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LETTER REPORT REGARDING FIRST QUARTER 2006 GROUNDWATER MONITORING FOR BUILDING 245 NS MAYPORT FL

10/5/2006

TETRA TECH NUS

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October 5, 2006

Project Number 112G00103

Commander, Southeast
Naval Facilities Engineering Command
Attn: Beverly Washington (Code OPAEVC)
Remedial Project Manager
2155 Eagle Drive
North Charleston, South Carolina 29406

Reference: CLEAN III Contract Number N62467-94-0888
Contract Tack Order Number 0386

Subject: First Quarter Groundwater Monitoring Letter Report, Building 245
For Calendar Year 2006
Naval Station Mayport, Mayport, Florida

Dear Ms. Washington:

Tetra Tech NUS Inc. (TtNUS) is pleased to submit the first quarter Groundwater Monitoring Letter Report for the referenced Contract Task Order (CTO). This report was prepared for the United States Navy, Naval Facilities Engineering Command Southeast (NAVFAC SE) under CTO 0386 for the Comprehensive Long-term Environmental Action Navy (CLEAN) III Contract Number N62467-94-0888. This letter report provides the result of the first quarter groundwater sampling event.

SITE LOCATION

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

SITE DESCRIPTION

Building 245 is one of many developed properties located along the beach of the Atlantic Ocean. Several venues of business, which include entertainment and dining, occupy Building 245. The groundwater monitoring wells are located in a grassy area on the northern side of the building.

PREVIOUS INVESTIGATIONS

In April 1995, an unspecified contractor removed Underground Storage Tank (UST) 245. UST 245 contained fuel oil and was removed from a grassy area approximated 7 feet (ft) east of an electrical switch room located on the northern side of Building 245. Volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs) were present in the analytical results of groundwater collected from the tank pit area. Soil impacts were also recorded based on soil head space screened values using

an organic vapor analyzer (OVA). Using an OVA, excessively contaminated soil was located at depths of 3 ft and 6 ft below land surface (bls). A replacement UST was installed approximately 20 ft north of the electrical switch room soon after the removal.

The initial assessment of UST 245 was completed by Bate Environmental Associates (BEA). The results are included in a Site Assessment for Report (SAR) for UST 245 dated February 12, 1998, which was submitted to the Florida Department of Environmental Protection (FDEP). Based on findings from the SAR, the following conclusions were made:

- Excessively contaminated soil was present at depths of 1 ft to 3 ft bls based on OVA soil headspace screening.
- Laboratory analysis of soil collected from 4 ft to 6 ft bls exceeded the FDEP regulatory action limit for Florida Petroleum Range Organics (FL-PRO).
- Laboratory analysis of groundwater from one of five monitoring wells contained exceedances to the groundwater cleanup target levels (GCTLs) for benzene, naphthalene, and lead.
- Depth to groundwater is approximately 3.5 ft to 6.0 ft bls with the groundwater flow direction being northerly.

Additional assessment of the impacted soil areas and groundwater was requested by the FDEP in a letter dated June 22, 1998. Complying with the request, BEA completed a SAR Addendum dated September 10, 1999. The FDEP approved the SAR and SAR Addendum in a letter dated December 1999 and requested that a Remedial Action Plan be developed.

No work was conducted at UST 245 for a period greater than 270 days and, in accordance with the Chapter 62-770, Florida Administrative Code, new analytical data was required. Ellis Environmental Group (EEG) was tasked with performing another SAR Addendum, which was dated May 2002. Based on the 2002 SAR Addendum, new findings were documented as specified below:

- Free product was observed at micro well MW-8. The product thickness was 0.02 ft to 0.3 ft.
- No excessively impacted soils were recorded in the vadose zone at depths of 1ft to 2 ft and 2ft to 3 ft bls.
- No lead exceedances of GCTLs.

In a July 18, 2002, letter from the FDEP concerning the EEG SAR Addendum, the following was requested:

- Monitoring well MW-8 be reinstalled as a 2-inch well since it was damaged during the UST removal.
- Quarterly monitoring only natural attenuation (MONA) should commence.
- An interim remedial action using aggressive fluid vapor recovery (AFVR) at MW-8R should be implemented.
- Soil samples should be collected for laboratory analysis from the vadose zone to confirm impacts reported by BEA.

The United States Army Corps of Engineers (USACE) was tasked with completing the four FDEP requests from the July 28, 2002, letter and completed all four as follows:

- Monitoring well MW-8 was replaced with MW-8R on September 28, 2002.

- Three quarters of monitoring were completed. The report dates are February 2002, April 2003, and September 2003.

- AFVR was completed and an estimated 125 gallons of free product were removed.

- Additional soil samples were collected for analysis by FL-PRO and PAHs on July 29, 2003, and January 26, 2004, from 2 ft to 3 ft bls. Based on the soil analytical results, no contamination was recorded in the vadose zone in excess of the soil cleanup target levels. The findings of the additional soil samples were summarized in a March 2004, Site 245, Soil Investigation Addendum.

In a July 13, 2004, letter from the FDEP referencing the March 2004 Soil Investigation Addendum and the September 2003 Third Quarter Monitoring Report, it was stated that "no further soil assessment is required." No soil impacts were identified at the site, and no further action is required concerning investigation of the soil. It was requested that the monitoring of wells MW-1, MW-4, MW-5, MW-6, MW-7, MW-8R, and MW-9 be continued. Groundwater analysis parameters are PAHs, FL-PRO, and VOCs. A copy of the July 13, 2004, letter from the FDEP is provided as Attachment A

Historically, groundwater impacts are only present in monitoring wells MW-1, MW-4, and MW-8R. Summery tables from the EEG SAR Addendum report, dated May 2002, and the USACE three summary tables from Third Quarter Monitoring Report, dated September 2003, are provided as Attachment B. Combined, these summary tables span a period of time from June 1997 to June 2003.

Historically, monitoring wells MW-5, MW-6, and MW-7 have not recorded an exceedance to the GCTLs for VOCs and PAHs for a period of time greater than 6 years. Total recoverable petroleum hydrocarbons (TRPH) were analyzed between the months of October 2002 and July 2003 and have also historically been below GCTLs for these three wells. Monitoring wells MW-5 and MW-6 are located upgradient from the release, while MW-7 is located downgradient.

SAMPLING PROCEDURES AND METHODS

On February 10 and 15, 2006, TtNUS personnel collected groundwater samples from monitoring wells MW-1, MW-4, MW-5, MW-8R, and MW-9 as required by the revised MONA. It should be noted the MW-7 and MW-6 are part of the MONA, but were not sampled due to inaccessibility. Monitoring well MW-7 is located down and cross gradient and is currently covered by a deck. Monitoring well MW-6 is upgradient, was formerly located in the asphalt parking lot, and appears to have been covered by asphalt.

Groundwater sampling was conducted in general accordance with FDEP Standard Operating Procedures (DEP-SOP-001/01) adopted in 2002. A minimum one well volume was pumped from each well (partially submerged screen) using a peristaltic pump and the low flow quiescent purging method. After purging of this initial quantity, purging was continued and field parameters pH, specific conductance and dissolved oxygen (DO) were measured periodically (minimum 3 minute interval) using YSI model 556 instrument. Turbidity was measured with a LaMotte 2020 turbidimeter. Purging was considered complete when three consecutive measurements were within the following limits:

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

After collection, samples were immediately placed on ice and delivered to Environmental Conservation Laboratories (ENCO) in Jacksonville, Florida for analysis of VOCs using United States Environmental Protection Agency (USEPA) Method 8260, PAHs using USEPA Method 8270, and TRPH using the FL-PRO Method. Groundwater Sampling Logs are provided in Attachment C, and the groundwater analytical report submitted by ENCO is included as Attachment D.

GROUNDWATER FLOW

Depth to groundwater was measured from the top of casing (TOC) of the monitoring well using an electronic water level indicator. The TOC elevations of the monitoring wells were obtained from EEG's SAR Addendum completed in May 2002. The groundwater elevation recorded at the monitoring well was obtained by subtracting the depth-to–water measurement from the surveyed TOC elevation. Depths of groundwater were measured from the TOC on February 13, 2006. Surveyed TOC elevations and groundwater measurement data are provided in Table 1. A groundwater elevation contour map generated from depth-to-water measurements is provided as Figure 2. Groundwater flow is towards the east to the Atlantic Ocean.

DISCUSSION OF GROUNDWATER ANALYTICAL RESULTS

On February 10 and 15, 2006 a TtNUS representative collected groundwater for laboratory analysis by ENCO located at 4810 Executive Park Court, Suite 211, in Jacksonville, Florida. Five monitoring wells were sampled for VOCs using USEPA Method 8260B, PAHs using USEPA Method 8270, and TRPH using the FL-PRO Method. A summary of the groundwater analytical results are presented as Table 2. Petroleum constituents were identified in all monitoring wells with the only groundwater constituents to exceed GCTLs identified in MW-1. Five constituents exceeding GCTLS are benzene [4.33 micrograms per liter (µg/L)], naphthalene (53.4 µg/L), 1-methylnaphthalene (47.4 µg/L), 2-methylnaphthalene (32.0 µg/L), and TRPH [9.13 milligrams per liter (mg/L)]. Groundwater concentrations in monitoring wells MW-5 and MW-9 were just above laboratory detection limits with limited concentrations of petroleum impacts in MW-4 and MW-8R.

