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NAS CECIL FIELD, FL
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SITE ASSESSMENT REPORT ADDENDUM FOR BUILDING 502 TANK 502 NAS CECIL FIELD FL

5/11/2007

TETRA TECH NUS INC

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Project Number 112G00378

Mr. David Grabka
Remedial Project Manager
Technical Review/Federal Facilities
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Reference: Clean IV Contract Number N62467-04-D-0055
Contract Task Order 0025

Subject: Site Assessment Report Addendum
Building 502, Tank 502
Former Naval Air Station (NAS) Cecil Field
Jacksonville, Florida

Dear Mr. Grabka:

Tetra Tech NUS, Inc. (TtNUS) is pleased to submit this Site Assessment Report (SAR) Addendum (SARA) for the subject site (as shown on Figure 1) under the referenced Contract Task Order (CTO). This report was prepared by TtNUS for the United States Navy, Naval Facilities Engineering Command Southeast (NAVFAC SE) under the Comprehensive Long-Term Environmental Action Navy (CLEAN) IV Contract Number N62467-04-D-0055. This SARA is TtNUS' response to the Florida Department of Environmental Protection's (FDEP's) technical review (see Attachment A) of the Building 502, Tank 502 Groundwater Monitoring Report, (1st Semi-Annual, 4th Year) dated June 23, 2004. This report was prepared in accordance with Chapter 62-770, Florida Administrative Code (F.A.C.).

As stated in the letter included in Attachment A, the FDEP suggested additional soil investigation at Building 502 based on the continued elevated levels of naphthalene, 1-methylnaphthalene, 2-methlynaphthalene, and total recoverable petroleum hydrocarbons (TRPH) in monitoring well CEF-502-1SR. In response to the letter, a total of 10 step-out soil borings in the vicinity of CEF-502-1SR were installed and sampled for polynuclear aromatic hydrocarbons (PAHs) including 1-methylnaphthalene and 2-methylnaphthalene using United States Environmental Protection Agency (USEPA) Method SW-846 8310 and for TRPH using the Florida Petroleum Range Organics (FL-PRO) method. In addition, one round of annual sampling of the six existing wells (CEF-502-1SR, CEF-502-3S, CEF-502-4S, CEF-502-6S, CEF-502-7D, and CEF-502-8S) was conducted at the time of soil sampling. The samples were analyzed for TRPH using FL-PRO, PAHs including 1-methylnaphthalene and 2-methylnaphthalene using USEPA Method SW-846 8310, and volatile organic compounds (VOCs) using USEPA Method SW-846 8260B.

BACKGROUND

Tank 502, a 1,000-gallon fuel oil tank, was removed in 1997, and a subsequent site assessment was performed by Harding Lawson Associates (HLA) in 1998 that recommended a soil source removal. The

source removal was conducted in January 1999, and the following items were noted in the report (CH2M Hill Constructors, Inc.):

- The contaminated soil associated with Tank 502 was removed.
- No free product was encountered in the excavation.
- Three monitoring wells (CEF-502-1S, CEF-502-2S, and CEF-502-5D) were abandoned because they were within the limits of the excavation.

In April 1999, a follow-up SAR (HLA, 1999) recommended that no further action be conducted with regard to soils at the site. G The SAR recommended that groundwater monitoring only for natural attenuation (MONA) take place as benzene, ethylbenzene, xylenes, naphthalene, and TRPH were previously detected in excess of FDEP Groundwater Cleanup Target Levels (GCTLs). The SAR noted that wells CEF-502-2S and CEF-502-5D had been abandoned, and it recommended that those wells be replaced and monitored along with CEF-502-4S. The FDEP responded in July 1999 with a Monitoring Only Plan (MOP) approval letter that required the semi-annual sampling of CEF-502-1S, CEF-502-4S, CEF-502-2S, and CEF-502-5D. A copy of the MOP approval letter is provided as Attachment B. HLA replaced the abandoned wells CEF-502-2S and CEF-502-5D with CEF-502-6S and CEF-502-7D, respectively, before the commencement of the first semi-annual event in August 1999. Following the second semi-annual sampling event, the FDEP agreed with the SAR recommendation (HLA, 1999) to continue groundwater monitoring. However, the FDEP required a monitoring well in the former location of CEF-502-1S and stipulated that the well should be sampled for benzene, toluene, ethylbenzene, and total xylenes using the USEPA Method 602; PAHs using USEPA Method 8310; and TRPH using FL-PRO.

During March and April 2001, TtNUS conducted a supplemental site assessment in response to FDEP's recommendations in response to the 1999 SAR. TtNUS personnel supervised the installation of a replacement well for CEF-502-1S (designated CEF-502-1SR) and sampled the four wells for VOCs, PAHs, and TRPH as required in the MOP. The Supplemental SAR (TtNUS, 2001) recommended several modifications to the monitoring program including the installation and sampling of an additional well (CEF-502-8S) and sampling of an additional existing well (CEF-502-3S). The recommendations were approved by the FDEP on August 3, 2001, and were implemented during the next semi-annual sampling event in December 2001.

Four semi-annual groundwater monitoring events were conducted from June 6, 2002, through January 28, 2004. The Second Semi-Annual, Fourth Year Groundwater Monitoring Report indicated that concentrations of benzene, ethylbenzene, and total xylenes were less than their respective milestone objectives for Year 4. However, the concentrations of naphthalene and TRPH in well CEF-502-1SR were greater than the Year 4 milestone objectives. (TtNUS, 2004)

Because the concentrations of contaminants of concern (COCs) at CEF-502-1SR continued to exceed the GCTLs specified in Chapter 62-770, F.A.C., TtNUS recommended that semi-annual monitoring of existing wells be continued and also recommended additional characterization of the source of contamination contributing to CEF-502-1SR (TtNUS, 2004). This recommendation was discussed and approved at the December 2005 NAS Cecil Field Base Realignment and Closure Cleanup Team (BCT) meeting.

FIELD OPERATIONS

On November 20 and 21, 2006, a total of 10 step-out soil borings were installed via hand auger in the vicinity of CEF-502-1SR. The soil boring locations are shown on Figure 1. Soil samples were collected from the hand auger bucket in the unsaturated zone at 1-foot vertical intervals beginning at 1 foot below ground surface (bgs) to 5 feet bgs. Samples were retained for field screening with an organic vapor analyzer equipped with a flame ionization detector at each of the soil boring locations. Soil vapor analyses were performed in accordance with the headspace screening method described in Chapter 62-770.200(2), F.A.C.

Based on field screening results and visual observations, one soil sample was collected from each location (soil borings SB01 through SB10) for fixed-base laboratory analysis. When no instrumental or visual indications of contamination were indicated, soil samples were collected from 5 feet bgs. Most of the samples were collected at 5 feet bgs; however, SB02 and SB09 were collected at 3 feet bgs. The samples were placed on ice and hand-delivered to ENCO Laboratories in Jacksonville, Florida for analysis. The samples were analyzed for PAHs including 1-methylnaphthalene and 2-methylnaphthalene using USEPA Method SW-846 8310 and for TRPH using FL-PRO. The reported detection limits for these methods met the requirements for the similar methods stipulated in the MOP approval letter. Excess soil was placed in 55-gallon drums for off-site disposal. The excess soil was analyzed for PAHs including 1-methylnaphthalene and 2-methylnaphthalene using USEPA Method SW-846 8310 and for TRPH using FL-PRO.

In addition, Year 5 annual sampling was conducted at the six existing wells (CEF-502-1SR, CEF-502-3S, CEF-502-4S, CEF-502-6S, CEF-502-7D, and CEF-502-8S) at the time of soil sampling. Locations of the six permanent monitoring wells at Building 502 are shown on Figure 2. The samples were placed on ice and hand delivered to ENCO Laboratories in Jacksonville, Florida for analysis. The samples were analyzed for TRPH using FL-PRO, PAHs including 1-methylnaphthalene and 2-methylnaphthalene using USEPA Method SW-846 8310, and VOCs using USEPA Method SW-846 8260B. The reported detection limits for these methods met the requirements for the similar methods stipulated in the MOP approval letter. The purge water was placed in 55-gallon drums for off-site disposal.

Prior to obtaining groundwater samples, synoptic water levels and total well depths were measured and recorded on a site-specific groundwater level measurement sheet (see Attachment C). General sampling protocols were in accordance with FDEP Standard Operating Procedures (SOPs) and TtNUS SOP SA-1.1. The data were recorded on groundwater sample log sheets and low flow purge data sheets (see Attachment C).

Water level measurements were recorded on November 20, 2006, from each of the monitoring wells shown in Table 1 prior to sample collection. The depth to water ranged from 8.46 feet bgs (CEF-502-3S) to 9.59 feet bgs (CEF-502-7D). Depth-to-water measurements, top of casing elevations, and groundwater elevations are presented in Table 1.

RESULTS

The soil analytical results (see Attachment D) in the vicinity of CEF-502-1SR indicate the following:

- The sample from CEF-502-SB06 had a TRPH concentration of 378 milligrams per kilogram (mg/kg), which exceeds the leachability to groundwater Soil Cleanup Target Level (SCTL) of 340 mg/kg. All other analytes were either not detected or were detected at estimated concentrations less than their respective SCTLs.

- The sample from CEF-502-SB07 had a TRPH concentration of 804 mg/kg, which exceeds the residential direct exposure SCTL of 460 mg/kg and the leachability to groundwater SCTL of 340 mg/kg. All other analytes were either not detected or were detected at estimated concentrations less than their respective SCTLs.

- The sample from CEF-502-SB09 had a TRPH concentration of 3,580 mg/kg, which exceeds the industrial direct exposure SCTL of 2,700 mg/kg, the residential direct exposure SCTL of 460 mg/kg, and the leachability to groundwater SCTL of 340 mg/kg. All other analytes were either not detected or were detected at estimated concentrations less than their respective SCTLs.

- The sample from CEF-502-SB10 had a TRPH concentration of 434 mg/kg, which exceeds the leachability to groundwater SCTL of 340 mg/kg. All other analytes were either not detected or were detected at estimated concentrations less than their respective SCTLs.

The soil analytical results for the remaining soil samples (CEF-502-SB01, CEF-502-SB02, CEF-502-SB03, CEF-502-SB04, CEF-502-SB05, and CEF-502-SB08) indicate that all target analytes were either not detected or were detected at estimated concentrations less than their respective SCTLs. Figure 3 presents exceedances in the soil samples collected as part of the SARA, and Table 2 summarizes the detected COCs.

The groundwater analytical results (see Attachment E) for CEF-502-1SR indicate the following:

- Well CEF-502-1SR had a 1-methylnaphthalene concentration of 52.8 micrograms per liter (μg/L), which exceeds the GCTL of 28 μg/L.
- CEF-502-1SR had a 2-methylnaphthalene concentration of 110 μg/L, which exceeds the GCTL of 28 μg/L.
- All other analytes were either not detected or were detected at estimated concentrations less than their respective GCTLs.

The analytical results (see Attachment E) for the remaining wells (CEF-502-3S, CEF-502-4S, CEF-502-6S, CEF-502-7D, and CEF-502-8S) indicate that all analytes were either not detected or were detected at estimated concentrations less than their respective GCTLs.

Figure 4 presents COC analytical data for groundwater, and Table 3 summarizes the detected COCs in groundwater.

The groundwater elevation data indicates that flow is to the east-southeast (see Figure 5), which is generally consistent with data from HLA's semi-annual monitoring reports. Historical and recent groundwater elevation data for the site are included in Table 1.

CONCLUSIONS AND RECOMMENDATIONS

Because TRPH exceedances were detected in samples from four soil borings (CEF-502-SB06, CEF-502-SB07, CEF-502-SB09, and CEF-502-SB10) located west of Building 502, a source removal is recommended. Monitoring well 502-1SR would have to be destroyed during the excavation, but would be reinstalled after the completion of excavation activities.

TtNUS recommends continuation of the MONA program with the following modifications:

- Following the excavation, monitor the following monitoring wells semi-annually:
  - CEF-502-1SR replacement well (perimeter well)
  - CEF-502-3S (perimeter well)
  - CEF-502-6S (source well)

  Wells CEF-502-4S and CEF-502-7D should be eliminated from the MONA program. This recommendation was discussed and approved at the March 2007 NAS Cecil Field BCT meeting.

- The recommended analytical list is as follows: PAHs using USEPA Method SW846 8310 for PAHs, VOCs using USEPA MethodSW846 8260, and TRPH using FL-PRO.

If you have any questions with regard to this submittal, please do not hesitate to contact me at (904) 730-4669, extension 213, or via email at Mark.Peterson@ttnus.com.

Sincerely,

Kara F. Wimble
Project Scientist

Mark A. Peterson, P.G.
PG Number 1917

MP/kfw

Attachments (13)

pc: Mark Davidson, NAVFAC SE (CD only)
M. Halil, CH2M Hill (CD only)
M. Perry, TtNUS (unbound and CD)
D. Humbert, TtNUS (letter only)
M. Speranza, TtNUS (letter only)
M. Jonnet, TtNUS (Cecil DMS) (CD)
J. Logan, TtNUS
R. Simcik, TtNUS (Bookcase File)
J. Johnson, TtNUS (Information Repository) (CD)
CTO 0025 Project File

CERTIFICATION

The information herein contained is based on the geologic investigation and associated information detailed in the text and appended to this report. If conditions are determined to exist that differ from those described, the undersigned geologist should be notified to evaluate the affects of any additional information on the information described in this report. This Site Assessment Report Addendum was developed for Building 502, Tank 502 at the Naval Air Station Cecil Field, Jacksonville, Florida, and should not be construed to apply to any other site.

_____

May 11, 2007
Mark A. Peterson, P.G.
Florida License Number PG-0001852

REFERENCES

CH2M Hill, 1999. *Source Removal Report, Revision No.: 01, UST 502, Naval Air Station Cecil Field, Jacksonville, Florida.* Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina. April.

Harding Lawson Associates (HLA), 1999. *Site Assessment Report, Building 502, Tank 502, Base Realignment and Closure, Underground Storage Tank and Aboveground Tank Grey Sites, Naval Air Station Cecil Field, Jacksonville, Florida.* Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina. April.

HLA, 2000. *Letter Report, Natural Attenuation Monitoring, 2nd Sampling Event Results, Petroleum Sites 367, 404, 428, 502, 623, Naval Air Station (NAS) Cecil Field, Jacksonville, Florida.* Prepared for Florida Department of Environmental Protection, Tallahassee, Florida. June.

TtNUS, 2001. *Site Assessment Report Addendum for Building 502, Tank 502, Base Realignment and Closure, Naval Air Station Cecil Field, Jacksonville, Florida.* Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina. July.

TtNUS, 2004. *Groundwater Monitoring Report, 2nd Semi-Annual, 4th Year (January 2004), Building 502, Tank 502, Naval Air Station Cecil Field, Jacksonville, Florida.* Prepared for Florida Department of Environmental Protection, Tallahassee, Florida. June.

TABLES

TABLE 1
GROUNDWATER ELEVATION AND MONITORING WELL CONSTRUCTION DATA
SITE ASSESSMENT REPORT ADDENDUM
BUILDING 502, TANK 502
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Well Number	Total Depth (ft bgs)	Top of Casing Elevation (ft NAVD)	April 9, 2001		December 11, 2001		March 4, 2002		June 6, 2002	
			Depth to Water (ft btoc)	Water Elevation (ft above msl)	Depth to Water (ft btoc)	Water Elevation (ft above msl)	Depth to Water (ft btoc)	Water Elevation (ft above msl)	Depth to Water (ft btoc)	Water Elevation (ft above msl)
CEF-502-1SR	12.48	82.16	6.31	75.85	5.27	76.89	4.65	77.51	8.38	73.78
CEF-502-3S	12.22	80.68	5.03	75.65	3.77	76.91	3.03	77.65	7.14	73.54
CEF-502-4S	12.36	80.68	5.07	75.61	3.73	76.95	3.02	77.66	7.18	73.50
CEF-502-6S	14.80	81.70	5.72	75.98	5.20	76.50	4.64	77.06	7.90	73.80
CEF-502-7D	29.95	81.65	6.00	75.65	4.87	76.78	4.21	77.44	7.84	73.81
CEF-502-8S	13.57	81.75	NA	NM	4.83	76.92	4.14	77.61	8.00	73.75

Well Number	Total Depth (ft bgs)	Top of Casing Elevation (ft NAVD)	December 20, 2002		June 24, 2003		January 28, 2004		November 20, 2006	
			Depth to Water (ft btoc)	Water Elevation (ft above msl)	Depth to Water (ft btoc)	Water Elevation (ft above msl)	Depth to Water (ft btoc)	Water Elevation (ft above msl)	Depth to Water (ft btoc)	Water Elevation (ft above msl)
CEF-502-1SR	12.48	82.16	4.77	77.39	5.62	76.54	8.36	73.80	9.40	72.76
CEF-502-3S	12.22	80.68	3.52	77.16	4.44	76.24	7.07	73.61	8.46	72.22
CEF-502-4S	12.36	80.68	3.54	77.14	5.45	75.23	7.17	73.51	8.6	72.08
CEF-502-6S	14.80	81.70	4.29	77.41	5.00	76.70	7.96	73.74	9.44	72.26
CEF-502-7D	29.95	81.65	4.62	77.03	5.41	76.24	7.98	73.67	9.59	72.06
CEF-502-8S	13.57	81.75	4.47	77.28	5.30	76.45	8.02	73.73	9.33	72.42

bgs = Below ground surface.
btoc = Below top of casing.
ft = Feet.
msl = Mean sea level.
NAVD = North American Vertical Datum, 1988.
NA = Not applicable.
NM = Not measured.

