29/12	
2,4-Dimethylphenol	1.57 U	5.21	1.57	1	12/05/12 12:17	11/29/12	
2,4-Dinitrophenol	0.792 U	20.8	0.792	1	12/05/12 12:17	11/29/12	
2,4-Dinitrotoluene	1.36 U	5.21	1.36	1	12/05/12 12:17	11/29/12	
2,6-Dinitrotoluene	1.15 U	5.21	1.15	1	12/05/12 12:17	11/29/12	
2-Chloronaphthalene	4.80 U	5.21	4.80	1	12/05/12 12:17	11/29/12	
2-Chlorophenol	1.25 U	5.21	1.25	1	12/05/12 12:17	11/29/12	
2-Methylnaphthalene	0.657 U	5.21	0.657	1	12/05/12 12:17	11/29/12	
2-Methylphenol	1.36 U	5.21	1.36	1	12/05/12 12:17	11/29/12	
2-Nitroaniline	1.57 U	5.21	1.57	1	12/05/12 12:17	11/29/12	
2-Nitrophenol	1.46 U	20.8	1.46	1	12/05/12 12:17	11/29/12	
3- and 4-Methylphenol Coelution	1.05 U	5.21	1.05	1	12/05/12 12:17	11/29/12	
3,3'-Dichlorobenzidine	1.46 U	20.8	1.46	1	12/05/12 12:17	11/29/12	
3-Nitroaniline	1.15 U	5.21	1.15	1	12/05/12 12:17	11/29/12	
4,6-Dinitro-2-methylphenol	1.05 U	20.8	1.05	1	12/05/12 12:17	11/29/12	
4-Bromophenyl Phenyl Ether	1.36 U	5.21	1.36	1	12/05/12 12:17	11/29/12	
4-Chloro-3-methylphenol	1.88 U	5.21	1.88	1	12/05/12 12:17	11/29/12	
4-Chloroaniline	1.46 U	5.21	1.46	1	12/05/12 12:17	11/29/12	
4-Chlorophenyl Phenyl Ether	1.00 U	5.21	1.00	1	12/05/12 12:17	11/29/12	
4-Nitroaniline	1.05 U	5.21	1.05	1	12/05/12 12:17	11/29/12	
4-Nitrophenol	1.88 U	20.8	1.88	1	12/05/12 12:17	11/29/12	
Acenaphthene	4.38 U	5.21	4.38	1	12/05/12 12:17	11/29/12	
Acenaphthylene	1.04 U	5.21	1.04	1	12/05/12 12:17	11/29/12	
Acetophenone	1.67 U	10.4	1.67	1	12/05/12 12:17	11/29/12	
Anthracene	1.67 U	5.21	1.67	1	12/05/12 12:17	11/29/12	
Benz(a)anthracene	1.05 U	5.21	1.05	1	12/05/12 12:17	11/29/12	
Benzo(a)pyrene	1.25 U	5.21	1.25	1	12/05/12 12:17	11/29/12	
Benzo(b)fluoranthene	1.05 U	5.21	1.05	1	12/05/12 12:17	11/29/12	
Benzo(g,h,i)perylene	1.46 U	5.21	1.46	1	12/05/12 12:17	11/29/12	
Benzo(k)fluoranthene	1.88 U	5.21	1.88	1	12/05/12 12:17	11/29/12	
Benzyl Alcohol	1.46 U	5.21	1.46	1	12/05/12 12:17	11/29/12	
Bis(2-chloroethoxy)methane	1.25 U	5.21	1.25	1	12/05/12 12:17	11/29/12	
Bis(2-chloroethyl) Ether	1.98 U	5.21	1.98	1	12/05/12 12:17	11/29/12	
Bis(2-chloroisopropyl) Ether	1.57 U	5.21	1.57	1	12/05/12 12:17	11/29/12	
Bis(2-ethylhexyl) Phthalate	1.57 U	5.21	1.57	1	12/05/12 12:17	11/29/12	
Butyl Benzyl Phthalate	0.896 U	10.4	0.896	1	12/05/12 12:17	11/29/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water
Sample Name: MPT-1596-GW01-112812
Lab Code: J1205834-008

Service Request: J1205834
Date Collected: 11/28/12 15:55
Date Received: 11/29/12 10:00

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	1.88 U	5.21	1.88	1	12/05/12 12:17	11/29/12	
Chrysene	1.25 U	5.21	1.25	1	12/05/12 12:17	11/29/12	
Dibenz(a,h)anthracene	1.57 U	5.21	1.57	1	12/05/12 12:17	11/29/12	
Dibenzofuran	1.36 U	5.21	1.36	1	12/05/12 12:17	11/29/12	
Diethyl Phthalate	1.78 U	5.21	1.78	1	12/05/12 12:17	11/29/12	
Dimethyl Phthalate	1.36 U	5.21	1.36	1	12/05/12 12:17	11/29/12	
Di-n-butyl Phthalate	2.30 U	5.21	2.30	1	12/05/12 12:17	11/29/12	
Di-n-octyl Phthalate	2.92 U	5.21	2.92	1	12/05/12 12:17	11/29/12	
Diphenylamine + n-Nitrosodiphenylamine	1.15 U	5.21	1.15	1	12/05/12 12:17	11/29/12	
Fluoranthene	1.46 U	5.21	1.46	1	12/05/12 12:17	11/29/12	
Fluorene	0.875 U	5.21	0.875	1	12/05/12 12:17	11/29/12	
Hexachlorobenzene	1.78 U	5.21	1.78	1	12/05/12 12:17	11/29/12	
Hexachlorobutadiene	1.25 U	5.21	1.25	1	12/05/12 12:17	11/29/12	
Hexachlorocyclopentadiene	0.521 U	5.21	0.521	1	12/05/12 12:17	11/29/12	
Hexachloroethane	0.844 U	5.21	0.844	1	12/05/12 12:17	11/29/12	
Indeno(1,2,3-cd)pyrene	1.78 U	5.21	1.78	1	12/05/12 12:17	11/29/12	
Isophorone	1.88 U	5.21	1.88	1	12/05/12 12:17	11/29/12	
Naphthalene	0.553 U	5.21	0.553	1	12/05/12 12:17	11/29/12	
Nitrobenzene	2.19 U	5.21	2.19	1	12/05/12 12:17	11/29/12	
N-Nitrosodi-n-propylamine	2.30 U	5.21	2.30	1	12/05/12 12:17	11/29/12	
Pentachlorophenol (PCP)	1.15 U	20.8	1.15	1	12/05/12 12:17	11/29/12	
Phenanthrene	1.46 U	5.21	1.46	1	12/05/12 12:17	11/29/12	
Phenol	0.615 U	5.21	0.615	1	12/05/12 12:17	11/29/12	
Pyrene	0.771 U	5.21	0.771	1	12/05/12 12:17	11/29/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	106	13 - 133	12/05/12 12:17	
2-Fluorobiphenyl	66	22 - 105	12/05/12 12:17	
2-Fluorophenol	73	10 - 69	12/05/12 12:17	*
Nitrobenzene-d5	66	10 - 123	12/05/12 12:17	
Phenol-d6	40	10 - 59	12/05/12 12:17	
p-Terphenyl-d14	71	20 - 128	12/05/12 12:17	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water
Sample Name: MPT-1596-GW01-112812
Lab Code: J1205834-008

Service Request: J1205834
Date Collected: 11/28/12 15:55
Date Received: 11/29/12 10:00

Units: ug/L
Basis: NA

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	2.64 U	10.2	2.64	20	12/06/12 09:08	12/3/12	
Aroclor 1221	5.89 U	10.2	5.89	20	12/06/12 09:08	12/3/12	
Aroclor 1232	4.07 U	10.2	4.07	20	12/06/12 09:08	12/3/12	
Aroclor 1242	2.64 U	10.2	2.64	20	12/06/12 09:08	12/3/12	
Aroclor 1248	0.264 U	0.508	0.264	1	12/04/12 10:11	12/3/12	
Aroclor 1254	0.336 U	0.508	0.336	1	12/04/12 10:11	12/3/12	
Aroclor 1260	0.272 U	0.508	0.272	1	12/04/12 10:11	12/3/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	101	10 - 151	12/04/12 10:11	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water

Service Request: J1205834
Date Collected: 11/28/12 15:55
Date Received: 11/29/12 10:00

Sample Name: MPT-1596-GW01-112812
Lab Code: J1205834-008

Units: mg/L
Basis: NA

Petroleum-Range Organics by GC-FID for State of Florida

Analysis Method: FL-PRO
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
FL-PRO (C8 - C40)	0.126 U	0.412	0.126	1	12/04/12 16:52	12/4/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	94	82 - 142	12/04/12 16:52	
n-Nonatriacontane	99	42 - 193	12/04/12 16:52	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water
Sample Name: MPT-1596-GW01-112812
Lab Code: J1205834-008

Service Request: J1205834
Date Collected: 11/28/12 15:55
Date Received: 11/29/12 10:00
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total Recoverable	6010B	4 I	ug/L	10	4	1	12/01/12 16:28	11/30/12	
Cadmium, Total Recoverable	6010B	0.2 U	ug/L	5.0	0.2	1	12/01/12 16:28	11/30/12	
Chromium, Total Recoverable	6010B	0.5 U	ug/L	10	0.5	1	12/01/12 16:28	11/30/12	
Lead, Total Recoverable	6010B	4 U	ug/L	10	4	1	12/01/12 16:28	11/30/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water

Service Request: J1205834
Date Collected: 11/28/12 00:00
Date Received: 11/29/12 10:00

Sample Name: Trip Blank
Lab Code: J1205834-009

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	1.0	0.19	1	12/01/12 02:49	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	12/01/12 02:49	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	12/01/12 02:49	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	12/01/12 02:49	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	12/01/12 02:49	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	12/01/12 02:49	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	12/01/12 02:49	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	5.0	2.3	1	12/01/12 02:49	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	12/01/12 02:49	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	12/01/12 02:49	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	12/01/12 02:49	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	12/01/12 02:49	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	12/01/12 02:49	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	12/01/12 02:49	
2-Butanone (MEK)	3.8 U	10	3.8	1	12/01/12 02:49	
2-Hexanone	2.2 U	25	2.2	1	12/01/12 02:49	
4-Methyl-2-pentanone (MIBK)	1.1 U	25	1.1	1	12/01/12 02:49	
Acetone	5.6 U	50	5.6	1	12/01/12 02:49	
Benzene	0.21 U	1.0	0.21	1	12/01/12 02:49	
Bromochloromethane	0.27 U	5.0	0.27	1	12/01/12 02:49	
Bromodichloromethane	0.22 U	1.0	0.22	1	12/01/12 02:49	
Bromoform	0.42 U	2.0	0.42	1	12/01/12 02:49	
Bromomethane	0.23 U	5.0	0.23	1	12/01/12 02:49	
Carbon Disulfide	2.4 U	10	2.4	1	12/01/12 02:49	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	12/01/12 02:49	
Chlorobenzene	0.16 U	1.0	0.16	1	12/01/12 02:49	
Chloroethane	0.52 U	5.0	0.52	1	12/01/12 02:49	
Chloroform	0.35 U	1.0	0.35	1	12/01/12 02:49	
Chloromethane	0.36 U	1.0	0.36	1	12/01/12 02:49	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	12/01/12 02:49	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	12/01/12 02:49	
Dibromochloromethane	0.21 U	1.0	0.21	1	12/01/12 02:49	
Dibromomethane	0.36 U	5.0	0.36	1	12/01/12 02:49	
Dichlorodifluoromethane	0.23 U	20	0.23	1	12/01/12 02:49	
Ethylbenzene	0.21 U	1.0	0.21	1	12/01/12 02:49	
Iodomethane	2.7 U	5.0	2.7	1	12/01/12 02:49	
m,p-Xylenes	0.31 U	2.0	0.31	1	12/01/12 02:49	
Methyl tert-Butyl Ether	0.24 U	2.0	0.24	1	12/01/12 02:49	
Methylene Chloride	0.21 U	5.0	0.21	1	12/01/12 02:49	
o-Xylene	0.14 U	1.0	0.14	1	12/01/12 02:49	
Styrene	0.29 U	1.0	0.29	1	12/01/12 02:49	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	12/01/12 02:49	
Toluene	0.19 U	1.0	0.19	1	12/01/12 02:49	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water
Sample Name: Trip Blank
Lab Code: J1205834-009