FIRST QUARTER CONCLUSIONS AND RECOMMENDATIONS

Based on the most recent monitoring event since June 2003, the groundwater quality has limited improvement. The most recent groundwater sampling prior to the first quarter was collected in June 2003 by the USACE. Comparison of the current sample result findings with the last sampling results showed elicit exceedances in benzene (22 µg/L), 1- and 2 -methylnaphthalene (26 µg/L for both), and no TRPH results. Present day results demonstrate a decreased benzene (4.33 µg/L) concentration, while increases in the three naphthalene concentrations and TRPH constituents have occurred. The trend of an increased TRPH and decreasing benzene value is consistent with an aging petroleum spill and is expected. Although the increased three naphthalene concentrations are unexpected, the lack of impacts in MW-9, which is down gradient well to MW-1, could indicate that the impacts in the groundwater are not moving or are moving at a slow rate.

Based on recent groundwater analytical results, impacts have not spread to nearby wells. This trend of the groundwater impacts appears to remain consistent with historical data. Also, while the concentrations of naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, and TRPH have increased, the concentrations do not exclude the site from MONA criteria.

Based on the current petroleum impacts, the following is recommended:

- Additional quarterly monitoring sampling events be conducted.
- Monitoring wells MW-6 and MW-7 be removed from the monitoring program, given that they are not accessible and these wells are historically not impacted.
- The second quarter sampling event should take place in before June 1, 2006.

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

Sincerely,

Mark A. Peterson, P.G.
Task Order Manager

MAP/ds

Attachments (8)

c: Jim Cason, FDEP (2 copies)
Diane Racine, NAVSTA Mayport
Mike Halil, CH2M Hill
Debbie Humbert, TtNUS (cover letter only)
Mark Perry, TtNUS (unbound copy)
NAVSTA Mayport Administrative Record
CTO 0386Project File

CERTI FICATION

The information contained is based on the geologic investigation and associated information detailed in the text and appended to this letter report. If conditions are determined to exist that differ from those described, the undersigned geologist should be notified to evaluate the effects of any additional information on the information described in this report. This First Quarter Groundwater Monitoring Letter Report was developed for Building 245 at the Naval Station Mayport, Mayport, Florida, and should not be construed to apply to any other site.

October 5, 2006
Mark A. Peterson, P.G.
Florida License Number PG-0001852

TABLES

TABLE 1
Top of Casing Survey Data and Depth-to-Groundwater Measurements

First Quarter Groundwater Monitoring Letter Report
Building 425
Naval Station Mayport
Mayport, Florida

Monitoring Well	TOC (ft)	Depth-to-Groundwater (ft)	Feet Above Mean Sea Level
1	11.57	6.67	4.9
2	10.27	5.28	4.99
3	10.15	5.05	5.1
4	10.31	5.24	5.07
5	9.76	4.63	5.13
6	9.15	NM	
7	12.48	NM	
8	10.07	5.28	4.79
9	NS	7.39	

Notes:
All wells were surveyed on February 13, 2006
NS=Not surveyed, MW-9 was added after the last survey
NM = not measured, MW-6 and MW-7 were not accessable due to permanent obstructions.

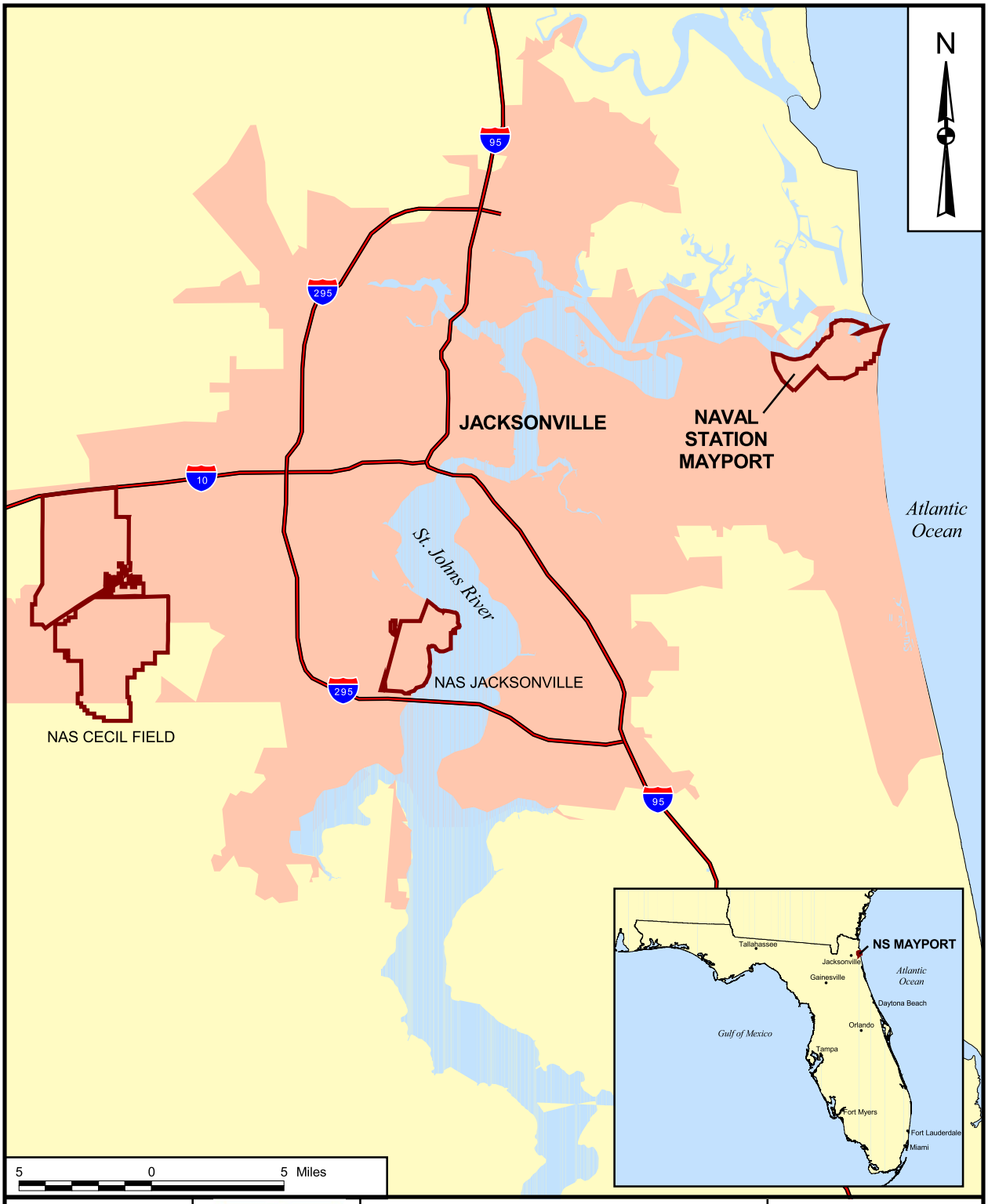
TABLE 2
Summary of Laboratory Groundwater Analytical Detections

First Quarter Groundwater Monitoring Letter Report
Building 425
Naval Station Mayport
Mayport, Florida

CONSTITUENT	FDEP GCTL	MW-1	MW-4	MW-5	MW-6	MW-7	MW-8R	MW-9
FL-RPO (mg/L)								
Petroleum Range Organics	5	**9.13**	0.6.9	0.094	NS	NS	0.998	0.094
PAHs (µg/L)								
1-Methylnaphthalene	28	**47.4**	3.97	<0.02	NS	NS	3.23	<0.02
2-Methylnaphthalene	28	**32**	1.52	<0.02	NS	NS	0.64	<0.02
Naphthalene	14	**53.4**	5.87	<0.02	NS	NS	5.03	<0.02
Phenanthrene	210	1.07	0.17	<0.02	NS	NS	0.09	<0.02
Pyrene	210	0.01	<0.02	<0.02	NS	NS	<0.02	<0.02
Flourene	280	2.51	0.54	<0.02	NS	NS	0.47	<0.02
Acenaphthene	20	2.04	0.52	<0.02	NS	NS	0.47	<0.02
VOCs (µg/L)								
Benzene	1	**4.33**	<.2	<.2	NS	NS	0.35	<.2
Ethylbenzene	30	0.32	0.37	<.2	NS	NS	7.53	<0.3