TABLE 2
SOIL ANALYTICAL DATA
SITE ASSESSMENT REPORT ADDENDUM
BUILDING 502, TANK 502
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

CONSTITUENT	FDEP SCTLs			CEF-502-					
	Residential	Industrial	Leachability	SB01 5 ft bgs 11/20/06	SB02 3 ft bgs 11/21/06	SB03 5 ft bgs 11/21/06	SB04 5 ft bgs 11/21/06	SB05 5 ft bgs 11/20/06	SB06 5 ft bgs 11/21/06
SEMIVOLATILE ORGANICS (MG/KG)									
1-METHYLNAPHTHALENE	200	1800	3.1	0.0126 U	0.0115 U	0.0133 U	0.0118 U	0.0121 U	0.0113 U
2-METHYLNAPHTHALENE	210	2100	8.5	0.0117 U	0.0107 U	0.0125 U	0.011 U	0.0113 U	0.0106 U
ACENAPHTHENE	2400	20000	2.1	0.00861 U	0.00788 U	0.00914 U	0.00805 U	0.00828 U	0.00777 U
ACENAPHTHYLENE	1800	20000	27	0.0126 U	0.0115 U	0.0133 U	0.0118 U	0.0121 U	0.0113 U
ANTHRACENE	21000	300000	2500	0.00818 U	0.00749 U	0.00868 U	0.00765 U	0.00787 U	0.00739 U
BENZO(A)ANTHRACENE	NC	NC	0.8	0.00818 U	0.00749 U	0.00868 U	0.00765 U	0.00787 U	0.00739 U
BENZO(A)PYRENE	0.1	0.7	8	0.00818 U	0.00749 U	0.00868 U	0.00765 U	0.00787 U	0.00739 U
BENZO(B)FLUORANTHENE	NC	NC	2.4	0.00632 U	0.00578 U	0.00671 U	0.00591 U	0.00608 U	0.0057 U
BENZO(G,H,I)PERYLENE	2500	52000	32000	0.0121 U	0.0111 U	0.0128 U	0.0113 U	0.0116 U	0.0109 U
BENZO(K)FLUORANTHENE	NC	NC	24	0.00818 U	0.00749 U	0.00868 U	0.00765 U	0.00787 U	0.00739 U
CHRYSENE	NC	NC	77	0.00866 U	0.00792 U	0.00919 U	0.0081 U	0.00832 U	0.00782 U
DIBENZO(A,H)ANTHRACENE	NC	NC	0.7	0.0133 U	0.0122 U	0.0141 U	0.0124 U	0.0128 U	0.012 U
FLUORANTHENE	3200	59000	1200	0.0106 U	0.00966 U	0.0112 U	0.00987 U	0.0101 U	0.00953 U
FLUORENE	2600	33000	160	0.00747 U	0.00684 U	0.00793 U	0.00699 U	0.00718 U	0.00674 U
INDENO(1,2,3-CD)PYRENE	NC	NC	6.6	0.0138 U	0.0126 U	0.0146 U	0.0129 U	0.0132 U	0.0124 U
NAPHTHALENE	55	300	1.2	0.0145 U	0.0132 U	0.0154 U	0.0135 U	0.0139 U	0.0131 U
PHENANTHRENE	2200	36000	250	0.00818 U	0.00749 U	0.00868 U	0.00765 U	0.00787 U	0.00739 U
PYRENE	2400	45000	880	0.0106 U	0.00966 U	0.0112 U	0.00987 U	0.0101 U	0.00953 U
TOTAL PETROLEUM HYDROCARBONS (MG/KG)									
TPH (C08-C40)	460	2700	360	6.64 U	15.3	70.6	161 E	63.4	**378 E**

See notes at end of table.

TABLE 2
SOIL ANALYTICAL DATA
SITE ASSESSMENT REPORT ADDENDUM
BUILDING 502, TANK 502
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

CONSTITUENT	FDEP SCTLs			CEF-502-				
	Residential	Industrial	Leachability	SB07 5 FEET 11/21/06	SB08 5 FEET 11/21/06	SB08-DU-01 1 FOOT 11/21/06	SB09 3 FEET 11/21/06	SB10 5 FEET 11/21/06
SEMIVOLATILE ORGANICS (MG/KG)								
1-METHYLNAPHTHALENE	200	1800	3.1	0.0117 U	0.0128 U	0.0113 U	0.0116 U	0.0127 U
2-METHYLNAPHTHALENE	210	2100	8.5	0.0109 U	0.0119 U	0.0106 U	0.0109 U	0.0118 U
ACENAPHTHENE	2400	20000	2.1	0.00801 U	0.00875 U	0.00777 U	0.00797 U	0.00867 U
ACENAPHTHYLENE	1800	20000	27	0.0117 U	0.0128 U	0.0113 U	0.0116 U	0.0127 U
ANTHRACENE	21000	300000	2500	0.00762 U	0.00832 U	0.00738 U	0.00758 U	0.00824 U
BENZO(A)ANTHRACENE	NC	NC	0.8	0.00762 U	0.00832 U	0.00738 U	0.00758 U	0.00824 U
BENZO(A)PYRENE	0.1	0.7	8	0.00762 U	0.00832 U	0.00738 U	0.00758 U	0.00824 U
BENZO(B)FLUORANTHENE	NC	NC	2.4	0.00588 U	0.00642 U	0.0057 U	0.00585 U	0.00636 U
BENZO(G,H,I)PERYLENE	2500	52000	32000	0.0113 U	0.0123 U	0.0109 U	0.0112 U	0.0122 U
BENZO(K)FLUORANTHENE	NC	NC	24	0.00762 U	0.00832 U	0.00738 U	0.00758 U	0.00824 U
CHRYSENE	NC	NC	77	0.00806 U	0.0088 U	0.00781 U	0.022 J	0.00872 U
DIBENZO(A,H)ANTHRACENE	NC	NC	0.7	0.0124 U	0.0135 U	0.012 U	0.0123 U	0.0134 U
FLUORANTHENE	3200	59000	1200	0.00982 U	0.0107 U	0.00952 U	0.00977 U	0.0106 U
FLUORENE	2600	33000	160	0.00695 U	0.00759 U	0.00674 U	0.00692 U	0.00753 U
INDENO(1,2,3-CD)PYRENE	NC	NC	6.6	0.0128 U	0.014 U	0.0124 U	0.0127 U	0.0139 U
NAPHTHALENE	55	300	1.2	0.0135 U	0.0147 U	0.0131 U	0.0134 U	0.0146 U
PHENANTHRENE	2200	36000	250	0.00762 U	0.00832 U	0.00738 U	0.00758 U	0.00824 U
PYRENE	2400	45000	880	0.00982 U	0.0107 U	0.00952 U	0.00977 U	0.0106 U
TOTAL PETROLEUM HYDROCARBONS (MG/KG)								
TPH (C08-C40)	460	2700	360	**804 DE**	185 E	299 E	**3580 DE**	**434 E**

FDEP SCTL = Florida Department of Environmental Protection Soil Cleanup Target Level, Chapter 62-777, F.A.C.

MG/KG = Milligrams per kilogram.

U = Not detected at associated detection limit.

NC = No criterion.

Concentration exceeds criterion.

J = Estimated concentration.

D = Data reported from a dilution.

E = Result exceeded calibration limit.

bgs = Below ground surface.

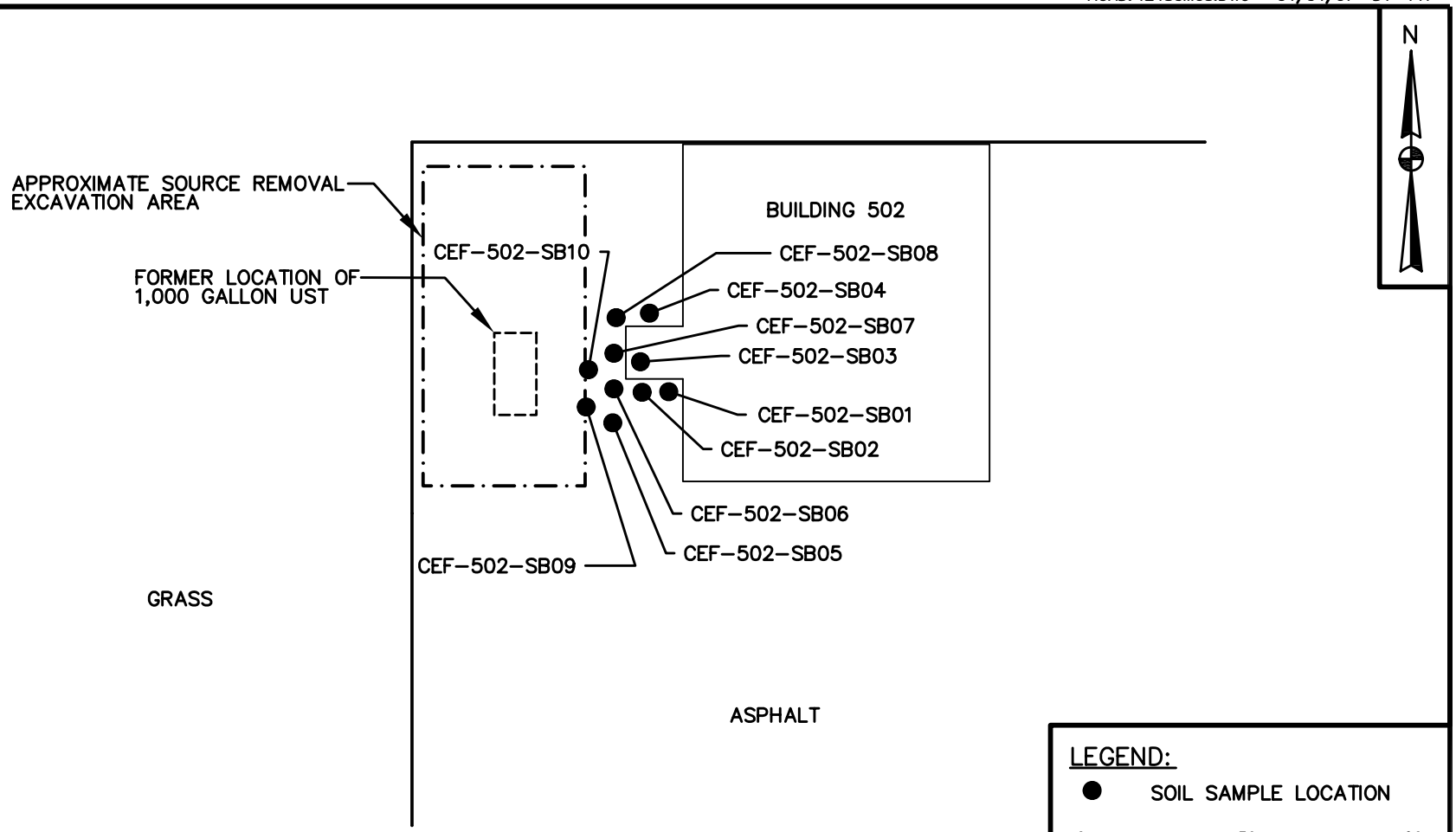
TABLE 3
GROUNDWATER ANALYTICAL DATA
SITE ASSESSMENT REPORT ADDENDUM
BUILDING 502, TANK 502
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

CONSTITUENTS	FDEP GCTL (µg/L)	CEF-502-						
		MW-1SR	MW-3S	MW-4S	MW-6S	MW-7D	MW-8S	MW-8S-DU-01
		11/21/06	11/20/06	11/21/06	11/20/06	11/20/06	11/21/06	11/21/06
VOLATILE ORGANICS (µg/L)								
1,2,4-TRIMETHYLBENZENE	10	6.9	0.5 J	0.6 J	0.2 U	0.2 U	0.2 U	0.2 U
1,3,5-TRIMETHYLBENZENE	10	2.8	0.2 U	0.6 J	0.2 U	0.2 U	0.2 U	0.2 U
BENZENE	1	0.2 U	0.2 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U
ETHYLBENZENE	30	2.5	0.3 U	2.2	0.3 J	0.3 U	0.3 U	0.3 U
ISOPROPYLBENZENE	0.8	2.7	0.1 U	1.2	0.4 J	0.1 U	0.1 U	0.1 U
TOTAL XYLENES	20	0.3 U	0.3 U	0.9 J	0.3 U	0.3 U	0.3 U	0.3 U
SEMIVOLATILE ORGANICS (µg/L)								
1-METHYLNAPHTHALENE	28	**52.8 D**	6.46	1.48	1.95	0.02 U	0.02 U	0.02 U
2-METHYLNAPHTHALENE	28	**110 D**	4.92	8.37	3.75	0.02 U	0.02 U	0.02 U
ACENAPHTHENE	20	1.72	0.39	0.29	1.11	0.02 U	0.02 U	0.02 U
ANTHRACENE	2100	0.07 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
FLUORENE	280	2.78	0.58	0.22	2.16	0.02 U	0.02 U	0.02 U
NAPHTHALENE	14	11.2	0.92	2.69	0.43	0.02 U	0.02 U	0.02 U
PHENANTHRENE	210	2.4	0.13	0.02 U	0.08 J	0.02 U	0.02 U	0.02 U
TOTAL PETROLEUM HYDROCARBONS (MG/L)								
TPH (C08-C40)	5	2.11	0.166 J	0.496	0.33	0.094 U	0.094 U	0.094 U

Concentration exceeds criterion.
D = Data reported from a dilution.
J = Estimated concentration.
U = Not detected at associated detection limit.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.

FIGURES

ACAD: 4248CM05.DWG 04/04/07 DT PIT

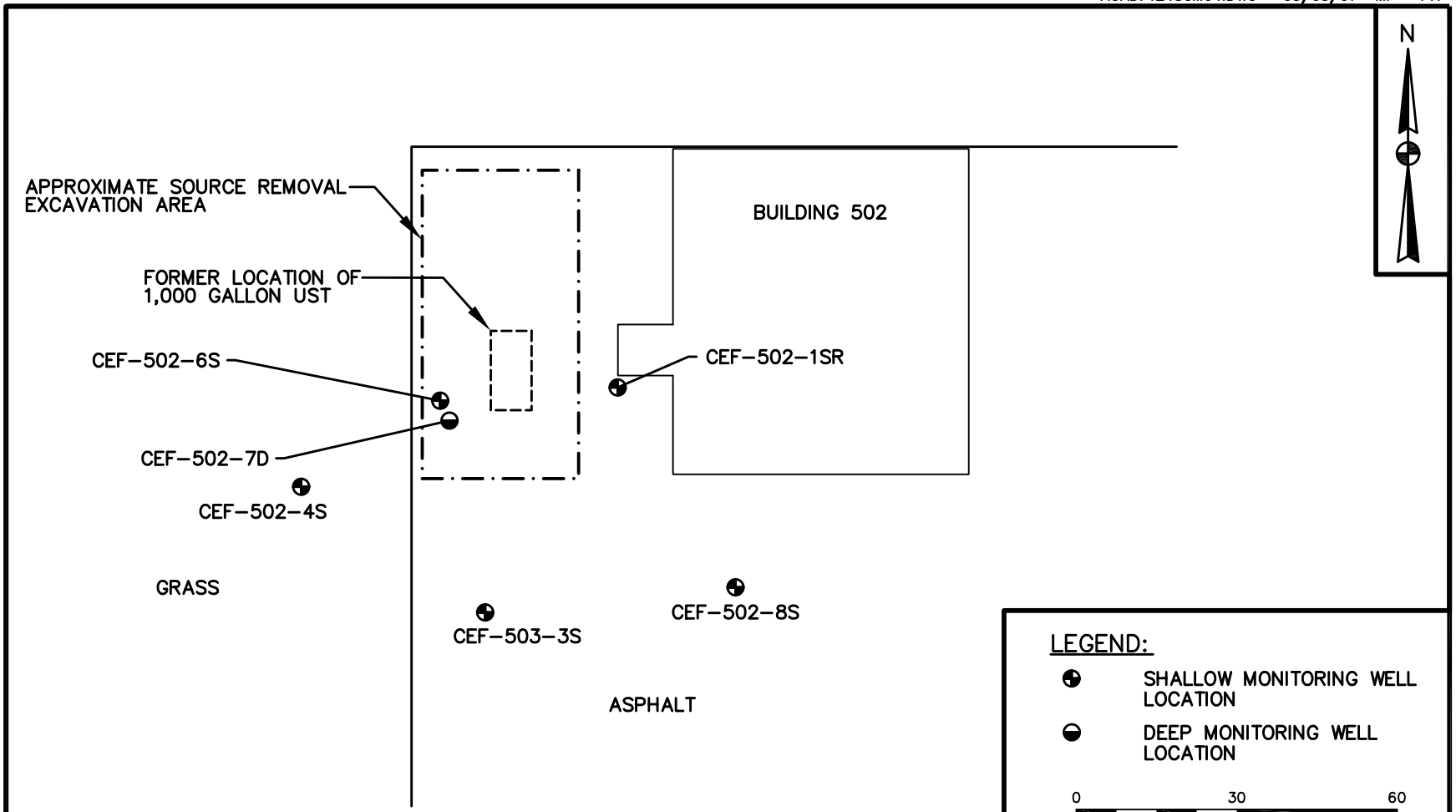


DRAWN BY: MF	DATE: 1/31/07	SOIL BORING LOCATIONS BUILDING 502, TANK 502 NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NO. 4248
CHECKED BY	DATE		OWNER NO.
REVISED BY	DATE		APPROVED BY / DATE
SCALE: AS NOTED			DRAWING NO. FIGURE 1 / REV. 0

