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

12/4/2006

TETRA TECH NUS

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December 4, 2006

Project Number 112G00103

Naval Facilities Engineering Command
Southeast
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: Second 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 second 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 second 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. The site is beachfront property located along the Atlantic Ocean as viewed on Figure 2.

SITE DESCRIPTION

Building 245 is the Community Center building which houses many different venues of business, which includes entertainment and dining. The groundwater monitoring wells are located in a grassy area on the northern side of the building. A site plan depicting the well locations at the site is provided as Figure 3.

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 approximately 7 feet (ft) east of an electrical switch room located on the northern side of Building 245. Groundwater 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). Excessively contaminated soil was located at depths of 3 ft and 6 ft below land surface (bls). A replacement UST was installed in a new location soon after the removal approximately 20 ft north of the electrical switch room.

The initial assessment of UST 245 was completed by Bhate 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 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 new 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 by 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 implementing the four items required by the FDEP from the July 28, 2002, letter and completed 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 removed an estimated that 125 gallons of free product.
- 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 through additional soil sampling it has been confirmed the absence of contaminated 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. Summary 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.

SAMPLING PROCEDURES AND METHODS

On June 1, 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 and has 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 total recoverable petroleum hydrocarbons (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 June 1, 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 4. Groundwater flow is towards the east to the Atlantic Ocean.

DISCUSSION OF GROUNDWATER ANALYTICAL RESULTS

On June 1, 2006, a TtNUS representative collected groundwater for laboratory analysis by ENCO. 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. The constituents exceeding the GCTLs included benzene [2.0 micrograms per liter (µg/L)], naphthalene (34.8 µg/L), 1-methylnaphthalene (52.0 µg/L), and TRPH [13.4 milligrams per liter (mg/L)].

FIRST QUARTER CONCLUSIONS AND RECOMMENDATIONS

Based on the most recent monitoring, benzene (2.0 µg/L), naphthalene (34.8 µg/L), 1-methylnaphthalene (52.0 µg/L), and TRPH (13.4 mg/L) all exceed GCTLs. Based on groundwater analytical results, impacts continue to be limited in extent.

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

- Additional quarterly monitoring sampling events should 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 third quarter sampling event should take place before September 30, 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 (6)

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

CERTIFICATION

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 Second 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.

December 4, 2006
Mark A. Peterson, P.G.
Florida License Number PG-0001852

TABLES

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

Second Quarter Groundwater Monitoring Letter Report
Building 245
Naval Station Mayport
Mayport, Florida

Monitoring Well	TOC (ft)	Depth-to-Groundwater (ft)	Feet Above Mean Sea Level
1	11.57	7.32	4.25
2	10.27	6.02	4.25
3	10.15	5.82	4.33
4	10.31	6.01	4.3
5	9.76	5.45	4.31
6	9.15	NM	
7	12.48	NM	
8	10.07	6.05	4.02
9	NS	8.02	

Notes:
All wells were surveyed on June 1, 2006
NS=Not surveyed, MW-9 was added after the last survey
NM = not measured, MW-6 and MW-7 were not accessible due to permanent obstructions.

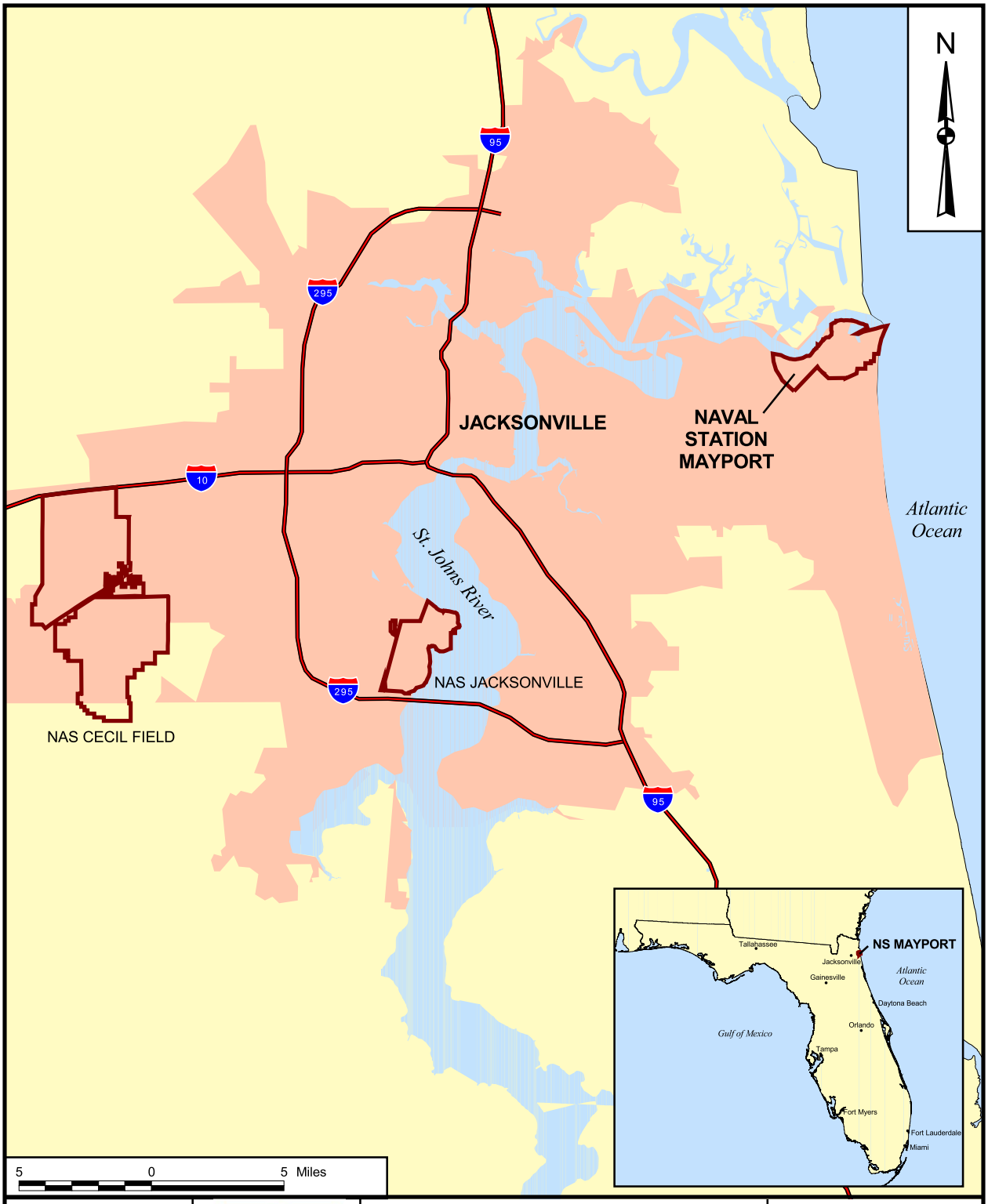
Table 2
Summary of Laboratory Groundwater Analytical Detections

Second Quarter Groundwater Monitoring Letter Report
Building 245
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	**13.4**	<0.094	<0.094	NS	NS	1.18	<0.094
PAHs (µg/L)								
1-Methylnaphthalene	28	**52**	0.71	<0.02	NS	NS	11.8	<0.02
2-Methylnaphthalene	28	14.3	0.62	<0.02	NS	NS	4.45	<0.02
Naphthalene	14	**34.8**	0.86	<0.02	NS	NS	7.55	<0.02
Phenanthrene	210	2.38	0.11	<0.02	NS	NS	0.83	<0.02
Pyrene	210	0.23	<0.02	<0.02	NS	NS	0.08	<0.02
Fluorene	280	4.6	0.29	<0.02	NS	NS	1.27	<0.02
Acenaphthene	20	3.32	0.24	<0.02	NS	NS	0.95	<0.02
VOCs (µg/L)								
Benzene	1	**2**	<0.2	<0.2	NS	NS	0.2	<0.2
Ethylbenzene	30	1.7	<0.3	<0.3	NS	NS	1.9	<0.3