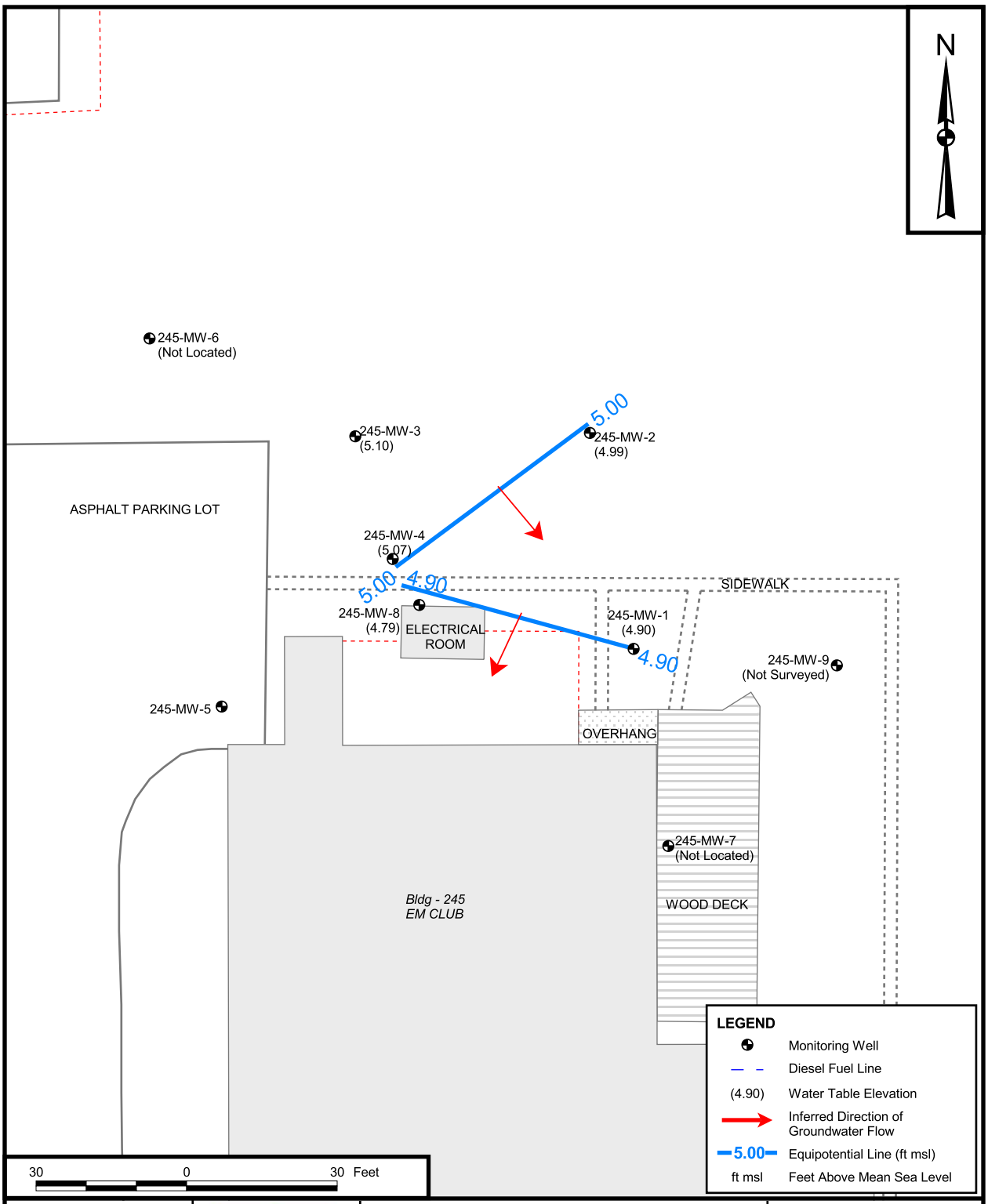
Notes:
Bold exceed FDEP GCTLs.
NS = not sampled

FIGURES



DRAWN BY K. PEILA	DATE 4/17/06	REGIONAL AREA MAP NAVAL STATION MAYPORT MAYPORT, FLORIDA	CONTRACT NUMBER 0103
CHECKED BY D. SIEFKEN	DATE 5/11/06		APPROVED BY — DATE —
COST/SCHEDULE-AREA			APPROVED BY — DATE —
SCALE AS NOTED			DRAWING NO. FIGURE 1 / REV 0

P:\GIS\MAYPORT_NS\MAPDOCS\APR\STATEMENT_BASIS.APR REGIONAL AREA 5/11/06 SS



DRAWN BY K. PEILA	DATE 4/17/06	GROUNDWATER ELEVATION CONTOUR MAP APRIL 2006 SITE 245 FIRST QUARTER MONITORING REPORT NAVAL STATION MAYPORT MAYPORT, FLORIDA	CONTRACT NUMBER CTO 00103
CHECKED BY D. SIEFKEN	DATE 4/17/06		APPROVED BY — DATE —
COST/SCHEDULE-AREA			APPROVED BY — DATE —
SCALE AS NOTED			DRAWING NO FIGURE 2 / REV 0

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ATTACHMENT A

FDEP LETTER DATED JULY 13, 2004

Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

July 13, 2004

Ms. Beverly Washington
Department of the Navy, Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive, PO Box 190010
North Charleston, SC 29419-9010

file: 245GWI0903.doc

RE: Site 245 Soil Investigation Addendum, Naval Station Mayport, Mayport, Florida

Third Quarter Site 245 Groundwater Monitoring Report, Naval Station Mayport, Mayport, Florida

Dear Ms. Washington:

I have reviewed the above documents dated, respectively, March 2004 (received June 8, 2004) and September 2003 (received June 8, 2004). The documents furnish a summary of the groundwater and soil investigation activities at Site 245. Recent soil borings confirm the absence of contaminated soil at the site and it is recommended that quarterly groundwater monitoring be continued. I concur with that recommendation.

Thank you for the opportunity to review this document. If you require further clarification or other assistance, please contact me at 850-245-8999.

Sincerely,

James H. Cason, P.G.
Remedial Program Manager

CC: Diane Lancaster, NAVSTA Mayport

ESN ESN JJC JJC by ESN

ATTACHMENT B

PREVIOUS INVESTIGATIONS

1st Qtr

TABLE 1

SUMMARY OF GROUND-WATER ANALYTICAL RESULTS

SITE 245

MAYPORT NAVAL STATION
MAYPORT FLORIDA
06 OCTOBER 2002

MONITOR WELL NUMBER

PARAMETER	MAY 245 - MW - 1 - 10-02	MAY 245 - MW - 4 - 10-02	MAY 245 - MW - 4 - 10-02 Duplicate	MAY 245 - MW - 5 - 10-02	MAY 245 - MW - 6 - 10-02	MAY 245 - MW - 7 - 10-02	MAY 245 - BLK - 10-02	Clean up Target Level or MCL
Florida PRO (mg/L)								
Petroleum Range Organics, mg/l	<1.7	**6.5**	**6.6**	<1.7	<1.7	<1.7	<1.7	5 mg/l
Extractable Organics (8310)								
Acenaphthene, ug/L	< 1.00	<1.00	*4.10*	< 1.00	< 1.00	< 1.00	< 1.00	20 ug/L
Acenaphthylene, ug/L	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.0	< 25.6	210 ug/L
Anthracene, ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	2100 ug/L
Benzo (a) anthracene, ug/L	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	0.2 ug/L
Benzo (a) pyrene, ug/L	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	0.2 mg/l
Benzo (b) fluoranthene, ug/L	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	0.2 ug/L
Benzo (g,h,i) perylene, ug/L	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	210 ug/L
Benzo (k) fluoranthene, ug/L	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	0.5 ug/L
Chrysene, ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	5 ug/L
Dibenzo(a,h) anthracene, ug/L	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	0.2 ug/L
Fluoranthene, ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	280 ug/L
Fluorene, ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	280 ug/L
Indeno(1,2,3-cd)pyrene, ug/L	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	0.2 ug/L
1-Methylnaphthalene, ug/L	< 1.00	< 1.00	<1.00	<1.00	<1.00	<1.00	< 1.00	20 ug/L
2-Methylnaphthalene, ug/L	< 1.00	<1.00	<1.00	<1.00	<1.00	<1.00	< 1.00	20 ug/L
Naphthalene, ug/L	<1.00	*1.20*	*1.50*	<1.00	<1.00	<1.00	<1.00	20 ug/L
Phenanthrene, ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	210 ug/L
Pyrene, ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	210 ug/L

Notes: - Bold value indicates regulatory limit exceeded.