Service Request: J1205834
Date Collected: 11/28/12 00:00
Date Received: 11/29/12 10:00
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	12/01/12 02:49	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	12/01/12 02:49	
trans-1,4-Dichloro-2-butene	2.2 U	20	2.2	1	12/01/12 02:49	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	12/01/12 02:49	
Trichlorofluoromethane	0.24 U	20	0.24	1	12/01/12 02:49	
Vinyl Acetate	1.9 U	10	1.9	1	12/01/12 02:49	
Vinyl Chloride	0.36 U	1.0	0.36	1	12/01/12 02:49	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	102	72 - 121	12/01/12 02:49	
4-Bromofluorobenzene	112	86 - 113	12/01/12 02:49	
Dibromofluoromethane	101	86 - 112	12/01/12 02:49	
Toluene-d8	108	88 - 115	12/01/12 02:49	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water

Service Request: J1205834**Date Collected:** NA**Date Received:** NA**Sample Name:** Method Blank**Units:** ug/L**Lab Code:** JQ1207746-03**Basis:** NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	1.0	0.19	1	11/30/12 21:38	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	11/30/12 21:38	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	11/30/12 21:38	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	11/30/12 21:38	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	11/30/12 21:38	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	11/30/12 21:38	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	11/30/12 21:38	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	5.0	2.3	1	11/30/12 21:38	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	11/30/12 21:38	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	11/30/12 21:38	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	11/30/12 21:38	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	11/30/12 21:38	
1,3-Dichlorobenzene	0.22 U	1.0	0.22	1	11/30/12 21:38	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	11/30/12 21:38	
2-Butanone (MEK)	3.8 U	10	3.8	1	11/30/12 21:38	
2-Hexanone	2.2 U	25	2.2	1	11/30/12 21:38	
4-Methyl-2-pentanone (MIBK)	1.1 U	25	1.1	1	11/30/12 21:38	
Acetone	5.6 U	50	5.6	1	11/30/12 21:38	
Benzene	0.21 U	1.0	0.21	1	11/30/12 21:38	
Bromochloromethane	0.27 U	5.0	0.27	1	11/30/12 21:38	
Bromodichloromethane	0.22 U	1.0	0.22	1	11/30/12 21:38	
Bromoform	0.42 U	2.0	0.42	1	11/30/12 21:38	
Bromomethane	0.23 U	5.0	0.23	1	11/30/12 21:38	
Carbon Disulfide	2.4 U	10	2.4	1	11/30/12 21:38	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	11/30/12 21:38	
Chlorobenzene	0.16 U	1.0	0.16	1	11/30/12 21:38	
Chloroethane	0.52 U	5.0	0.52	1	11/30/12 21:38	
Chloroform	0.35 U	1.0	0.35	1	11/30/12 21:38	
Chloromethane	0.36 U	1.0	0.36	1	11/30/12 21:38	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	11/30/12 21:38	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	11/30/12 21:38	
Dibromochloromethane	0.21 U	1.0	0.21	1	11/30/12 21:38	
Dibromomethane	0.36 U	5.0	0.36	1	11/30/12 21:38	
Dichlorodifluoromethane	0.23 U	20	0.23	1	11/30/12 21:38	
Ethylbenzene	0.21 U	1.0	0.21	1	11/30/12 21:38	
Iodomethane	2.7 U	5.0	2.7	1	11/30/12 21:38	
m,p-Xylenes	0.31 U	2.0	0.31	1	11/30/12 21:38	
Methyl tert-Butyl Ether	0.24 U	2.0	0.24	1	11/30/12 21:38	
Methylene Chloride	0.21 U	5.0	0.21	1	11/30/12 21:38	
o-Xylene	0.14 U	1.0	0.14	1	11/30/12 21:38	
Styrene	0.29 U	1.0	0.29	1	11/30/12 21:38	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	11/30/12 21:38	
Toluene	0.19 U	1.0	0.19	1	11/30/12 21:38	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: JQ1207746-03

Service Request: J1205834
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	11/30/12 21:38	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	11/30/12 21:38	
trans-1,4-Dichloro-2-butene	2.2 U	20	2.2	1	11/30/12 21:38	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	11/30/12 21:38	
Trichlorofluoromethane	0.24 U	20	0.24	1	11/30/12 21:38	
Vinyl Acetate	1.9 U	10	1.9	1	11/30/12 21:38	
Vinyl Chloride	0.36 U	1.0	0.36	1	11/30/12 21:38	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	102	72 - 121	11/30/12 21:38	
4-Bromofluorobenzene	110	86 - 113	11/30/12 21:38	
Dibromofluoromethane	100	86 - 112	11/30/12 21:38	
Toluene-d8	108	88 - 115	11/30/12 21:38	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request: J1205834
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: JQ1207825-03

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,1,1,2-Tetrachloroethane	0.410 U	5.00	0.410	1	12/05/12 22:17	12/5/12	
1,1,1-Trichloroethane (TCA)	0.230 U	5.00	0.230	1	12/05/12 22:17	12/5/12	
1,1,2,2-Tetrachloroethane	0.230 U	5.00	0.230	1	12/05/12 22:17	12/5/12	
1,1,2-Trichloroethane	0.390 U	5.00	0.390	1	12/05/12 22:17	12/5/12	
1,1-Dichloroethane (1,1-DCA)	0.310 U	5.00	0.310	1	12/05/12 22:17	12/5/12	
1,1-Dichloroethene (1,1-DCE)	0.690 U	5.00	0.690	1	12/05/12 22:17	12/5/12	
1,2,3-Trichloropropane	0.760 U	5.00	0.760	1	12/05/12 22:17	12/5/12	
1,2-Dibromo-3-chloropropane (DBCP)	0.530 U	10.0	0.530	1	12/05/12 22:17	12/5/12	
1,2-Dibromoethane (EDB)	0.580 U	5.00	0.580	1	12/05/12 22:17	12/5/12	
1,2-Dichlorobenzene	0.320 U	5.00	0.320	1	12/05/12 22:17	12/5/12	
1,2-Dichloroethane	0.300 U	5.00	0.300	1	12/05/12 22:17	12/5/12	
1,2-Dichloropropane	0.410 U	5.00	0.410	1	12/05/12 22:17	12/5/12	
1,3-Dichlorobenzene	0.300 U	5.00	0.300	1	12/05/12 22:17	12/5/12	
1,4-Dichlorobenzene	0.100 U	5.00	0.100	1	12/05/12 22:17	12/5/12	
2-Butanone (MEK)	1.60 U	25.0	1.60	1	12/05/12 22:17	12/5/12	
2-Hexanone	2.20 U	10.0	2.20	1	12/05/12 22:17	12/5/12	
4-Methyl-2-pentanone (MIBK)	1.50 U	10.0	1.50	1	12/05/12 22:17	12/5/12	
Acetone	2.30 U	125	2.30	1	12/05/12 22:17	12/5/12	
Benzene	0.170 U	5.00	0.170	1	12/05/12 22:17	12/5/12	
Bromochloromethane	0.600 U	5.00	0.600	1	12/05/12 22:17	12/5/12	
Bromodichloromethane	0.370 U	5.00	0.370	1	12/05/12 22:17	12/5/12	
Bromoform	0.340 U	5.00	0.340	1	12/05/12 22:17	12/5/12	
Bromomethane	0.270 U	5.00	0.270	1	12/05/12 22:17	12/5/12	
Carbon Disulfide	0.800 U	10.0	0.800	1	12/05/12 22:17	12/5/12	
Carbon Tetrachloride	0.190 U	5.00	0.190	1	12/05/12 22:17	12/5/12	
Chlorobenzene	0.140 U	5.00	0.140	1	12/05/12 22:17	12/5/12	
Chloroethane	0.330 U	5.00	0.330	1	12/05/12 22:17	12/5/12	
Chloroform	0.180 U	5.00	0.180	1	12/05/12 22:17	12/5/12	
Chloromethane	0.210 U	5.00	0.210	1	12/05/12 22:17	12/5/12	
cis-1,2-Dichloroethene	0.330 U	5.00	0.330	1	12/05/12 22:17	12/5/12	
cis-1,3-Dichloropropene	0.140 U	5.00	0.140	1	12/05/12 22:17	12/5/12	
Dibromochloromethane	0.220 U	5.00	0.220	1	12/05/12 22:17	12/5/12	
Dibromomethane	0.390 U	5.00	0.390	1	12/05/12 22:17	12/5/12	
Dichlorodifluoromethane	0.180 U	20.0	0.180	1	12/05/12 22:17	12/5/12	
Ethylbenzene	0.120 U	5.00	0.120	1	12/05/12 22:17	12/5/12	
Iodomethane	1.10 U	10.0	1.10	1	12/05/12 22:17	12/5/12	
m,p-Xylenes	0.210 U	10.0	0.210	1	12/05/12 22:17	12/5/12	
Methyl tert-Butyl Ether	0.260 U	5.00	0.260	1	12/05/12 22:17	12/5/12	
Methylene Chloride	2.80 I	10.0	0.310	1	12/05/12 22:17	12/5/12	
o-Xylene	0.160 U	5.00	0.160	1	12/05/12 22:17	12/5/12	
Styrene	0.270 U	5.00	0.270	1	12/05/12 22:17	12/5/12	
Tetrachloroethene (PCE)	0.250 U	5.00	0.250	1	12/05/12 22:17	12/5/12	
Toluene	0.270 U	5.00	0.270	1	12/05/12 22:17	12/5/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: JQ1207825-03

Service Request: J1205834
Date Collected: NA
Date Received: NA

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Prep Method: EPA 5035

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
trans-1,2-Dichloroethene	0.390 U	5.00	0.390	1	12/05/12 22:17	12/5/12	
trans-1,3-Dichloropropene	0.220 U	5.00	0.220	1	12/05/12 22:17	12/5/12	
trans-1,4-Dichloro-2-butene	0.540 U	20.0	0.540	1	12/05/12 22:17	12/5/12	
Trichloroethene (TCE)	0.250 U	5.00	0.250	1	12/05/12 22:17	12/5/12	
Trichlorofluoromethane	0.210 U	20.0	0.210	1	12/05/12 22:17	12/5/12	
Vinyl Acetate	1.20 U	10.0	1.20	1	12/05/12 22:17	12/5/12	
Vinyl Chloride	0.260 U	5.00	0.260	1	12/05/12 22:17	12/5/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	99	80 - 120	12/05/12 22:17	
4-Bromofluorobenzene	97	64 - 135	12/05/12 22:17	
Dibromofluoromethane	98	74 - 125	12/05/12 22:17	
Toluene-d8	100	46 - 156	12/05/12 22:17	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water