NAVFAC

FORM CADD NO. SDIV-AH.DWG – REV 1 – 9/10/98

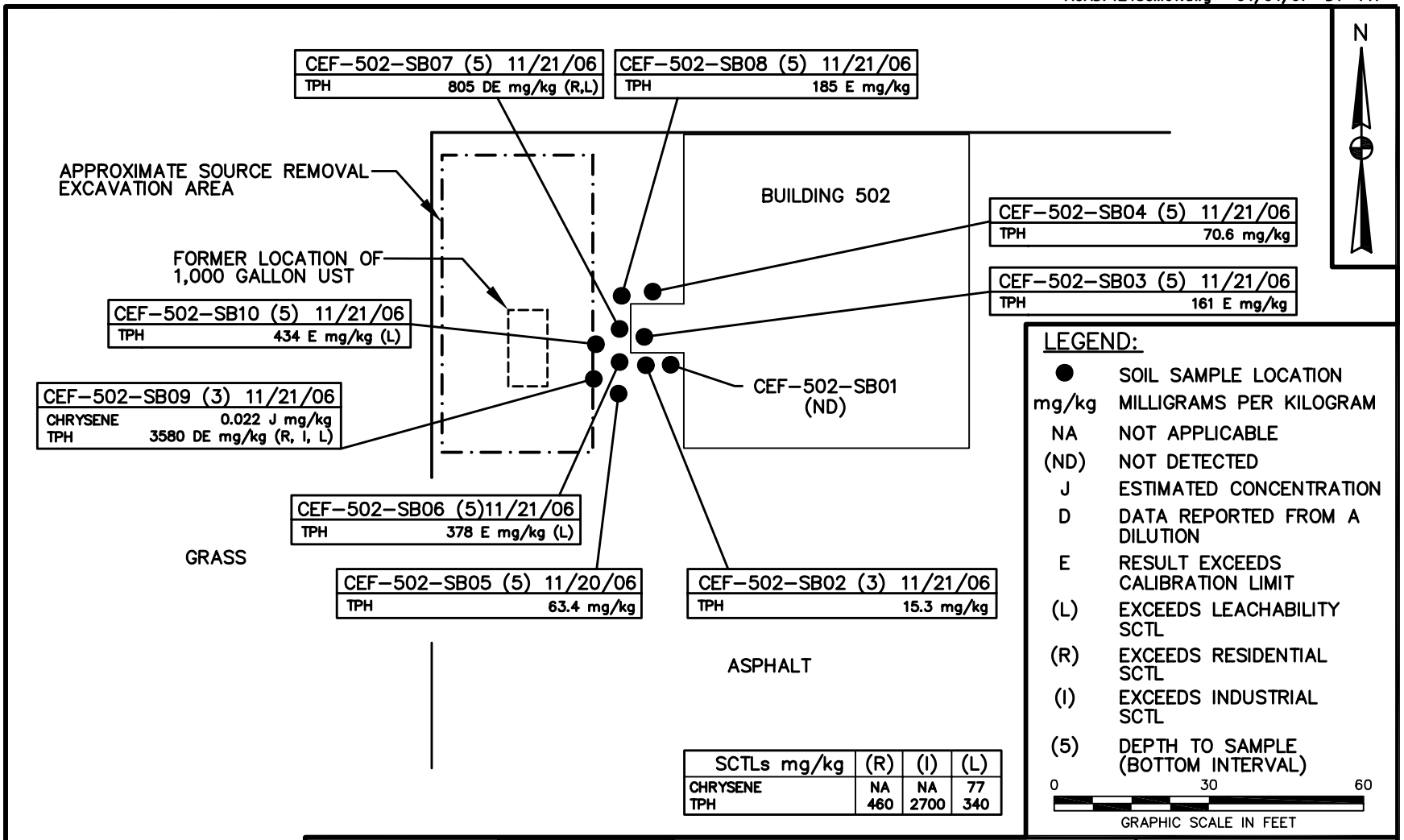
ACAD: 4248CM04.DWG 03/05/07 MF PIT



DRAWN BY: MF DATE: 1/31/07	NAVFAC	GROUNDWATER MONITORING WELL LOCATIONS BUILDING 502 NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NO. 4248
CHECKED BY: DATE:			OWNER NO.
REVISED BY: DATE:			APPROVED BY: DATE:
SCALE: AS NOTED			DRAWING NO. FIGURE 2 / REV. 0

FORM CADD NO. SDIV-AH.DWG – REV 1 – 9/10/98

ACAD: 4248CM01.dwg 04/04/07 DT PIT



LEGEND:

●	SOIL SAMPLE LOCATION
mg/kg	MILLIGRAMS PER KILOGRAM
NA	NOT APPLICABLE
(ND)	NOT DETECTED
J	ESTIMATED CONCENTRATION
D	DATA REPORTED FROM A DILUTION
E	RESULT EXCEEDS CALIBRATION LIMIT
(L)	EXCEEDS LEACHABILITY SCTL
(R)	EXCEEDS RESIDENTIAL SCTL
(I)	EXCEEDS INDUSTRIAL SCTL
(5)	DEPTH TO SAMPLE (BOTTOM INTERVAL)

0 30 60

GRAPHIC SCALE IN FEET

SCTLs mg/kg	(R)	(I)	(L)
CHRYSENE	NA	NA	77
TPH	460	2700	340

DRAWN BY: MF	DATE: 12/29/06
CHECKED BY	DATE
REVISED BY	DATE
SCALE: AS NOTED	

NAVFAC

SOIL BORING RESULTS
NOVEMBER 2006
BUILDING 502, TANK 502
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

CONTRACT NO. 4248	
OWNER NO.	
APPROVED BY	DATE
DRAWING NO. FIGURE 3	REV. 0

FORM CADD NO. SDIV-AH.DWG – REV 1 – 9/10/98

ACAD: 4248CM02.dwg 04/04/07 DT PIT

N

CEF-502-6S	11/20/06	GCTL
1,2,4-TRIMETHYLBENZENE	0.02 U µg/L	10
1,3,5-TRIMETHYLBENZENE	0.02 U µg/L	10
BENZENE	0.02 U µg/L	1
ETHYLBENZENE	0.3 J µg/L	30
ISOPROPYLBENZENE	0.4 J µg/L	0.8
1-METHYLNAPHTHALENE	1.95 µg/L	28
2-METHYLNAPHTHALENE	3.75 µg/L	28
ACENAPTHTHENE	1.11 µg/L	20
ANTHRACENE	0.02 U µg/L	2100
FLUORENE	2.16 µg/L	280
NAPHTHALENE	0.43 µg/L	14
PHENANTHRENE	0.08 J µg/L	210
TPH	0.33 mg/L	5

APPROXIMATE SOURCE REMOVAL EXCAVATION AREA

FORMER LOCATION OF 1,000 GALLON UST

BUILDING 502

CEF-502-7D (ND)

CEF-502-1SR	11/21/06	GCTL
1,2,4-TRIMETHYLBENZENE	6.9 µg/L	10
1,3,5-TRIMETHYLBENZENE	2.8 µg/L	10
BENZENE	0.2 U µg/L	1
ETHYLBENZENE	2.5 µg/L	30
ISOPROPYLBENZENE	2.7 µg/L *	0.8
1-METHYLNAPHTHALENE	52.8 D µg/L *	28
2-METHYLNAPHTHALENE	110 D µg/L *	28
ACENAPTHTHENE	1.72 µg/L	20
ANTHRACENE	0.07 J µg/L	2100
FLUORENE	2.78 µg/L	280
NAPHTHALENE	11.2 µg/L	14
PHENANTHRENE	2.4 µg/L	210
TPH	2.11 mg/L	5

CEF-502-4S	11/21/06	GCTL
1,2,4-TRIMETHYLBENZENE	0.06 J µg/L	10
1,3,5-TRIMETHYLBENZENE	0.06 J µg/L	10
BENZENE	0.06 J µg/L	1
ETHYLBENZENE	2.2 µg/L	30
ISOPROPYLBENZENE	1.2 µg/L *	.08
1-METHYLNAPHTHALENE	1.48 µg/L	28
2-METHYLNAPHTHALENE	8.37 µg/L	28
ACENAPTHTHENE	0.29 µg/L	20
ANTHRACENE	0.02 U µg/L	2100
FLUORENE	0.22 µg/L	280
NAPHTHALENE	2.69 µg/L	14
TPH	0.496 mg/L	5

GRASS

CEF-502-8S (ND)

ASPHALT

CEF-502-3S	11/20/06	GCTL
1,2,4-TRIMETHYLBENZENE	0.5 J µg/L	10
1,3,5-TRIMETHYLBENZENE	0.2 U µg/L	10
BENZENE	0.2 U µg/L	1
ISOPROPYLBENZENE	0.1 U µg/L	0.8
1-METHYLNAPHTHALENE	6.46 µg/L	28
2-METHYLNAPHTHALENE	4.92 µg/L	28
ACENAPTHTHENE	0.39 µg/L	20
ANTHRACENE	0.02 U µg/L	2100
FLUORENE	0.58 µg/L	280
NAPHTHALENE	0.92 µg/L	14
PHENANTHRENE	0.13 µg/L	210
TPH	0.166 J mg/L	5

LEGEND:

⊕	MONITORING WELL
mg/L	MILLIGRAMS PER LITER
µg/L	MICROGRAMS PER LITER
J	ESTIMATED CONCENTRATION
U	NONE DETECTED
D	DATA REPORTED FROM A DILUTION
ND	NON DETECT
*	EXCEEDS GCTL
GCTL	GROUNDWATER CLEANUP TARGET LEVEL

0 30 60

GRAPHIC SCALE IN FEET

DRAWN BY MF	DATE 1/3/07
CHECKED BY	DATE
REVISED BY	DATE
SCALE AS NOTED	

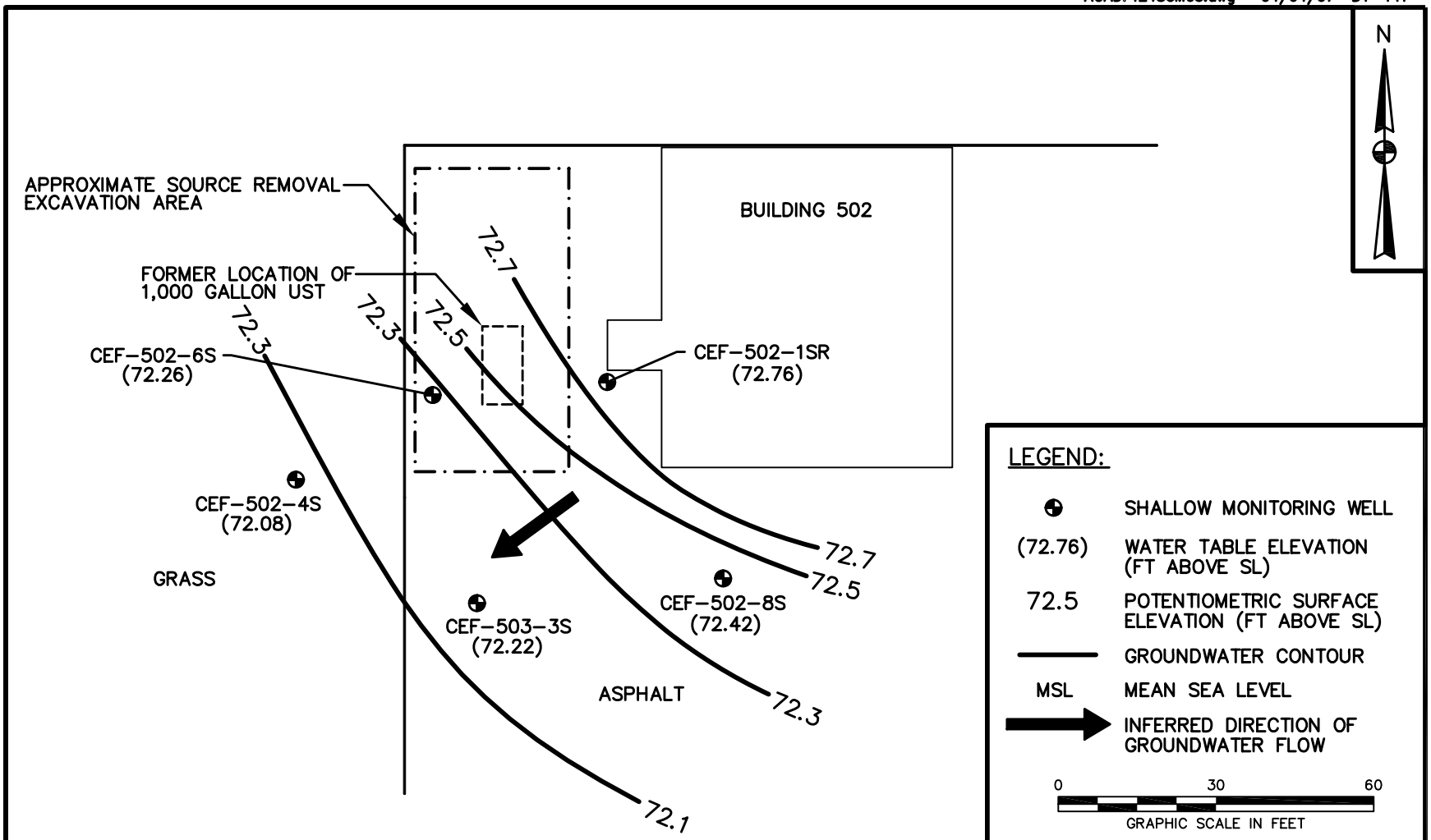
NAVFAC

MONITORING WELL RESULTS
NOVEMBER 2006
BUILDING 502, TANK 502
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

CONTRACT NO. 4248	
OWNER NO.	
APPROVED BY	DATE
DRAWING NO. FIGURE 4	REV. 0

FORM CADD NO. SDIV-BH.DWG – REV 1 – 9/10/98

ACAD: 4248CM03.dwg 04/04/07 DT PIT



DRAWN BY MF	DATE 1/5/07	POTENTIOMETRIC SURFACE ELEVATION MAP NOVEMBER 2006 BUILDING 502, TANK 502 NAS CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NO. 4248
CHECKED BY	DATE		OWNER NO.
REVISED BY	DATE		APPROVED BY DATE
SCALE AS NOTED			DRAWING NO. FIGURE 5 / REV. 0

NAVFAC

FORM CADD NO. SDIV-AH.DWG – REV 1 – 9/10/98

ATTACHMENT A

FDEP 2004 COMMENTS

TS

Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

June 23, 2004

Mr. Gabe Magwood
Code ES24 (UST RPM)
Southern Division
Naval Facilities Engineering Command
Post Office Box 190010
North Charleston, South Carolina 29419-9010

RE: Groundwater Monitoring Report, 1st Semi-Annual, 4th Year (June 2003), Building 502, Tank 502, Naval Air Station Cecil Field, Jacksonville, Florida

Dear Mr. Magwood:

I have completed the review of the Groundwater Monitoring Report, 1st Semi-Annual, 4th Year (June 2003), Building 502, Tank 502, Naval Air Station Cecil Field, dated January 30, 2004 (received February 2, 2004), prepared and submitted by Tetra Tech NUS, Inc. The report adequately reports the groundwater contaminant levels in monitoring wells approved in the Natural Attenuation Monitoring Plan Approval Order (NAMP Order) issued by the Department on July 13, 1999 and as modified by subsequent reports. Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene and TRPH continue to remain elevated in monitoring well CEF-502-1SR. I would like to point out that the monitoring period approved in the NAMP Order expires in July 2004. Because of this, the data collected up to the point the NAMP Order expires should be evaluated to determine whether the milestones specified in the NAMP Order have been met and the site can be considered rehabilitated or whether further assessment, further monitoring or more active remediation is required at the site. A report should be prepared and submitted with conclusions on the effectiveness of monitored natural attenuation and recommendations for further work.

I have done some speculating on why contaminant concentrations in groundwater have not been reduced more than they have. Based on a limited review of past reports, it seems possible there may be contaminated soil still present that is impacting groundwater in the vicinity of monitoring well CEF-502-1SR. This contamination may not have been previously identified because of its location beneath Building 502. As this building has apparently been demolished, further investigation of soil contamination in this area may be possible at this time.

If I can be of any further assistance with this matter, please contact me at (850) 245-8997.

Sincerely,

David P. Grabka, P.G.
Remedial Project Manager

cc: Paul Calligan, Tetra Tech NUS, Tampa
Doyle Brittain, USEPA Region 4
Mike Fitzsimmons, FDEP Northeast District

JJC for ESN

ATTACHMENT B

FDEP MONITORING ONLY PLAN ORDER

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

July 13, 1999

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Commanding Officer
Mr. Bryan Kizer, Code 1842
SOUTHNAVFACENGCOM
Post Office Box 190010
North Charleston, SC 29419-9010

RE: Site Assessment Report and Monitoring Only Proposal for Facility 502, Tank 502, Naval Air Station Cecil Field, Florida.

Dear Mr. Kizer:

I have reviewed the Site Assessment Report Revision and Monitoring Only Proposal for Natural Attenuation dated April 1999 (received April 23, 1999), submitted for this site. Based upon my review and comments, the enclosed Monitoring Only Plan for Natural Attenuation was signed by Mr. John M. Ruddell, Director of the Division of Waste Management.

If I can be of any further assistance with this matter, please contact me at (850) 921-9991.

Sincerely,

Michael J. Deliz

Michael J. Deliz, P.G.
Remedial Project Manager

13-July-99
Date

CC: Debbie Vaughn-Wright, USEPA
John Flowe, City of Jacksonville
Scott Glass, SOUTHNAVFACENGCOM
Dave Kruzicki, NAS Cecil Field
Eric Blomberg, HLA - Tallahassee

TJB JJC ESN

Department of
Environmental Protection

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

Jeb Bush
Governor

David B. Struhs
Secretary

July 13, 1999

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Commanding Officer
Mr. Bryan Kizer, Code 1842
SOUTHNAVFACENGCOM
Post Office Box 190010
North Charleston, South Carolina 29419-0068

Subject: Monitoring Only Plan Approval
Order Facility 502, Tank 502,
Naval Air Station, Cecil Field

Dear Mr. Kizer:

The Bureau of Waste Cleanup has completed the review of the Site Assessment Report and Monitoring Only Proposal for Natural Attenuation dated April 1999 (received April 23, 1999), submitted for this site. Pursuant to Rule 62-770.690, Florida Administrative Code (F.A.C.), the Department approves the monitoring only proposal. Pursuant to Rule 62-770.690(7), F.A.C., you are required to complete the monitoring program outlined below. The first sampling event should be performed within 60 days of receipt of this Monitoring Only Plan Approval Order (Order). Water-level measurements should be made immediately prior to each sampling event. The analytical results (laboratory report), chain of custody, cumulative summary table of the analytical results, site map(s) illustrating the most recent analytical results, and the water-level elevation information (cumulative summary table and most recent flow interpretation map), should be submitted to the Department within 60 days of sample collection.