- *Italic values indicate concentration detected is below clean up target level*

TABLE 1

SUMMARY OF GROUND-WATER ANALYTICAL RESULTS

SITE 245

2nd Qtr

MAYPORT NAVAL STATION
MAYPORT FLORIDA
24 FEBRUARY 2003

MONITOR WELL NUMBER

PARAMETER	MAY 245 - MW - 1 - 02-03	MAY 245 - MW - 4 - 02-03	MAY 245 - MW - 5 - 02-03	MAY 245 - MW - 5 - 02-03 Duplicate	MAY 245 - MW - 6 - 02-03	MAY 245 - MW - 7 - 02-03	MAY 245 - MW - 8R - 02-03	MAY 245 - BLK - 02-03	Clean up Target Level or MCL
Florida PRO (mg/L)									
Petroleum Range Organics, mg/l	*1.7*	<1.7	<1.7	<1.7	<1.7	<1.7	*2.1*	<1.7	5 mg/l
Extractable Organics (8310)									
Acenaphthene, ug/L	*0.41*	*0.57*	< 0.20	< 0.20	< 0.20	< 0.20	*1.8*	< 0.20	20 ug/L
Acenaphthylene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	210 ug/L
Anthracene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	*0.17(J)*	< 0.20	2100 ug/L
Benzo (a) anthracene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.2 ug/L
Benzo (a) pyrene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.2 mg/l
Benzo (b) fluoranthene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.2 ug/L
Benzo (g,h,i) perylene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	210 ug/L
Benzo (k) fluoranthene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.5 ug/L
Chrysene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	5 ug/L
Dibenzo(a,h) anthracene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.2 ug/L
Fluoranthene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	280 ug/L
Fluorene, ug/L	*0.64*	*0.90*	< 0.20	< 0.20	< 0.20	< 0.20	*2.6*	< 0.20	280 ug/L
Indeno(1,2,3-cd)pyrene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.2 ug/L
1-Methylnaphthalene, ug/L	*6.3*	*3.9*	< 0.20	< 0.20	< 0.20	< 0.20	**29**	< 0.20	20 ug/L
2-Methylnaphthalene, ug/L	*4.9*	*1.5*	< 0.20	< 0.20	< 0.20	< 0.20	*14*	< 0.20	20 ug/L
Naphthalene, ug/L	*7.9*	*3.7*	< 0.20	< 0.20	< 0.20	< 0.20	*23*	< 0.20	20 ug/L
Phenanthrene, ug/L	*0.25*	*0.20*	< 0.20	< 0.20	< 0.20	< 0.20	*1.6*	< 0.20	210 ug/L
Pyrene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	210 ug/L

Notes: - Bold value indicates regulatory limit exceeded.
- *Italic values indicate concentration detected is below clean up target level*

TABLE 1

SUMMARY OF GROUND-WATER ANALYTICAL RESULTS

SITE 245

3rd Qtr

MAYPORT NAVAL STATION
MAYPORT FLORIDA
09 JUNE 2003

MONITOR WELL NUMBER

PARAMETER	MAY 245 - MW - 1 - 06-03	MAY 245- MW - 1 - 06-03 Duplicate	MAY 245 - MW - 4 - 06-03	MAY 245 - MW - 5 - 06-03	MAY 245 - MW - 6 - 06-03	MAY 245- MW - 7 - 06-03	MAY 245- MW - 8R - 06-03	MAY 245- MW - 9 - 09-03	MAY 245 - BLK - 06-03	Clean up Target Level or MCL
BTEX										
Benzene ug/L	**22**	**22**	NA	NA	NA	<1.0	NA	<1.0	<1.0	1 ug/L
Ethylbenzene ug/L	*0.87*	*0.90*	NA	NA	NA	<1.0	NA	<1.0	<1.0	40 ug/L
Toluene ug/L	<1.0	<1.0	NA	NA	NA	<1.0	NA	<1.0	<1.0	30 ug/L
Xylenes (total) ug/L	<3.0	<3.0	NA	NA	NA	<3.0	NA	<3.0	<3.0	20 ug/L

Notes: - Bold value indicates regulatory limit exceeded.
- *Italic values indicate concentration detected is below clean up target level*
- J values indicate detection was below laboratory reporting limits
- B values indicate that contaminat was detected in the equipment blank.
- NA indicates compound was not analyzed for

TABLE 1

SUMMARY OF GROUND-WATER ANALYTICAL RESULTS

SITE 245

3rd Qtr

MAYPORT NAVAL STATION
MAYPORT FLORIDA
09 JUNE 2003

MONITOR WELL NUMBER

PARAMETER	MAY 245 - MW - 1 - 06-03	MAY 245- MW - 1 - 06-03 Duplicate	MAY 245 - MW - 4 - 06-03	MAY 245 - MW - 5 - 06-03	MAY 245 - MW - 6 - 06-03	MAY 245- MW - 7 - 06-03	MAY 245- MW - 8R - 06-03	MAY 245- MW - 9 - 09-03	MAY 245 - BLK - 06-03	Clean up Target Level or MCL
Florida PRO (mg/L)										
Petroleum Range Organics, mg/l	*3.9B*	*4.8B*	*2.1B*	*0.78JB*	*1.1JB*	*1.7JB*	**5.0B**	*0.82 JB*	0.76JB	5 mg/l
Extractable Organics (8310)										
Acenaphthene, ug/L	*1.3*	*1.2*	0.62	< 0.20	< 0.20	< 0.20	*0.72*	< 0.20	< 0.20	20 ug/L
Acenaphthylene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	210 ug/L
Anthracene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	2100 ug/L
Benzo (a) anthracene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.2 ug/L
Benzo (a) pyrene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.2 mg/l
Benzo (b) fluoranthene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.2 ug/L
Benzo (g,h,i) perylene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	210 ug/L
Benzo (k) fluoranthene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.5 ug/L
Chrysene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	5 ug/L
Dibenzo(a,h) anthracene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.2 ug/L
Fluoranthene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	280 ug/L
Fluorene, ug/L	*1.6*	*1.5*	*0.90*	< 0.20	< 0.20	< 0.20	*1.0*	< 0.20	< 0.20	280 ug/L
Indeno(1,2,3-cd)pyrene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.2 ug/L
1-Methylnaphthalene, ug/L	**26**	**28**	*5.9*	< 0.20	< 0.20	< 0.20	*9.5*	< 0.20	< 0.20	20 ug/L
2-Methylnaphthalene, ug/L	*18*	**21**	*3.1*	< 0.20	< 0.20	< 0.20	*3.2*	< 0.20	< 0.20	20 ug/L
Naphthalene, ug/L	**26**	**26**	*5.4*	< 0.20	< 0.20	< 0.20	*5.9*	< 0.20	< 0.20	20 ug/L
Phenanthrene, ug/L	*0.88*	*1.0*	*0.29*	< 0.20	< 0.20	< 0.20	*0.70*	< 0.20	< 0.20	210 ug/L
Pyrene, ug/L	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	210 ug/L

Table 4. Groundwater Analytical Results – Volatile Organic Compounds

Sample Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	EDB (µg/L)
MW-1	06/10/97	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
	02/16/99	NS	NS	NS	NS	NS	NS
	07/01/99	NS	NS	NS	NS	NS	NS
	07/31/01	**16.0**	< 1.0	< 1.0	< 1.0	NA	NA
MW-2	06/10/97	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
	02/16/99	NS	NS	NS	NS	NS	NS
	07/01/99	NS	NS	NS	NS	NS	NS
	07/31/01	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA
MW-3	06/10/97	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
	02/16/99	NS	NS	NS	NS	NS	NS
	07/01/99	NS	NS	NS	NS	NS	NS
	07/31/01	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA
MW-4	06/10/97	**6.5**	< 1.0	22.0	18.0	< 1.0	NA
	02/16/99	**1.8**	< 1.0	1.8	< 1.0	< 1.0	< 1.0
(Duplicate)	02/16/99	**1.4**	<1.0	1.2	<1.0	<1.0	<1.0
	07/01/99	NA	NA	NA	NA	NA	< 0.02
(Duplicate)	07/01/99	NA	NA	NA	NA	NA	< 0.02
	07/31/01	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA
MW-5	06/10/97	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
	02/16/99	NS	NS	NS	NS	NS	NS
	07/01/99	NS	NS	NS	NS	NS	NS
	07/31/01	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA
MW-6	06/10/97	NI	NI	NI	NI	NI	NI
	02/16/99	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	07/01/99	NA	NA	NA	NA	NA	< 0.02
	08/01/01	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA
(Duplicate)	08/01/01	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA
MW-7	06/10/97	NI	NI	NI	NI	NI	NI
	02/16/99	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	07/01/99	NA	NA	NA	NA	NA	< 0.02
	07/31/01	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA
MW-8	06/10/97	NI	NI	NI	NI	NI	NI
	02/16/99	**17.5**	< 5.0	**59.0**	7.5	< 1.0	< 5.0
	07/01/99	NA	NA	NA	NA	NA	< 0.02
	08/01/01	FP	FP	FP	FP	FP	FP
Groundwater		1	40	30	20	50	0.02
Marine		10	400	300	200	500	0.2
NA source		100	400	300	200	500	2
NA parameter		1	40	30	20	50	0.02

Notes:
Analytical results obtained prior to July 31, 2001, were by Bhate Environmental Associates (BEA, 1997, 1999)
FP = Free-phase liquid present, groundwater sample not collected; NA = Not analyzed; NI = Not installed; NS = Not sampled
NA source = Natural attenuation source guidance concentration; NA parameter = Natural attenuation parameter guidance concentration
µg/L = Micrograms per liter