Service Request: J1205834
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: JQ1207672-01

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	0.600 U	5.00	0.600	1	12/01/12 05:01	11/29/12	
1,2-Dichlorobenzene	0.640 U	5.00	0.640	1	12/01/12 05:01	11/29/12	
1,3-Dichlorobenzene	0.920 U	5.00	0.920	1	12/01/12 05:01	11/29/12	
1,4-Dichlorobenzene	0.910 U	5.00	0.910	1	12/01/12 05:01	11/29/12	
1-Methylnaphthalene	0.730 U	5.00	0.730	1	12/01/12 05:01	11/29/12	
2,4,5-Trichlorophenol	1.30 U	5.00	1.30	1	12/01/12 05:01	11/29/12	
2,4,6-Trichlorophenol	0.890 U	5.00	0.890	1	12/01/12 05:01	11/29/12	
2,4-Dichlorophenol	1.20 U	5.00	1.20	1	12/01/12 05:01	11/29/12	
2,4-Dimethylphenol	1.50 U	5.00	1.50	1	12/01/12 05:01	11/29/12	
2,4-Dinitrophenol	0.760 U	20.0	0.760	1	12/01/12 05:01	11/29/12	
2,4-Dinitrotoluene	1.30 U	5.00	1.30	1	12/01/12 05:01	11/29/12	
2,6-Dinitrotoluene	1.10 U	5.00	1.10	1	12/01/12 05:01	11/29/12	
2-Chloronaphthalene	4.60 U	5.00	4.60	1	12/01/12 05:01	11/29/12	
2-Chlorophenol	1.20 U	5.00	1.20	1	12/01/12 05:01	11/29/12	
2-Methylnaphthalene	0.630 U	5.00	0.630	1	12/01/12 05:01	11/29/12	
2-Methylphenol	1.30 U	5.00	1.30	1	12/01/12 05:01	11/29/12	
2-Nitroaniline	1.50 U	5.00	1.50	1	12/01/12 05:01	11/29/12	
2-Nitrophenol	1.40 U	20.0	1.40	1	12/01/12 05:01	11/29/12	
3- and 4-Methylphenol Coelution	1.00 U	5.00	1.00	1	12/01/12 05:01	11/29/12	
3,3'-Dichlorobenzidine	1.40 U	20.0	1.40	1	12/01/12 05:01	11/29/12	
3-Nitroaniline	1.10 U	5.00	1.10	1	12/01/12 05:01	11/29/12	
4,6-Dinitro-2-methylphenol	1.00 U	20.0	1.00	1	12/01/12 05:01	11/29/12	
4-Bromophenyl Phenyl Ether	1.30 U	5.00	1.30	1	12/01/12 05:01	11/29/12	
4-Chloro-3-methylphenol	1.80 U	5.00	1.80	1	12/01/12 05:01	11/29/12	
4-Chloroaniline	1.40 U	5.00	1.40	1	12/01/12 05:01	11/29/12	
4-Chlorophenyl Phenyl Ether	0.960 U	5.00	0.960	1	12/01/12 05:01	11/29/12	
4-Nitroaniline	1.00 U	5.00	1.00	1	12/01/12 05:01	11/29/12	
4-Nitrophenol	1.80 U	20.0	1.80	1	12/01/12 05:01	11/29/12	
Acenaphthene	4.20 U	5.00	4.20	1	12/01/12 05:01	11/29/12	
Acenaphthylene	0.990 U	5.00	0.990	1	12/01/12 05:01	11/29/12	
Acetophenone	1.60 U	10.0	1.60	1	12/01/12 05:01	11/29/12	
Anthracene	1.60 U	5.00	1.60	1	12/01/12 05:01	11/29/12	
Benz(a)anthracene	1.00 U	5.00	1.00	1	12/01/12 05:01	11/29/12	
Benzo(a)pyrene	1.20 U	5.00	1.20	1	12/01/12 05:01	11/29/12	
Benzo(b)fluoranthene	1.00 U	5.00	1.00	1	12/01/12 05:01	11/29/12	
Benzo(g,h,i)perylene	1.40 U	5.00	1.40	1	12/01/12 05:01	11/29/12	
Benzo(k)fluoranthene	1.80 U	5.00	1.80	1	12/01/12 05:01	11/29/12	
Benzyl Alcohol	1.40 U	5.00	1.40	1	12/01/12 05:01	11/29/12	
Bis(2-chloroethoxy)methane	1.20 U	5.00	1.20	1	12/01/12 05:01	11/29/12	
Bis(2-chloroethyl) Ether	1.90 U	5.00	1.90	1	12/01/12 05:01	11/29/12	
Bis(2-chloroisopropyl) Ether	1.50 U	5.00	1.50	1	12/01/12 05:01	11/29/12	
Bis(2-ethylhexyl) Phthalate	1.50 U	5.00	1.50	1	12/01/12 05:01	11/29/12	
Butyl Benzyl Phthalate	0.860 U	10.0	0.860	1	12/01/12 05:01	11/29/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: JQ1207672-01

Service Request: J1205834
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	1.80 U	5.00	1.80	1	12/01/12 05:01	11/29/12	
Chrysene	1.20 U	5.00	1.20	1	12/01/12 05:01	11/29/12	
Dibenz(a,h)anthracene	1.50 U	5.00	1.50	1	12/01/12 05:01	11/29/12	
Dibenzofuran	1.30 U	5.00	1.30	1	12/01/12 05:01	11/29/12	
Diethyl Phthalate	1.70 U	5.00	1.70	1	12/01/12 05:01	11/29/12	
Dimethyl Phthalate	1.30 U	5.00	1.30	1	12/01/12 05:01	11/29/12	
Di-n-butyl Phthalate	2.20 U	5.00	2.20	1	12/01/12 05:01	11/29/12	
Di-n-octyl Phthalate	2.80 U	5.00	2.80	1	12/01/12 05:01	11/29/12	
Diphenylamine + n-Nitrosodiphenylamine	1.10 U	5.00	1.10	1	12/01/12 05:01	11/29/12	
Fluoranthene	1.40 U	5.00	1.40	1	12/01/12 05:01	11/29/12	
Fluorene	0.840 U	5.00	0.840	1	12/01/12 05:01	11/29/12	
Hexachlorobenzene	1.70 U	5.00	1.70	1	12/01/12 05:01	11/29/12	
Hexachlorobutadiene	1.20 U	5.00	1.20	1	12/01/12 05:01	11/29/12	
Hexachlorocyclopentadiene	0.500 U	5.00	0.500	1	12/01/12 05:01	11/29/12	
Hexachloroethane	0.810 U	5.00	0.810	1	12/01/12 05:01	11/29/12	
Indeno(1,2,3-cd)pyrene	1.70 U	5.00	1.70	1	12/01/12 05:01	11/29/12	
Isophorone	1.80 U	5.00	1.80	1	12/01/12 05:01	11/29/12	
Naphthalene	0.530 U	5.00	0.530	1	12/01/12 05:01	11/29/12	
Nitrobenzene	2.10 U	5.00	2.10	1	12/01/12 05:01	11/29/12	
N-Nitrosodi-n-propylamine	2.20 U	5.00	2.20	1	12/01/12 05:01	11/29/12	
Pentachlorophenol (PCP)	1.10 U	20.0	1.10	1	12/01/12 05:01	11/29/12	
Phenanthrene	1.40 U	5.00	1.40	1	12/01/12 05:01	11/29/12	
Phenol	0.590 U	5.00	0.590	1	12/01/12 05:01	11/29/12	
Pyrene	0.740 U	5.00	0.740	1	12/01/12 05:01	11/29/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	94	13 - 133	12/01/12 05:01	
2-Fluorobiphenyl	77	22 - 105	12/01/12 05:01	
2-Fluorophenol	70	10 - 69	12/01/12 05:01	*
Nitrobenzene-d5	72	10 - 123	12/01/12 05:01	
Phenol-d6	48	10 - 59	12/01/12 05:01	
p-Terphenyl-d14	89	20 - 128	12/01/12 05:01	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request: J1205834
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: JQ1207744-01

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	63.0 U	170	63.0	1	12/05/12 17:58	12/3/12	
1,2-Dichlorobenzene	32.0 U	170	32.0	1	12/05/12 17:58	12/3/12	
1,3-Dichlorobenzene	38.0 U	170	38.0	1	12/05/12 17:58	12/3/12	
1,4-Dichlorobenzene	41.0 U	170	41.0	1	12/05/12 17:58	12/3/12	
1-Methylnaphthalene	66.0 U	170	66.0	1	12/05/12 17:58	12/3/12	
2,4,5-Trichlorophenol	57.0 U	170	57.0	1	12/05/12 17:58	12/3/12	
2,4,6-Trichlorophenol	50.0 U	170	50.0	1	12/05/12 17:58	12/3/12	
2,4-Dichlorophenol	63.0 U	170	63.0	1	12/05/12 17:58	12/3/12	
2,4-Dimethylphenol	83.0 U	170	83.0	1	12/05/12 17:58	12/3/12	
2,4-Dinitrophenol	23.0 U	670	23.0	1	12/05/12 17:58	12/3/12	
2,4-Dinitrotoluene	41.0 U	170	41.0	1	12/05/12 17:58	12/3/12	
2,6-Dinitrotoluene	48.0 U	170	48.0	1	12/05/12 17:58	12/3/12	
2-Chloronaphthalene	43.0 U	170	43.0	1	12/05/12 17:58	12/3/12	
2-Chlorophenol	35.0 U	170	35.0	1	12/05/12 17:58	12/3/12	
2-Methylnaphthalene	59.0 U	170	59.0	1	12/05/12 17:58	12/3/12	
2-Methylphenol	48.0 U	170	48.0	1	12/05/12 17:58	12/3/12	
2-Nitroaniline	51.0 U	170	51.0	1	12/05/12 17:58	12/3/12	
2-Nitrophenol	52.0 U	670	52.0	1	12/05/12 17:58	12/3/12	
3- and 4-Methylphenol Coelution	43.0 U	170	43.0	1	12/05/12 17:58	12/3/12	
3,3'-Dichlorobenzidine	85.0 U	670	85.0	1	12/05/12 17:58	12/3/12	
3-Nitroaniline	51.0 U	170	51.0	1	12/05/12 17:58	12/3/12	
4,6-Dinitro-2-methylphenol	48.0 U	170	48.0	1	12/05/12 17:58	12/3/12	
4-Bromophenyl Phenyl Ether	52.0 U	170	52.0	1	12/05/12 17:58	12/3/12	
4-Chloro-3-methylphenol	53.0 U	170	53.0	1	12/05/12 17:58	12/3/12	
4-Chloroaniline	69.0 U	170	69.0	1	12/05/12 17:58	12/3/12	
4-Chlorophenyl Phenyl Ether	52.0 U	170	52.0	1	12/05/12 17:58	12/3/12	
4-Nitroaniline	55.0 U	170	55.0	1	12/05/12 17:58	12/3/12	
4-Nitrophenol	56.0 U	670	56.0	1	12/05/12 17:58	12/3/12	
Acenaphthene	53.0 U	170	53.0	1	12/05/12 17:58	12/3/12	
Acenaphthylene	47.0 U	170	47.0	1	12/05/12 17:58	12/3/12	
Acetophenone	46.0 U	340	46.0	1	12/05/12 17:58	12/3/12	
Anthracene	43.0 U	170	43.0	1	12/05/12 17:58	12/3/12	
Benz(a)anthracene	47.0 U	170	47.0	1	12/05/12 17:58	12/3/12	
Benzo(a)pyrene	37.0 U	170	37.0	1	12/05/12 17:58	12/3/12	
Benzo(b)fluoranthene	26.0 U	170	26.0	1	12/05/12 17:58	12/3/12	
Benzo(g,h,i)perylene	52.0 U	170	52.0	1	12/05/12 17:58	12/3/12	
Benzo(k)fluoranthene	59.0 U	170	59.0	1	12/05/12 17:58	12/3/12	
Benzyl Alcohol	38.0 U	340	38.0	1	12/05/12 17:58	12/3/12	
Bis(2-chloroethoxy)methane	53.0 U	170	53.0	1	12/05/12 17:58	12/3/12	
Bis(2-chloroethyl) Ether	42.0 U	170	42.0	1	12/05/12 17:58	12/3/12	
Bis(2-chloroisopropyl) Ether	35.0 U	170	35.0	1	12/05/12 17:58	12/3/12	
Bis(2-ethylhexyl) Phthalate	44.0 U	170	44.0	1	12/05/12 17:58	12/3/12	
Butyl Benzyl Phthalate	47.0 U	340	47.0	1	12/05/12 17:58	12/3/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request: J1205834
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: JQ1207744-01