Monitoring Wells	Parameters	Frequency
CEF-502-1S, CEF-502-2S, CEF-502-4S, and CEF-502 5D	602, 8310, and FL-PRO	Semi-annual

If concentrations of chemicals of concern in any of the designated wells increase above the action levels listed below, the well or wells must be resampled no later than 30 days after the initial positive results are known. If the results of the resampling confirm the initial sampling results, then a proposal must be submitted, as described in Rule 62-70.690(7)(f),F.A.C.

Contaminated wells:

CEF-502-1S and CEF-502-2S: 100 µg/l Benzene; 200 µg/l Xylene; 300 µg/l Ethylbenzene; 400 µg/l Toluene; 200 µg/l Naphthalene; and 50 mg/l TRPH.

Perimeter wells:

CEF-502-4S and CEF-502-5D: 1 µg/l Benzene; 20 µg/l Xylene; 30 µg/l Ethylbenzene; 40 µg/l Toluene; 20 µg/l Naphthalene; and 5 mg/l TRPH

The approved Remedial Action by Natural Attenuation monitoring period is 5 years. Milestone objectives should be established if monitoring is projected to take greater than one year. The following are the milestone objectives that will be used for annual evaluation of remediation progress by natural attenuation. An explanation of the progress relative to these milestone objectives, and the need for corrective action (if applicable), should be provided in the annual evaluation:

Benzene	MW-CEF-502-2S
End of year 1	26
End of year 2	13
End of year 3	6
End of year 4	3
End of year 5	<1

Ethylbenzene	MW-CEF-502-2S
End of year 1	60
End of year 2	50
End of year 3	40
End of year 4	30
End of year 5	<30

Xylene	MW-CEF-502-2S
End of year 1	150
End of year 2	100
End of year 3	50
End of year 4	20
End of year 5	<20

Naphthalene	MW-CEF-502-2S
End of year 1	150
End of year 2	100
End of year 3	50
End of year 4	20
End of year 5	<20

TRPH	MW-CEF-502-2S
End of year 1	10
End of year 2	8
End of year 3	6
End of year 4	5
End of year 5	<5

If the applicable No Further Action criteria in Rule 62-70.680, F.A.C., are achieved at the end of the monitoring period, a Site Rehabilitation Completion Report, summarizing the monitoring program and containing documentation supporting the opinion that the cleanup objectives have been achieved, should be submitted as required in Rule 62-770.690(8), F.A.C. If the applicable No Further Action criteria in Rule 62-770.680, F.A.C., are not achieved following one year of monitoring, then a report summarizing the monitoring program should be submitted, including a proposal as described in Rule 62-770.690(7)(g).

Persons affected by this Order have the following options:

If you choose to accept the above decision by the Department you do not have to do anything. This Order is final and effective as of the date on the top of the first page of this Order.

If you disagree with the decision, you may do one of the following:

1. File a petition for administrative hearing with the Office of the General Counsel of the Department within 21 days after receipt of this Order;

OR

2. File a request for an extension of time to file a petition for hearing with the Office of the General Counsel of the Department within 21 days after receipt of this Order. Such a request should be made if you wish to meet with the Department in an attempt to informally resolve any disputes without first filing a petition for hearing.

Please be advised that mediation of this decision, pursuant to Section 120.573, Florida Statutes (F.S.), is not available.

How to Request an Extension of Time to File a Petition for Hearing

A request for an extension of time to file a petition for hearing must be filed (received) in the Office of the General Counsel of the Department at 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida 32399-3000, within 21 days after receipt of this Order. Pursuant to Rule 28-106.111(3), F.A.C., a request for extension of time shall contain a certificate that the moving party has consulted with all other parties, if any, concerning the extension and that the Department and any other parties agree to said extension. Petitioner, if different from Commanding Officer, Naval Air Station Cecil Field, shall mail a copy of the petition to from Commanding Officer, Naval Air Station Cecil Field at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for administrative hearing must be filed until the request is acted upon.

How to File a Petition for Administrative Hearing

A person whose substantial interests are affected by this Order may petition for administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of the General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, within 21 days after receipt of this Order. Petitioner, if different from Commanding Officer, Naval Air Station Cecil Field, shall mail a copy of the petition to from

Commanding Officer, Naval Air Station Cecil Field at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

Pursuant to Rules 62-103.155 and 28-06.201, F.A.C., a petition for administrative hearing shall contain the following information:

a) The name, address, and telephone number of each petitioner, the name, address, and telephone number of the petitioner's representative, if any, the site owner's name and address, if different from the petitioner, the FDEP facility number, and the name and address of the facility;
b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
d) A statement of the material facts disputed by the petitioner, if any;

e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
f) A statement of which rules or statutes petitioner contends requires reversal or modification of the Department's action or proposed action; and
g) A statement of the relief petitioner seeks, stating precisely what petitioner wants the Department to do regarding the Department's action or proposed action.

This Order is final and effective as of the date on the top of the first page of this Order. Timely filing a petition for administrative hearing postpones the date this Order takes effect until the Department issues either a Final Order pursuant to an administrative hearing or an Order Responding to Supplemental Information provided pursuant to meetings with the Department.

Judicial Review

Any party to this Order has the right to seek judicial review of this Order pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Department clerk in the Office of

the General Counsel, 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida 32399-3000. Simultaneously with filing a Notice of Appeal with the Department, petitioner must file a copy of the Notice of Appeal with the applicable filing fees, with the appropriate District Court of Appeal. The Notice of Appeal must be received by the Department clerk within 30 days from the date this Order was signed by the Department clerk (see below).

Questions

Should you have any questions regarding the legal processes, please contact the Office of the General Counsel at (850) 488-9730. Any questions you may have on the technical aspects of this Order should be directed to Michael J. Deliz, P.G. at (850) 921-9991. Contact with any of the above does not constitute a petition for administrative hearing.

Sincerely,

John M. Ruddell, Director
Division of Waste Management

JMR/mjd

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Minnie L. Ransom 7/15/99
Clerk (or Deputy Clerk Date

ATTACHMENT C

FIELD FORMS

Tetra Tech NUS, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: Cecil Field - CTO 25 **Project No.:** 112G00378

Location: Building 502 **Personnel:** KW, WH

Weather Conditions: 65°, sunny, breezy **Measuring Device:** H2O level indicator

Tidally Influenced: Yes ___ No X **Remarks:**

CEF-

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
502-6S	11/20/06	1149		9.44	14.90			
502-7D	11/20/06	1155		9.59	30.11			
502-4S	11/20/06	1200		8.60	17.30			
502-3S	11/20/06	1205		8.46	13.18			
502-8S	11/20/06	1210		9.33	13.49			
502-15R	11/20/06	1217		9.46	12.40			had H_2O above the TOC

* All measurements to the nearest 0.01 foot

Tetra Tech NUS, Inc.

EQUIPMENT CALIBRATION LOG

PROJECT NAME: Cecil Field - CTO 25

SITE NAME: Building 502

PROJECT No.: 112G00378

INSTRUMENT NAME/MODEL: LaMotte Turbimeter

MANUFACTURER: LaMotte

SERIAL NUMBER: 3332-2402

Date of Calibration	Instrument I.D. Number	Person Performing Calibration	Instrument Settings		Instrument Readings		Calibration Standard (Lot No.)	Remarks and Comments
			Pre-calibration	Post-calibration	Pre-calibration	Post-calibration		
11/20/06		KW			0.75 9.8	0.00 10.0	0 NTU 10 NTU	
11/20/06		KW			6.98		pH 7.00 HS1160	06C2658 AJ exp 6/07
					240.7		ORP 240mV	G364 exp 2/2010
					699 - out of range		1413 1501544	Conductivity exp 12/06

LaMotte Turbidity Meter serial # 3332-2402

YSI

Tetra Tech NUS, Inc.

EQUIPMENT CALIBRATION LOG

PROJECT NAME: NAS Cecil - CTO 025 INSTRUMENT NAME/MODEL: Lamotte Turbidimeter

SITE NAME: Bldg 502 MANUFACTURER: Lamotte

PROJECT No.: 112G00378 SERIAL NUMBER: ~~3332~~ 3332 - 2402

Date of Calibration	Instrument I.D. Number	Person Performing Calibration	Instrument Settings		Instrument Readings		Calibration Standard (Lot No.)	Remarks and Comments
			Pre-calibration	Post-calibration	Pre-calibration	Post-calibration		
11/21/06	3332-1402	KW	—	—	0.00	0.00	0 NTU	
					10.00	10.00	10 NTU	

Tetra Tech NUS, Inc.

EQUIPMENT CALIBRATION LOG

PROJECT NAME: NAS Cecil - CTO25

SITE NAME: Bldg 502

PROJECT No.: 112G00378

INSTRUMENT NAME/MODEL: YSI 556 MPS

MANUFACTURER:

SERIAL NUMBER: 06C2658AJ

Date of Calibration	Instrument I.D. Number	Person Performing Calibration	Instrument Settings		Instrument Readings		Calibration Standard (Lot No.)	Remarks and Comments
			Pre-calibration	Post-calibration	Pre-calibration	Post-calibration		
11/21/06	—	KW	—	—	640	out of range	1501544	conductivity 1413 exp date: 12/06
					248	240.8	G3621	ORP 240mV exp date: 2/2010
					7.01	7.00	5160	pH 7.00 exp date 4/07
					4.11	4.00	2505079	pH 4.00 exp date: 4-4-07

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Bldg 502
PROJECT NUMBER: 112G00338
DRILLING COMPANY: T+NUS
DRILLING RIG: Hand Auger

BORING No.: SB01
DATE: 11-20-96
GEOLOGIST: Wes Harden
DRILLER: Wes Harden

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	PID/FID Reading (ppm): Sampler BZ	PID/FID Reading (ppm): Borehole**	PID/FID Reading (ppm): Driller BZ**
	1					brn	fine sand, silty			0			
	2					brn	fine sand, silty			0			
	3					brn	fine sand, silty			0			
	4					lt brn	fine sand			0			
	5					brn	fine sand, silty			0			

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): [ ]

Remarks: Sample CEF-502-SB01-05 collected @ 1550

Converted to Well: Yes ____ No X Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: Bldg 502
PROJECT NUMBER: 112G00378
DRILLING COMPANY: T+NUS
DRILLING RIG: Hand Auger

BORING No.: SB02
DATE: 11-21-06
GEOLOGIST: W.H.
DRILLER: W.H.

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	1					brn	fine sand silty			2.1			
	2					brn	fine sand silty			1.8			
	3					brn	fine sand silty			2.1			
WH					refusal @ 3.5'								
WH													

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: Soil sample CEF-502-SB02-03 collected @ 0840

Drilling Area Background (ppm): [ ]

Converted to Well: Yes _____ No ✓ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: Bldg 562
PROJECT NUMBER: 112G00358
DRILLING COMPANY: TtNUS
DRILLING RIG: Hand Auger

BORING No.: SB03
DATE: 11-21-06
GEOLOGIST: WH
DRILLER: WH

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	1					brn	fine sand, silty			2.2			
	2					brn	fine sand, silty			2.3			
	3					brn	fine sand, silty			2.2			
	4					ltbrn	fine sand			2.1			
	5					ltbrn	fine sand			2.3			

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: 50.1 sample GBP-502-SB03-05 collected @ 0855

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: Bldg 502
PROJECT NUMBER: 112G05378
DRILLING COMPANY: TtNUS
DRILLING RIG: Hand auger

BORING No.: SB04
DATE: 11-21-06
GEOLOGIST: WH
DRILLER: WH

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	PID/FID Reading (ppm): Sampler BZ	PID/FID Reading (ppm): Borehole**	PID/FID Reading (ppm): Driller BZ**
	1					dkbr	fine sand, silty			2.5			
	2					dkbr	fine sand, silty			2.8			
	3					dkbr	fine sand, silty			2.7			
	4					ltbr	sand, fine			2.6			
	5					brn	fine sand, silty			2.8			

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: Sample CEF-502-SB04-05 collected @ 1045

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: Bldg 502
PROJECT NUMBER: 112G00378
DRILLING COMPANY: TtNUS
DRILLING RIG: Hand auger

BORING No.: SB05
DATE: 11-20-06
GEOLOGIST: WH
DRILLER: WH

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	PID/FID Reading (ppm): Sampler BZ	PID/FID Reading (ppm): Borehole**	PID/FID Reading (ppm): Driller BZ**
	1					brn	fine sand, silty			0			
	2					brn	fine sand, silty			0			
	3					brn	fine sand, silty			0			
	4					ltbrn	fine sand			0			
	5					brn	fine sand, silty			0			

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: Sample (FF-502-SB05-05 collected @ 1600

Drilling Area Background (ppm): ____

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: Bldg 502
PROJECT NUMBER: 112G00378
DRILLING COMPANY: TtNUS
DRILLING RIG: Hand Auger

BORING No.: SB06
DATE: 11-21-06
GEOLOGIST: WH
DRILLER: WH

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	PID/FID Reading (ppm): Sampler BZ	PID/FID Reading (ppm): Borehole**	PID/FID Reading (ppm): Driller BZ**
	1					brn	fine sand, silty			1.8			
	2					brn	fine sand, silty			2.1			
	3					brn	fine sand, silty			2.0			
	4					brn	fine sand, silty			2.4			
	5					brn	fine sand, silty			12.4			

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ☐

Remarks: sample CEF-502-SB06-05 collected @ 1055 ~~Dup~~. Duplicate CEF-~~03~~ CEF-502-D401 collected

Converted to Well: Yes ___ No X Well I.D. #: ___

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: Bldg 502
PROJECT NUMBER: 112G0378
DRILLING COMPANY: TtNUS
DRILLING RIG: hand auger

BORING No.: SB07
DATE: 11-21-06
GEOLOGIST: Wesley Harden
DRILLER: WH

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	PID/FID Reading (ppm): Sampler BZ	PID/FID Reading (ppm): Borehole**	PID/FID Reading (ppm): Driller BZ**
	1					brn	fine sand, silty		↑	2.0			
	2					brn	fine sand, silty			2.0			
	3					brn	fine sand, silty			2.0			
	4					brn	fine sand, silty			1.9			
	5					dk brn	fine sand, silty		no odor	32.5			

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: take sample SB07-05 @ 1255

Drilling Area Background (ppm): ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: Bldg 502
PROJECT NUMBER: 112G00378
DRILLING COMPANY: TtNUS
DRILLING RIG: hand auger

BORING No.: ~~SB05~~ SB08 (KW)
DATE: 11-21-0
GEOLOGIST: KW
DRILLER: WH

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	1					dk brn	Fine sand, silty			2.2			
	2					brn	fine sand, silty			2.0			
	3					brn	fine sand, silty			2.0			
	4					brn	fine sand, silty			2.0			
	5					dk brn	fine sand, silty			11.8			

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: _____

Drilling Area Background (ppm): ____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: Bldg 502
PROJECT NUMBER: 112G03378
DRILLING COMPANY: TtNUS
DRILLING RIG: hand auger

BORING No.: SB09
DATE: 11/21/06
GEOLOGIST: KW
DRILLER: WH

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	1					brn	fine sand, silty			1.6			
	2					brn	fine sand, silty			1.4			
	3					dk brn	fine sand, silty			24.1			
	4					lt. brn	fine sand			13.4			
	5					Comp brn	fine sand, silty			3.5			

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: Collect SB09-03 @ 1344

Drilling Area Background (ppm): ____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: Bldg 502
PROJECT NUMBER: 112G00378
DRILLING COMPANY: T+NUS
DRILLING RIG: hand auger

BORING No.: SB10
DATE: 11/21/06
GEOLOGIST: KW
DRILLER: WH

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	1				lt	brn	fine sand, silty			2.1			
	2				lt	brn	fine sand, silty			1.7			
	3				lt	brn	fine sand, silty			1.4			
	4				lt	brn	fine sand, silty			1.1			
	5				dk	brn	fine sand, silty			15.7			

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: Collect SB10-05@ 1403

Drilling Area Background (ppm): ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Bldg 502 - CTO 0125
Project No.: 112G00378

Sample ID No.: CEF-502-85-0
Sample Location: MW-85
Sampled By: KW
C.O.C. No.: 8426

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

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

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 11/21/06							X	
Time: 0933								
Method: peristaltic	clear	5.16	350	26.09	9.1	0.61		

PURGE DATA:

Date: 11/21/06	
Method: peristaltic	
Monitor Reading (ppm): NA	
Well Casing Diameter & Material Type: 2 in - PVC	
Total Well Depth (TD): 13.49	
Static Water Level (WL): 9.56	
One Casing Volume(gal/L): 0.628 gal	
Start Purge (hrs): 0848	
End Purge (hrs): 0933	
Total Purge Time (min): 45	
Total Vol. Purged (gal/L): 7.134 - 13.50 L	

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
	~~H2SO4~~		
TPH	~~None~~	(2) 1 L amber	KW
SW 846 8310	~~H2SO4~~, None	(1) 1 L amber	
SW 846 8260B	HCl	+ 3 - 40 ml	

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
	~~GW~~ CEF-502-GW-Dup-01

Signature(s): Kara J Wendel

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Cecil Field - CTO 25
PROJECT NUMBER: Building 502

WELL ID.: CEF-502-85-01
DATE: 11/21/06

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0927	8.56	300	5.16	358	5.8	0.69	26.00	245.8		
0930	8.56	300	5.15	352	7.6	0.62	26.00	249.7		
0933	8.56	300	5.14	350	9.1	0.61	26.09	248.4		