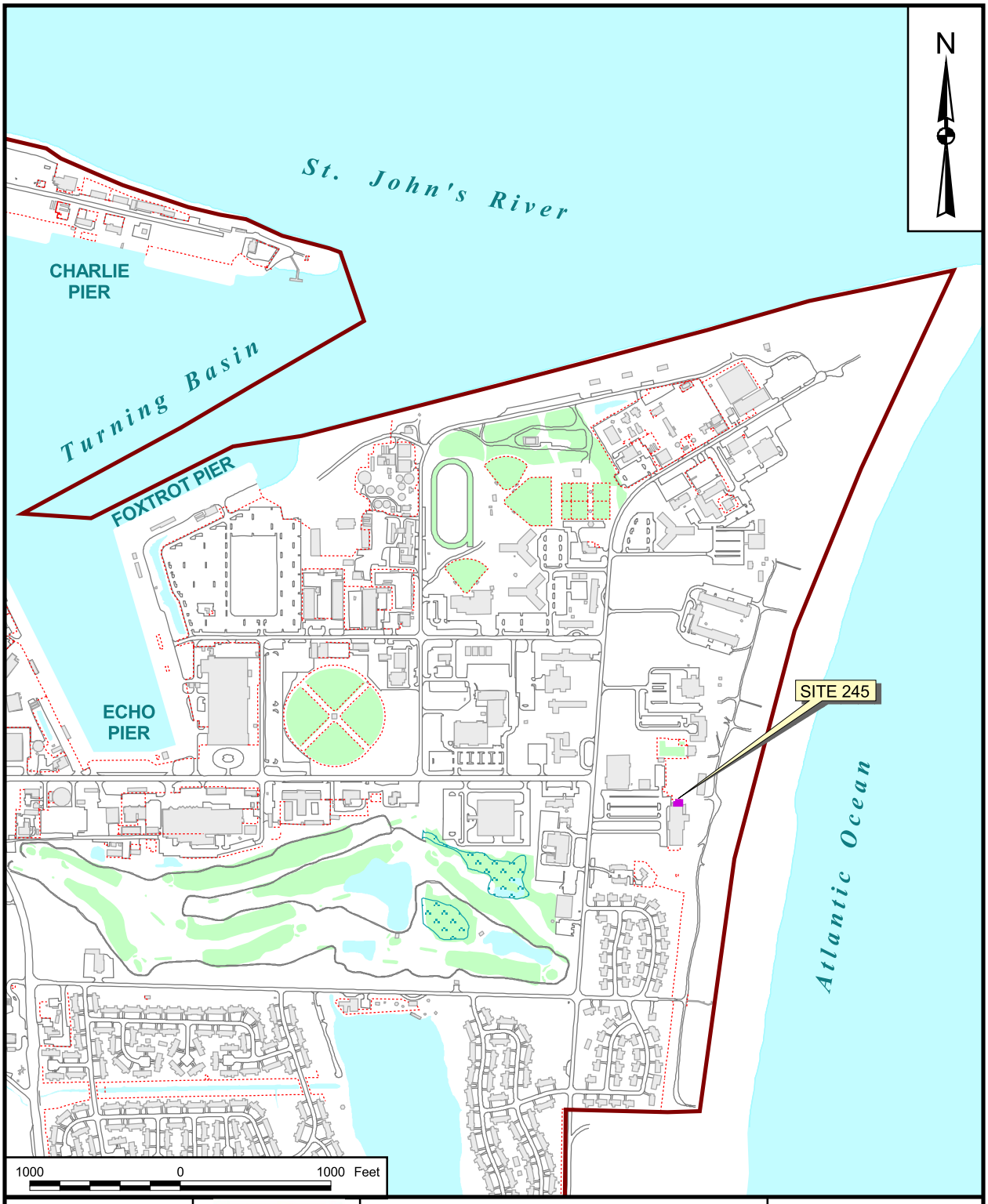
Notes:
Bold exceed FDEP GCTLs.
NS = not sampled

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

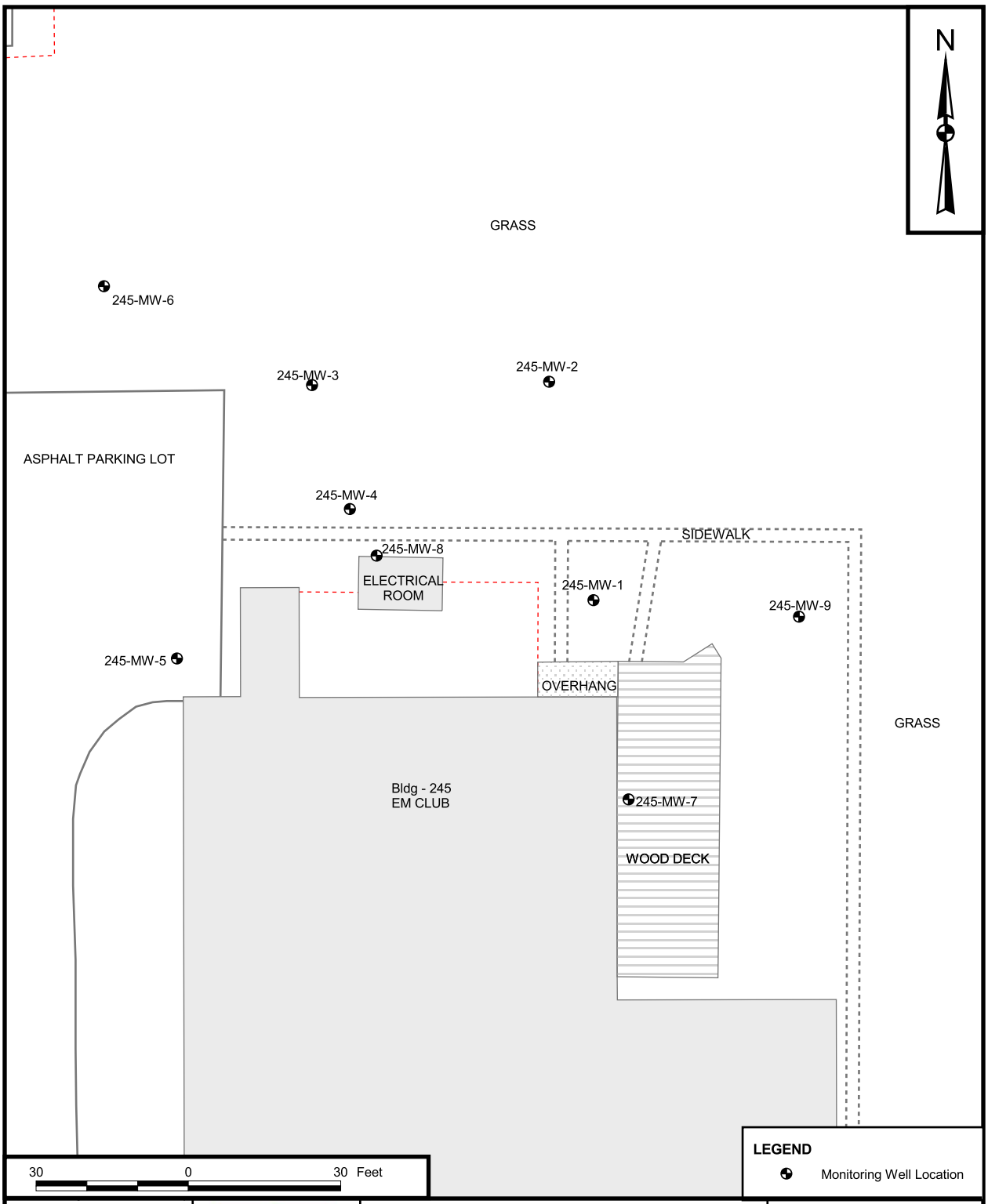
P:\GIS\MAYPORT_NS\MAPDOCS\APR\STATEMENT_BASIS.APR REGIONAL AREA 5/11/06 SS



DRAWN BY K. PEILA	DATE 4/17/06	SITE LOCATION MAP SITE 245 NAVAL STATION MAYPORT MAYPORT, FLORIDA	CONTRACT NUMBER 0103
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