Table 5. Groundwater Analytical Results – Polynuclear Aromatics & Hydrocarbons

Sample Location	Date	1-Methyl-naphthalene (µg/L)	2-Methyl-naphthalene (µg/L)	Acenaphthene (µg/L)	Acenaphthylene (µg/L)	Naphthalene (µg/L)	Fluorene (µg/L)	Phenanthrene µg/L	FL-PRO (mg/L)
MW-1	06/13/97	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	NA
	02/16/99	NA	NA	NA	NA	NA	NA	NA	< 0.202
	07/31/01	4.6	2.0	< 1.0	14	8	< 1.0	< 1.0	1.0
MW-2	06/13/97	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
	02/16/99	NA	NA	NA	NA	NA	NA	NA	< 0.202
	07/31/01	< 1.5	< 1.5	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 0.10
MW-3	06/13/97	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
	02/16/99	NA	NA	NA	NA	NA	NA	NA	< 0.206
	07/31/01	< 1.5	< 1.5	< 1.0	< 2.0	4	< 1.0	< 1.0	< 0.10
MW-4	06/13/97	41	42	3.4	< 1.0	33	3.9	3.7	NA
	02/16/99	< 10.1 *	< 10.1 *	< 5.1 *	10.1 *	37 *	0.5	< 0.6	0.790
	07/31/01	< 1.5	< 1.5	< 1.0	< 2.0	9.9	< 1.0	< 1.0	0.44
MW-5	06/13/97	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
	02/16/99	NA	NA	NA	NA	NA	NA	NA	< 0.004
	07/31/01	< 1.5	< 1.5	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	0.26
MW-6	02/16/99	< 2.1	< 2.1	< 1.0	< 2.1	< 1.0	< 0.2	< 0.7	< 0.202
	08/01/01	< 1.5	< 1.5	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 0.10
(Duplicate)	08/01/01	< 1.5	< 1.5	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 0.10
MW-7	02/16/99	12.3 *	< 10.2 *	< 5.1 *	< 10.2 *	32.8 *	1.3 *	< 0.7	0.440
	07/01/99	NA	NA	< 1.1	< 2.1	< 1.1	< 0.2	< 0.7	NA
	07/31/01	< 1.5	< 1.5	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	0.12
MW-8	02/16/99	**75.2 ***	**76.0 ***	< 21.1 *	< 42.1 *	**164 ***	4.8 *	< 13.5 *	2.830
	08/01/01	FP	FP	FP	FP	FP	FP	FP	FP
Groundwater		20	20	20	210	20	280	210	5
Marine		95	30	3	0.031	26	30	0.031	5
NA source		200	200	200	2,100	200	2,800	2,100	50
NA parameter		20	20	20	210	20	280	210	5

Notes:
Analytical results obtained prior to July 30, 2001, were by Bhate Environmental Associates (BEA, 1997, 1999)
* = Dilution factor used in determining analytical reporting limits
FP = Free-phase liquid present, groundwater sample not collected; NA = Not analyzed
NA source = Natural attenuation source guidance concentration; NA parameter = Natural attenuation parameter guidance concentration
mg/L = Milligrams per liter; ug/L = Micrograms per liter

ATTACHMENT C

GROUNDWATER SAMPLE LOGS

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

GROUNDWATER SAMPLING LOG

SITE NAME: BUILDING 245	SITE LOCATION: NS MAYPORT	
WELL NO: MW-01	SAMPLE ID: MPT-245-MW01-0206	DATE: 2/10/06

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 2.2 feet to 12.2 feet	STATIC DEPTH TO WATER (feet): 5.17	PURGE PUMP TYPE OR BAILER: PERISTALTIC

WELL VOLUME PURGE: ~~1 WELL VOLUME~~ = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) 4.3 L = (feet – feet) X gallons/foot = 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): 9.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 9.0	PURGING INITIATED AT: 1214	PURGING ENDED AT: 1239	TOTAL VOLUME PURGED (~~gallons~~): 10.02

TIME	VOLUME PURGED ~~(gallons)~~ L	CUMUL. VOLUME PURGED ~~(gallons)~~ L	~~GPM~~ mLpm 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)
1214	–	–	400	5.17	–	–	–	–	–	TAN	NONE
1224	4.0	4.0	400	5.20	7.85	19.25	427	4.02	28	CLEAR	NONE
1229	2.0	6.0	400	5.20	7.81	19.20	436	1.23	16	CLEAR	NONE
1234	2.0	8.0	400	5.20	7.78	19.19	440	1.18	11	CLEAR	NONE
1239	2.0	10.0	400	5.20	7.75	19.16	443	1.16	9.3	CLEAR	NONE
SAMPLE TIME			1241								

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: TERRY COTTENOIR / TENUS	SAMPLER(S) SIGNATURES: Terry Cottenoir	SAMPLING INITIATED AT: 1241	SAMPLING ENDED AT: 1256
PUMP OR TUBING DEPTH IN WELL (feet): 9.0	SAMPLE PUMP FLOW RATE (mL per minute): 200/SM	TUBING MATERIAL CODE: TEFLON	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) Filtration Equipment Type: FILTER SIZE: ____ µm	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
PP	1	AG	1 L	NONE	–	–	PAH / 8270C	VT
PP	2	AG	1 L	H_2SO_4	–	–	TRPH / FLPRO	VT
PP	3	CG	40 mL	HCl	–	<2	VOC / 8260B	SM

REMARKS:

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

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

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

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

GROUNDWATER SAMPLING LOG

SITE NAME: NS MAYPORT	SITE LOCATION: BUILDING 245
WELL NO: MW04	SAMPLE ID: MPT-245-MW04-0206 / DATE: 2/15/06

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 2.55 feet to 12.55 feet	STATIC DEPTH TO WATER (feet): 5.31	PURGE PUMP TYPE OR BAILER: PERISTALTIC

WELL VOLUME PURGE: (only fill out if applicable) 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
4.3L = (feet – feet) X gallons/foot = gallons

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

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 8.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8.0	PURGING INITIATED AT: 1209	PURGING ENDED AT: 1234	TOTAL VOLUME PURGED (gallons): 10.0

TIME	VOLUME PURGED (~~gallons~~) L	CUMUL. VOLUME PURGED (~~gallons~~) L	~~gpm~~ ml per 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)
1209	–	–	400	5.31	–	–	–	–	–	CLEAR	NONE
1219	4.0	4.0	400	5.38	6.70	21.04	676	0.31	17	CLEAR	NONE
1224	2.0	6.0	400	5.38	6.74	21.01	657	0.16	13	CLEAR	NONE
1229	2.0	8.0	400	5.38	6.78	20.96	651	0.17	8.6	CLEAR	NONE
1234	2.0	10.0	400	5.38	6.81	20.95	648	0.10	5.3	CLEAR	NONE
SAMPLE TIME 1235											

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TERRY COTTENOIR / TENUS	SAMPLER(S) SIGNATURES: Terry Cottenoir	SAMPLING INITIATED AT: 1235	SAMPLING ENDED AT: 1250
PUMP OR TUBING DEPTH IN WELL (feet): 8.0	SAMPLE PUMP FLOW RATE (mL per minute): 200/SM	TUBING MATERIAL CODE: TEFLON	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
PP	1	AG	1L	NONE	–	–	PAH / 8270 SIM	VT
PP	2	AG	1L	H_2SO_4	–	–	TRPH / FLPRO	VT
PP	3	CG	40 mL	HCL	–	<2	VOC / 8260 B	SM

REMARKS:

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

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

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

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

GROUNDWATER SAMPLING LOG

SITE NAME: BUILDING 245	SITE LOCATION: NS MAYPORT	
WELL NO: MW-05	SAMPLE ID: MPT-245-MW05-0206	DATE: 2/10/06

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 2.4 feet to 12.4 feet	STATIC DEPTH TO WATER (feet): 4.50	PURGE PUMP TYPE OR BAILER: PERISTALTIC

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) 4.9L = (feet – feet) X gallons/foot = 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): 7.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 7.5	PURGING INITIATED AT: 1113	PURGING ENDED AT: 1138	TOTAL VOLUME PURGED (~~gallons~~): 10.0L

TIME	VOLUME PURGED (~~gallons~~) L	CUMUL. VOLUME PURGED (~~gallons~~) L	mLpm 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)
1113	–	–	400	4.50	–	–	–	–	–	TAN	NONE
1123	4.0	4.0	400	4.54	7.58	21.82	594	0.38	27	CLEAR	NONE
1128	2.0	6.0	400	4.54	7.57	21.79	578	0.34	23	CLEAR	NONE
1133	2.0	8.0	400	4.54	7.58	21.78	560	0.31	14	CLEAR	NONE
1138	2.0	10.0	400	4.54	7.57	21.78	554	0.30	11	CLEAR	NONE
SAMPLE TIME 1140											

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: TERRY COTTENOIR / TENUS	SAMPLER(S) SIGNATURES: Terry Cottenoir	SAMPLING INITIATED AT: 1140	SAMPLING ENDED AT: 1155
PUMP OR TUBING DEPTH IN WELL (feet): 7.5	SAMPLE PUMP FLOW RATE (mL per minute): 200/5m	TUBING MATERIAL CODE: TEFLON	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
PP	1	AG	1 L	NONE	–	–	PAH / 8270C	VT
PP	2	AG	1 L	H_2SO_4	–	–	TRPH / FLPRO	VT
PP	3	CG	40 mL	HCl	–	<2	VOC / 8260B	SM

REMARKS:

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

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

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

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

GROUNDWATER SAMPLING LOG

SITE NAME: NS MAYPORT	SITE LOCATION: BUILDING 245	
WELL NO: MW-08R	SAMPLE ID: MPT-245-MW08R-0206	DATE: 2/15/06

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 2.25 feet to 12.25 feet	STATIC DEPTH TO WATER (feet): 5.36	PURGE PUMP TYPE OR BAILER: PERISTALTIC

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) 4.3 L = (feet – feet) X gallons/foot = 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): 8.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8.0	PURGING INITIATED AT: 1310	PURGING ENDED AT: 1335	TOTAL VOLUME PURGED (gallons): 10.0