Units: ug/Kg
Basis: Dry

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	57.0 U	170	57.0	1	12/05/12 17:58	12/3/12	
Chrysene	45.0 U	170	45.0	1	12/05/12 17:58	12/3/12	
Dibenz(a,h)anthracene	46.0 U	170	46.0	1	12/05/12 17:58	12/3/12	
Dibenzofuran	46.0 U	170	46.0	1	12/05/12 17:58	12/3/12	
Diethyl Phthalate	51.0 U	170	51.0	1	12/05/12 17:58	12/3/12	
Dimethyl Phthalate	53.0 U	170	53.0	1	12/05/12 17:58	12/3/12	
Di-n-butyl Phthalate	34.0 U	170	34.0	1	12/05/12 17:58	12/3/12	
Di-n-octyl Phthalate	52.0 U	170	52.0	1	12/05/12 17:58	12/3/12	
Diphenylamine + n-Nitrosodiphenylamine	37.0 U	170	37.0	1	12/05/12 17:58	12/3/12	
Fluoranthene	48.0 U	170	48.0	1	12/05/12 17:58	12/3/12	
Fluorene	47.0 U	170	47.0	1	12/05/12 17:58	12/3/12	
Hexachlorobenzene	48.0 U	170	48.0	1	12/05/12 17:58	12/3/12	
Hexachlorobutadiene	55.0 U	170	55.0	1	12/05/12 17:58	12/3/12	
Hexachlorocyclopentadiene	34.0 U	170	34.0	1	12/05/12 17:58	12/3/12	
Hexachloroethane	31.0 U	170	31.0	1	12/05/12 17:58	12/3/12	
Indeno(1,2,3-cd)pyrene	41.0 U	170	41.0	1	12/05/12 17:58	12/3/12	
Isophorone	58.0 U	170	58.0	1	12/05/12 17:58	12/3/12	
Naphthalene	49.0 U	170	49.0	1	12/05/12 17:58	12/3/12	
Nitrobenzene	39.0 U	170	39.0	1	12/05/12 17:58	12/3/12	
N-Nitrosodi-n-propylamine	50.0 U	170	50.0	1	12/05/12 17:58	12/3/12	
Pentachlorophenol (PCP)	35.0 U	670	35.0	1	12/05/12 17:58	12/3/12	
Phenanthrene	42.0 U	170	42.0	1	12/05/12 17:58	12/3/12	
Phenol	46.0 U	170	46.0	1	12/05/12 17:58	12/3/12	
Pyrene	46.0 U	170	46.0	1	12/05/12 17:58	12/3/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	59	28 - 164	12/05/12 17:58	
2-Fluorobiphenyl	73	33 - 133	12/05/12 17:58	
2-Fluorophenol	59	10 - 126	12/05/12 17:58	
Nitrobenzene-d5	69	25 - 138	12/05/12 17:58	
Phenol-d6	64	10 - 170	12/05/12 17:58	
p-Terphenyl-d14	96	16 - 168	12/05/12 17:58	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: JQ1207730-01

Service Request: J1205834
Date Collected: NA
Date Received: NA

Units: ug/Kg
Basis: Dry

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082
Prep Method: EPA 3550B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	9.06 U	33.0	9.06	1	12/04/12 03:18	12/1/12	
Aroclor 1221	6.68 U	33.0	6.68	1	12/04/12 03:18	12/1/12	
Aroclor 1232	21.6 U	33.0	21.6	1	12/04/12 03:18	12/1/12	
Aroclor 1242	8.89 U	33.0	8.89	1	12/04/12 03:18	12/1/12	
Aroclor 1248	16.1 U	33.0	16.1	1	12/04/12 03:18	12/1/12	
Aroclor 1254	12.2 U	33.0	12.2	1	12/04/12 03:18	12/1/12	
Aroclor 1260	9.30 U	33.0	9.30	1	12/04/12 03:18	12/1/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	101	10 - 258	12/04/12 03:18	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: JQ1207738-01

Service Request: J1205834
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: NA

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.130 U	0.500	0.130	1	12/04/12 08:28	12/3/12	
Aroclor 1221	0.290 U	0.500	0.290	1	12/04/12 08:28	12/3/12	
Aroclor 1232	0.200 U	0.500	0.200	1	12/04/12 08:28	12/3/12	
Aroclor 1242	0.130 U	0.500	0.130	1	12/04/12 08:28	12/3/12	
Aroclor 1248	0.260 U	0.500	0.260	1	12/04/12 08:28	12/3/12	
Aroclor 1254	0.330 U	0.500	0.330	1	12/04/12 08:28	12/3/12	
Aroclor 1260	0.267 U	0.500	0.267	1	12/04/12 08:28	12/3/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	120	10 - 151	12/04/12 08:28	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water

Service Request: J1205834
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: JQ1207769-01

Units: mg/L
Basis: NA

Petroleum-Range Organics by GC-FID for State of Florida

Analysis Method: FL-PRO
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
FL-PRO (C8 - C40)	0.122 U	0.400	0.122	1	12/04/12 14:28	12/4/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	102	82 - 142	12/04/12 14:28	
n-Nonatriacontane	102	42 - 193	12/04/12 14:28	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request: J1205834
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: JQ1207770-01

Units: mg/Kg
Basis: Dry

Petroleum-Range Organics by GC-FID for State of Florida

Analysis Method: FL-PRO
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
FL-PRO (C8 - C40)	2.00 U	20.0	2.00	1	12/04/12 20:13	12/4/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	99	62 - 109	12/04/12 20:13	
n-Nonatriacontane	96	60 - 118	12/04/12 20:13	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: J1205834-MB1

Service Request: J1205834
Date Collected: NA
Date Received: NA
Basis: Dry

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total Recoverable	6010B	0.12 U	mg/Kg	0.50	0.12	1	12/04/12 17:24	12/3/12	
Cadmium, Total Recoverable	6010B	0.007 U	mg/Kg	0.25	0.007	1	12/04/12 17:24	12/3/12	
Chromium, Total Recoverable	6010B	0.05 I	mg/Kg	0.50	0.02	1	12/04/12 17:24	12/3/12	
Lead, Total Recoverable	6010B	0.13 U	mg/Kg	0.50	0.13	1	12/04/12 17:24	12/3/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: J1205834-MB2

Service Request: J1205834
Date Collected: NA
Date Received: NA
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total Recoverable	6010B	4 U	ug/L	10	4	1	12/01/12 14:26	11/30/12	
Cadmium, Total Recoverable	6010B	0.2 U	ug/L	5.0	0.2	1	12/01/12 14:26	11/30/12	
Chromium, Total Recoverable	6010B	0.5 U	ug/L	10	0.5	1	12/01/12 14:26	11/30/12	
Lead, Total Recoverable	6010B	4 U	ug/L	10	4	1	12/01/12 14:26	11/30/12	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil
Analysis Method: 160.3 Modified

Service Request: J1205834
Date Collected: 11/28/12
Date Received: 11/29/12

Units: Percent
Basis: As Received

Solids, Total

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
MPT-1241-SS03-0102-112812	J1205834-001	95	0.10	0.10	1	12/04/12 08:25	
MPT-1241-SB03-0405-112812	J1205834-002	81	0.10	0.10	1	12/04/12 08:25	
MPT-1241-SS02-0102-112812	J1205834-003	96	0.10	0.10	1	12/04/12 08:25	
MPT-1596-SB01-0203-112812	J1205834-005	82	0.10	0.10	1	12/04/12 08:25	
MPT-1596-SB01-0405-112812	J1205834-006	81	0.10	0.10	1	12/04/12 08:25	
MPT-1596-SB03-0203-112812	J1205834-007	86	0.10	0.10	1	12/04/12 08:25	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request: J1205834

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Extraction Method: EPA 5035

Sample Name	Lab Code	1,2-Dichloroethane-d4	4-Bromofluorobenzene	Dibromofluoromethane
		80 - 120	64 - 135	74 - 125
MPT-1241-SS03-0102-112812J1205834-001		103	99	101
MPT-1241-SB03-0405-112812J1205834-002		102	100	100
MPT-1241-SS02-0102-112812J1205834-003		103	97	98
MPT-1241-GW03-112812	J1205834-004	101	107	100
MPT-1596-SB01-0203-112812J1205834-005		102	99	97
MPT-1596-SB01-0405-112812J1205834-006		101	116	100
MPT-1596-SB03-0203-112812J1205834-007		103	101	100
MPT-1596-GW01-112812	J1205834-008	102	107	101
Trip Blank	J1205834-009	102	112	101
Lab Control Sample	JQ1207746-01	100	102	98
Duplicate Lab Control Sample	JQ1207746-02	100	102	98
Method Blank	JQ1207746-03	102	110	100
Lab Control Sample	JQ1207825-01	98	101	98
Duplicate Lab Control Sample	JQ1207825-02	99	96	99
Method Blank	JQ1207825-03	99	97	98

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request: J1205834

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260B
Extraction Method: EPA 5035

Sample Name	Lab Code	Toluene-d8
		46 - 156
MPT-1241-SS03-0102-112812J1205834-001		99
MPT-1241-SB03-0405-112812J1205834-002		100
MPT-1241-SS02-0102-112812J1205834-003		104
MPT-1241-GW03-112812	J1205834-004	107
MPT-1596-SB01-0203-112812J1205834-005		101
MPT-1596-SB01-0405-112812J1205834-006		105
MPT-1596-SB03-0203-112812J1205834-007		102
MPT-1596-GW01-112812	J1205834-008	109
Trip Blank	J1205834-009	108
Lab Control Sample	JQ1207746-01	103
Duplicate Lab Control Sample	JQ1207746-02	105
Method Blank	JQ1207746-03	108
Lab Control Sample	JQ1207825-01	100
Duplicate Lab Control Sample	JQ1207825-02	100
Method Blank	JQ1207825-03	100