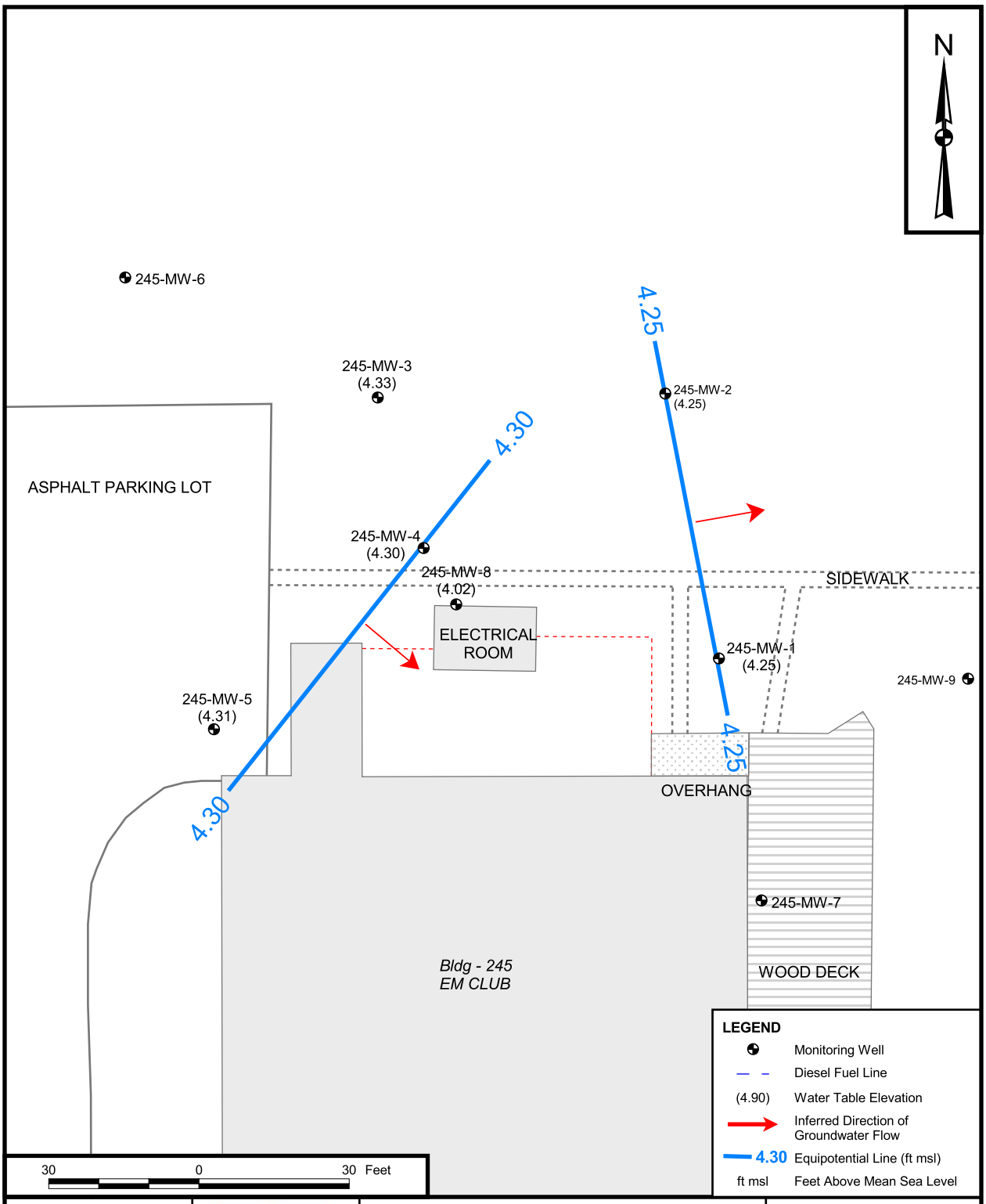
NAVFAC

P:\GIS\MAYPORT_NS\MAPDOCS\APR\STATEMENT_BASIS.APR SITE 245 SITE LOCATION 4/17/06 KMP



DRAWN BY K. PEILA	DATE 4/17/06	SITE PLAN SITE 245 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 3 / REV 0

P:\GIS\MAYPORT_NS\MAPDOCS\APR\BLDG413_1585.APR BLDG 245 SITE PLAN_LAYOUT 6/5/06 MKB (KOP)



DRAWN BY MK BOND	DATE 6/15/06	GROUNDWATER ELEVATION CONTOUR MAP JUNE 2006 SITE 245 SECOND QUARTER MONITORING REPORT NAVAL STATION MAYPORT MAYPORT, FLORIDA	CONTRACT NUMBER CTO 00386
CHECKED BY D. HARDISON	DATE 6/15/06		APPROVED BY — DATE —
COST/SCHEDULE-AREA			APPROVED BY — DATE —
SCALE AS NOTED			DRAWING NO. FIGURE 4 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: Bldg 245		SITE LOCATION: Mayport	
WELL NO: MW01	SAMPLE ID: MPT-245-MW01 060106		DATE: 06-01-06

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH 2.85 feet to 12.85 feet	STATIC DEPTH TO WATER (feet): 7.32	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)
= (feet – feet) X gallons/foot = 4.3 l 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): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGING INITIATED AT: 1255	PURGING ENDED AT: 1315	TOTAL VOLUME PURGED (gallons): 6.0

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) ORP	ODOR (describe)
1255	0	0	300	7.32							
1310	4.5	4.5	300	7.44	6.37	23.76	0.909	0.17	15	-83.1	clear
1313			300	7.44	6.38	23.66	.908	0.15	14	-78.3	clear
1315	1.5	6.0	300	7.44	6.39	23.70	.906	0.18	14	-75.5	clear
1320	sample										

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: David Siefken / T+NUS	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1315	SAMPLING ENDED AT: 1335
PUMP OR TUBING DEPTH IN WELL (feet): 10	SAMPLE PUMP FLOW RATE (mL per minute): 300	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		
		AG	1000 ml	–	1000		PAH 8270	UT
		AG	1000 ml	H_2SO_4	1000		TRPH	VT
	3	CG	40 ml	HCL	40	<2.0	VOC 8260	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: MPT-245-MW04 060106	SITE LOCATION: Mayport	
WELL NO: MW 04	SAMPLE ID:	DATE: 06/01/06

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 12.9 feet to 2.9 feet	STATIC DEPTH TO WATER (feet): 6.01	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)
= (12.90 feet – 6.01 feet) X 7 ft H2O gallons/foot = 4.3 l 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): 9.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 9.5	PURGING INITIATED AT: 1115	PURGING ENDED AT: 1137	TOTAL VOLUME PURGED (gallons): 6.75 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)
1115	0	0	300	6.01	—	—	—	—	—	—	—
1130	4.5	4.5	300	6.04	7.03	24.57	0.555	0.25	4.2	-77.7	
1132	—	—	300	6.04	6.82	24.62	0.552	0.21	3.8	-76.0	
1135	6.0	6.0	300	6.04	6.77	24.73	0.551	0.20	3.6	-75.1	
1137	.75	6.75	300	6.04	6.74	24.61	0.551	0.18	3.2	-72.2	
1140	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: David Siefken / Tetra Tech	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1140	SAMPLING ENDED AT: 1200
PUMP OR TUBING DEPTH IN WELL (feet): 9.5 ft	SAMPLE PUMP FLOW RATE (mL per minute): 300	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		
		AG	1000 ml	—	1000		PAH 8270	UT
		AG	1000 ml	H_2SO_4	1000		TRPH	UT
	3	CG	40 ml	HCL	40	<2.0	VOC 8260	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: Bldg 245		SITE LOCATION: Mayport	
WELL NO: MW05	SAMPLE ID: MOT 245 MW05 060106		DATE: 06-01-06

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 2.8 feet to 12.8 feet	STATIC DEPTH TO WATER (feet): 5.45	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)
= (feet – feet) X gallons/foot = 4.5 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): 7.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 7.5	PURGING INITIATED AT: 1420	PURGING ENDED AT: 1450	TOTAL VOLUME PURGED (gallons): 9.0