TIME	VOLUME PURGED ~~(gallons)~~ L	CUMUL. VOLUME PURGED ~~(gallons)~~ L	mLpm 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)
1310	—	—	400	5.36	—	—	—	—	—	CLEAR	NONE
1320	4.0	4.0	400	5.41	6.61	19.93	772	0.25	14	CLEAR	NONE
1325	2.0	6.0	400	5.41	6.62	19.94	769	0.21	11	CLEAR	NONE
1330	2.0	8.0	400	5.41	6.63	19.96	766	0.18	9.6	CLEAR	NONE
1335	2.0	10.0	400	5.41	6.64	19.99	762	0.16	7.9	CLEAR	NONE
SAMPLE TIME		1337									

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: TERRY COTTENOIR / TENUS	SAMPLER(S) SIGNATURES: Terry Cottenoir	SAMPLING INITIATED AT: 1337	SAMPLING ENDED AT: 1400
PUMP OR TUBING DEPTH IN WELL (feet): 8.0	SAMPLE PUMP FLOW RATE (mL per minute): 200/SM	TUBING MATERIAL CODE: TEFLON	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) Filtration Equipment Type: ____ FILTER SIZE: ____ µm	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
PP	1	AG	1 L	NONE	—	—	PAH / 8270 SIM	VT
PP	2	AG	1 L	H_2SO_4	—	—	TRPH / FLPRO	VT
PP	3	AG	40 mL	HCl	—	<2	VOC / 8260B	SM

REMARKS:
* COLLECT DUPLICATE SAMPLE: MPT-245-DU01-0206

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)

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

GROUNDWATER SAMPLING LOG

SITE NAME: BUILDING 245		SITE LOCATION: NS MAYPORT	
WELL NO: MW-09	SAMPLE ID: MPT-245-MW09-0206	DATE: 2/10/06	

PURGING DATA

WELL DIAMETER (inches): 1 1/4	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 1.7 feet to 11.7 feet	STATIC DEPTH TO WATER (feet): 7.26	PURGE PUMP TYPE OR BAILER: PERISTALTIC

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
~~0.1776 x 3.785 = 0.7L~~ = (11.7 ~~feet~~ – 7.26 ~~feet~~) x ~~0.04~~ ~~gallons/foot~~ = ~~0.1776~~ ~~gallons~~ 1.2L

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): 9.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 9.0	PURGING INITIATED AT: 1018	PURGING ENDED AT: 1038	TOTAL VOLUME PURGED ~~(gallons)~~: 4.0L

TIME	VOLUME PURGED ~~(gallons)~~ L	CUMUL. VOLUME PURGED ~~(gallons)~~ L	mLpm 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)
1018	–	–	200	7.26	–	–	–	–	–	TAN	NONE
1023	1.0	1.0	200	7.30	7.16	20.11	1011	2.35	140	TAN	NONE
1028	1.0	2.0	200	7.30	7.19	20.50	1034	1.64	55	TAN	NONE
1033	1.0	3.0	200	7.30	7.19	20.61	1050	1.16	31	CLEAR	NONE
1038	1.0	4.0	200	7.30	7.18	20.51	1066	0.98	17	CLEAR	NONE
SAMPLE TIME 1040											

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: TERRY COTTENOIR / TENUS	SAMPLER(S) SIGNATURES: Terry Cottenoir	SAMPLING INITIATED AT: 1040	SAMPLING ENDED AT: 1055
PUMP OR TUBING DEPTH IN WELL (feet): 9.0	SAMPLE PUMP FLOW RATE (mL per minute): 200/SM	TUBING MATERIAL CODE: TEFLON	
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
PP	1	AG	1 L	NONE	–	–	PAH / 8270C	VT
PP	2	AG	1 L	H_2SO_4	–	–	TRPH / FLPRO	VT
PP	3	CG	40 mL	HCl	–	<2	VOC / 8260B	SM

REMARKS:

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

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

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

ATTACHMENT D

GROUNDWATER ANALYTICAL REPORT

PROJ_NO: 00103

SDG: B601167 MEDIA: WATER DATA FRACTION: OV

nsample	MPT-245-EB01-0206
samp_date	2/10/2006
lab_id	B601167-05
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
BENZENE	0.2	U	U	
ETHYLBENZENE	0.3	U	U	
M+P-XYLENES	0.3	U	U	
METHYL TERT-BUTYL ETHER	0.2	U	U	
O-XYLENE	0.2	U	U	
TOLUENE	0.2	U	U	

nsample	MPT-245-MW05-0206
samp_date	2/10/2006
lab_id	B601167-02
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
BENZENE	0.2	U	U	
ETHYLBENZENE	0.3	U	U	
M+P-XYLENES	0.3	U	U	
METHYL TERT-BUTYL ETHER	0.2	U	U	
O-XYLENE	0.2	U	U	
TOLUENE	0.2	U	U	

nsample	MPT-245-MW09-0206
samp_date	2/10/2006
lab_id	B601167-01
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
BENZENE	0.2	U	U	
ETHYLBENZENE	0.3	U	U	
M+P-XYLENES	0.3	U	U	
METHYL TERT-BUTYL ETHER	0.2	U	U	
O-XYLENE	0.2	U	U	
TOLUENE	0.2	U	U	

PROJ_NO: 00103

SDG: B601167 MEDIA: WATER DATA FRACTION: OV

nsample	Trip Blank
samp_date	2/9/2006
lab_id	B601167-06
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
BENZENE	0.2	U	U	
ETHYLBENZENE	0.3	U	U	
M+P-XYLENES	0.3	U	U	
METHYL TERT-BUTYL ETHER	0.2	U	U	
O-XYLENE	0.2	U	U	
TOLUENE	0.2	U	U	

PROJ_NO: 00103

SDG: B601167 MEDIA: WATER DATA FRACTION: PAH

nsample	MPT-245-EB01-0206	nsample	MPT-245-MW05-0206	nsample	MPT-245-MW09-0206
samp_date	2/10/2006	samp_date	2/10/2006	samp_date	2/10/2006
lab_id	B601167-05	lab_id	B601167-02	lab_id	B601167-01
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.02	U	U	
2-METHYLNAPHTHALENE	0.02	U	U	
ACENAPHTHENE	0.02	U	U	
ACENAPHTHYLENE	0.01	U	U	
ANTHRACENE	0.02	U	U	
BENZO(A)ANTHRACENE	0.01	U	U	
BENZO(A)PYRENE	0.01	U	U	
BENZO(B)FLUORANTHENE	0.03	U	U	
BENZO(G,H,I)PERYLENE	0.03	U	U	
BENZO(K)FLUORANTHENE	0.02	U	U	
CHRYSENE	0.02	U	U	
DIBENZO(A,H)ANTHRACENE	0.02	U	U	
FLUORANTHENE	0.01	U	U	
FLUORENE	0.02	U	U	
INDENO(1,2,3-CD)PYRENE	0.02	U	U	
NAPHTHALENE	0.02	U	U	
PHENANTHRENE	0.02	U	U	
PYRENE	0.02	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.02	U	U	
2-METHYLNAPHTHALENE	0.02	U	U	
ACENAPHTHENE	0.02	U	U	
ACENAPHTHYLENE	0.01	U	U	
ANTHRACENE	0.02	U	U	
BENZO(A)ANTHRACENE	0.01	U	U	
BENZO(A)PYRENE	0.01	U	U	
BENZO(B)FLUORANTHENE	0.03	U	U	
BENZO(G,H,I)PERYLENE	0.03	U	U	
BENZO(K)FLUORANTHENE	0.02	U	U	
CHRYSENE	0.02	U	U	
DIBENZO(A,H)ANTHRACENE	0.02	U	U	
FLUORANTHENE	0.01	U	U	
FLUORENE	0.02	U	U	
INDENO(1,2,3-CD)PYRENE	0.02	U	U	
NAPHTHALENE	0.02	U	U	
PHENANTHRENE	0.02	U	U	
PYRENE	0.02	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1-METHYLNAPHTHALENE	0.02	U	U	
2-METHYLNAPHTHALENE	0.02	U	U	
ACENAPHTHENE	0.02	U	U	
ACENAPHTHYLENE	0.01	U	U	
ANTHRACENE	0.02	U	U	
BENZO(A)ANTHRACENE	0.01	U	U	
BENZO(A)PYRENE	0.01	U	U	
BENZO(B)FLUORANTHENE	0.03	U	U	
BENZO(G,H,I)PERYLENE	0.03	U	U	
BENZO(K)FLUORANTHENE	0.02	U	U	
CHRYSENE	0.02	U	U	
DIBENZO(A,H)ANTHRACENE	0.02	U	U	
FLUORANTHENE	0.01	U	U	
FLUORENE	0.02	U	U	
INDENO(1,2,3-CD)PYRENE	0.02	U	U	
NAPHTHALENE	0.02	U	U	
PHENANTHRENE	0.02	U	U	
PYRENE	0.02	U	U	