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water

Service Request:J1205834
Date Analyzed:11/30/12

**Duplicate Lab Control Sample Summary
 Volatile Organic Compounds by GC/MS**

Analysis Method: 8260B

Units:ug/L
Basis:NA
Analysis Lot:320702

Analyte Name	Lab Control Sample JQ1207746-01			Duplicate Lab Control Sample JQ1207746-02			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1,2-Tetrachloroethane	17.9	20.0	89	18.1	20.0	90	77-118	1	30
1,1,1-Trichloroethane (TCA)	18.7	20.0	93	17.9	20.0	90	70-122	4	30
1,1,2,2-Tetrachloroethane	17.4	20.0	87	17.7	20.0	88	66-135	2	30
1,1,2-Trichloroethane	18.2	20.0	91	18.0	20.0	90	75-122	<1	30
1,1-Dichloroethane (1,1-DCA)	18.9	20.0	95	17.6	20.0	88	79-117	7	30
1,1-Dichloroethene (1,1-DCE)	20.3	20.0	101	19.3	20.0	96	72-128	5	30
1,2,3-Trichloropropane	18.1	20.0	91	17.5	20.0	88	70-123	3	30
1,2-Dibromo-3-chloropropane (DBCP)	18.9	20.0	94	19.2	20.0	96	60-122	2	30
1,2-Dibromoethane (EDB)	18.2	20.0	91	18.4	20.0	92	76-118	1	30
1,2-Dichlorobenzene	17.9	20.0	90	17.7	20.0	88	81-115	1	30
1,2-Dichloroethane	18.9	20.0	94	18.7	20.0	94	70-117	<1	30
1,2-Dichloropropane	18.4	20.0	92	17.9	20.0	90	79-117	2	30
1,3-Dichlorobenzene	18.2	20.0	91	18.1	20.0	90	82-116	<1	30
1,4-Dichlorobenzene	18.1	20.0	91	17.9	20.0	89	82-115	1	30
2-Butanone (MEK)	92.2	100	92	91.2	100	91	62-138	1	30
2-Hexanone	96.3	100	96	95.7	100	96	74-127	<1	30
4-Methyl-2-pentanone (MIBK)	97.3	100	97	96.5	100	96	77-120	<1	30
Acetone	93.0	100	93	91.1	100	91	42-161	2	30
Benzene	17.9	20.0	90	17.4	20.0	87	80-117	3	30
Bromochloromethane	18.9	20.0	94	18.4	20.0	92	78-118	2	30

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water

Service Request:J1205834
Date Analyzed:11/30/12

**Duplicate Lab Control Sample Summary
 Volatile Organic Compounds by GC/MS**

Analysis Method: 8260B

Units:ug/L
Basis:NA
Analysis Lot:320702

Analyte Name	Lab Control Sample JQ1207746-01			Duplicate Lab Control Sample JQ1207746-02			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Bromodichloromethane	18.2	20.0	91	18.3	20.0	91	75-118	<1	30
Bromoform	17.1	20.0	86	17.9	20.0	89	63-121	4	30
Bromomethane	28.9	20.0	144	27.1	20.0	136	31-153	6	30
Carbon Disulfide	91.5	100	91	86.5	100	86	72-128	6	30
Carbon Tetrachloride	18.6	20.0	93	17.8	20.0	89	67-124	4	30
Chlorobenzene	18.0	20.0	90	17.7	20.0	88	83-118	2	30
Chloroethane	21.4	20.0	107	20.3	20.0	102	68-132	5	30
Chloroform	18.5	20.0	92	18.1	20.0	90	77-116	2	30
Chloromethane	25.3	20.0	126	23.3	20.0	116	60-128	8	30
cis-1,2-Dichloroethene	18.7	20.0	93	18.1	20.0	90	78-117	3	30
cis-1,3-Dichloropropene	18.1	20.0	90	18.2	20.0	91	80-119	<1	30
Dibromochloromethane	18.4	20.0	92	18.5	20.0	93	74-121	<1	30
Dibromomethane	18.3	20.0	91	18.2	20.0	91	76-117	<1	30
Dichlorodifluoromethane	19.6	20.0	98	18.1	20.0	91	49-132	8	30
Ethylbenzene	18.1	20.0	91	17.6	20.0	88	82-119	3	30
Iodomethane	64.2	100	64	77.8	100	78	51-137	19	30
m,p-Xylenes	37.5	40.0	94	36.2	40.0	91	79-122	3	30
Methyl tert-Butyl Ether	16.9	20.0	85	16.7	20.0	83	73-118	1	30
Methylene Chloride	18.4	20.0	92	18.3	20.0	92	75-123	<1	30
o-Xylene	18.3	20.0	91	17.8	20.0	89	80-119	3	30

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water

Service Request:J1205834
Date Analyzed:11/30/12

**Duplicate Lab Control Sample Summary
 Volatile Organic Compounds by GC/MS**

Analysis Method: 8260B

Units:ug/L
Basis:NA
Analysis Lot:320702

Analyte Name	Lab Control Sample JQ1207746-01			Duplicate Lab Control Sample JQ1207746-02			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Styrene	17.9	20.0	89	17.5	20.0	87	80-121	2	30
Tetrachloroethene (PCE)	18.2	20.0	91	17.5	20.0	88	75-126	4	30
Toluene	18.4	20.0	92	18.0	20.0	90	52-152	2	30
trans-1,2-Dichloroethene	18.6	20.0	93	18.4	20.0	92	75-121	1	30
trans-1,3-Dichloropropene	18.2	20.0	91	18.4	20.0	92	76-118	1	30
trans-1,4-Dichloro-2-butene	17.1	20.0	86	16.7	20.0	83	10-198	3	30
Trichloroethene (TCE)	18.8	20.0	94	18.0	20.0	90	78-122	4	30
Trichlorofluoromethane	21.0	20.0	105	19.7	20.0	98	58-134	6	30
Vinyl Acetate	91.5	100	92	91.5	100	91	36-169	<1	30
Vinyl Chloride	21.4	20.0	107	19.8	20.0	99	69-138	8	30

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request:J1205834
Date Analyzed:12/05/12
Date Extracted:12/05/12

**Duplicate Lab Control Sample Summary
 Volatile Organic Compounds by GC/MS**

Analysis Method: 8260B
Prep Method: EPA 5035

Units:ug/Kg
Basis:Dry
Analysis Lot:321474

Analyte Name	Lab Control Sample JQ1207825-01			Duplicate Lab Control Sample JQ1207825-02			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1,2-Tetrachloroethane	21.3	20.0	106	20.7	20.0	104	71-124	3	30
1,1,1-Trichloroethane (TCA)	22.7	20.0	114	23.2	20.0	116	72-131	2	30
1,1,2,2-Tetrachloroethane	18.9	20.0	95	19.2	20.0	96	51-136	1	30
1,1,2-Trichloroethane	19.4	20.0	97	19.7	20.0	98	74-113	1	30
1,1-Dichloroethane (1,1-DCA)	21.3	20.0	107	21.4	20.0	107	74-124	<1	30
1,1-Dichloroethene (1,1-DCE)	23.0	20.0	115	23.3	20.0	116	67-128	1	30
1,2,3-Trichloropropane	19.0	20.0	95	19.7	20.0	99	67-115	4	30
1,2-Dibromo-3-chloropropane (DBCP)	18.2	20.0	91	18.0	20.0	90	54-129	1	30
1,2-Dibromoethane (EDB)	19.7	20.0	99	19.8	20.0	99	74-114	<1	30
1,2-Dichlorobenzene	21.0	20.0	105	20.4	20.0	102	74-111	3	30
1,2-Dichloroethane	20.1	20.0	101	20.7	20.0	103	74-120	3	30
1,2-Dichloropropane	21.1	20.0	105	21.1	20.0	106	77-119	<1	30
1,3-Dichlorobenzene	21.3	20.0	107	20.9	20.0	104	74-114	2	30
1,4-Dichlorobenzene	21.0	20.0	105	20.4	20.0	102	72-112	3	30
2-Butanone (MEK)	93.1	100	93	91.3	100	91	55-136	2	30
2-Hexanone	92.1	100	92	93.7	100	94	60-127	2	30
4-Methyl-2-pentanone (MIBK)	93.0	100	93	93.8	100	94	64-122	<1	30
Acetone	99.9	100	100	115	100	115	30-164	14	30
Benzene	21.9	20.0	110	21.8	20.0	109	76-123	<1	30
Bromochloromethane	20.7	20.0	103	20.3	20.0	102	75-124	2	30

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request:J1205834
Date Analyzed:12/05/12
Date Extracted:12/05/12

**Duplicate Lab Control Sample Summary
 Volatile Organic Compounds by GC/MS**

Analysis Method: 8260B
Prep Method: EPA 5035

Units:ug/Kg
Basis:Dry
Analysis Lot:321474

Analyte Name	Lab Control Sample JQ1207825-01			Duplicate Lab Control Sample JQ1207825-02			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Bromodichloromethane	20.7	20.0	103	20.8	20.0	104	74-124	<1	30
Bromoform	17.8	20.0	89	18.7	20.0	94	58-126	5	30
Bromomethane	22.5	20.0	113	21.8	20.0	109	25-175	3	30
Carbon Disulfide	115	100	115	116	100	116	62-134	<1	30
Carbon Tetrachloride	22.7	20.0	113	22.8	20.0	114	68-134	<1	30
Chlorobenzene	20.9	20.0	104	21.1	20.0	106	74-116	1	30
Chloroethane	23.6	20.0	118	23.0	20.0	115	64-131	2	30
Chloroform	21.4	20.0	107	21.2	20.0	106	75-120	<1	30
Chloromethane	22.6	20.0	113	23.0	20.0	115	59-138	2	30
cis-1,2-Dichloroethene	21.4	20.0	107	21.3	20.0	106	74-122	<1	30
cis-1,3-Dichloropropene	20.4	20.0	102	20.5	20.0	102	75-115	<1	30
Dibromochloromethane	19.9	20.0	99	19.6	20.0	98	67-123	1	30
Dibromomethane	21.2	20.0	106	20.5	20.0	103	75-120	3	30
Dichlorodifluoromethane	24.2	20.0	121	24.0	20.0	120	51-150	<1	30
Ethylbenzene	22.1	20.0	110	22.0	20.0	110	71-122	<1	30
Iodomethane	117	100	117	116	100	116	39-165	<1	30
m,p-Xylenes	44.1	40.0	110	44.3	40.0	111	71-122	<1	30
Methyl tert-Butyl Ether	19.6	20.0	98	20.1	20.0	100	72-121	2	30
Methylene Chloride	24.5	20.0	122	26.1	20.0	130	60-140	6	30
o-Xylene	21.7	20.0	109	21.7	20.0	109	71-120	<1	30

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request:J1205834
Date Analyzed:12/05/12
Date Extracted:12/05/12