SIGNATURE(S): Kara L. Wensley

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Bldg 502 - CTO 025
Project No.: 112G00378

Sample ID No.: CEF-502-MW-7D-0
Sample Location: MW7D
Sampled By: KW
C.O.C. No.: 2486

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

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

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 11/20/06								
Time: 1544								
Method: grab	clear	5.71	229	24.15	5.4	0.15	X	

PURGE DATA:

Date: 11/20/06
Method: peristaltic
Monitor Reading (ppm): NA
Well Casing Diameter & Material Type: 2 in PVC
Total Well Depth (TD): 30.11
Static Water Level (WL): 9.59
One Casing Volume(gal/L): 3.1
Start Purge (hrs): 1335
End Purge (hrs): 1541
Total Purge Time (min): 67
Total Vol. Purged (gal/L): 23.45 L

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
	None		
SW846-8310	H_2SO_4 KW	1L Amber (1)	KW
SW846-8260B	HCl	3-40ml	KW
FL-PRO	NAxw	1L Amber (2)	KW
	H_2SO_4		

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Kara J. Wunderly

9.5

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Cecil Field - CTO 25
PROJECT NUMBER: Building 502

WELL ID.: CEF-~~7D~~-502-7D
DATE: 11/20/06

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	~~Salinity~~ % or ppt	Comments
1533	10.58	~~25~~ 350	5.72	228	9.1	0.16	24.26	-129.3		
1537	10.59	350	5.72	230	4.1	0.17	24.21	-133.7		
1541	10.58	350	5.71	229	5.4	0.15	24.15	-137.9		

SIGNATURE(S): Kara D. Wrinkle

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Bldg 502 - CT0025
Project No.: 112G00378

Sample ID No.: CEF-502-35-01
Sample Location: MW-35
Sampled By: KW
C.O.C. No.: 2486

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

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

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 11/20/06								
Time: 1640								
Method: grab	clear	5.63	1886	24.36	12	0.41	X	

PURGE DATA:

Date: 11/20/06
Method: peristaltic
Monitor Reading (ppm): NA
Well Casing Diameter & Material Type: 2in PVC
Total Well Depth (TD): 13.18
Static Water Level (WL): 8.46
One Casing Volume(gal/L): 0.755gal
Start Purge (hrs): 1540
End Purge (hrs): 1640 KW
Total Purge Time (min):
Total Vol. Purged (gal/L): 5gal

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
	None		
SW846 8310	~~H_2SO_4~~	2 1L-Amber (1)	KW
SW 846 8260B	HCl	3-40ml	KW
HL-PRO	~~None~~ H_2SO_4	1L-Amber (1)	KW

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Kara J. Wendt

8.46 - 13.18   4.72

.7552 gal
2.656 gal
8.56 L

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Cecil Field - CTO 25
PROJECT NUMBER: Building 502

WELL ID.: CEF-502-35-01
DATE: 11/20

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	~~Salinity % or ppt~~	Comments
1627	8.87	750	5.62	183	14	0.63	26.59	-55.5		
1637	8.87	600	5.63	188	13	0.41	26.42	-63.1		
1640	8.87	600	5.63	186	12	0.41	26.36	-63.2		going to sample b/c I have purged over 5 well volumes (~4.5 gal)

SIGNATURE(S): [signature]

PAGE 1 OF 1

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Bldg 502 - CTO 025
Project No.: ~~4200~~ 112G00378

Sample ID No.: CEF-502-GS-W
Sample Location:
Sampled By: KW
C.O.C. No.: 1286

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

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

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	~~Salinity~~ (%)	Other
Date: 11/20/06								
Time: 1500								
Method: peristaltic	clear	6.24	318	25.77	3.4	0.38		

PURGE DATA:

Date: 11/20/06	
Method: peristaltic	
Monitor Reading (ppm): NA	
Well Casing Diameter & Material Type: 2-inch PVC	
Total Well Depth (TD): 15	
Static Water Level (WL): 9.44	
One Casing Volume(gal/L):	
Start Purge (hrs): 1335	
End Purge (hrs): 1500	
Total Purge Time (min): 95	
Total Vol. Purged (gal/L): 5gal	

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
SW 846 8310	H_2SO_4	1 Liter	KW
SW 846 8260B	HCl	3-40 vial	
F-1 Pco	None	1 Liter	V

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Kara J Wendt

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Cecil Field - CTO 25
PROJECT NUMBER: Building 502
WELL ID.: 502-65-01
DATE: 11/20/06

0.2 10% <30 0.2

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1453	9.80	500	6.21	322	4.2	4.30	25.63	-153.6		
		TW	~~6.24~~	~~328~~		0.34	~~25.78~~ TW	~~-169.2~~	TW	
1457	9.90	500	6.24	328	3.7	0.41	25.78	-169.2		
1500	9.95	500	6.24	318	3.4	0.38	25.77	-172.9		

SIGNATURE(S): Karen J Wimbish

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: CTO 025 - Bldg 502
Project No.: 112G00378

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: CEF-502-1SR01
Sample Location: MW-1SR
Sampled By: KW
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 11/21/06								
Time: 1042								
Method: Peristaltic	clear	5.71	3.74	24.24	17	0.24	X	

PURGE DATA:

Date: 11/21/06
Method: peristaltic
Monitor Reading (ppm): NA
Well Casing Diameter & Material Type: 2 in PVC
Total Well Depth (TD): 12.40
Static Water Level (WL): 9.46
One Casing Volume(gal/L): 0.470 gal
Start Purge (hrs): 0848
End Purge (hrs): 1050
Total Purge Time (min): 120
Total Vol. Purged (gal/L): 5 gal

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
	H_2SO_4		
FL-PRO	~~Hexane~~ HCl	1 L amber (2)	KW
SW846-8310	~~NaOH~~ NaOH	1 L amber (1)	↓
SW846-8260B	HCl	3-40 ml	↓

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Yaw J Wunsch

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Cecil Field - CTO 25
PROJECT NUMBER: Building 502
WELL ID.: CEF-502-1SR-01
DATE: 11/21/06

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	~~Salinity % or ppt~~	Comments
10:35	9.96	100	5.72	370	17	~~3.7~~	23.98	-55.7		
~~10:39~~	~~9.96~~	~~100~~	~~5.71~~	~~361~~		0.32				
1039	9.96	100	5.71	361	40	0.27	24.21	-66.9		
1042	9.96	100	5.71	374	17	0.24	24.24	-72.6		

JW

SIGNATURE(S): [signature]

PAGE 1 **OF** 1

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 2487 | PAGE 2 OF 2

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112G00378	Bldg 502	Dave Siefken	904-636-6125	ENCO

SAMPLERS (SIGNATURE)	FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
Hana Fanimble (signature)	Terry Cottenoir	904-636-6125	
	CARRIER/WAYBILL NUMBER: hand-delivered		CITY, STATE: Jacksonville, FL

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

									TYPE OF ANALYSIS								
								CONTAINER TYPE PLASTIC (P) or GLASS (G)	G	G	G	G					
								PRESERVATIVE USED	None	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	SW846-8310	FL-PRO	FL-PRO	SW846-8260B					COMMENTS
11/21	0855	CEF-502-SB02-05				SO	G	1	1	1							
11/21	1045	CEF-502-SB04-05				SO	G	1	1	1							
11/21	1055	CEF-502-SB06-05				SO	G	1	1	1							
11/21	0840	CEF-502-SB02-03				SO	G	1	1	1							
11/21	1513	CEF-502-FB01				GW	G	6	1		2	3					
11/21	1145	CEF-502-4S-01				GW	G	4	1		1	2					low recharge

1. RELINQUISHED BY	DATE	TIME	1. RECEIVED BY	DATE	TIME
(signature)	11-21-06	1620	J Heyman	11/21/06	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

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 2486 | PAGE 1 OF 2

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112G00378	Building 502	Dave Sietken	904-636-6125	ENCO
SAMPLERS (SIGNATURE)		**FIELD OPERATIONS LEADER**	**PHONE NUMBER**	**ADDRESS**
Kara J Wimble		Terry Cottenoir	904-636-6125	
		CARRIER/WAYBILL NUMBER		**CITY, STATE**
		Hand-delivered		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	CONTAINER TYPE PLASTIC (P) or GLASS (G)									PRESERVATIVE USED									TYPE OF ANALYSIS									COMMENTS
									G	G	G	G						None	HCl	H_2SO_4	NaOH						SW8240 - 8310	SW 8240 8260B	FL-PRO	FL-PRO						
11/20	1500	CEF-502-GS-01				GW	G	6	1										3	2																
11/20	1544	CEF-502-GTD-01				GW	G	6	1										3	2																
11/20	1640	CEF-502-3S-01				GW	G	6	1										3	2																
11/20	1600	CEF-502-SB05-05				SO	G	1	1												1															
11/20	1550	CEF-502-SB01-05				SO	G	1	1												1															
11/21	0935	CEF-502-8S-01				GW	G	6	1										3	2																
11/21	0955	CEF-502-GW-21P-01				GW	G	6	1										3	2																
11/21	1045	CEF-502-15R-01				GW	G	6	1										3	2																
11/21	1255	CEF-502-SB07-05				SO	G	1	1												1															
11/21	1305	CEF-502-SB08-05				SO	G	1	1												1															
11/21	1344	CEF-502-GW-22M-02				GW	G	1	1												1															
11/21	1412	CEF-502-SB10-05				SO	G	1	1												1															
11/21	1500	CEF-502-GW-23D-01				GW	G	1	1												1															

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	11-21-06	1620	1. RECEIVED BY	11/21/06	1620
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

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4/02R
FORM NO. TtNUS-001

ATTACHMENT D

SOIL LABORATORY ANALYTICAL DATA

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

Thursday, December 7, 2006

Tetra Tech NUS (BR006)

Attn: Mr. Dave Siefken

8640 Philips Highway Suite 16

Jacksonville, FL 32256

RE: Project Number: 112G00378 Building 502, Project Name/Desc: NAS Cecil Field CTO #0025
ENCO Workorder: B610165

Dear Mr. Dave Siefken,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Tuesday, November 21, 2006.

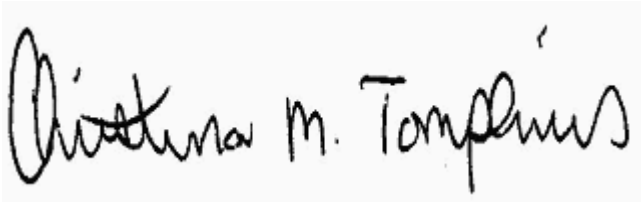
Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

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 31.

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: CEF-502-SB05-05 **Lab ID:** B610165-01

Sampled: 11/20/06 16:00 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8270C	12/04/06	01/07/07	11/28/06 08:59	12/4/2006 17:52
FLPRO	12/04/06	01/07/07	11/28/06 09:01	11/29/2006 14:47

Client ID: CEF-502-SB01-05 **Lab ID:** B610165-02

Sampled: 11/20/06 15:50 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8270C	12/04/06	01/07/07	11/28/06 08:59	12/4/2006 18:10
FLPRO	12/04/06	01/07/07	11/28/06 09:01	11/29/2006 15:09

Client ID: CEF-502-SB07-05 **Lab ID:** B610165-03

Sampled: 11/21/06 12:55 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8270C	12/05/06	01/07/07	11/28/06 08:59	12/4/2006 18:28
FLPRO	12/05/06	01/07/07	11/28/06 09:01	11/29/2006 16:39

Client ID: CEF-502-SB08-05 **Lab ID:** B610165-04

Sampled: 11/21/06 13:05 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8270C	12/05/06	01/07/07	11/28/06 08:59	12/4/2006 18:45
FLPRO	12/05/06	01/07/07	11/28/06 09:01	11/29/2006 15:32

Client ID: CEF-502-SB09-03 **Lab ID:** B610165-05

Sampled: 11/21/06 13:44 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8270C	12/05/06	01/07/07	11/28/06 08:59	12/4/2006 19:03
FLPRO	12/05/06	01/07/07	11/28/06 09:01	11/29/2006 18:07

Client ID: CEF-502-SB10-05 **Lab ID:** B610165-06

Sampled: 11/21/06 14:03 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8270C	12/05/06	01/07/07	11/28/06 08:59	12/4/2006 19:20
FLPRO	12/05/06	01/07/07	11/28/06 09:01	11/29/2006 15:54

Client ID: CEF-502-SB-DU-01 **Lab ID:** B610165-07

Sampled: 11/21/06 00:00 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8270C	12/05/06	01/07/07	11/28/06 08:59	12/4/2006 19:38
FLPRO	12/05/06	01/07/07	11/28/06 09:01	11/30/2006 11:16

Client ID: CEF-502-SB03-05 **Lab ID:** B610165-08

Sampled: 11/21/06 08:55 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8270C	12/05/06	01/07/07	11/28/06 08:59	12/4/2006 19:55
FLPRO	12/05/06	01/07/07	11/28/06 09:01	11/30/2006 11:39

Client ID: CEF-502-SB04-05 **Lab ID:** B610165-09

Sampled: 11/21/06 10:45 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8270C	12/05/06	01/07/07	11/28/06 08:59	12/4/2006 20:13
FLPRO	12/05/06	01/07/07	11/28/06 09:01	11/30/2006 13:31

Client ID: CEF-502-SB06-05 **Lab ID:** B610165-10

Sampled: 11/21/06 10:55 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8270C	12/05/06	01/07/07	11/28/06 08:59	12/4/2006 20:30
FLPRO	12/05/06	01/07/07	11/28/06 09:01	11/30/2006 10:32

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Client ID: CEF-502-SB02-03 **Lab ID:** B610165-11

Sampled: 11/21/06 08:40 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8270C	12/05/06	01/07/07	11/28/06 08:59	12/4/2006 20:48
FLPRO	12/05/06	01/07/07	11/28/06 09:01	11/30/2006 10:10

SAMPLE DETECTION SUMMARY

Client ID: CEF-502-SB05-05 **Lab ID:** B610165-01

Analyte	Results/Qual	MRL	Units	Method
TPH (C8-C40)	63.4	7.53	mg/kg dry	FLPRO

Client ID: CEF-502-SB07-05 **Lab ID:** B610165-03

Analyte	Results/Qual	MRL	Units	Method
TPH (C8-C40)	804 D	36.4	mg/kg dry	FLPRO

Client ID: CEF-502-SB08-05 **Lab ID:** B610165-04

Analyte	Results/Qual	MRL	Units	Method
TPH (C8-C40)	185	7.95	mg/kg dry	FLPRO

Client ID: CEF-502-SB09-03 **Lab ID:** B610165-05

Analyte	Results/Qual	MRL	Units	Method
Chrysene	0.0220 J	0.0362	mg/kg dry	EPA 8270C
TPH (C8-C40)	3580 D	145	mg/kg dry	FLPRO

Client ID: CEF-502-SB10-05 **Lab ID:** B610165-06

Analyte	Results/Qual	MRL	Units	Method
TPH (C8-C40)	434	7.88	mg/kg dry	FLPRO

Client ID: CEF-502-SB-DU-01 **Lab ID:** B610165-07

Analyte	Results/Qual	MRL	Units	Method
TPH (C8-C40)	299	7.06	mg/kg dry	FLPRO

Client ID: CEF-502-SB03-05 **Lab ID:** B610165-08

Analyte	Results/Qual	MRL	Units	Method
TPH (C8-C40)	70.6	8.31	mg/kg dry	FLPRO

Client ID: CEF-502-SB04-05 **Lab ID:** B610165-09

Analyte	Results/Qual	MRL	Units	Method
TPH (C8-C40)	161	7.32	mg/kg dry	FLPRO

Client ID: CEF-502-SB06-05 **Lab ID:** B610165-10

Analyte	Results/Qual	MRL	Units	Method
TPH (C8-C40)	378	7.07	mg/kg dry	FLPRO

Client ID: CEF-502-SB02-03 **Lab ID:** B610165-11

Analyte	Results/Qual	MRL	Units	Method
TPH (C8-C40)	15.3	7.16	mg/kg dry	FLPRO

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB05-05	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-01	Work Order #:	B610165
Prep. Method:	EPA 3545_MS	Matrix:	Soil
Analyzed:	12/04/06 By: jj	Unit:	mg/kg dry
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00073	Percent Solids:	87.69
QC Batch:	6K28006		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0121 U	0.0121	0.0376	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0113 U	0.0113	0.0376	mg/kg dry
Acenaphthene	83-32-9	0.00828 U	0.00828	0.0376	mg/kg dry
Acenaphthylene	208-96-8	0.0121 U	0.0121	0.0376	mg/kg dry
Anthracene	120-12-7	0.00787 U	0.00787	0.0376	mg/kg dry
Benzo(a)anthracene	56-55-3	0.00787 U	0.00787	0.0376	mg/kg dry
Benzo(a)pyrene	50-32-8	0.00787 U	0.00787	0.0376	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.00608 U	0.00608	0.0376	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0116 U	0.0116	0.0376	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.00787 U	0.00787	0.0376	mg/kg dry
Chrysene	218-01-9	0.00832 U	0.00832	0.0376	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0128 U	0.0128	0.0376	mg/kg dry
Fluoranthene	206-44-0	0.0101 U	0.0101	0.0376	mg/kg dry
Fluorene	86-73-7	0.00718 U	0.00718	0.0376	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.0132 U	0.0132	0.0376	mg/kg dry
Naphthalene	91-20-3	0.0139 U	0.0139	0.0376	mg/kg dry
Phenanthrene	85-01-8	0.00787 U	0.00787	0.0376	mg/kg dry
Pyrene	129-00-0	0.0101 U	0.0101	0.0376	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	1.27	1.90	67 %	34-180