PROJ_NO: 00103

SDG: B601167 MEDIA: WATER DATA FRACTION: PET

nsample	MPT-245-EB01-0206	nsample	MPT-245-MW05-0206	nsample	MPT-245-MW09-0206
samp_date	2/10/2006	samp_date	2/10/2006	samp_date	2/10/2006
lab_id	B601167-05	lab_id	B601167-02	lab_id	B601167-01
qc_type	NM	qc_type	NM	qc_type	NM
units	MG/L	units	MG/L	units	MG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
TPH (C08-C40)	0.094	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
TPH (C08-C40)	0.094	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
TPH (C08-C40)	0.094	U	U	

TETRA TECH NUS, INC. CHAIN OF CUSTODY NUMBER 3253 PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112G00103	NS MAYPORT	MARK PETERSON	(904) 636-6125	ENCO
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
Terry Cottenoir		DAVE SEIFKEN	(904) 636-6125	4810 EXECUTIVE PARK COURT, STE 21
		CARRIER/WAYBILL NUMBER		CITY, STATE
		DROP-OFF		JACKSONVILLE, FL

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

CONTAINER TYPE PLASTIC (P) or GLASS (G): G G G
PRESERVATIVE USED: NONE H_2SO_4 HCl

DATE YEAR 2006	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS: PAH / 8270C	TRPH / FLPRO	VOC / 8260B						COMMENTS
2/10	1040	MPT-245-MW09-0206				GW	G	6	1	2	3						*Cool To 4°C
	1140	MPT-245-MW05-0206															
	1241	~~MPT-245-MW01-0206~~															
	1358	~~MPT-245-MW04-0206~~															*REFERENCE
	1308	MPT-245-EB01-0206				QC	G										CTO 386
																	BUILDING 245
																	B6001167

1. RELINQUISHED BY Terry Cottenoir	DATE 2/10/06	TIME 1545	1. RECEIVED BY [signature]	DATE 2/10/06	TIME 1545
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY 1.2	DATE	TIME	3. RECEIVED BY	DATE	TIME

Received on Wet Ice 0.6 °C

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

4/02R
FORM NO. TtNUS-001

PROJ_NO: 00103

SDG: B601317 MEDIA: WATER DATA FRACTION: OV

nsample	MPT-245-DU01-0206	nsample	MPT-245-DU01-0206	nsample	MPT-245-MW01-0206
samp_date	2/15/2006	samp_date	2/15/2006	samp_date	2/15/2006
lab_id	B601317-04	lab_id	B601317-04	lab_id	B601317-03
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:	MPT-245-MW08R-0206	DUP_OF:	MPT-245-MW08R-0206	DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.3	U	U	
1,1,2,2-TETRACHLOROETHANE	0.2	U	U	
1,1,2-TRICHLOROETHANE	0.3	U	U	
1,1-DICHLOROETHANE	0.2	U	U	
1,1-DICHLOROETHENE	0.2	U	U	
1,2-DICHLOROBENZENE	0.66	I	J	P
1,2-DICHLOROETHANE	0.1	U	U	
1,2-DICHLOROPROPANE	0.4	U	U	
1,3-DICHLOROBENZENE	0.2	U	U	
1,4-DICHLOROBENZENE	0.1	U	U	
BENZENE	0.4	I	J	P
BROMODICHLOROMETHANE	0.2	U	U	
BROMOFORM	0.2	U	U	
BROMOMETHANE	0.6	U	U	
CARBON TETRACHLORIDE	0.3	U	U	
CHLOROBENZENE	0.46	I	J	P
CHLORODIBROMOMETHANE	0.2	U	U	
CHLOROETHANE	0.3	U	U	
CHLOROFORM	0.2	U	U	
CHLOROMETHANE	0.3	U	U	
CIS-1,2-DICHLOROETHENE	0.2	U	U	
CIS-1,3-DICHLOROPROPENE	0.1	U	U	
DICHLORODIFLUOROMETHANE	0.3	U	U	
ETHYLBENZENE	7.28			
M+P-XYLENES	0.3	U	U	
METHYL TERT-BUTYL ETHER	0.2	U	U	
METHYLENE CHLORIDE	2	U	U	
O-XYLENE	0.2	U	U	
TETRACHLOROETHENE	0.3	U	U	
TOLUENE	0.2	U	U	
TRANS-1,2-DICHLOROETHENE	0.2	U	U	
TRANS-1,3-DICHLOROPROPENE	0.2	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
TRICHLOROETHENE	0.3	U	U	
TRICHLOROFLUOROMETHANE	0.3	U	U	
VINYL CHLORIDE	0.4	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.3	U	U	
1,1,2,2-TETRACHLOROETHANE	0.2	U	U	
1,1,2-TRICHLOROETHANE	0.3	U	U	
1,1-DICHLOROETHANE	0.2	U	U	
1,1-DICHLOROETHENE	0.2	U	U	
1,2-DICHLOROBENZENE	0.2	U	U	
1,2-DICHLOROETHANE	0.1	U	U	
1,2-DICHLOROPROPANE	0.4	U	U	
1,3-DICHLOROBENZENE	0.2	U	U	
1,4-DICHLOROBENZENE	0.1	U	U	
BENZENE	4.33			
BROMODICHLOROMETHANE	0.2	U	U	
BROMOFORM	0.2	U	U	
BROMOMETHANE	0.6	U	U	
CARBON TETRACHLORIDE	0.3	U	U	
CHLOROBENZENE	0.2	U	U	
CHLORODIBROMOMETHANE	0.2	U	U	
CHLOROETHANE	0.3	U	U	
CHLOROFORM	0.2	U	U	
CHLOROMETHANE	0.3	U	U	
CIS-1,2-DICHLOROETHENE	0.2	U	U	
CIS-1,3-DICHLOROPROPENE	0.1	U	U	
DICHLORODIFLUOROMETHANE	0.3	U	U	
ETHYLBENZENE	0.32	I	J	P
M+P-XYLENES	0.3	U	U	
METHYL TERT-BUTYL ETHER	0.2	U	U	
METHYLENE CHLORIDE	2	U	U	
O-XYLENE	0.2	U	U	
TETRACHLOROETHENE	0.3	U	U	
TOLUENE	0.2	U	U	
TRANS-1,2-DICHLOROETHENE	0.2	U	U	
TRANS-1,3-DICHLOROPROPENE	0.2	U	U	

PROJ_NO: 00103

SDG: B601317 MEDIA: WATER DATA FRACTION: OV

nsample	MPT-245-MW01-0206
samp_date	2/15/2006
lab_id	B601317-03
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
TRICHLOROETHENE	0.3	U	U	
TRICHLOROFLUOROMETHANE	0.3	U	U	
VINYL CHLORIDE	0.4	U	U	

nsample	MPT-245-MW04-0206
samp_date	2/15/2006
lab_id	B601317-01
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.3	U	U	
1,1,2,2-TETRACHLOROETHANE	0.2	U	U	
1,1,2-TRICHLOROETHANE	0.3	U	U	
1,1-DICHLOROETHANE	0.2	U	U	
1,1-DICHLOROETHENE	0.2	U	U	
1,2-DICHLOROBENZENE	0.2	U	U	
1,2-DICHLOROETHANE	0.1	U	U	
1,2-DICHLOROPROPANE	0.4	U	U	
1,3-DICHLOROBENZENE	0.2	U	U	
1,4-DICHLOROBENZENE	0.1	U	U	
BENZENE	0.2	U	U	
BROMODICHLOROMETHANE	0.2	U	U	
BROMOFORM	0.2	U	U	
BROMOMETHANE	0.6	U	U	
CARBON TETRACHLORIDE	0.3	U	U	
CHLOROBENZENE	0.2	U	U	
CHLORODIBROMOMETHANE	0.2	U	U	
CHLOROETHANE	0.3	U	U	
CHLOROFORM	0.2	U	U	
CHLOROMETHANE	0.3	U	U	
CIS-1,2-DICHLOROETHENE	0.2	U	U	
CIS-1,3-DICHLOROPROPENE	0.1	U	U	
DICHLORODIFLUOROMETHANE	0.3	U	U	
ETHYLBENZENE	0.37	I	J	P
M+P-XYLENES	0.3	U	U	
METHYL TERT-BUTYL ETHER	0.2	U	U	
METHYLENE CHLORIDE	2	U	U	
O-XYLENE	0.2	U	U	
TETRACHLOROETHENE	0.3	U	U	
TOLUENE	0.2	U	U	
TRANS-1,2-DICHLOROETHENE	0.2	U	U	
TRANS-1,3-DICHLOROPROPENE	0.2	U	U	

nsample	MPT-245-MW04-0206
samp_date	2/15/2006
lab_id	B601317-01
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
TRICHLOROETHENE	0.3	U	U	
TRICHLOROFLUOROMETHANE	0.3	U	U	
VINYL CHLORIDE	0.4	U	U	