**Duplicate Lab Control Sample Summary
 Volatile Organic Compounds by GC/MS**

Analysis Method: 8260B
Prep Method: EPA 5035

Units:ug/Kg
Basis:Dry
Analysis Lot:321474

Analyte Name	Lab Control Sample JQ1207825-01			Duplicate Lab Control Sample JQ1207825-02			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Styrene	21.3	20.0	107	21.7	20.0	108	70-122	2	30
Tetrachloroethene (PCE)	22.2	20.0	111	22.8	20.0	114	69-124	3	30
Toluene	21.5	20.0	107	21.8	20.0	109	72-118	1	30
trans-1,2-Dichloroethene	22.8	20.0	114	22.6	20.0	113	71-127	<1	30
trans-1,3-Dichloropropene	20.2	20.0	101	19.8	20.0	99	73-115	2	30
trans-1,4-Dichloro-2-butene	17.4	20.0	87	17.7	20.0	89	52-136	2	30
Trichloroethene (TCE)	22.7	20.0	113	22.5	20.0	112	70-129	<1	30
Trichlorofluoromethane	23.1	20.0	116	23.5	20.0	117	67-129	1	30
Vinyl Acetate	93.9	100	94	92.4	100	92	18-184	2	30
Vinyl Chloride	26.0	20.0	130	26.0	20.0	130	62-137	<1	30

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request: J1205834

SURROGATE RECOVERY SUMMARY
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Extraction Method: EPA 3550C

Sample Name	Lab Code	2,4,6-Tribromophenol	2-Fluorobiphenyl	2-Fluorophenol
		28 - 164	33 - 133	10 - 126
MPT-1241-SS03-0102-112812J1205834-001		82	61	77
MPT-1241-SB03-0405-112812J1205834-002		65	60	61
MPT-1241-SS02-0102-112812J1205834-003		190 *	117	82
MPT-1241-GW03-112812	J1205834-004	85	73	60 *
MPT-1596-SB01-0203-112812J1205834-005		81	55	64
MPT-1596-SB01-0405-112812J1205834-006		109	69	83
MPT-1596-SB03-0203-112812J1205834-007		95	64	78
MPT-1596-GW01-112812	J1205834-008	106	66	73 *
Method Blank	JQ1207672-01	94	77	70 *
Lab Control Sample	JQ1207672-02	105	79	65
Method Blank	JQ1207744-01	59	73	59
Lab Control Sample	JQ1207744-02	106	75	75
MPT-1241-SS03-0102-112812JQ1207744-03		103	70	69
MPT-1241-SS03-0102-112812JQ1207744-04		106	76	77

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request: J1205834

SURROGATE RECOVERY SUMMARY
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Extraction Method: EPA 3550C

Sample Name	Lab Code	Nitrobenzene-d5	Phenol-d6	p-Terphenyl-d14
		25 - 138	10 - 170	16 - 168
MPT-1241-SS03-0102-112812J1205834-001		56	63	78
MPT-1241-SB03-0405-112812J1205834-002		48	50	63
MPT-1241-SS02-0102-112812J1205834-003		68	67	152
MPT-1241-GW03-112812	J1205834-004	66	42	80
MPT-1596-SB01-0203-112812J1205834-005		49	53	59
MPT-1596-SB01-0405-112812J1205834-006		63	67	70
MPT-1596-SB03-0203-112812J1205834-007		59	62	74
MPT-1596-GW01-112812	J1205834-008	66	40	71
Method Blank	JQ1207672-01	72	48	89
Lab Control Sample	JQ1207672-02	71	45	87
Method Blank	JQ1207744-01	69	64	96
Lab Control Sample	JQ1207744-02	73	74	83
MPT-1241-SS03-0102-112812JQ1207744-03		68	70	82
MPT-1241-SS03-0102-112812JQ1207744-04		74	75	90

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request: J1205834

SURROGATE RECOVERY SUMMARY
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Extraction Method: EPA 3550C

Sample Name	Lab Code
MPT-1241-SS03-0102-112812J1205834-001	
MPT-1241-SB03-0405-112812J1205834-002	
MPT-1241-SS02-0102-112812J1205834-003	
MPT-1241-GW03-112812	J1205834-004
MPT-1596-SB01-0203-112812J1205834-005	
MPT-1596-SB01-0405-112812J1205834-006	
MPT-1596-SB03-0203-112812J1205834-007	
MPT-1596-GW01-112812	J1205834-008
Method Blank	JQ1207672-01
Lab Control Sample	JQ1207672-02
Method Blank	JQ1207744-01
Lab Control Sample	JQ1207744-02
MPT-1241-SS03-0102-112812JQ1207744-03	
MPT-1241-SS03-0102-112812JQ1207744-04	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request: J1205834
Date Collected: 11/28/12
Date Received: 11/29/12
Date Analyzed: 12/5/12
Date Extracted: 12/3/12

Duplicate Matrix Spike Summary
Semivolatile Organic Compounds by GC/MS

Sample Name: MPT-1241-SS03-0102-112812
Lab Code: J1205834-001
Analysis Method: 8270C
Prep Method: EPA 3550C

Units: ug/Kg
Basis: Dry

Analyte Name	Sample Result	Matrix Spike JQ1207744-03			Duplicate Matrix Spike JQ1207744-04			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,2,4-Trichlorobenzene	ND	1280	1920	67	1410	1960	72	30-142	10	30
1,2-Dichlorobenzene	ND	1200	1920	62	1350	1960	69	26-135	11	30
1,3-Dichlorobenzene	ND	1160	1920	60	1310	1960	67	26-132	12	30
1,4-Dichlorobenzene	ND	1190	1920	62	1330	1960	68	29-130	11	30
1-Methylnaphthalene	ND	1390	1920	72	1510	1960	77	32-156	8	30
2,4,5-Trichlorophenol	ND	1730	1920	90	1840	1960	94	41-164	6	30
2,4,6-Trichlorophenol	ND	1690	1920	88	1800	1960	91	38-162	6	30
2,4-Dichlorophenol	ND	1510	1920	78	1650	1960	84	33-156	9	30
2,4-Dimethylphenol	ND	1450	1920	76	1570	1960	80	18-162	8	30
2,4-Dinitrophenol	ND	1670	1920	87	1550	1960	79	10-195	8	30
2,4-Dinitrotoluene	ND	1720	1920	90	1780	1960	91	43-181	3	30
2,6-Dinitrotoluene	ND	1600	1920	83	1690	1960	86	39-172	5	30
2-Chloronaphthalene	ND	1290	1920	67	1430	1960	73	38-153	10	30
2-Chlorophenol	ND	1250	1920	65	1360	1960	69	21-144	8	30
2-Methylnaphthalene	ND	1400	1920	73	1520	1960	77	32-151	8	30
2-Methylphenol	ND	1400	1920	73	1510	1960	77	32-145	7	30
2-Nitroaniline	ND	1710	1920	89	1760	1960	90	34-192	3	30
2-Nitrophenol	ND	1500	1920	78	1630	1960	83	28-154	8	30
3- and 4-Methylphenol Coelution	ND	1440	1920	75	1560	1960	80	15-178	8	30
3,3'-Dichlorobenzidine	ND	1630	1920	85	1680	1960	85	37-185	3	30
3-Nitroaniline	ND	1790	1920	93	1840	1960	94	39-168	2	30
4,6-Dinitro-2-methylphenol	ND	1710	1920	89	1620	1960	82	22-186	6	30
4-Bromophenyl Phenyl Ether	ND	1540	1920	80	1640	1960	84	38-168	7	30
4-Chloro-3-methylphenol	ND	1550	1920	81	1660	1960	85	39-170	7	30
4-Chloroaniline	ND	1480	1920	77	1610	1960	82	29-150	8	30
4-Chlorophenyl Phenyl Ether	ND	1530	1920	80	1630	1960	83	38-164	6	30
4-Nitroaniline	ND	1800	1920	94	1780	1960	90	39-172	1	30
4-Nitrophenol	ND	2070	1920	108	1960	1960	100	10-222	5	30
Acenaphthene	ND	1470	1920	77	1580	1960	80	35-163	7	30
Acenaphthylene	ND	1490	1920	78	1600	1960	81	33-167	7	30
Acetophenone	ND	1430	1920	74	1540	1960	78	56-139	7	30
Anthracene	ND	1610	1920	84	1690	1960	86	38-178	5	30
Benz(a)anthracene	ND	1670	1920	87	1730	1960	88	66-178	3	30
Benzo(a)pyrene	ND	1700	1920	88	1770	1960	90	39-180	4	30
Benzo(b)fluoranthene	ND	1670	1920	87	1680	1960	85	42-174	<1	30

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Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request: J1205834
Date Collected: 11/28/12
Date Received: 11/29/12
Date Analyzed: 12/5/12
Date Extracted: 12/3/12

Duplicate Matrix Spike Summary
Semivolatile Organic Compounds by GC/MS

Sample Name: MPT-1241-SS03-0102-112812
Lab Code: J1205834-001
Analysis Method: 8270C
Prep Method: EPA 3550C

Units: ug/Kg
Basis: Dry

Analyte Name	Sample Result	Matrix Spike JQ1207744-03			Duplicate Matrix Spike JQ1207744-04			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Benzo(g,h,i)perylene	ND	1420	1920	74	1580	1960	80	42-186	10	30
Benzo(k)fluoranthene	ND	1860	1920	97	2040	1960	104	42-172	9	30
Benzyl Alcohol	ND	1500	1920	78	1610	1960	82	10-263	7	30
Bis(2-chloroethoxy)methane	ND	1370	1920	71	1500	1960	76	33-160	9	30
Bis(2-chloroethyl) Ether	ND	1330	1920	69	1410	1960	72	13-168	7	30
Bis(2-chloroisopropyl) Ether	ND	1290	1920	67	1420	1960	72	10-199	9	30
Bis(2-ethylhexyl) Phthalate	ND	1750	1920	91	1870	1960	95	10-220	7	30
Butyl Benzyl Phthalate	ND	1730	1920	90	1890	1960	96	38-196	9	30
Carbazole	ND	1740	1920	91	1780	1960	90	38-179	2	30
Chrysene	ND	1620	1920	84	1700	1960	87	39-179	5	30
Dibenz(a,h)anthracene	ND	1510	1920	79	1640	1960	84	41-194	8	30
Dibenzofuran	ND	1530	1920	80	1630	1960	83	36-164	7	30
Diethyl Phthalate	ND	1630	1920	85	1690	1960	86	42-176	4	30
Dimethyl Phthalate	ND	1580	1920	82	1670	1960	85	39-173	5	30
Di-n-butyl Phthalate	ND	1660	1920	87	1730	1960	88	15-203	4	30
Di-n-octyl Phthalate	ND	2010	1920	105	2180	1960	111	34-207	8	30
Diphenylamine + n-Nitrosodiphenylamine	ND	1630	1920	85	1700	1960	87	62-111	4	30
Fluoranthene	ND	1650	1920	86	1700	1960	87	44-180	3	30
Fluorene	ND	1530	1920	80	1620	1960	83	38-171	6	30
Hexachlorobenzene	ND	1540	1920	80	1640	1960	84	42-176	6	30
Hexachlorobutadiene	ND	1250	1920	65	1390	1960	71	32-136	11	30
Hexachlorocyclopentadiene	ND	1510	1920	78	1600	1960	82	27-142	6	30
Hexachloroethane	ND	1180	1920	61	1320	1960	67	31-133	12	30
Indeno(1,2,3-cd)pyrene	ND	1510	1920	79	1630	1960	83	46-185	8	30
Isophorone	ND	1440	1920	75	1570	1960	80	34-165	8	30
Naphthalene	ND	1320	1920	69	1440	1960	73	12-160	9	30
Nitrobenzene	ND	1370	1920	71	1480	1960	76	31-153	8	30
N-Nitrosodi-n-propylamine	ND	1450	1920	75	1550	1960	79	19-180	7	30
Pentachlorophenol (PCP)	ND	1670	1920	87	1590	1960	81	25-195	5	30
Phenanthrene	ND	1570	1920	82	1660	1960	85	40-173	5	30
Phenol	ND	1390	1920	72	1480	1960	76	26-151	7	30
Pyrene	ND	1640	1920	86	1790	1960	91	39-177	8	30