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB05-05	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-01	Work Order #:	B610165
Prep. Method:	EPA 3545	Matrix:	Soil
Analyzed:	11/29/06 By: PL	Unit:	mg/kg dry
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:		Percent Solids:	87.69
QC Batch:	6K28007		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	**63.4**	6.39	7.53	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	4.83	3.80	127 %	29-145
o-Terphenyl	84-15-1	2.12	1.90	112 %	36-140

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB01-05	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-02	Work Order #:	B610165
Prep. Method:	EPA 3545_MS	Matrix:	Soil
Analyzed:	12/04/06 By: jj	Unit:	mg/kg dry
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00073	Percent Solids:	84.33
QC Batch:	6K28006		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0126 U	0.0126	0.0391	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0117 U	0.0117	0.0391	mg/kg dry
Acenaphthene	83-32-9	0.00861 U	0.00861	0.0391	mg/kg dry
Acenaphthylene	208-96-8	0.0126 U	0.0126	0.0391	mg/kg dry
Anthracene	120-12-7	0.00818 U	0.00818	0.0391	mg/kg dry
Benzo(a)anthracene	56-55-3	0.00818 U	0.00818	0.0391	mg/kg dry
Benzo(a)pyrene	50-32-8	0.00818 U	0.00818	0.0391	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.00632 U	0.00632	0.0391	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0121 U	0.0121	0.0391	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.00818 U	0.00818	0.0391	mg/kg dry
Chrysene	218-01-9	0.00866 U	0.00866	0.0391	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0133 U	0.0133	0.0391	mg/kg dry
Fluoranthene	206-44-0	0.0106 U	0.0106	0.0391	mg/kg dry
Fluorene	86-73-7	0.00747 U	0.00747	0.0391	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.0138 U	0.0138	0.0391	mg/kg dry
Naphthalene	91-20-3	0.0145 U	0.0145	0.0391	mg/kg dry
Phenanthrene	85-01-8	0.00818 U	0.00818	0.0391	mg/kg dry
Pyrene	129-00-0	0.0106 U	0.0106	0.0391	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	1.12	1.98	57 %	34-180

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB01-05	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-02	Work Order #:	B610165
Prep. Method:	EPA 3545	Matrix:	Soil
Analyzed:	11/29/06 By: PL	Unit:	mg/kg dry
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:		Percent Solids:	84.33
QC Batch:	6K28007		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	6.64 U	6.64	7.83	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	4.35	3.95	110 %	29-145
o-Terphenyl	84-15-1	1.94	1.98	98 %	36-140

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB07-05	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-03	Work Order #:	B610165
Prep. Method:	EPA 3545_MS	Matrix:	Soil
Analyzed:	12/04/06 By: jj	Unit:	mg/kg dry
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00073	Percent Solids:	90.61
QC Batch:	6K28006		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0117 U	0.0117	0.0364	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0109 U	0.0109	0.0364	mg/kg dry
Acenaphthene	83-32-9	0.00801 U	0.00801	0.0364	mg/kg dry
Acenaphthylene	208-96-8	0.0117 U	0.0117	0.0364	mg/kg dry
Anthracene	120-12-7	0.00762 U	0.00762	0.0364	mg/kg dry
Benzo(a)anthracene	56-55-3	0.00762 U	0.00762	0.0364	mg/kg dry
Benzo(a)pyrene	50-32-8	0.00762 U	0.00762	0.0364	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.00588 U	0.00588	0.0364	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0113 U	0.0113	0.0364	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.00762 U	0.00762	0.0364	mg/kg dry
Chrysene	218-01-9	0.00806 U	0.00806	0.0364	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0124 U	0.0124	0.0364	mg/kg dry
Fluoranthene	206-44-0	0.00982 U	0.00982	0.0364	mg/kg dry
Fluorene	86-73-7	0.00695 U	0.00695	0.0364	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.0128 U	0.0128	0.0364	mg/kg dry
Naphthalene	91-20-3	0.0135 U	0.0135	0.0364	mg/kg dry
Phenanthrene	85-01-8	0.00762 U	0.00762	0.0364	mg/kg dry
Pyrene	129-00-0	0.00982 U	0.00982	0.0364	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	1.94	1.84	105 %	34-180

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB07-05	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-03	Work Order #:	B610165
Prep. Method:	EPA 3545	Matrix:	Soil
Analyzed:	11/29/06 By: PL	Unit:	mg/kg dry
Anal. Method:	FLPRO	Dilution Factor:	5
Anal. Batch:		Percent Solids:	90.61
QC Batch:	6K28007		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	**804** D	30.9	36.4	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	3.88	3.68	106 %	29-145
o-Terphenyl	84-15-1	2.12	1.84	115 %	36-140

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB08-05	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-04	Work Order #:	B610165
Prep. Method:	EPA 3545_MS	Matrix:	Soil
Analyzed:	12/04/06 By: jj	Unit:	mg/kg dry
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00073	Percent Solids:	82.97
QC Batch:	6K28006		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0128 U	0.0128	0.0398	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0119 U	0.0119	0.0398	mg/kg dry
Acenaphthene	83-32-9	0.00875 U	0.00875	0.0398	mg/kg dry
Acenaphthylene	208-96-8	0.0128 U	0.0128	0.0398	mg/kg dry
Anthracene	120-12-7	0.00832 U	0.00832	0.0398	mg/kg dry
Benzo(a)anthracene	56-55-3	0.00832 U	0.00832	0.0398	mg/kg dry
Benzo(a)pyrene	50-32-8	0.00832 U	0.00832	0.0398	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.00642 U	0.00642	0.0398	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0123 U	0.0123	0.0398	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.00832 U	0.00832	0.0398	mg/kg dry
Chrysene	218-01-9	0.00880 U	0.00880	0.0398	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0135 U	0.0135	0.0398	mg/kg dry
Fluoranthene	206-44-0	0.0107 U	0.0107	0.0398	mg/kg dry
Fluorene	86-73-7	0.00759 U	0.00759	0.0398	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.0140 U	0.0140	0.0398	mg/kg dry
Naphthalene	91-20-3	0.0147 U	0.0147	0.0398	mg/kg dry
Phenanthrene	85-01-8	0.00832 U	0.00832	0.0398	mg/kg dry
Pyrene	129-00-0	0.0107 U	0.0107	0.0398	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	1.11	2.01	55 %	34-180

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB08-05	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-04	Work Order #:	B610165
Prep. Method:	EPA 3545	Matrix:	Soil
Analyzed:	11/29/06 By: PL	Unit:	mg/kg dry
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:		Percent Solids:	82.97
QC Batch:	6K28007		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	**185**	6.75	7.95	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	4.11	4.02	102 %	29-145
o-Terphenyl	84-15-1	1.95	2.01	97 %	36-140

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB09-03	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-05	Work Order #:	B610165
Prep. Method:	EPA 3545_MS	Matrix:	Soil
Analyzed:	12/04/06 By: jj	Unit:	mg/kg dry
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00073	Percent Solids:	91.05
QC Batch:	6K28006		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0116 U	0.0116	0.0362	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0109 U	0.0109	0.0362	mg/kg dry
Acenaphthene	83-32-9	0.00797 U	0.00797	0.0362	mg/kg dry
Acenaphthylene	208-96-8	0.0116 U	0.0116	0.0362	mg/kg dry
Anthracene	120-12-7	0.00758 U	0.00758	0.0362	mg/kg dry
Benzo(a)anthracene	56-55-3	0.00758 U	0.00758	0.0362	mg/kg dry
Benzo(a)pyrene	50-32-8	0.00758 U	0.00758	0.0362	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.00585 U	0.00585	0.0362	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0112 U	0.0112	0.0362	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.00758 U	0.00758	0.0362	mg/kg dry
Chrysene	218-01-9	**0.0220 J**	0.00802	0.0362	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0123 U	0.0123	0.0362	mg/kg dry
Fluoranthene	206-44-0	0.00977 U	0.00977	0.0362	mg/kg dry
Fluorene	86-73-7	0.00692 U	0.00692	0.0362	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.0127 U	0.0127	0.0362	mg/kg dry
Naphthalene	91-20-3	0.0134 U	0.0134	0.0362	mg/kg dry
Phenanthrene	85-01-8	0.00758 U	0.00758	0.0362	mg/kg dry
Pyrene	129-00-0	0.00977 U	0.00977	0.0362	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	1.73	1.83	94 %	34-180

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB09-03	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-05	Work Order #:	B610165
Prep. Method:	EPA 3545	Matrix:	Soil
Analyzed:	11/29/06 By: PL	Unit:	mg/kg dry
Anal. Method:	FLPRO	Dilution Factor:	20
Anal. Batch:		Percent Solids:	91.05
QC Batch:	6K28007		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	**3580** D	123	145	mg/kg dry

Surrogate Recovery		Result		Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	4.03		3.66	110 %	29-145
o-Terphenyl	84-15-1	2.64	S-GC	1.83	144 %	36-140

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB10-05	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-06	Work Order #:	B610165
Prep. Method:	EPA 3545_MS	Matrix:	Soil
Analyzed:	12/04/06 By: jj	Unit:	mg/kg dry
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00073	Percent Solids:	83.71
QC Batch:	6K28006		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0127 U	0.0127	0.0394	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0118 U	0.0118	0.0394	mg/kg dry
Acenaphthene	83-32-9	0.00867 U	0.00867	0.0394	mg/kg dry
Acenaphthylene	208-96-8	0.0127 U	0.0127	0.0394	mg/kg dry
Anthracene	120-12-7	0.00824 U	0.00824	0.0394	mg/kg dry
Benzo(a)anthracene	56-55-3	0.00824 U	0.00824	0.0394	mg/kg dry
Benzo(a)pyrene	50-32-8	0.00824 U	0.00824	0.0394	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.00636 U	0.00636	0.0394	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0122 U	0.0122	0.0394	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.00824 U	0.00824	0.0394	mg/kg dry
Chrysene	218-01-9	0.00872 U	0.00872	0.0394	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0134 U	0.0134	0.0394	mg/kg dry
Fluoranthene	206-44-0	0.0106 U	0.0106	0.0394	mg/kg dry
Fluorene	86-73-7	0.00753 U	0.00753	0.0394	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.0139 U	0.0139	0.0394	mg/kg dry
Naphthalene	91-20-3	0.0146 U	0.0146	0.0394	mg/kg dry
Phenanthrene	85-01-8	0.00824 U	0.00824	0.0394	mg/kg dry
Pyrene	129-00-0	0.0106 U	0.0106	0.0394	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	1.46	1.99	73 %	34-180

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB10-05	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-06	Work Order #:	B610165
Prep. Method:	EPA 3545	Matrix:	Soil
Analyzed:	11/29/06 By: PL	Unit:	mg/kg dry
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:		Percent Solids:	83.71
QC Batch:	6K28007		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	**434**	6.69	7.88	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	4.33	3.98	109 %	29-145
o-Terphenyl	84-15-1	1.92	1.99	96 %	36-140

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB-DU-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-07	Work Order #:	B610165
Prep. Method:	EPA 3545_MS	Matrix:	Soil
Analyzed:	12/04/06 By: jj	Unit:	mg/kg dry
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00073	Percent Solids:	93.47
QC Batch:	6K28006		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0113 U	0.0113	0.0353	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0106 U	0.0106	0.0353	mg/kg dry
Acenaphthene	83-32-9	0.00777 U	0.00777	0.0353	mg/kg dry
Acenaphthylene	208-96-8	0.0113 U	0.0113	0.0353	mg/kg dry
Anthracene	120-12-7	0.00738 U	0.00738	0.0353	mg/kg dry
Benzo(a)anthracene	56-55-3	0.00738 U	0.00738	0.0353	mg/kg dry
Benzo(a)pyrene	50-32-8	0.00738 U	0.00738	0.0353	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.00570 U	0.00570	0.0353	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0109 U	0.0109	0.0353	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.00738 U	0.00738	0.0353	mg/kg dry
Chrysene	218-01-9	0.00781 U	0.00781	0.0353	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0120 U	0.0120	0.0353	mg/kg dry
Fluoranthene	206-44-0	0.00952 U	0.00952	0.0353	mg/kg dry
Fluorene	86-73-7	0.00674 U	0.00674	0.0353	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.0124 U	0.0124	0.0353	mg/kg dry
Naphthalene	91-20-3	0.0131 U	0.0131	0.0353	mg/kg dry
Phenanthrene	85-01-8	0.00738 U	0.00738	0.0353	mg/kg dry
Pyrene	129-00-0	0.00952 U	0.00952	0.0353	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	2.09	1.78	117 %	34-180

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB-DU-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-07	Work Order #:	B610165
Prep. Method:	EPA 3545	Matrix:	Soil
Analyzed:	11/30/06 By: PL	Unit:	mg/kg dry
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:		Percent Solids:	93.47
QC Batch:	6K28007		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	**299**	5.99	7.06	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	4.06	3.57	114 %	29-145
o-Terphenyl	84-15-1	1.95	1.78	110 %	36-140

ANALYTICAL REPORT

Sample ID:	CEF-502-SB03-05	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-08	Work Order #:	B610165
Prep. Method:	EPA 3545_MS	Matrix:	Soil
Analyzed:	12/04/06 By: jj	Unit:	mg/kg dry
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00073	Percent Solids:	79.46
QC Batch:	6K28006		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0133 U	0.0133	0.0415	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0125 U	0.0125	0.0415	mg/kg dry
Acenaphthene	83-32-9	0.00914 U	0.00914	0.0415	mg/kg dry
Acenaphthylene	208-96-8	0.0133 U	0.0133	0.0415	mg/kg dry
Anthracene	120-12-7	0.00868 U	0.00868	0.0415	mg/kg dry
Benzo(a)anthracene	56-55-3	0.00868 U	0.00868	0.0415	mg/kg dry
Benzo(a)pyrene	50-32-8	0.00868 U	0.00868	0.0415	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.00671 U	0.00671	0.0415	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0128 U	0.0128	0.0415	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.00868 U	0.00868	0.0415	mg/kg dry
Chrysene	218-01-9	0.00919 U	0.00919	0.0415	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0141 U	0.0141	0.0415	mg/kg dry
Fluoranthene	206-44-0	0.0112 U	0.0112	0.0415	mg/kg dry
Fluorene	86-73-7	0.00793 U	0.00793	0.0415	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.0146 U	0.0146	0.0415	mg/kg dry
Naphthalene	91-20-3	0.0154 U	0.0154	0.0415	mg/kg dry
Phenanthrene	85-01-8	0.00868 U	0.00868	0.0415	mg/kg dry
Pyrene	129-00-0	0.0112 U	0.0112	0.0415	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	1.31	2.10	63 %	34-180

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB03-05	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-08	Work Order #:	B610165
Prep. Method:	EPA 3545	Matrix:	Soil
Analyzed:	11/30/06 By: PL	Unit:	mg/kg dry
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:		Percent Solids:	79.46
QC Batch:	6K28007		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	**70.6**	7.05	8.31	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	4.80	4.20	114 %	29-145
o-Terphenyl	84-15-1	2.19	2.10	105 %	36-140

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB04-05	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-09	Work Order #:	B610165
Prep. Method:	EPA 3545_MS	Matrix:	Soil
Analyzed:	12/04/06 By: jj	Unit:	mg/kg dry
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00073	Percent Solids:	90.14
QC Batch:	6K28006		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0118 U	0.0118	0.0366	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0110 U	0.0110	0.0366	mg/kg dry
Acenaphthene	83-32-9	0.00805 U	0.00805	0.0366	mg/kg dry
Acenaphthylene	208-96-8	0.0118 U	0.0118	0.0366	mg/kg dry
Anthracene	120-12-7	0.00765 U	0.00765	0.0366	mg/kg dry
Benzo(a)anthracene	56-55-3	0.00765 U	0.00765	0.0366	mg/kg dry
Benzo(a)pyrene	50-32-8	0.00765 U	0.00765	0.0366	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.00591 U	0.00591	0.0366	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0113 U	0.0113	0.0366	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.00765 U	0.00765	0.0366	mg/kg dry
Chrysene	218-01-9	0.00810 U	0.00810	0.0366	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0124 U	0.0124	0.0366	mg/kg dry
Fluoranthene	206-44-0	0.00987 U	0.00987	0.0366	mg/kg dry
Fluorene	86-73-7	0.00699 U	0.00699	0.0366	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.0129 U	0.0129	0.0366	mg/kg dry
Naphthalene	91-20-3	0.0135 U	0.0135	0.0366	mg/kg dry
Phenanthrene	85-01-8	0.00765 U	0.00765	0.0366	mg/kg dry
Pyrene	129-00-0	0.00987 U	0.00987	0.0366	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	2.01	1.85	109 %	34-180

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB04-05	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-09	Work Order #:	B610165
Prep. Method:	EPA 3545	Matrix:	Soil
Analyzed:	11/30/06 By: PL	Unit:	mg/kg dry
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:		Percent Solids:	90.14
QC Batch:	6K28007		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	**161**	6.21	7.32	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	4.19	3.70	113 %	29-145
o-Terphenyl	84-15-1	1.96	1.85	106 %	36-140

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB06-05	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-10	Work Order #:	B610165
Prep. Method:	EPA 3545_MS	Matrix:	Soil
Analyzed:	12/04/06 By: jj	Unit:	mg/kg dry
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00073	Percent Solids:	93.41
QC Batch:	6K28006		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0113 U	0.0113	0.0353	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0106 U	0.0106	0.0353	mg/kg dry
Acenaphthene	83-32-9	0.00777 U	0.00777	0.0353	mg/kg dry
Acenaphthylene	208-96-8	0.0113 U	0.0113	0.0353	mg/kg dry
Anthracene	120-12-7	0.00739 U	0.00739	0.0353	mg/kg dry
Benzo(a)anthracene	56-55-3	0.00739 U	0.00739	0.0353	mg/kg dry
Benzo(a)pyrene	50-32-8	0.00739 U	0.00739	0.0353	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.00570 U	0.00570	0.0353	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0109 U	0.0109	0.0353	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.00739 U	0.00739	0.0353	mg/kg dry
Chrysene	218-01-9	0.00782 U	0.00782	0.0353	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0120 U	0.0120	0.0353	mg/kg dry
Fluoranthene	206-44-0	0.00953 U	0.00953	0.0353	mg/kg dry
Fluorene	86-73-7	0.00674 U	0.00674	0.0353	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.0124 U	0.0124	0.0353	mg/kg dry
Naphthalene	91-20-3	0.0131 U	0.0131	0.0353	mg/kg dry
Phenanthrene	85-01-8	0.00739 U	0.00739	0.0353	mg/kg dry
Pyrene	129-00-0	0.00953 U	0.00953	0.0353	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	2.26	1.78	126 %	34-180