PROJ_NO: 00103

SDG: B601317 MEDIA: WATER DATA FRACTION: OV

nsample	MPT-245-MW08R-0206	nsample	MPT-245-MW08R-0206
samp_date	2/15/2006	samp_date	2/15/2006
lab_id	B601317-02	lab_id	B601317-02
qc_type	NM	qc_type	NM
units	UG/L	units	UG/L
Pct_Solids		Pct_Solids	
DUP_OF:		DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.3	U	U	
1,1,2,2-TETRACHLOROETHANE	0.2	U	U	
1,1,2-TRICHLOROETHANE	0.3	U	U	
1,1-DICHLOROETHANE	0.2	U	U	
1,1-DICHLOROETHENE	0.2	U	U	
1,2-DICHLOROBENZENE	0.67	I	J	P
1,2-DICHLOROETHANE	0.1	U	U	
1,2-DICHLOROPROPANE	0.4	U	U	
1,3-DICHLOROBENZENE	0.2	U	U	
1,4-DICHLOROBENZENE	0.1	U	U	
BENZENE	0.35	I	J	P
BROMODICHLOROMETHANE	0.2	U	U	
BROMOFORM	0.2	U	U	
BROMOMETHANE	0.6	U	U	
CARBON TETRACHLORIDE	0.3	U	U	
CHLOROBENZENE	0.4	I	J	P
CHLORODIBROMOMETHANE	0.2	U	U	
CHLOROETHANE	0.3	U	U	
CHLOROFORM	0.2	U	U	
CHLOROMETHANE	0.3	U	U	
CIS-1,2-DICHLOROETHENE	0.2	U	U	
CIS-1,3-DICHLOROPROPENE	0.1	U	U	
DICHLORODIFLUOROMETHANE	0.3	U	U	
ETHYLBENZENE	7.53			
M+P-XYLENES	0.3	U	U	
METHYL TERT-BUTYL ETHER	0.2	U	U	
METHYLENE CHLORIDE	2	U	U	
O-XYLENE	0.2	U	U	
TETRACHLOROETHENE	0.3	U	U	
TOLUENE	0.2	U	U	
TRANS-1,2-DICHLOROETHENE	0.2	U	U	
TRANS-1,3-DICHLOROPROPENE	0.2	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
TRICHLOROETHENE	0.3	U	U	
TRICHLOROFLUOROMETHANE	0.3	U	U	
VINYL CHLORIDE	0.4	U	U	

PROJ_NO: 00103

SDG: B601317 MEDIA: WATER DATA FRACTION: PAH

nsample	MPT-245-DU01-0206	nsample	MPT-245-MW01-0206	nsample	MPT-245-MW04-0206
samp_date	2/15/2006	samp_date	2/15/2006	samp_date	2/15/2006
lab_id	B601317-04	lab_id	B601317-03	lab_id	B601317-01
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:	MPT-245-MW08R-0206	DUP_OF:		DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1-METHYLNAPHTHALENE	5.02		J	G
2-METHYLNAPHTHALENE	1.3		J	G
ACENAPHTHENE	0.53			
ACENAPHTHYLENE	0.01	U	U	
ANTHRACENE	0.02	U	U	
BENZO(A)ANTHRACENE	0.01	U	U	
BENZO(A)PYRENE	0.01	U	U	
BENZO(B)FLUORANTHENE	0.03	U	U	
BENZO(G,H,I)PERYLENE	0.03	U	U	
BENZO(K)FLUORANTHENE	0.02	U	U	
CHRYSENE	0.02	U	U	
DIBENZO(A,H)ANTHRACENE	0.02	U	U	
FLUORANTHENE	0.01	U	U	
FLUORENE	0.59			
INDENO(1,2,3-CD)PYRENE	0.02	U	U	
NAPHTHALENE	7.57		J	G
PHENANTHRENE	0.12			
PYRENE	0.02	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1-METHYLNAPHTHALENE	47.4	D	J	G
2-METHYLNAPHTHALENE	32.0	D	J	G
ACENAPHTHENE	2.04			
ACENAPHTHYLENE	0.01	U	U	
ANTHRACENE	0.22			
BENZO(A)ANTHRACENE	0.01	U	U	
BENZO(A)PYRENE	0.01	U	U	
BENZO(B)FLUORANTHENE	0.03	U	U	
BENZO(G,H,I)PERYLENE	0.03	U	U	
BENZO(K)FLUORANTHENE	0.02	U	U	
CHRYSENE	0.02	U	U	
DIBENZO(A,H)ANTHRACENE	0.02	U	U	
FLUORANTHENE	0.01	U	U	
FLUORENE	2.51			
INDENO(1,2,3-CD)PYRENE	0.02	U	U	
NAPHTHALENE	53.4	D	J	G
PHENANTHRENE	1.07			
PYRENE	0.10			

Parameter	Result	Lab Qual	Val Qual	Qual Code
1-METHYLNAPHTHALENE	3.97		J	G
2-METHYLNAPHTHALENE	1.52		J	G
ACENAPHTHENE	0.52			
ACENAPHTHYLENE	0.01	U	U	
ANTHRACENE	0.02	U	U	
BENZO(A)ANTHRACENE	0.01	U	U	
BENZO(A)PYRENE	0.01	U	U	
BENZO(B)FLUORANTHENE	0.03	U	U	
BENZO(G,H,I)PERYLENE	0.03	U	U	
BENZO(K)FLUORANTHENE	0.02	U	U	
CHRYSENE	0.02	U	U	
DIBENZO(A,H)ANTHRACENE	0.02	U	U	
FLUORANTHENE	0.01	U	U	
FLUORENE	0.54			
INDENO(1,2,3-CD)PYRENE	0.02	U	U	
NAPHTHALENE	5.87		J	G
PHENANTHRENE	0.17			
PYRENE	0.02	U	U	

PROJ_NO: 00103

SDG: B601317 MEDIA: WATER DATA FRACTION: PAH

nsample	MPT-245-MW03R-0206
samp_date	2/15/2006
lab_id	B601317-02
qc_type	NM
units	UG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1-METHYLNAPHTHALENE	3.23		J	G
2-METHYLNAPHTHALENE	0.64		J	G
ACENAPHTHENE	0.47			
ACENAPHTHYLENE	0.01	U	U	
ANTHRACENE	0.02	U	U	
BENZO(A)ANTHRACENE	0.01	U	U	
BENZO(A)PYRENE	0.01	U	U	
BENZO(B)FLUORANTHENE	0.03	U	U	
BENZO(G,H,I)PERYLENE	0.03	U	U	
BENZO(K)FLUORANTHENE	0.02	U	U	
CHRYSENE	0.02	U	U	
DIBENZO(A,H)ANTHRACENE	0.02	U	U	
FLUORANTHENE	0.01	U	U	
FLUORENE	0.47			
INDENO(1,2,3-CD)PYRENE	0.02	U	U	
NAPHTHALENE	5.03		J	G
PHENANTHRENE	0.09	I	J	P
PYRENE	0.02	U	U	

PROJ_NO: 00103

SDG: B601317 MEDIA: WATER DATA FRACTION: PET

nsample	MPT-245-DU01-0206	nsample	MPT-245-MW01-0206	nsample	MPT-245-MW04-0206
samp_date	2/15/2006	samp_date	2/15/2006	samp_date	2/15/2006
lab_id	B601317-04	lab_id	B601317-03	lab_id	B601317-01
qc_type	NM	qc_type	NM	qc_type	NM
units	MG/L	units	MG/L	units	MG/L
Pct_Solids		Pct_Solids		Pct_Solids	
DUP_OF:	MPT-245-MW03R-0206	DUP_OF:		DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
TPH (C08-C40)	1.31	I		

Parameter	Result	Lab Qual	Val Qual	Qual Code
TPH (C08-C40)	9.13	I		

Parameter	Result	Lab Qual	Val Qual	Qual Code
TPH (C08-C40)	0.609	I		

PROJ_NO: 00103

SDG: B601317 MEDIA: WATER DATA FRACTION: PET

nsample	MPT-245-MW08R-0206
samp_date	2/15/2006
lab_id	B601317-02
qc_type	NM
units	MG/L
Pct_Solids	
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
TPH (C08-C40)	0.998	I		

TETRA TECH NUS, INC. CHAIN OF CUSTODY NUMBER 3264 1 PAGE 1 OF 1

PROJECT NO: 112G00103	FACILITY: NS MAYPORT	PROJECT MANAGER: MARK PETERSON	PHONE NUMBER: (904) 636-6125	LABORATORY NAME AND CONTACT: ENCO
SAMPLERS (SIGNATURE): Terry Cotterman		FIELD OPERATIONS LEADER: DAVE SIEFKEN	PHONE NUMBER: (904) 636-6125	ADDRESS: 4810 EXECUTIVE PARK CT. STE 211
		CARRIER/WAYBILL NUMBER: DROP-OFF		CITY, STATE: JACKSONVILLE, FL

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

DATE YEAR 2006	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS: PAH 8270 SIM	TRPH / FLPRO	VOC 8260B					COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)									G	G	G					
PRESERVATIVE USED									—	H_2SO_4	HCL					
2/15	1235	MPT-245-MW04-0206				GW	G	6	1	2	3					*COOL TO 4°C
2/15	1337	MPT-245-MW08R-0206				↓	↓	↓	↓	↓	↓					
2/15	1445	MPT-245-MW01-0206				↓	↓	↓	↓	↓	↓					
2/15	0000	MPT-245-DU01-0206				↓	↓	↓	↓	↓	↓					REF #1006102
																B601317

1. RELINQUISHED BY: Terry Cotterman	DATE: 2/15/06	TIME: 1620	1. RECEIVED BY: [illegible]	DATE: 2/15/06	TIME: 1620
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

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

4/02R
FORM NO. TtNUS-001