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Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water

Service Request:J1205834
Date Analyzed:12/01/12
Date Extracted:11/29/12

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3510C

Units:ug/L
Basis:NA
Analysis Lot:320747

Lab Control Sample
JQ1207672-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,2,4-Trichlorobenzene	37.5	50.0	75	38-105
1,2-Dichlorobenzene	36.1	50.0	72	32-103
1,3-Dichlorobenzene	35.7	50.0	71	29-103
1,4-Dichlorobenzene	36.6	50.0	73	34-99
1-Methylnaphthalene	37.5	50.0	75	47-118
2,4,5-Trichlorophenol	46.3	50.0	93	51-126
2,4,6-Trichlorophenol	47.2	50.0	94	51-120
2,4-Dichlorophenol	41.8	50.0	84	46-115
2,4-Dimethylphenol	39.4	50.0	79	17-128
2,4-Dinitrophenol	50.0	50.0	100	29-131
2,4-Dinitrotoluene	43.8	50.0	88	59-133
2,6-Dinitrotoluene	46.8	50.0	94	58-120
2-Chloronaphthalene	41.8	50.0	84	53-108
2-Chlorophenol	39.8	50.0	80	31-107
2-Methylnaphthalene	37.9	50.0	76	47-113
2-Methylphenol	37.0	50.0	74	26-108
2-Nitroaniline	38.3	50.0	77	62-126
2-Nitrophenol	46.8	50.0	94	45-110
3- and 4-Methylphenol Coelution	34.1	50.0	68	23-104
3,3'-Dichlorobenzidine	41.1	50.0	82	56-137
3-Nitroaniline	47.7	50.0	95	57-116
4,6-Dinitro-2-methylphenol	52.3	50.0	105	32-141
4-Bromophenyl Phenyl Ether	42.3	50.0	85	62-120
4-Chloro-3-methylphenol	42.6	50.0	85	49-124
4-Chloroaniline	39.1	50.0	78	10-142
4-Chlorophenyl Phenyl Ether	41.4	50.0	83	58-124
4-Nitroaniline	44.6	50.0	89	60-121
4-Nitrophenol	18.5	50.0	37	10-78
Acenaphthene	41.0	50.0	82	56-114
Acenaphthylene	41.6	50.0	83	53-119
Acetophenone	37.7	50.0	75	44-112
Anthracene	42.1	50.0	84	59-127
Benz(a)anthracene	41.9	50.0	84	61-140
Benzo(a)pyrene	43.3	50.0	87	51-151
Benzo(b)fluoranthene	41.5	50.0	83	55-144
Benzo(g,h,i)perylene	42.1	50.0	84	48-162
Benzo(k)fluoranthene	42.8	50.0	86	61-131
Benzyl Alcohol	34.6	50.0	69	26-101
Bis(2-chloroethoxy)methane	36.1	50.0	72	55-110
Bis(2-chloroethyl) Ether	38.0	50.0	76	42-103
Bis(2-chloroisopropyl) Ether	26.2	50.0	52	32-137

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water

Service Request:J1205834
Date Analyzed:12/01/12
Date Extracted:11/29/12

**Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS**

Analysis Method: 8270C
Prep Method: EPA 3510C

Units:ug/L
Basis:NA
Analysis Lot:320747

**Lab Control Sample
JQ1207672-02**

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bis(2-ethylhexyl) Phthalate	45.2	50.0	90	61-143
Butyl Benzyl Phthalate	44.9	50.0	90	57-145
Carbazole	42.0	50.0	84	61-130
Chrysene	41.5	50.0	83	65-127
Dibenz(a,h)anthracene	45.3	50.0	91	49-166
Dibenzofuran	40.5	50.0	81	56-122
Diethyl Phthalate	40.8	50.0	82	63-122
Dimethyl Phthalate	41.6	50.0	83	60-120
Di-n-butyl Phthalate	42.1	50.0	84	62-133
Di-n-octyl Phthalate	48.2	50.0	96	57-151
Diphenylamine + n-Nitrosodiphenylamine	40.8	50.0	82	59-120
Fluoranthene	40.6	50.0	81	61-137
Fluorene	41.1	50.0	82	55-119
Hexachlorobenzene	43.6	50.0	87	49-140
Hexachlorobutadiene	35.8	50.0	72	18-131
Hexachlorocyclopentadiene	36.5	50.0	73	32-112
Hexachloroethane	37.1	50.0	74	26-112
Indeno(1,2,3-cd)pyrene	44.4	50.0	89	47-150
Isophorone	36.8	50.0	74	55-116
Naphthalene	38.3	50.0	77	44-106
Nitrobenzene	35.8	50.0	72	17-150
N-Nitrosodi-n-propylamine	36.1	50.0	72	47-119
Pentachlorophenol (PCP)	34.6	50.0	69	29-145
Phenanthrene	41.7	50.0	83	63-123
Phenol	23.4	50.0	47	10-84
Pyrene	44.5	50.0	89	61-126

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request:J1205834
Date Analyzed:12/05/12
Date Extracted:12/03/12

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Units:ug/Kg
Basis:Dry
Analysis Lot:321254

Lab Control Sample
JQ1207744-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,2,4-Trichlorobenzene	1190	1670	71	30-142
1,2-Dichlorobenzene	1150	1670	69	26-135
1,3-Dichlorobenzene	1130	1670	68	26-132
1,4-Dichlorobenzene	1140	1670	69	29-130
1-Methylnaphthalene	1270	1670	76	32-156
2,4,5-Trichlorophenol	1570	1670	94	41-164
2,4,6-Trichlorophenol	1520	1670	91	38-162
2,4-Dichlorophenol	1360	1670	82	33-156
2,4-Dimethylphenol	1320	1670	79	18-162
2,4-Dinitrophenol	1510	1670	90	10-195
2,4-Dinitrotoluene	1500	1670	90	43-181
2,6-Dinitrotoluene	1410	1670	85	39-172
2-Chloronaphthalene	1160	1670	70	38-153
2-Chlorophenol	1140	1670	69	21-144
2-Methylnaphthalene	1280	1670	77	32-151
2-Methylphenol	1280	1670	77	32-145
2-Nitroaniline	1540	1670	92	34-192
2-Nitrophenol	1370	1670	82	28-154
3- and 4-Methylphenol Coelution	1300	1670	78	15-178
3,3'-Dichlorobenzidine	1350	1670	81	37-185
3-Nitroaniline	1570	1670	94	39-168
4,6-Dinitro-2-methylphenol	1430	1670	86	22-186
4-Bromophenyl Phenyl Ether	1380	1670	83	38-168
4-Chloro-3-methylphenol	1380	1670	83	39-170
4-Chloroaniline	1350	1670	81	29-150
4-Chlorophenyl Phenyl Ether	1360	1670	82	38-164
4-Nitroaniline	1530	1670	92	39-172
4-Nitrophenol	1730	1670	104	10-222
Acenaphthene	1320	1670	79	35-163
Acenaphthylene	1340	1670	81	33-167
Acetophenone	1310	1670	79	56-139
Anthracene	1410	1670	85	38-178
Benz(a)anthracene	1410	1670	85	66-178
Benzo(a)pyrene	1450	1670	87	39-180
Benzo(b)fluoranthene	1440	1670	86	42-174
Benzo(g,h,i)perylene	1230	1670	74	42-186
Benzo(k)fluoranthene	1590	1670	96	42-172
Benzyl Alcohol	1370	1670	82	10-263
Bis(2-chloroethoxy)methane	1310	1670	78	33-160
Bis(2-chloroethyl) Ether	1230	1670	74	13-168
Bis(2-chloroisopropyl) Ether	1210	1670	73	10-199

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request:J1205834
Date Analyzed:12/05/12
Date Extracted:12/03/12

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270C
Prep Method: EPA 3550C

Units:ug/Kg
Basis:Dry
Analysis Lot:321254

Lab Control Sample
JQ1207744-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bis(2-ethylhexyl) Phthalate	1480	1670	89	10-220
Butyl Benzyl Phthalate	1490	1670	89	38-196
Carbazole	1480	1670	89	38-179
Chrysene	1380	1670	83	39-179
Dibenz(a,h)anthracene	1310	1670	79	41-194
Dibenzofuran	1370	1670	82	36-164
Diethyl Phthalate	1410	1670	85	42-176
Dimethyl Phthalate	1390	1670	83	39-173
Di-n-butyl Phthalate	1410	1670	85	15-203
Di-n-octyl Phthalate	1750	1670	105	34-207
Diphenylamine + n-Nitrosodiphenylamine	1430	1670	86	62-111
Fluoranthene	1400	1670	84	44-180
Fluorene	1370	1670	82	38-171
Hexachlorobenzene	1350	1670	81	42-176
Hexachlorobutadiene	1170	1670	70	32-136
Hexachlorocyclopentadiene	1400	1670	84	27-142
Hexachloroethane	1140	1670	68	31-133
Indeno(1,2,3-cd)pyrene	1290	1670	77	46-185
Isophorone	1320	1670	79	34-165
Naphthalene	1210	1670	73	12-160
Nitrobenzene	1260	1670	75	31-153
N-Nitrosodi-n-propylamine	1320	1670	79	19-180
Pentachlorophenol (PCP)	1520	1670	91	25-195
Phenanthrene	1380	1670	83	40-173
Phenol	1250	1670	75	26-151
Pyrene	1430	1670	86	39-177

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request: J1205834

SURROGATE RECOVERY SUMMARY
Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082
Extraction Method: EPA 3550B

Sample Name	Lab Code	Decachlorobiphenyl
		10 - 258
MPT-1241-SS03-0102-112812J1205834-001		92
MPT-1241-SB03-0405-112812J1205834-002		50
MPT-1241-SS02-0102-112812J1205834-003		43
MPT-1241-GW03-112812	J1205834-004	99
MPT-1596-SB01-0203-112812J1205834-005		80
MPT-1596-SB01-0405-112812J1205834-006		73
MPT-1596-SB03-0203-112812J1205834-007		76
MPT-1596-GW01-112812	J1205834-008	101
Method Blank	JQ1207730-01	101
Lab Control Sample	JQ1207730-03	100
MPT-1241-SS03-0102-112812JQ1207730-04		94
MPT-1241-SS03-0102-112812JQ1207730-05		83
Method Blank	JQ1207738-01	120
Lab Control Sample	JQ1207738-02	78
Duplicate Lab Control Sample	JQ1207738-03	103