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB06-05	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-10	Work Order #:	B610165
Prep. Method:	EPA 3545	Matrix:	Soil
Analyzed:	11/30/06 By: PL	Unit:	mg/kg dry
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:		Percent Solids:	93.41
QC Batch:	6K28007		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	**378**	6.00	7.07	mg/kg dry

Surrogate Recovery		Result		Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	4.06		3.57	114 %	29-145
o-Terphenyl	84-15-1	2.93	S-GC	1.78	164 %	36-140

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB02-03	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-11	Work Order #:	B610165
Prep. Method:	EPA 3545_MS	Matrix:	Soil
Analyzed:	12/04/06 By: jj	Unit:	mg/kg dry
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00073	Percent Solids:	92.12
QC Batch:	6K28006		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	0.0115 U	0.0115	0.0358	mg/kg dry
2-Methylnaphthalene	91-57-6	0.0107 U	0.0107	0.0358	mg/kg dry
Acenaphthene	83-32-9	0.00788 U	0.00788	0.0358	mg/kg dry
Acenaphthylene	208-96-8	0.0115 U	0.0115	0.0358	mg/kg dry
Anthracene	120-12-7	0.00749 U	0.00749	0.0358	mg/kg dry
Benzo(a)anthracene	56-55-3	0.00749 U	0.00749	0.0358	mg/kg dry
Benzo(a)pyrene	50-32-8	0.00749 U	0.00749	0.0358	mg/kg dry
Benzo(b)fluoranthene	205-99-2	0.00578 U	0.00578	0.0358	mg/kg dry
Benzo(g,h,i)perylene	191-24-2	0.0111 U	0.0111	0.0358	mg/kg dry
Benzo(k)fluoranthene	207-08-9	0.00749 U	0.00749	0.0358	mg/kg dry
Chrysene	218-01-9	0.00792 U	0.00792	0.0358	mg/kg dry
Dibenzo(a,h)anthracene	53-70-3	0.0122 U	0.0122	0.0358	mg/kg dry
Fluoranthene	206-44-0	0.00966 U	0.00966	0.0358	mg/kg dry
Fluorene	86-73-7	0.00684 U	0.00684	0.0358	mg/kg dry
Indeno(1,2,3-cd)pyrene	193-39-5	0.0126 U	0.0126	0.0358	mg/kg dry
Naphthalene	91-20-3	0.0132 U	0.0132	0.0358	mg/kg dry
Phenanthrene	85-01-8	0.00749 U	0.00749	0.0358	mg/kg dry
Pyrene	129-00-0	0.00966 U	0.00966	0.0358	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
p-Terphenyl	92-94-4	1.88	1.81	104 %	34-180

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ANALYTICAL REPORT

Sample ID:	CEF-502-SB02-03	Project:	NAS Cecil Field CTO #0025
Lab #:	B610165-11	Work Order #:	B610165
Prep. Method:	EPA 3545	Matrix:	Soil
Analyzed:	11/30/06 By: PL	Unit:	mg/kg dry
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:		Percent Solids:	92.12
QC Batch:	6K28007		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	**15.3**	6.08	7.16	mg/kg dry

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	3.00	3.62	83 %	29-145
o-Terphenyl	84-15-1	1.57	1.81	87 %	36-140

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 6K28006 - EPA 3545_MS										
Blank (6K28006-BLK1)				Prepared: 11/28/2006 08:59 Analyzed: 12/04/2006 16:42						
Benzo(a)anthracene	0.00690 U	0.0330	mg/kg wet							
Benzo(b)fluoranthene	0.00533 U	0.0330	mg/kg wet							
Benzo(k)fluoranthene	0.00690 U	0.0330	mg/kg wet							
Benzo(g,h,i)perylene	0.0102 U	0.0330	mg/kg wet							
Benzo(a)pyrene	0.00690 U	0.0330	mg/kg wet							
Dibenzo(a,h)anthracene	0.0112 U	0.0330	mg/kg wet							
Indeno(1,2,3-cd)pyrene	0.0116 U	0.0330	mg/kg wet							
Naphthalene	0.0122 U	0.0330	mg/kg wet							
2-Methylnaphthalene	0.00990 U	0.0330	mg/kg wet							
1-Methylnaphthalene	0.0106 U	0.0330	mg/kg wet							
Acenaphthylene	0.0106 U	0.0330	mg/kg wet							
Acenaphthene	0.00726 U	0.0330	mg/kg wet							
Fluorene	0.00630 U	0.0330	mg/kg wet							
Phenanthrene	0.00690 U	0.0330	mg/kg wet							
Anthracene	0.00690 U	0.0330	mg/kg wet							
Fluoranthene	0.00890 U	0.0330	mg/kg wet							
Pyrene	0.00890 U	0.0330	mg/kg wet							
Chrysene	0.00730 U	0.0330	mg/kg wet							
Surrogate: p-Terphenyl	*1.13*		*mg/kg wet*	*1.67*		*68*	*34-180*			
LCS (6K28006-BS1)				Prepared: 11/28/2006 08:59 Analyzed: 12/04/2006 17:00						
Benzo(a)anthracene	0.533	0.0330	mg/kg wet	0.667		80	50-105			
Benzo(b)fluoranthene	0.500	0.0330	mg/kg wet	0.667		75	55-120			
Benzo(k)fluoranthene	0.553	0.0330	mg/kg wet	0.667		83	50-120			
Benzo(g,h,i)perylene	0.473	0.0330	mg/kg wet	0.667		71	55-115			
Benzo(a)pyrene	0.527	0.0330	mg/kg wet	0.667		79	40-125			
Dibenzo(a,h)anthracene	0.593	0.0330	mg/kg wet	0.667		89	45-115			
Indeno(1,2,3-cd)pyrene	0.537	0.0330	mg/kg wet	0.667		80	55-135			
Naphthalene	0.480	0.0330	mg/kg wet	0.667		72	50-104			
2-Methylnaphthalene	0.510	0.0330	mg/kg wet	0.667		76	48-117			
1-Methylnaphthalene	0.503	0.0330	mg/kg wet	0.667		75	43-114			
Acenaphthylene	0.520	0.0330	mg/kg wet	0.667		78	35-115			
Acenaphthene	0.507	0.0330	mg/kg wet	0.667		76	35-110			
Fluorene	0.527	0.0330	mg/kg wet	0.667		79	45-105			
Phenanthrene	0.503	0.0330	mg/kg wet	0.667		75	55-125			
Anthracene	0.523	0.0330	mg/kg wet	0.667		78	40-125			
Fluoranthene	0.587	0.0330	mg/kg wet	0.667		88	40-135			
Pyrene	0.573	0.0330	mg/kg wet	0.667		86	50-115			
Chrysene	0.507	0.0330	mg/kg wet	0.667		76	55-120			
Surrogate: p-Terphenyl	*1.92*		*mg/kg wet*	*1.67*		*115*	*34-180*			
Matrix Spike (6K28006-MS1)		**Source: B610165-01**		Prepared: 11/28/2006 08:59 Analyzed: 12/04/2006 17:17						
Benzo(a)anthracene	0.342	0.0376	mg/kg dry	0.760	0.00787 U	45	52-114			
Benzo(b)fluoranthene	0.312	0.0376	mg/kg dry	0.760	0.00608 U	41	49-116			
Benzo(k)fluoranthene	0.312	0.0376	mg/kg dry	0.760	0.00787 U	41	43-133			
Benzo(g,h,i)perylene	0.247	0.0376	mg/kg dry	0.760	0.0116 U	32	36-115			

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 6K28006 - EPA 3545_MS										
Matrix Spike (6K28006-MS1) Continued		**Source: B610165-01**		Prepared: 11/28/2006 08:59 Analyzed: 12/04/2006 17:17						
Benzo(a)pyrene	0.293	0.0376	mg/kg dry	0.760	0.00787 U	38	50-113			
Dibenzo(a,h)anthracene	0.422	0.0376	mg/kg dry	0.760	0.0128 U	55	41-118			
Indeno(1,2,3-cd)pyrene	0.319	0.0376	mg/kg dry	0.760	0.0132 U	42	43-115			
Naphthalene	0.418	0.0376	mg/kg dry	0.760	0.0139 U	55	50-114			
2-Methylnaphthalene	0.418	0.0376	mg/kg dry	0.760	0.0113 U	55	48-117			
1-Methylnaphthalene	0.411	0.0376	mg/kg dry	0.760	0.0121 U	54	43-114			
Acenaphthylene	0.407	0.0376	mg/kg dry	0.760	0.0121 U	53	47-118			
Acenaphthene	0.388	0.0376	mg/kg dry	0.760	0.00828 U	51	49-117			
Fluorene	0.395	0.0376	mg/kg dry	0.760	0.00718 U	52	47-119			
Phenanthrene	0.376	0.0376	mg/kg dry	0.760	0.00787 U	50	51-113			
Anthracene	0.369	0.0376	mg/kg dry	0.760	0.00787 U	48	49-125			
Fluoranthene	0.403	0.0376	mg/kg dry	0.760	0.0101 U	53	52-132			
Pyrene	0.392	0.0376	mg/kg dry	0.760	0.0101 U	52	52-126			
Chrysene	0.346	0.0376	mg/kg dry	0.760	0.00832 U	46	47-128			
Surrogate: p-Terphenyl		*1.55*	*mg/kg dry*	*1.90*		*82*	*34-180*			
Matrix Spike (6K28006-MS2)		**Source: B610165-01**		Prepared: 11/28/2006 08:59 Analyzed: 12/05/2006 10:54						
Benzo(a)anthracene	0.407	0.0376	mg/kg dry	0.760	0.00787 U	53	52-114			
Benzo(b)fluoranthene	0.373	0.0376	mg/kg dry	0.760	0.00608 U	49	49-116			
Benzo(k)fluoranthene	0.384	0.0376	mg/kg dry	0.760	0.00787 U	50	43-133			
Benzo(g,h,i)perylene	0.308	0.0376	mg/kg dry	0.760	0.0116 U	40	36-115			
Benzo(a)pyrene	0.357	0.0376	mg/kg dry	0.760	0.00787 U	47	50-113			
Dibenzo(a,h)anthracene	0.509	0.0376	mg/kg dry	0.760	0.0128 U	67	41-118			
Indeno(1,2,3-cd)pyrene	0.388	0.0376	mg/kg dry	0.760	0.0132 U	51	43-115			
Naphthalene	0.502	0.0376	mg/kg dry	0.760	0.0139 U	66	50-114			
2-Methylnaphthalene	0.506	0.0376	mg/kg dry	0.760	0.0113 U	66	48-117			
1-Methylnaphthalene	0.494	0.0376	mg/kg dry	0.760	0.0121 U	65	43-114			
Acenaphthylene	0.479	0.0376	mg/kg dry	0.760	0.0121 U	63	47-118			
Acenaphthene	0.460	0.0376	mg/kg dry	0.760	0.00828 U	60	49-117			
Fluorene	0.475	0.0376	mg/kg dry	0.760	0.00718 U	62	47-119			
Phenanthrene	0.449	0.0376	mg/kg dry	0.760	0.00787 U	59	51-113			
Anthracene	0.441	0.0376	mg/kg dry	0.760	0.00787 U	58	49-125			
Fluoranthene	0.487	0.0376	mg/kg dry	0.760	0.0101 U	64	52-132			
Pyrene	0.471	0.0376	mg/kg dry	0.760	0.0101 U	62	52-126			
Chrysene	0.414	0.0376	mg/kg dry	0.760	0.00832 U	54	47-128			
Surrogate: p-Terphenyl		*1.90*	*mg/kg dry*	*1.90*		*100*	*34-180*			
Matrix Spike Dup (6K28006-MSD1)		**Source: B610165-01**		Prepared: 11/28/2006 08:59 Analyzed: 12/04/2006 17:35						
Benzo(a)anthracene	0.258	0.0376	mg/kg dry	0.760	0.00787 U	34	52-114	28	20	
Benzo(b)fluoranthene	0.209	0.0376	mg/kg dry	0.760	0.00608 U	28	49-116	39	23	
Benzo(k)fluoranthene	0.255	0.0376	mg/kg dry	0.760	0.00787 U	34	43-133	20	22	
Benzo(g,h,i)perylene	0.201	0.0376	mg/kg dry	0.760	0.0116 U	26	36-115	20	24	
Benzo(a)pyrene	0.217	0.0376	mg/kg dry	0.760	0.00787 U	28	50-113	30	21	
Dibenzo(a,h)anthracene	0.361	0.0376	mg/kg dry	0.760	0.0128 U	48	41-118	16	21	
Indeno(1,2,3-cd)pyrene	0.258	0.0376	mg/kg dry	0.760	0.0132 U	34	43-115	21	23	
Naphthalene	0.365	0.0376	mg/kg dry	0.760	0.0139 U	48	50-114	14	23	

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 6K28006 - EPA 3545_MS										
Matrix Spike Dup (6K28006-MSD1) Continued		**Source: B610165-01**		Prepared: 11/28/2006 08:59 Analyzed: 12/04/2006 17:35						
2-Methylnaphthalene	0.365	0.0376	mg/kg dry	0.760	0.0113 U	48	48-117	14	20	
1-Methylnaphthalene	0.354	0.0376	mg/kg dry	0.760	0.0121 U	46	43-114	15	23	
Acenaphthylene	0.331	0.0376	mg/kg dry	0.760	0.0121 U	44	47-118	21	23	
Acenaphthene	0.319	0.0376	mg/kg dry	0.760	0.00828 U	42	49-117	19	19	
Fluorene	0.319	0.0376	mg/kg dry	0.760	0.00718 U	42	47-119	21	22	
Phenanthrene	0.293	0.0376	mg/kg dry	0.760	0.00787 U	38	51-113	25	22	
Anthracene	0.281	0.0376	mg/kg dry	0.760	0.00787 U	37	49-125	27	24	
Fluoranthene	0.304	0.0376	mg/kg dry	0.760	0.0101 U	40	52-132	28	20	
Pyrene	0.296	0.0376	mg/kg dry	0.760	0.0101 U	39	52-126	28	25	
Chrysene	0.266	0.0376	mg/kg dry	0.760	0.00832 U	35	47-128	26	23	
Surrogate: p-Terphenyl	*1.33*		*mg/kg dry*	*1.90*		*70*	*34-180*			
Matrix Spike Dup (6K28006-MSD2)		**Source: B610165-01**		Prepared: 11/28/2006 08:59 Analyzed: 12/05/2006 11:11						
Benzo(a)anthracene	0.285	0.0376	mg/kg dry	0.760	0.00787 U	38	52-114	35	20	
Benzo(b)fluoranthene	0.236	0.0376	mg/kg dry	0.760	0.00608 U	31	49-116	45	23	
Benzo(k)fluoranthene	0.289	0.0376	mg/kg dry	0.760	0.00787 U	38	43-133	28	22	
Benzo(g,h,i)perylene	0.228	0.0376	mg/kg dry	0.760	0.0116 U	30	36-115	30	24	
Benzo(a)pyrene	0.247	0.0376	mg/kg dry	0.760	0.00787 U	32	50-113	36	21	
Dibenzo(a,h)anthracene	0.414	0.0376	mg/kg dry	0.760	0.0128 U	54	41-118	21	21	
Indeno(1,2,3-cd)pyrene	0.293	0.0376	mg/kg dry	0.760	0.0132 U	38	43-115	28	23	
Naphthalene	0.411	0.0376	mg/kg dry	0.760	0.0139 U	54	50-114	20	23	
2-Methylnaphthalene	0.407	0.0376	mg/kg dry	0.760	0.0113 U	53	48-117	22	20	
1-Methylnaphthalene	0.388	0.0376	mg/kg dry	0.760	0.0121 U	51	43-114	24	23	
Acenaphthylene	0.365	0.0376	mg/kg dry	0.760	0.0121 U	48	47-118	27	23	
Acenaphthene	0.350	0.0376	mg/kg dry	0.760	0.00828 U	46	49-117	27	19	
Fluorene	0.357	0.0376	mg/kg dry	0.760	0.00718 U	47	47-119	28	22	
Phenanthrene	0.327	0.0376	mg/kg dry	0.760	0.00787 U	43	51-113	31	22	
Anthracene	0.315	0.0376	mg/kg dry	0.760	0.00787 U	42	49-125	33	24	
Fluoranthene	0.346	0.0376	mg/kg dry	0.760	0.0101 U	46	52-132	34	20	
Pyrene	0.338	0.0376	mg/kg dry	0.760	0.0101 U	44	52-126	33	25	
Chrysene	0.300	0.0376	mg/kg dry	0.760	0.00832 U	40	47-128	32	23	
Surrogate: p-Terphenyl	*1.55*		*mg/kg dry*	*1.90*		*81*	*34-180*			
FL Petroleum Range Organics - Quality Control										
Batch 6K28007 - EPA 3545										
Blank (6K28007-BLK1)				Prepared: 11/28/2006 09:01 Analyzed: 11/29/2006 12:35						
TPH (C8-C40)	5.60 U	6.60	mg/kg wet							
LCS (6K28007-BS1)				Prepared: 11/28/2006 09:01 Analyzed: 11/29/2006 12:57						
TPH (C8-C40)	35.9	6.60	mg/kg wet	56.7		63	48-118			
Matrix Spike (6K28007-MS1)		**Source: B610165-01**		Prepared: 11/28/2006 09:01 Analyzed: 11/29/2006 13:20						
TPH (C8-C40)	105	7.53	mg/kg dry	64.6	63.4	65	40-136			
Matrix Spike Dup (6K28007-MSD1)		**Source: B610165-01**		Prepared: 11/28/2006 09:01 Analyzed: 11/29/2006 13:41						
TPH (C8-C40)	116	7.53	mg/kg dry	64.6	63.4	82	40-136	10	25	