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) ORP	ODOR (describe)
1420	0	0	300	5.45							
1445	7.5	7.5	300	5.62	7.13	25.88	0.406	0.23	4.28	-69.1	Clear
1447			300	5.62	7.15	26.01	0.407	0.23	4.11	-68.1	
1450	9.5	9.0	300	5.62	7.17	26.06	0.408	0.24	3.97	-69.8	
1500	Sample										
1500	Sample										

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: Dave Siefken / T+NUS	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1450	SAMPLING ENDED AT: 1510
PUMP OR TUBING DEPTH IN WELL (feet): 9.5	SAMPLE PUMP FLOW RATE (mL per minute): 300	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		
		AG	1000 ml	—	1000		PAH 8270	UT
		AG	1000 ml	H_2SO_4	1000		TRPH	UT
	3	CG	40 ml	HCL	40	< 2.0	VOC 8260	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: Mayport Bldg 245		SITE LOCATION: Mayport	
WELL NO: MW 8R	SAMPLE ID: MPT 245 MW 8R 060106		DATE: 060106

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 7.6 feet to 12.6 feet	STATIC DEPTH TO WATER (feet): 6.05	PURGE PUMP TYPE OR BAILER: 4.3 l peristaltic

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = 4.3 l ~~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: 1115	PURGING ENDED AT: 1147	TOTAL VOLUME PURGED (gallons): 6.5

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~~ ORP (describe)	ODOR (describe)
1115			200	6.05							
1140	5	5	200	6.15	6.61	24.31	0.768	0.40	3.9	-63.5	
1142			200	6.15	6.52	24.15	0.755	0.37	3.9	-63.2	
1145	1	6	200	6.15	6.50	24.11	0.755	0.28	3.6	-65.7	
1147	.5	6.5	200	6.15	6.47		0.774	0.25	3.5	-66.4	
1150	Sample										

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: Dave Siefker / T+MS	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1150	SAMPLING ENDED AT: 1210
PUMP OR TUBING DEPTH IN WELL (feet): 9.0	SAMPLE PUMP FLOW RATE (mL per minute): 200	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		
		AG	1 L	—	1 l	6	PAH 8270	VT
		AG	1 L	H_2SO_4	1 l		TRPH	VT
	3	CG	40 ml	HCL	40 ml	<2	VOC 8260	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: Bldg 245	SITE LOCATION: Mayport	
WELL NO: MW09	SAMPLE ID: MPT-245-MW09-060109	DATE: 06/01/06

PURGING DATA

WELL DIAMETER (inches): 1.5	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 18 feet to 28 feet	STATIC DEPTH TO WATER (feet): 8.02	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)
= (feet – feet) X ~5 ft of H2O gallons/foot = 3.7 l 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): 10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGING INITIATED AT: 1300	PURGING ENDED AT: 1335	TOTAL VOLUME PURGED (gallons): 7 l

TIME	VOLUME PURGED (~~gallons~~) l	CUMUL. VOLUME PURGED (~~gallons~~) l	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) ORP	ODOR (describe)
1300	0	0	200	8.02							
1330	6	6	200	8.11	6.85	23.98	1.031	0.14	1.23	-40	
1332			200	8.11	6.86	24.01	1.032	0.15	1.28	-41	
1335	7	7	200	8.11	6.87	24.03	1.034	0.13	1.21	-42	
1340	Sample										

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: Dave Siefken / T+NUS	SAMPLER(S) SIGNATURES: [signature]	SAMPLING INITIATED AT: 1335	SAMPLING ENDED AT: 1355
PUMP OR TUBING DEPTH IN WELL (feet): 10 ft	SAMPLE PUMP FLOW RATE (mL per minute): 200	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		
		AG	1000 ml	—	1000		PAH 8270	UT
		AG	1000 ml	H_2SO_4	1000		TRPH	UT
	3	CG	40 ml	HCl	40	< 2.0	VOC 8260	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)

Tetra Tech NUS, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: NAVSTA Mayport
Project No.: 112G00103
Location: Building 245
Personnel: D Siefken
Weather Conditions: Clear 86°F
Measuring Device: Heron
Tidally Influenced: Yes X No ___
Remarks:

Well or Piezometer Number MPT-	Date 2006	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	PID (ppm) BK/BH
	06/01							
MW01		1030		12.85	7.32			
MW02					6.02			
MW03					5.82			
MW04				12.90	6.01			
MW05				12.80	5.45			
MW06			Not Found					
MW07			Not Found					
MW08R				12.60	6.05			
MW09		1100		12.9	8.02			

ppm=parts per million; BK=background; and BH=borehole of the well.

* All measurements to the nearest 0.01 foot

TETRA TECH NUS, INC. | **CHAIN OF CUSTODY** | **NUMBER** 3327 | **PAGE** 1 **OF** 1

PROJECT NO: 112600103	**FACILITY:** Magnet	**PROJECT MANAGER** M. Peterson	**PHONE NUMBER** 904-334-7260	**LABORATORY NAME AND CONTACT:** Eurofins / Clins
SAMPLERS (SIGNATURE)		**FIELD OPERATIONS LEADER** D. Siefken	**PHONE NUMBER** 904-334-7260	**ADDRESS** 4910 Executive Park CT, Ste 211
		CARRIER/WAYBILL NUMBER Drop off		**CITY, STATE** Jacksonville, FL 32216

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

CONTAINER TYPE PLASTIC (P) or GLASS (G): GG, AG, AG
PRESERVATIVE USED: HCl, H_2SO_4

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	VOC 8260B	PAH 8270 SIM	TRPH	RL PB					COMMENTS
06/01	1320	MPT-245-MW-01-060106	MW01			GW		6	3	1	2						Cool to 4°C
	1140	MPT-245-MW-04-060106	MW04					6	3	1	2						
	1150	MPT-245-MW-09R-060106	MW9R					6	3	1	2						RF 1 10x102
	1500	MPT-245-MW-05-060106	MW05					6	3	1	2						
	1340	MPT-245-MW-09-060106	MW09					6	3	1	2						
06/01		Trip Blank				QC		3	3								

1. RELINQUISHED BY	DATE 060206	TIME 0910	1. RECEIVED BY	DATE	TIME
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

ATTACHMENT D

GROUNDWATER ANALYTICAL REPORT

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

Friday, June 9, 2006

Tetra Tech NUS (BR006)

Attn: Mark Peterson

8640 Philips Highway Suite 16

Jacksonville, FL 32256

RE: Project Number: 12600103, Project Name/Desc: 12600103 Mayport
ENCO Workorder: B604501

Dear Mark Peterson,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Friday, June 2, 2006.

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

This data has been produced in accordance with NELAC standards (June, 2003). This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Data from outside organizations will be reported under separate cover.

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

Sincerely,

Chris Tompkins

Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 23.

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: MPT-245-MW-01-060106 **Lab ID:** B604501-01

Sampled: 06/01/06 13:20 **Received:** 06/02/06 09:40

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	06/15/06		06/08/06 08:00	6/9/2006 02:56
EPA 8270C	06/08/06	07/15/06	06/05/06 11:18	6/5/2006 18:31
FLPRO	06/08/06	07/15/06	06/05/06 10:30	6/6/2006 15:34

Client ID: MPT-245-MW-04-060106 **Lab ID:** B604501-02

Sampled: 05/30/06 00:00 **Received:** 06/02/06 09:40

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	06/13/06		06/08/06 08:00	6/8/2006 21:37
EPA 8270C	06/06/06	07/15/06	06/05/06 11:18	6/5/2006 18:49
FLPRO	06/06/06	07/15/06	06/05/06 10:30	6/6/2006 15:56

Client ID: MPT-245-MW-08R-060106 **Lab ID:** B604501-03

Sampled: 05/30/06 00:00 **Received:** 06/02/06 09:40

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	06/13/06		06/08/06 08:00	6/8/2006 22:06
EPA 8270C	06/06/06	07/15/06	06/05/06 11:18	6/5/2006 19:07
FLPRO	06/06/06	07/15/06	06/05/06 10:30	6/6/2006 16:18

Client ID: MPT-245-MW-05-060106 **Lab ID:** B604501-04

Sampled: 05/30/06 00:00 **Received:** 06/02/06 09:40

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	06/13/06		06/08/06 08:00	6/9/2006 01:58
EPA 8270C	06/06/06	07/15/06	06/05/06 11:18	6/5/2006 19:24
FLPRO	06/06/06	07/15/06	06/05/06 10:30	6/6/2006 16:40