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request: J1205834

SURROGATE RECOVERY SUMMARY

Petroleum-Range Organics by GC-FID for State of Florida

Analysis Method: FL-PRO

Extraction Method: Method

Sample Name	Lab Code	o-Terphenyl	n-Nonatriacontane
		62 - 109	60 - 118
MPT-1241-SS03-0102-112812J1205834-001		90	98
MPT-1241-SB03-0405-112812J1205834-002		97	102
MPT-1241-SS02-0102-112812J1205834-003		66	84
MPT-1241-GW03-112812	J1205834-004	100	109
MPT-1596-SB01-0203-112812J1205834-005		96	107
MPT-1596-SB01-0405-112812J1205834-006		93	102
MPT-1596-SB03-0203-112812J1205834-007		93	103
MPT-1596-GW01-112812	J1205834-008	94	99
Method Blank	JQ1207769-01	102	102
Lab Control Sample	JQ1207769-02	97	95
MPT-1241-GW03-112812	JQ1207769-03	96	101
MPT-1241-GW03-112812	JQ1207769-04	102	106
Method Blank	JQ1207770-01	99	96
Lab Control Sample	JQ1207770-02	101	100
MPT-1241-SS03-0102-112812JQ1207770-03		94	105
MPT-1241-SS03-0102-112812JQ1207770-04		92	102

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request:J1205834
Date Collected:11/28/12
Date Received:11/29/12
Date Analyzed:12/4/12
Date Extracted:12/1/12

**Duplicate Matrix Spike Summary
 Polychlorinated Biphenyls (PCBs) by GC**

Sample Name: MPT-1241-SS03-0102-112812
Lab Code: J1205834-001
Analysis Method: 8082
Prep Method: EPA 3550B

Units:ug/Kg
Basis:Dry

Analyte Name	Sample Result	Result	Matrix Spike JQ1207730-04		Result	Duplicate Matrix Spike JQ1207730-05		% Rec Limits	RPD	RPD Limit
			Spike Amount	% Rec		Spike Amount	% Rec			
Aroclor 1016	ND	231	255	91	228	281	81	28-149	2	30
Aroclor 1260	ND	260	255	102	251	281	90	10-176	4	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water

Service Request: J1205834
Date Collected: 11/28/12
Date Received: 11/29/12
Date Analyzed: 12/4/12
Date Extracted: 12/4/12

Duplicate Matrix Spike Summary
Petroleum-Range Organics by GC-FID for State of Florida

Sample Name: MPT-1241-GW03-112812 **Units:**mg/L
Lab Code: J1205834-004 **Basis:**NA
Analysis Method: FL-PRO
Prep Method: Method

Analyte Name	Sample Result	Result	Matrix Spike JQ1207769-03		Duplicate Matrix Spike JQ1207769-04		% Rec Limits	RPD	RPD Limit	
			Spike Amount	% Rec	Result	Spike Amount				% Rec
FL-PRO (C8 - C40)	ND	6.01	6.97	86	6.74	6.97	97	55-118	12	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request:J1205834
Date Collected:11/28/12
Date Received:11/29/12
Date Analyzed:12/4/12
Date Extracted:12/4/12

Duplicate Matrix Spike Summary
Petroleum-Range Organics by GC-FID for State of Florida

Sample Name: MPT-1241-SS03-0102-112812
Lab Code: J1205834-001
Analysis Method: FL-PRO
Prep Method: Method

Units:mg/Kg
Basis:Dry

Analyte Name	Sample Result	Result	Matrix Spike JQ1207770-03		Result	Duplicate Matrix Spike JQ1207770-04		% Rec Limits	RPD	RPD Limit
			Spike Amount	% Rec		Spike Amount	% Rec			
FL-PRO (C8 - C40)	ND	113	118	96	109	117	93	63-143	4	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water

Service Request:J1205834
Date Analyzed:12/04/12
Date Extracted:12/04/12

Lab Control Sample Summary
Petroleum-Range Organics by GC-FID for State of Florida

Analysis Method: FL-PRO
Prep Method: Method

Units:mg/L
Basis:NA
Analysis Lot:321075

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	JQ1207769-02	3.09	3.38	92	55-118

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request:J1205834
Date Analyzed:12/04/12
Date Extracted:12/04/12

Lab Control Sample Summary
Petroleum-Range Organics by GC-FID for State of Florida

Analysis Method: FL-PRO
Prep Method: Method

Units:mg/Kg
Basis:Dry
Analysis Lot:321075

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	JQ1207770-02	103	113	91	63-143

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water

Service Request:J1205834
Date Analyzed:12/04/12
Date Extracted:12/03/12

Duplicate Lab Control Sample Summary
Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082
Prep Method: EPA 3510C

Units:ug/L
Basis:NA
Analysis Lot:321217

Lab Control Sample
JQ1207738-02

Duplicate Lab Control Sample
JQ1207738-03

Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Aroclor 1016	4.19	4.00	105	4.06	4.00	101	27-120	3	30
Aroclor 1260	4.38	4.00	110	4.13	4.00	103	33-112	6	30

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request:J1205834
Date Collected:11/28/12
Date Received:11/29/12
Date Analyzed:12/4/12

**Duplicate Matrix Spike Summary
 Inorganic Parameters**

Sample Name: MPT-1241-SS02-0102-112812
Lab Code: J1205834-003

Units:mg/Kg
Basis:Dry

Matrix Spike
 J1205834-003MS

Duplicate Matrix Spike
 J1205834-003DMS

Analyte Name	Method	Sample		Spike		Duplicate Matrix Spike		% Rec	% Rec	Limits	RPD	RPD
		Result	Result	Amount	% Rec	Result	Amount					
Arsenic, Total Recoverable	6010B	0.81	20.0	19.1	100	19.8	19.3	98	75-125	1	20	
Cadmium, Total Recoverable	6010B	0.007	9.69	9.57	101	9.65	9.65	100	75-125	<1	20	
Chromium, Total Recoverable	6010B	3.82	22.7	19.1	98	22.8	19.3	98	75-125	<1	20	
Lead, Total Recoverable	6010B	4.63	22.3	19.1	92	22.1	19.3	91	75-125	<1	20	

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Soil

Service Request:J1205834
Date Analyzed:12/4/12

Lab Control Sample Summary
Inorganic Parameters

Units:mg/Kg
Basis:Dry

Lab Control Sample
J1205834-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic, Total Recoverable	6010B	24.1	25.0	96	80-120
Cadmium, Total Recoverable	6010B	12.6	12.5	100	80-120
Chromium, Total Recoverable	6010B	25.9	25.0	103	80-120
Lead, Total Recoverable	6010B	25.3	25.0	101	80-120

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project: NS Mayport/112CO4630
Sample Matrix: Water

Service Request:J1205834
Date Analyzed:12/1/12

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
J1205834-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic, Total Recoverable	6010B	536	500	107	80-120
Cadmium, Total Recoverable	6010B	272	250	109	80-120
Chromium, Total Recoverable	6010B	529	500	106	80-120
Lead, Total Recoverable	6010B	544	500	109	80-120

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: TriEco, LLC
Project NS Mayport/112CO4630
Sample Matrix: Soil

Service Request: J1205834
Date Collected: 11/28/12
Date Received: 11/29/12
Date Analyzed: 12/04/12

Replicate Sample Summary
General Chemistry Parameters

Sample Name: MPT-1596-SB03-0203-112812
Lab Code: J1205834-007

Units: Percent
Basis: As Received

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>MRL</u>	<u>MDL</u>	<u>Sample Result</u>	<u>Duplicate Sample J1205834-007DUP Result</u>	<u>Average</u>	<u>RPD</u>	<u>RPD Limit</u>
Solids, Total	160.3 Modified	0.10	0.10	86	86	86.3	<1	20

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Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: TriEco Service Request #: J1205834
 Project: Navsta Mayport Site 1241 + 1596
 Cooler received on 11-29-12 and opened on 11-29-12 GB
 COURIER: ALS UPS FEDEX (Client) Other _____ Airbill # _____

- 1 Were custody seals on outside of cooler? Yes No
 If yes, how many and where? #: ___ on lid other _____
- 2 Were seals intact and signature and date correct? Yes _____ No _____ N/A
- 3 Were custody papers properly filled out? Yes No _____ N/A _____
- 4 Temperature of cooler(s) upon receipt (Should be > 0°C and < 6°C) 5.0 3.4
- 5 Thermometer ID T81
- 6 Temperature Blank Present? Yes No _____
- 7 Were Ice or Ice Packs present Ice Ice Packs _____ No _____
- 8 Did all bottles arrive in good condition (unbroken, etc....)? Yes No _____ N/A _____
- 9 Type of packing material present Netting Vial Holder Bubble Wrap
 Paper _____ Styrofoam _____ Other _____ N/A _____
- 10 Were all bottle labels complete (sample ID, preservation, etc....)? Yes No _____ N/A _____
- 11 Did all bottle labels and tags agree with custody papers? Yes No _____ N/A _____
- 12 Were the correct bottles used for the tests indicated? Yes No _____ N/A _____
- 13 Were all of the preserved bottles received with the appropriate preservative?
 HNO3 pH<2 H2SO4 pH<2 ZnAc2/NaOH pH>9 _____ NaOH pH>12 _____ HCl pH<2 _____
Preservative additions noted below
- 14 Were all samples received within analysis holding times? Yes No _____ N/A _____
- 15 Were all VOA vials free of air bubbles? If present, note below Yes No _____ N/A _____
- 16 Where did the bottles originate? ALS Client _____

Sample ID	Reagent	Lot #	ml added	Initials Date/Time

Additional comments and/or explanation of all discrepancies noted above:

Client approval to run samples if discrepancies noted: _____ Date: _____



TETRA TECH NUS, INC.

NAVSTA MAYPORT - SITES 1241 & 1596

CHAIN OF CUSTODY

NUMBER NO 2640

J1205834

J1205834

5

TriCo, LLC
NS Mayport



PROJECT NO: 112 CO 4630	FACILITY: NS MAYPORT	PROJECT MANAGER STEF DEFEARS	PHONE NUMBER 904-803-6353	LABORATORY NAME ALS/CAL
SAMPLERS (SIGNATURE) JC. 124		FIELD OPERATIONS LEADER DEFEARS	PHONE NUMBER 904-803-6353	ADDRESS 9143 PHILIPS HIGHWAY SUITE 200
CARRIER/WAYBILL NUMBER DROP OFF			CITY, STATE JACKSONVILLE FL 32256	

DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)					PRESERVATIVE USED	COMMENTS
									VOE	SVOC	TRPH	METALS	PCB		
11/28	0915	MPT-1241-5503-0102-112812		1	2	SO	G	5	✓	✓	✓	✓	✓		COOL TO 4°C
11/28	0947	MPT-1241-5803-0405-112812		4	5	SO	G	5	✓	✓	✓	✓	✓		
11/28	1045	MPT-1241-5503-0102-112812		1	2	SO	G	5	✓	✓	✓	✓	✓		
11/28	1210	MPT-1241-GW03-112812				GW	G	7	✓	✓	✓	✓	✓		
11/28	1400	MPT-1596-5801-0203-112812		2	3	SO	G	5	✓	✓	✓	✓	✓		
11/28	1410	MPT-1596-5801-0405-112812		4	5	SO	G	5	✓	✓	✓	✓	✓		
11/28	1445	MPT-1596-5803-0203-112812		2	3	SO	G	5	✓	✓	✓	✓	✓		
11/28	1555	MPT-1596-GW01-112812				GW	G	7	✓	✓	✓	✓	✓		
11/28	0000	TRIP BLANK				QC									TRIP BLANK

1. RELINQUISHED BY Deane Gram	DATE 11/29/2012	TIME 1000	1. RECEIVED BY <i>[Signature]</i>	DATE 11-29-12	TIME 1000
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS: ① - METALS - As, Cd, Cr, Pb only 5.0°C 3.4°C

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

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