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Client ID: MPT-245-MW-09-060106 **Lab ID:** B604501-05

Sampled: 05/30/06 00:00 **Received:** 06/02/06 09:40

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	06/13/06		06/08/06 08:00	6/9/2006 02:27
EPA 8270C	06/06/06	07/15/06	06/05/06 11:18	6/5/2006 19:42
FLPRO	06/06/06	07/15/06	06/05/06 10:30	6/6/2006 17:03

Client ID: Trip Blank **Lab ID:** B604501-06

Sampled: 06/01/06 00:00 **Received:** 06/02/06 09:40

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	06/15/06	06/08/06 08:00	6/9/2006 01:29

SAMPLE DETECTION SUMMARY

Client ID: MPT-245-MW-01-060106 **Lab ID:** B604501-01

Analyte	Results/Qual	MRL	Units	Method
1-Methylnaphthalene	52.0 D	1.00	ug/L	EPA 8270C
2-Methylnaphthalene	14.3 D	1.00	ug/L	EPA 8270C
Acenaphthene	3.32	0.10	ug/L	EPA 8270C
Anthracene	0.43	0.10	ug/L	EPA 8270C
Benzene	2.0	1.0	ug/L	EPA 8260B
Ethylbenzene	1.7	1.0	ug/L	EPA 8260B
Fluoranthene	0.10	0.10	ug/L	EPA 8270C
Fluorene	4.60	0.10	ug/L	EPA 8270C
Naphthalene	34.8 D	1.00	ug/L	EPA 8270C
o-Xylene	0.5 I	1.0	ug/L	EPA 8260B
Phenanthrene	2.38	0.10	ug/L	EPA 8270C
Pyrene	0.23	0.10	ug/L	EPA 8270C
Toluene	0.5 I	1.0	ug/L	EPA 8260B
TPH (C8-C40)	13.4	0.170	mg/L	FLPRO

Client ID: MPT-245-MW-04-060106 **Lab ID:** B604501-02

Analyte	Results/Qual	MRL	Units	Method
1-Methylnaphthalene	0.71	0.10	ug/L	EPA 8270C
2-Methylnaphthalene	0.62	0.10	ug/L	EPA 8270C
Acenaphthene	0.24	0.10	ug/L	EPA 8270C
Fluorene	0.29	0.10	ug/L	EPA 8270C
Naphthalene	0.86	0.10	ug/L	EPA 8270C
Phenanthrene	0.11	0.10	ug/L	EPA 8270C

Client ID: MPT-245-MW-08R-060106 **Lab ID:** B604501-03

Analyte	Results/Qual	MRL	Units	Method
1-Methylnaphthalene	11.8	0.10	ug/L	EPA 8270C
2-Methylnaphthalene	4.45	0.10	ug/L	EPA 8270C
Acenaphthene	0.95	0.10	ug/L	EPA 8270C
Benzene	0.2 I	1.0	ug/L	EPA 8260B
Ethylbenzene	1.9	1.0	ug/L	EPA 8260B
Fluoranthene	0.05 I	0.10	ug/L	EPA 8270C
Fluorene	1.27	0.10	ug/L	EPA 8270C
Naphthalene	7.55	0.10	ug/L	EPA 8270C
Phenanthrene	0.83	0.10	ug/L	EPA 8270C
Pyrene	0.08 I	0.10	ug/L	EPA 8270C
TPH (C8-C40)	1.18	0.170	mg/L	FLPRO

Client ID: Trip Blank **Lab ID:** B604501-06

Analyte	Results/Qual	MRL	Units	Method
Toluene	0.2 I	1.0	ug/L	EPA 8260B

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ANALYTICAL REPORT

Sample ID:	MPT-245-MW-01-060106	Project:	12600103 Mayport
Lab #:	B604501-01	Work Order #:	B604501
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	06/09/06 By: ds/	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:			
QC Batch:	6F09002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
Benzene	71-43-2	**2.0**	0.2	1.0	ug/L
Ethylbenzene	100-41-4	**1.7**	0.3	1.0	ug/L
m,p-Xylenes	108-38-3/106-42-3	0.3 U	0.3	2.0	ug/L
Methyl-tert-Butyl Ether	1634-04-4	0.2 U	0.2	1.0	ug/L
o-Xylene	95-47-6	**0.5** I	0.2	1.0	ug/L
Toluene	108-88-3	**0.5** I	0.2	1.0	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
1,2-Dichloroethane-d4	17060-07-0	72.4	50.0	145 %	50-150
4-Bromofluorobenzene	460-00-4	48.9	50.0	98 %	60-130
Dibromofluoromethane	1868-53-7	60.9	50.0	122 %	66-131
Toluene-d8	2037-26-5	49.2	50.0	98 %	67-139

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ANALYTICAL REPORT

Sample ID:	MPT-245-MW-01-060106	Project:	12600103 Mayport
Lab #:	B604501-01	Work Order #:	B604501
Prep. Method:	EPA 3510C_MS	Matrix:	Ground Water
Analyzed:	06/06/06 By: jj	Unit:	ug/L
Anal. Method:	EPA 8270C	Dilution Factor:	10
Anal. Batch:			
QC Batch:	6F05001		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	**52.0** D	0.21	1.00	ug/L
2-Methylnaphthalene	91-57-6	**14.3** D	0.21	1.00	ug/L
Acenaphthene	83-32-9	**3.32**	0.02	0.10	ug/L
Acenaphthylene	208-96-8	0.01 U	0.01	0.10	ug/L
Anthracene	120-12-7	**0.43**	0.02	0.10	ug/L
Benzo(a)anthracene	56-55-3	0.01 U	0.01	0.10	ug/L
Benzo(a)pyrene	50-32-8	0.01 U	0.01	0.10	ug/L
Benzo(b)fluoranthene	205-99-2	0.03 U	0.03	0.10	ug/L
Benzo(g,h,i)perylene	191-24-2	0.03 U	0.03	0.10	ug/L
Benzo(k)fluoranthene	207-08-9	0.02 U	0.02	0.10	ug/L
Chrysene	218-01-9	0.02 U	0.02	0.10	ug/L
Dibenzo(a,h)anthracene	53-70-3	0.02 U	0.02	0.10	ug/L
Fluoranthene	206-44-0	**0.10**	0.01	0.10	ug/L
Fluorene	86-73-7	**4.60**	0.02	0.10	ug/L
Indeno(1,2,3-cd)pyrene	193-39-5	0.02 U	0.02	0.10	ug/L
Naphthalene	91-20-3	**34.8** D	0.23	1.00	ug/L
Phenanthrene	85-01-8	**2.38**	0.02	0.10	ug/L
Pyrene	129-00-0	**0.23**	0.02	0.10	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	3.79	5.00	76 %	10-167

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ANALYTICAL REPORT

Sample ID:	MPT-245-MW-01-060106	Project:	12600103 Mayport
Lab #:	B604501-01	Work Order #:	B604501
Prep. Method:	EPA 3510C	Matrix:	Ground Water
Analyzed:	06/06/06 By: jbh	Unit:	mg/L
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:			
QC Batch:	6F05004		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	**13.4**	0.094	0.170	mg/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	0.0723	0.100	72 %	22-137
o-Terphenyl	84-15-1	0.0484	0.0500	97 %	33-133

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ANALYTICAL REPORT

Sample ID:	MPT-245-MW-04-060106	Project:	12600103 Mayport
Lab #:	B604501-02	Work Order #:	B604501
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	06/08/06 By: ds/	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:			
QC Batch:	6F09002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
Benzene	71-43-2	0.2 U	0.2	1.0	ug/L
Ethylbenzene	100-41-4	0.3 U	0.3	1.0	ug/L
m,p-Xylenes	108-38-3/106-42-3	0.3 U	0.3	2.0	ug/L
Methyl-tert-Butyl Ether	1634-04-4	0.2 U	0.2	1.0	ug/L
o-Xylene	95-47-6	0.2 U	0.2	1.0	ug/L
Toluene	108-88-3	0.2 U	0.2	1.0	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
1,2-Dichloroethane-d4	17060-07-0	70.4	50.0	141 %	50-150
4-Bromofluorobenzene	460-00-4	47.2	50.0	94 %	60-130
Dibromofluoromethane	1868-53-7	59.9	50.0	120 %	66-131
Toluene-d8	2037-26-5	47.4	50.0	95 %	67-139

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ANALYTICAL REPORT

Sample ID:	MPT-245-MW-04-060106	Project:	12600103 Mayport
Lab #:	B604501-02	Work Order #:	B604501
Prep. Method:	EPA 3510C_MS	Matrix:	Ground Water
Analyzed:	06/05/06 By: jj	Unit:	ug/L
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:			
QC Batch:	6F05001		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	**0.71**	0.02	0.10	ug/L
2-Methylnaphthalene	91-57-6	**0.62**	0.02	0.10	ug/L
Acenaphthene	83-32-9	**0.24**	0.02	0.10	ug/L
Acenaphthylene	208-96-8	0.01 U	0.01	0.10	ug/L
Anthracene	120-12-7	0.02 U	0.02	0.10	ug/L
Benzo(a)anthracene	56-55-3	0.01 U	0.01	0.10	ug/L
Benzo(a)pyrene	50-32-8	0.01 U	0.01	0.10	ug/L
Benzo(b)fluoranthene	205-99-2	0.03 U	0.03	0.10	ug/L
Benzo(g,h,i)perylene	191-24-2	0.03 U	0.03	0.10	ug/L
Benzo(k)fluoranthene	207-08-9	0.02 U	0.02	0.10	ug/L
Chrysene	218-01-9	0.02 U	0.02	0.10	ug/L
Dibenzo(a,h)anthracene	53-70-3	0.02 U	0.02	0.10	ug/L
Fluoranthene	206-44-0	0.01 U	0.01	0.10	ug/L
Fluorene	86-73-7	**0.29**	0.02	0.10	ug/L
Indeno(1,2,3-cd)pyrene	193-39-5	0.02 U	0.02	0.10	ug/L
Naphthalene	91-20-3	**0.86**	0.02	0.10	ug/L
Phenanthrene	85-01-8	**0.11**	0.02	0.10	ug/L
Pyrene	129-00-0	0.02 U	0.02	0.10	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	4.35	5.00	87 %	10-167

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ANALYTICAL REPORT

Sample ID:	MPT-245-MW-04-060106	Project:	12600103 Mayport
Lab #:	B604501-02	Work Order #:	B604501
Prep. Method:	EPA 3510C	Matrix:	Ground Water
Analyzed:	06/06/06 By: jbh	Unit:	mg/L
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:			
QC Batch:	6F05004		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	0.094 U	0.094	0.170	mg/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	0.0694	0.100	69 %	22-137
o-Terphenyl	84-15-1	0.0400	0.0500	80 %	33-133

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ANALYTICAL REPORT

Sample ID:	MPT-245-MW-08R-060106	Project:	12600103 Mayport
Lab #:	B604501-03	Work Order #:	B604501
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	06/08/06 By: ds/	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:			
QC Batch:	6F09002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
Benzene	71-43-2	**0.2** I	0.2	1.0	ug/L
Ethylbenzene	100-41-4	**1.9**	0.3	1.0	ug/L
m,p-Xylenes	108-38-3/106-42-3	0.3 U	0.3	2.0	ug/L
Methyl-tert-Butyl Ether	1634-04-4	0.2 U	0.2	1.0	ug/L
o-Xylene	95-47-6	0.2 U	0.2	1.0	ug/L
Toluene	108-88-3	0.2 U	0.2	1.0	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
1,2-Dichloroethane-d4	17060-07-0	72.8	50.0	146 %	50-150
4-Bromofluorobenzene	460-00-4	48.3	50.0	97 %	60-130
Dibromofluoromethane	1868-53-7	60.0	50.0	120 %	66-131
Toluene-d8	2037-26-5	48.6	50.0	97 %	67-139

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ANALYTICAL REPORT

Sample ID:	MPT-245-MW-08R-060106	Project:	12600103 Mayport
Lab #:	B604501-03	Work Order #:	B604501
Prep. Method:	EPA 3510C_MS	Matrix:	Ground Water
Analyzed:	06/05/06 By: jj	Unit:	ug/L
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:			
QC Batch:	6F05001		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	**11.8**	0.02	0.10	ug/L
2-Methylnaphthalene	91-57-6	**4.45**	0.02	0.10	ug/L
Acenaphthene	83-32-9	**0.95**	0.02	0.10	ug/L
Acenaphthylene	208-96-8	0.01 U	0.01	0.10	ug/L
Anthracene	120-12-7	0.02 U	0.02	0.10	ug/L
Benzo(a)anthracene	56-55-3	0.01 U	0.01	0.10	ug/L
Benzo(a)pyrene	50-32-8	0.01 U	0.01	0.10	ug/L
Benzo(b)fluoranthene	205-99-2	0.03 U	0.03	0.10	ug/L
Benzo(g,h,i)perylene	191-24-2	0.03 U	0.03	0.10	ug/L
Benzo(k)fluoranthene	207-08-9	0.02 U	0.02	0.10	ug/L
Chrysene	218-01-9	0.02 U	0.02	0.10	ug/L
Dibenzo(a,h)anthracene	53-70-3	0.02 U	0.02	0.10	ug/L
Fluoranthene	206-44-0	**0.05** I	0.01	0.10	ug/L
Fluorene	86-73-7	**1.27**	0.02	0.10	ug/L
Indeno(1,2,3-cd)pyrene	193-39-5	0.02 U	0.02	0.10	ug/L
Naphthalene	91-20-3	**7.55**	0.02	0.10	ug/L
Phenanthrene	85-01-8	**0.83**	0.02	0.10	ug/L
Pyrene	129-00-0	**0.08** I	0.02	0.10	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	4.21	5.00	84 %	10-167

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ANALYTICAL REPORT

Sample ID:	MPT-245-MW-08R-060106	Project:	12600103 Mayport
Lab #:	B604501-03	Work Order #:	B604501
Prep. Method:	EPA 3510C	Matrix:	Ground Water
Analyzed:	06/06/06 By: jbh	Unit:	mg/L
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:			
QC Batch:	6F05004		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	**1.18**	0.094	0.170	mg/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	0.0662	0.100	66 %	22-137
o-Terphenyl	84-15-1	0.0392	0.0500	78 %	33-133

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ANALYTICAL REPORT

Sample ID:	MPT-245-MW-05-060106	Project:	12600103 Mayport
Lab #:	B604501-04	Work Order #:	B604501
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	06/09/06 By: ds/	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:			
QC Batch:	6F09002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
Benzene	71-43-2	0.2 U	0.2	1.0	ug/L
Ethylbenzene	100-41-4	0.3 U	0.3	1.0	ug/L
m,p-Xylenes	108-38-3/106-42-3	0.3 U	0.3	2.0	ug/L
Methyl-tert-Butyl Ether	1634-04-4	0.2 U	0.2	1.0	ug/L
o-Xylene	95-47-6	0.2 U	0.2	1.0	ug/L
Toluene	108-88-3	0.2 U	0.2	1.0	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
1,2-Dichloroethane-d4	17060-07-0	72.6	50.0	145 %	50-150
4-Bromofluorobenzene	460-00-4	48.2	50.0	96 %	60-130
Dibromofluoromethane	1868-53-7	58.8	50.0	118 %	66-131
Toluene-d8	2037-26-5	47.9	50.0	96 %	67-139

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ANALYTICAL REPORT

Sample ID:	MPT-245-MW-05-060106	Project:	12600103 Mayport
Lab #:	B604501-04	Work Order #:	B604501
Prep. Method:	EPA 3510C_MS	Matrix:	Ground Water
Analyzed:	06/05/06 By: jj	Unit:	ug/L
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:			
QC Batch:	6F05001		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.02 U	0.02	0.10	ug/L
2-Methylnaphthalene	91-57-6	0.02 U	0.02	0.10	ug/L
Acenaphthene	83-32-9	0.02 U	0.02	0.10	ug/L
Acenaphthylene	208-96-8	0.01 U	0.01	0.10	ug/L
Anthracene	120-12-7	0.02 U	0.02	0.10	ug/L
Benzo(a)anthracene	56-55-3	0.01 U	0.01	0.10	ug/L
Benzo(a)pyrene	50-32-8	0.01 U	0.01	0.10	ug/L
Benzo(b)fluoranthene	205-99-2	0.03 U	0.03	0.10	ug/L
Benzo(g,h,i)perylene	191-24-2	0.03 U	0.03	0.10	ug/L
Benzo(k)fluoranthene	207-08-9	0.02 U	0.02	0.10	ug/L
Chrysene	218-01-9	0.02 U	0.02	0.10	ug/L
Dibenzo(a,h)anthracene	53-70-3	0.02 U	0.02	0.10	ug/L
Fluoranthene	206-44-0	0.01 U	0.01	0.10	ug/L
Fluorene	86-73-7	0.02 U	0.02	0.10	ug/L
Indeno(1,2,3-cd)pyrene	193-39-5	0.02 U	0.02	0.10	ug/L
Naphthalene	91-20-3	0.02 U	0.02	0.10	ug/L
Phenanthrene	85-01-8	0.02 U	0.02	0.10	ug/L
Pyrene	129-00-0	0.02 U	0.02	0.10	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	4.30	5.00	86 %	10-167

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ANALYTICAL REPORT

Sample ID:	MPT-245-MW-05-060106	Project:	12600103 Mayport
Lab #:	B604501-04	Work Order #:	B604501
Prep. Method:	EPA 3510C	Matrix:	Ground Water
Analyzed:	06/06/06 By: jbh	Unit:	mg/L
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:			
QC Batch:	6F05004		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	0.094 U	0.094	0.170	mg/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	0.0788	0.100	79 %	22-137
o-Terphenyl	84-15-1	0.0417	0.0500	83 %	33-133

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ANALYTICAL REPORT

Sample ID:	MPT-245-MW-09-060106	Project:	12600103 Mayport
Lab #:	B604501-05	Work Order #:	B604501
Prep. Method:	EPA 5030B_MS	Matrix:	Ground Water
Analyzed:	06/09/06 By: ds/	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:			
QC Batch:	6F09002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
Benzene	71-43-2	0.2 U	0.2	1.0	ug/L
Ethylbenzene	100-41-4	0.3 U	0.3	1.0	ug/L
m,p-Xylenes	108-38-3/106-42-3	0.3 U	0.3	2.0	ug/L
Methyl-tert-Butyl Ether	1634-04-4	0.2 U	0.2	1.0	ug/L
o-Xylene	95-47-6	0.2 U	0.2	1.0	ug/L
Toluene	108-88-3	0.2 U	0.2	1.0	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
1,2-Dichloroethane-d4	17060-07-0	72.2	50.0	144 %	50-150
4-Bromofluorobenzene	460-00-4	47.5	50.0	95 %	60-130
Dibromofluoromethane	1868-53-7	60.4	50.0	121 %	66-131
Toluene-d8	2037-26-5	47.5	50.0	95 %	67-139

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ANALYTICAL REPORT

Sample ID:	MPT-245-MW-09-060106	Project:	12600103 Mayport
Lab #:	B604501-05	Work Order #:	B604501
Prep. Method:	EPA 3510C_MS	Matrix:	Ground Water
Analyzed:	06/05/06 By: jj	Unit:	ug/L
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:			
QC Batch:	6F05001		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.02 U	0.02	0.10	ug/L
2-Methylnaphthalene	91-57-6	0.02 U	0.02	0.10	ug/L
Acenaphthene	83-32-9	0.02 U	0.02	0.10	ug/L
Acenaphthylene	208-96-8	0.01 U	0.01	0.10	ug/L
Anthracene	120-12-7	0.02 U	0.02	0.10	ug/L
Benzo(a)anthracene	56-55-3	0.01 U	0.01	0.10	ug/L
Benzo(a)pyrene	50-32-8	0.01 U	0.01	0.10	ug/L
Benzo(b)fluoranthene	205-99-2	0.03 U	0.03	0.10	ug/L
Benzo(g,h,i)perylene	191-24-2	0.03 U	0.03	0.10	ug/L
Benzo(k)fluoranthene	207-08-9	0.02 U	0.02	0.10	ug/L
Chrysene	218-01-9	0.02 U	0.02	0.10	ug/L
Dibenzo(a,h)anthracene	53-70-3	0.02 U	0.02	0.10	ug/L
Fluoranthene	206-44-0	0.01 U	0.01	0.10	ug/L
Fluorene	86-73-7	0.02 U	0.02	0.10	ug/L
Indeno(1,2,3-cd)pyrene	193-39-5	0.02 U	0.02	0.10	ug/L
Naphthalene	91-20-3	0.02 U	0.02	0.10	ug/L
Phenanthrene	85-01-8	0.02 U	0.02	0.10	ug/L
Pyrene	129-00-0	0.02 U	0.02	0.10	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	4.76	5.00	95 %	10-167

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ANALYTICAL REPORT

Sample ID:	MPT-245-MW-09-060106	Project:	12600103 Mayport
Lab #:	B604501-05	Work Order #:	B604501
Prep. Method:	EPA 3510C	Matrix:	Ground Water
Analyzed:	06/06/06 By: jbh	Unit:	mg/L
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:			
QC Batch:	6F05004		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	0.094 U	0.094	0.170	mg/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	0.0813	0.100	81 %	22-137
o-Terphenyl	84-15-1	0.0422	0.0500	84 %	33-133

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ANALYTICAL REPORT

Sample ID:	Trip Blank	Project:	12600103 Mayport
Lab #:	B604501-06	Work Order #:	B604501
Prep. Method:	EPA 5030B_MS	Matrix:	Water
Analyzed:	06/09/06 By: ds/	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:			
QC Batch:	6F09002		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
Benzene	71-43-2	0.2 U	0.2	1.0	ug/L
Ethylbenzene	100-41-4	0.3 U	0.3	1.0	ug/L
m,p-Xylenes	108-38-3/106-42-3	0.3 U	0.3	2.0	ug/L
Methyl-tert-Butyl Ether	1634-04-4	0.2 U	0.2	1.0	ug/L
o-Xylene	95-47-6	0.2 U	0.2	1.0	ug/L
Toluene	108-88-3	**0.2** I	0.2	1.0	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
1,2-Dichloroethane-d4	17060-07-0	70.4	50.0	141 %	50-150
4-Bromofluorobenzene	460-00-4	48.0	50.0	96 %	60-130
Dibromofluoromethane	1868-53-7	58.6	50.0	117 %	66-131
Toluene-d8	2037-26-5	47.1	50.0	94 %	67-139

QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sanple Notes
Volatile Organic Compounds by GCMS - Quality Control										
Batch 6F09002 - EPA 5030B_MS										
Blank (6F09002-BLK1)				Prepared: 06/08/2006 08:00 Analyzed: 06/08/2006 11:58						
Methyl-tert-Butyl Ether	0.2 U	1.0	ug/L							
Benzene	0.2 U	1.0	ug/L							
Toluene	0.2 U	1.0	ug/L							
Ethylbenzene	0.3 U	1.0	ug/L							
m,p-Xylenes	0.3 U	2.0	ug/L							
o-Xylene	0.2 U	1.0	ug/L							
Blank (6F09002-BLK2)				Prepared: 06/08/2006 08:00 Analyzed: 06/09/2006 01:00						
Methyl-tert-Butyl Ether	0.2 U	1.0	ug/L							
Benzene	0.2 U	1.0	ug/L							
Toluene	0.2 U	1.0	ug/L							
Ethylbenzene	0.3 U	1.0	ug/L							
m,p-Xylenes	0.3 U	2.0	ug/L							
o-Xylene	0.2 U	1.0	ug/L							
LCS (6F09002-BS1)				Prepared: 06/08/2006 08:00 Analyzed: 06/08/2006 14:23						
Benzene	20.2	1.0	ug/L	20.0		101	62-135			
Toluene	22.4	1.0	ug/L	20.0		112	74-126			
Matrix Spike (6F09002-MS1)		**Source: B604514-09**		Prepared: 06/08/2006 08:00 Analyzed: 06/08/2006 13:25						
Benzene	18.2	1.0	ug/L	20.0	0.2 U	91	64-138			
Toluene	19.9	1.0	ug/L	20.0	0.2 U	100	72-124			
Matrix Spike Dup (6F09002-MSD1)		**Source: B604514-09**		Prepared: 06/08/2006 08:00 Analyzed: 06/08/2006 13:54						
Benzene	19.1	1.0	ug/L	20.0	0.2 U	96	64-138	5	10	
Toluene	21.8	1.0	ug/L	20.0	0.2 U	109	72-124	9	13	
Semivolatile Organic Compounds by GCMS SIM - Quality Control										
Batch 6F05001 - EPA 3510C_MS										
Blank (6F05001-BLK1)				Prepared: 06/05/2006 11:18 Analyzed: 06/05/2006 16:11						
Naphthalene	0.02 U	0.10	ug/L							
2-Methylnaphthalene	0.02 U	0.10	ug/L							
1-Methylnaphthalene	0.02 U	0.10	ug/L							
Acenaphthylene	0.01 U	0.10	ug/L							
Acenaphthene	0.02 U	0.10	ug/L							
Benzo(a)anthracene	0.01 U	0.10	ug/L							
Benzo(b)fluoranthene	0.03 U	0.10	ug/L							
Benzo(k)fluoranthene	0.02 U	0.10	ug/L							
Fluorene	0.02 U	0.10	ug/L							
Benzo(g,h,i)perylene	0.03 U	0.10	ug/L							
Benzo(a)pyrene	0.01 U	0.10	ug/L							
Phenanthrene	0.02 U	0.10	ug/L							
Anthracene	0.02 U	0.10	ug/L							
Fluoranthene	0.01 U	0.10	ug/L							
Pyrene	0.02 U	0.10	ug/L							
Chrysene	0.02 U	0.10	ug/L							
Dibenzo(a,h)anthracene	0.02 U	0.10	ug/L							
Indeno(1,2,3-cd)pyrene	0.02 U	0.10	ug/L							

QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sanple Notes
Semivolatile Organic Compounds by GCMS SIM - Quality Control										
Batch 6F05001 - EPA 3510C_MS										
Blank (6F05001-BLK1) Continued				Prepared: 06/05/2006 11:18 Analyzed: 06/05/2006 16:11						
Surrogate: p-Terphenyl	*9.90*		*ug/L*	*10.0*		*99*	*10-167*			
LCS (6F05001-BS1)				Prepared: 06/05/2006 11:18 Analyzed: 06/05/2006 16:29						
Naphthalene	1.80	0.10	ug/L	2.00		90	33-98			
Acenaphthene	1.84	0.10	ug/L	2.00		92	41-104			
Benzo(g,h,i)perylene	2.44	0.10	ug/L	2.00		122	10-159			
Benzo(a)pyrene	1.94	0.10	ug/L	2.00		97	38-125			
Surrogate: p-Terphenyl	*4.53*		*ug/L*	*5.00*		*91*	*10-167*			
Matrix Spike (6F05001-MS1)		**Source: B604710-01**		Prepared: 06/05/2006 11:18 Analyzed: 06/05/2006 16:46						
Naphthalene	1.79	0.10	ug/L	2.00	0.02 U	90	35-97			
Acenaphthene	1.82	0.10	ug/L	2.00	0.02 U	91	43-102			
Benzo(g,h,i)perylene	2.49	0.10	ug/L	2.00	0.03 U	124	10-173			
Benzo(a)pyrene	1.95	0.10	ug/L	2.00	0.01 U	98	37-127			
Surrogate: p-Terphenyl	*4.77*		*ug/L*	*5.00*		*95*	*10-167*			
Matrix Spike Dup (6F05001-MSD1)		**Source: B604710-01**		Prepared: 06/05/2006 11:18 Analyzed: 06/05/2006 17:04						
Naphthalene	1.84	0.10	ug/L	2.00	0.02 U	92	35-97	3	28	
Acenaphthene	1.92	0.10	ug/L	2.00	0.02 U	96	43-102	5	22	
Benzo(g,h,i)perylene	2.60	0.10	ug/L	2.00	0.03 U	130	10-173	4	35	
Benzo(a)pyrene	2.06	0.10	ug/L	2.00	0.01 U	103	37-127	5	19	
Surrogate: p-Terphenyl	*5.00*		*ug/L*	*5.00*		*100*	*10-167*			
FL Petroleum Range Organics - Quality Control										
Batch 6F05004 - EPA 3510C										
Blank (6F05004-BLK1)				Prepared: 06/05/2006 10:30 Analyzed: 06/06/2006 13:43						
TPH (C8-C40)	0.094 U	0.170	mg/L							
Surrogate: n-Nonatriacontane	*0.0813*		*mg/L*	*0.100*		*81*	*22-137*			
Surrogate: o-Terphenyl	*0.0440*		*mg/L*	*0.0500*		*88*	*33-133*			
LCS (6F05004-BS1)				Prepared: 06/05/2006 10:30 Analyzed: 06/06/2006 14:05						
TPH (C8-C40)	1.61	0.170	mg/L	1.70		95	46-126			
Surrogate: n-Nonatriacontane	*0.0883*		*mg/L*	*0.100*		*88*	*22-137*			
Surrogate: o-Terphenyl	*0.0469*		*mg/L*	*0.0500*		*94*	*33-133*			
Matrix Spike (6F05004-MS1)		**Source: B604710-01**		Prepared: 06/05/2006 10:30 Analyzed: 06/06/2006 14:28						
TPH (C8-C40)	1.57	0.170	mg/L	1.70	0.166	83	48-118			
Surrogate: n-Nonatriacontane	*0.0868*		*mg/L*	*0.100*		*87*	*22-137*			
Surrogate: o-Terphenyl	*0.0451*		*mg/L*	*0.0500*		*90*	*33-133*			
Matrix Spike Dup (6F05004-MSD1)		**Source: B604710-01**		Prepared: 06/05/2006 10:30 Analyzed: 06/06/2006 14:49						
TPH (C8-C40)	1.56	0.170	mg/L	1.70	0.166	82	48-118	0.6	30	
Surrogate: n-Nonatriacontane	*0.0888*		*mg/L*	*0.100*		*89*	*22-137*			
Surrogate: o-Terphenyl	*0.0450*		*mg/L*	*0.0500*		*90*	*33-133*			

NOTES AND DEFINITIONS

U	Analyte included in the analysis, but not detected
I	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
D	Data reported from a dilution

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 3327 | PAGE 1 OF 1

PROJECT NO: 112600103	FACILITY: Mayport	PROJECT MANAGER: M. Peterson	PHONE NUMBER: 904-334-7260
LABORATORY NAME AND CONTACT: ECO / Chris	SAMPLERS (SIGNATURE)	FIELD OPERATIONS LEADER: D. Siefken	PHONE NUMBER: 904-334-7260
ADDRESS: 4810 Executive Park CT, Suite 211	CARRIER/WAYBILL NUMBER: Drop-off	CITY, STATE: Jacksonville, FL 32216	

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

DATE YEAR 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	VOC 8260B (BTEX+MTBE)	PAH 8270 SIM	TRPH 418.1					COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)									G	G	G					
PRESERVATIVE USED									HCL		H2SO4					
06/01	1320	MPT-245-MW-01-060106	MW01			GW		6	3	1	2					Cool to 4°C
	1140	MPT-245-MW-04-060106	MW04					6	3	1	2					
	1150	MPT-245-MW-08R-060106	MW8R					6	3	1	2					RF# 100602
	1500	MPT-245-MW-05-060106	MW05					6	3	1	2					
	1340	MPT-245-MW-09-060106	MW09					6	3	1	2					
06/01		Trip Blank				QC		3	3							

1. RELINQUISHED BY	DATE 060206	TIME 0940	1. RECEIVED BY	DATE 06/2/06	TIME 9:40
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS (JX201 2.6°C) (JH06 1.9°C)

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

4/02R
FORM NO. TINUS-001