NOTES AND DEFINITIONS

D	Data reported from a dilution
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
U	Analyte included in the analysis, but not detected

LABORATORY CERTIFICATION SUMMARY

Analysis	Matrix	Cert ID	Cert Number
8270C PAH SIM	Soil	NELAC	E82277
FLPRO	Soil	NELAC	E82277

B610164 & B610165

TETRA TECH NUS, INC. CHAIN OF CUSTODY NUMBER 2486 PAGE 1 OF 2

PROJECT NO: 112G00378	FACILITY: Building 502	PROJECT MANAGER Dave Sietken	PHONE NUMBER 904-636-6125	LABORATORY NAME AND CONTACT: ENCO
SAMPLERS (SIGNATURE) Kara J. Wimble		FIELD OPERATIONS LEADER Terry Cottenoir	PHONE NUMBER 904-636-6125	ADDRESS
		CARRIER/WAYBILL NUMBER hand-delivered		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	CONTAINER TYPE PLASTIC (P) or GLASS (G)								PRESERVATIVE USED								TYPE OF ANALYSIS								COMMENTS
									G	G	G	G					None	HCL	H_2SO_4	NONE					SW 846-8310	SW 846 8260B	FL-PRO	FL-Key					
11/20	1500	CEF-502-GS-01				GW	G	6	1		3	2													1	1						
11/20	1544	CEF-502-GTD-01				GW	G	6	1		3	2													1	1						
11/20	1640	CEF-502-3S-01				GW	G	6	1		3	2													1	1						
11/20	1600	CEF-502-SB05-05				SO	G	1	1																		1					
11/20	1550	CEF-502-SB01-05				SO	G	1	1																		1					
11/21	0935	CEF-502-85-01				GW	G	6	1		3	2													1	1						
11/21	0955	CEF-502-GW-DUP-01				GW	G	6	1		3	2													1	1						
11/21	1045	CEF-502-15R-01				GW	G	6	1		3	2													1	1						
11/21	1254	CEF-502-SB07-05				SO	G	1	1																		1					
11/21	1305	CEF-502-SB08-05				SO	G	1	1																		1					
11/21	1344	CEF-502-SB09-03				SO	G	1	1																		1					
11/21	1403	CEF-502-SB10-05				SO	G	1	1																		1					
11/21	0000	CEF-502-SB-DUP-01				SO	G	1	1																		1					

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	11-21-06	1620	1. RECEIVED BY	11/21/06	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

B610164 + B610165

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 2487 | PAGE 2 OF 2

PROJECT NO: 112G00378	FACILITY: Bldg 502	PROJECT MANAGER Dave Sieffken	PHONE NUMBER 904-636-6125	LABORATORY NAME AND CONTACT: ENCO
SAMPLERS (SIGNATURE) Kara Fawcett		FIELD OPERATIONS LEADER Terry Cottenair	PHONE NUMBER 904-636-6125	ADDRESS
		CARRIER/WAYBILL NUMBER hand-delivered		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	CONTAINER TYPE PLASTIC (P) or GLASS (G)								
									G	G	G	G					
									PRESERVATIVE USED			None	None	H_2SO_4	HCl		
									TYPE OF ANALYSIS			SW 846-8310	FL-PRO	FL-PRO	SW 846-8260B		COMMENTS
11/21	0855	CEF-502-SB03-05				SO	G	1	1	1							
11/21	1045	CEF-502-SB04-05				SO	G	1	1	1							
11/21	1055	CEF-502-SB06-05				SO	G	1	1	1							
11/21	0840	CEF-502-SB02-03				SO	G	1	1	1							
11/21	1513	CEF-502-FB01				GW	G	6	1		2	3					
11/21	1145	CEF-502-45-01				GW	G	4	1		1	2					low rec range

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	11-21-06	1620	1. RECEIVED BY	11/21/06	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

ATTACHMENT E

GROUNDWATER LABORATORY ANALYTICAL DATA

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

Wednesday, December 6, 2006

Tetra Tech NUS (BR006)

Attn: Mr. Dave Siefken

8640 Philips Highway Suite 16

Jacksonville, FL 32256

RE: Project Number: 112G00378 Building 502, Project Name/Desc: NAS Cecil Field CTO #0025
ENCO Workorder: B610164

Dear Mr. Dave Siefken,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Tuesday, November 21, 2006.

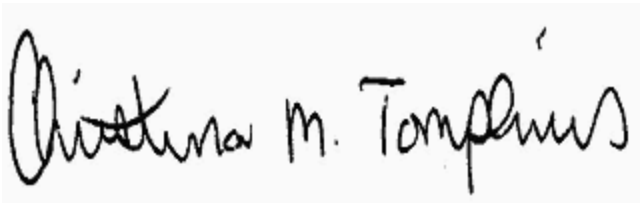
Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

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 35.

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: CEF-502-6S-01 **Lab ID:** B610164-01

Sampled: 11/20/06 15:00 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	12/04/06		12/04/06 09:00	12/4/2006 14:36
EPA 8270C	11/27/06	01/06/07	11/27/06 13:47	11/30/2006 15:25
FLPRO	11/27/06	01/06/07	11/27/06 13:40	11/28/2006 03:45

Client ID: CEF-502-7D-01 **Lab ID:** B610164-02

Sampled: 11/20/06 15:44 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	12/04/06		12/04/06 09:00	12/4/2006 15:07
EPA 8270C	11/27/06	01/06/07	11/27/06 13:47	11/30/2006 15:42
FLPRO	11/27/06	01/06/07	11/27/06 13:40	11/28/2006 04:07

Client ID: CEF-502-3S-01 **Lab ID:** B610164-03

Sampled: 11/20/06 16:40 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	12/04/06		12/04/06 09:00	12/4/2006 15:37
EPA 8270C	11/27/06	01/06/07	11/27/06 13:47	11/30/2006 16:00
FLPRO	11/27/06	01/06/07	11/27/06 13:40	11/28/2006 04:29

Client ID: CEF-502-85-01 **Lab ID:** B610164-04

Sampled: 11/21/06 09:35 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	12/05/06		12/04/06 09:00	12/4/2006 16:08
EPA 8270C	11/28/06	01/06/07	11/27/06 13:47	11/30/2006 16:17
FLPRO	11/28/06	01/06/07	11/27/06 13:40	11/28/2006 04:52

Client ID: CEF-502-GW-DUP-01 **Lab ID:** B610164-05

Sampled: 11/21/06 09:55 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	12/05/06		12/04/06 09:00	12/4/2006 16:39
EPA 8270C	11/28/06	01/06/07	11/27/06 13:47	11/30/2006 16:35
FLPRO	11/28/06	01/06/07	11/27/06 13:40	11/28/2006 05:14

Client ID: CEF-502-15R-01 **Lab ID:** B610164-06

Sampled: 11/21/06 09:45 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	12/05/06		12/04/06 09:00	12/4/2006 17:10
EPA 8270C	11/28/06	01/06/07	11/27/06 13:47	11/30/2006 16:52
FLPRO	11/28/06	01/06/07	11/27/06 13:40	11/28/2006 05:37

Client ID: CEF-502-15R-01 **Lab ID:** B610164-06RE1

Sampled: 11/21/06 09:45 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8270C	11/28/06	01/06/07	11/27/06 13:47	11/30/2006 19:48

Client ID: CEF-502-FB-01 **Lab ID:** B610164-07

Sampled: 11/21/06 15:13 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	12/05/06		12/04/06 09:00	12/4/2006 17:40
EPA 8270C	11/28/06	01/06/07	11/27/06 13:47	11/30/2006 17:10
FLPRO	11/28/06	01/06/07	11/27/06 13:40	11/28/2006 05:59

Client ID: CEF-502-4S-01 **Lab ID:** B610164-08

Sampled: 11/21/06 11:45 **Received:** 11/21/06 16:20

Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8260B	12/05/06		12/04/06 09:00	12/4/2006 18:11
EPA 8270C	11/28/06	01/06/07	11/27/06 13:47	11/30/2006 17:28
FLPRO	11/28/06	01/06/07	11/27/06 13:40	11/28/2006 06:22

SAMPLE DETECTION SUMMARY

Client ID: CEF-502-6S-01 **Lab ID:** B610164-01

Analyte	Results/Qual	MRL	Units	Method
1-Methylnaphthalene	1.95	0.10	ug/L	EPA 8270C
2-Methylnaphthalene	3.75	0.10	ug/L	EPA 8270C
Acenaphthene	1.11	0.10	ug/L	EPA 8270C
Ethylbenzene	0.3 J	1.0	ug/L	EPA 8260B
Fluorene	2.16	0.10	ug/L	EPA 8270C
Isopropylbenzene	0.4 J	1.0	ug/L	EPA 8260B
Naphthalene	0.43	0.10	ug/L	EPA 8270C
Phenanthrene	0.08 J	0.10	ug/L	EPA 8270C
TPH (C8-C40)	0.330	0.170	mg/L	FLPRO

Client ID: CEF-502-3S-01 **Lab ID:** B610164-03

Analyte	Results/Qual	MRL	Units	Method
1,2,4-Trimethylbenzene	0.5 J	1.0	ug/L	EPA 8260B
1-Methylnaphthalene	6.46	0.10	ug/L	EPA 8270C
2-Methylnaphthalene	4.92	0.10	ug/L	EPA 8270C
Acenaphthene	0.39	0.10	ug/L	EPA 8270C
Fluorene	0.58	0.10	ug/L	EPA 8270C
Naphthalene	0.92	0.10	ug/L	EPA 8270C
Phenanthrene	0.13	0.10	ug/L	EPA 8270C
TPH (C8-C40)	0.166 J	0.170	mg/L	FLPRO

Client ID: CEF-502-15R-01 **Lab ID:** B610164-06

Analyte	Results/Qual	MRL	Units	Method
1,2,4-Trimethylbenzene	6.9	1.0	ug/L	EPA 8260B
1,3,5-Trimethylbenzene	2.8	1.0	ug/L	EPA 8260B
Acenaphthene	1.72	0.10	ug/L	EPA 8270C
Anthracene	0.07 J	0.10	ug/L	EPA 8270C
Ethylbenzene	2.5	1.0	ug/L	EPA 8260B
Fluorene	2.78	0.10	ug/L	EPA 8270C
Isopropylbenzene	2.7	1.0	ug/L	EPA 8260B
Naphthalene	11.2	0.10	ug/L	EPA 8270C
Phenanthrene	2.40	0.10	ug/L	EPA 8270C
TPH (C8-C40)	2.11	0.170	mg/L	FLPRO

Client ID: CEF-502-15R-01 **Lab ID:** B610164-06RE1

Analyte	Results/Qual	MRL	Units	Method
1-Methylnaphthalene	52.8 D	1.00	ug/L	EPA 8270C
2-Methylnaphthalene	110 D	1.00	ug/L	EPA 8270C

Client ID: CEF-502-4S-01 **Lab ID:** B610164-08

Analyte	Results/Qual	MRL	Units	Method
1,2,4-Trimethylbenzene	0.6 J	1.0	ug/L	EPA 8260B
1,3,5-Trimethylbenzene	0.6 J	1.0	ug/L	EPA 8260B
1-Methylnaphthalene	1.48	0.10	ug/L	EPA 8270C

2-Methylnaphthalene	8.37	0.10	ug/L	EPA 8270C
Acenaphthene	0.29	0.10	ug/L	EPA 8270C
Benzene	0.3 J	1.0	ug/L	EPA 8260B
Ethylbenzene	2.2	1.0	ug/L	EPA 8260B
Fluorene	0.22	0.10	ug/L	EPA 8270C
Isopropylbenzene	1.2	1.0	ug/L	EPA 8260B
Naphthalene	2.69	0.10	ug/L	EPA 8270C
TPH (C8-C40)	0.496	0.170	mg/L	FLPRO
Xylenes (Total)	0.9 J	1.0	ug/L	EPA 8260B

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ANALYTICAL REPORT

Sample ID:	CEF-502-6S-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-01	Work Order #:	B610164
Prep. Method:	EPA 5030B_MS	Matrix:	Water
Analyzed:	12/04/06 By: jdb	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	BA00076		
QC Batch:	6L04023		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1,2,4-Trimethylbenzene	95-63-6	0.2 U	0.2	1.0	ug/L
1,3,5-Trimethylbenzene	108-67-8	0.2 U	0.2	1.0	ug/L
Benzene	71-43-2	0.2 U	0.2	1.0	ug/L
Ethylbenzene	100-41-4	**0.3 J**	0.3	1.0	ug/L
Isopropylbenzene	98-82-8	**0.4 J**	0.1	1.0	ug/L
Methyl-tert-Butyl Ether	1634-04-4	0.2 U	0.2	1.0	ug/L
Toluene	108-88-3	0.2 U	0.2	1.0	ug/L
Xylenes (Total)	NA	0.3 U	0.3	1.0	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	48.8	50.0	98 %	75-120
Dibromofluoromethane	1868-53-7	52.3	50.0	105 %	85-115
Toluene-d8	2037-26-5	50.3	50.0	101 %	85-120

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ANALYTICAL REPORT

Sample ID:	CEF-502-6S-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-01	Work Order #:	B610164
Prep. Method:	EPA 3510C_MS	Matrix:	Water
Analyzed:	11/30/06 By: jj	Unit:	ug/L
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00071		
QC Batch:	6K27016		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	**1.95**	0.02	0.10	ug/L
2-Methylnaphthalene	91-57-6	**3.75**	0.02	0.10	ug/L
Acenaphthene	83-32-9	**1.11**	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	**2.16**	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	**0.43**	0.02	0.10	ug/L
Phenanthrene	85-01-8	**0.08** J	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	3.25	5.00	65 %	10-167

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ANALYTICAL REPORT

Sample ID:	CEF-502-6S-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-01	Work Order #:	B610164
Prep. Method:	EPA 3510C	Matrix:	Water
Analyzed:	11/28/06 By: jbh	Unit:	mg/L
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:	BA00072		
QC Batch:	6K27003		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	**0.330**	0.094	0.170	mg/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	0.0916	0.100	92 %	22-137
o-Terphenyl	84-15-1	0.0461	0.0500	92 %	33-133

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ANALYTICAL REPORT

Sample ID:	CEF-502-7D-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-02	Work Order #:	B610164
Prep. Method:	EPA 5030B_MS	Matrix:	Water
Analyzed:	12/04/06 By: jdb	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	BA00076		
QC Batch:	6L04023		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1,2,4-Trimethylbenzene	95-63-6	0.2 U	0.2	1.0	ug/L
1,3,5-Trimethylbenzene	108-67-8	0.2 U	0.2	1.0	ug/L
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
Isopropylbenzene	98-82-8	0.1 U	0.1	1.0	ug/L
Methyl-tert-Butyl Ether	1634-04-4	0.2 U	0.2	1.0	ug/L
Toluene	108-88-3	0.2 U	0.2	1.0	ug/L
Xylenes (Total)	NA	0.3 U	0.3	1.0	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	48.2	50.0	96 %	75-120
Dibromofluoromethane	1868-53-7	51.6	50.0	103 %	85-115
Toluene-d8	2037-26-5	50.5	50.0	101 %	85-120

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ANALYTICAL REPORT

Sample ID:	CEF-502-7D-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-02	Work Order #:	B610164
Prep. Method:	EPA 3510C_MS	Matrix:	Water
Analyzed:	11/30/06 By: jj	Unit:	ug/L
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00071		
QC Batch:	6K27016		

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	3.39	5.00	68 %	10-167

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ANALYTICAL REPORT

Sample ID:	CEF-502-7D-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-02	Work Order #:	B610164
Prep. Method:	EPA 3510C	Matrix:	Water
Analyzed:	11/28/06 By: jbh	Unit:	mg/L
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:	BA00072		
QC Batch:	6K27003		

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	0.101	0.100	101 %	22-137
o-Terphenyl	84-15-1	0.0446	0.0500	89 %	33-133

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ANALYTICAL REPORT

Sample ID:	CEF-502-3S-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-03	Work Order #:	B610164
Prep. Method:	EPA 5030B_MS	Matrix:	Water
Analyzed:	12/04/06 By: jdb	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	BA00076		
QC Batch:	6L04023		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1,2,4-Trimethylbenzene	95-63-6	**0.5 J**	0.2	1.0	ug/L
1,3,5-Trimethylbenzene	108-67-8	0.2 U	0.2	1.0	ug/L
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
Isopropylbenzene	98-82-8	0.1 U	0.1	1.0	ug/L
Methyl-tert-Butyl Ether	1634-04-4	0.2 U	0.2	1.0	ug/L
Toluene	108-88-3	0.2 U	0.2	1.0	ug/L
Xylenes (Total)	NA	0.3 U	0.3	1.0	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	49.0	50.0	98 %	75-120
Dibromofluoromethane	1868-53-7	51.0	50.0	102 %	85-115
Toluene-d8	2037-26-5	50.1	50.0	100 %	85-120

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ANALYTICAL REPORT

Sample ID:	CEF-502-3S-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-03	Work Order #:	B610164
Prep. Method:	EPA 3510C_MS	Matrix:	Water
Analyzed:	11/30/06 By: jj	Unit:	ug/L
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00071		
QC Batch:	6K27016		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	**6.46**	0.02	0.10	ug/L
2-Methylnaphthalene	91-57-6	**4.92**	0.02	0.10	ug/L
Acenaphthene	83-32-9	**0.39**	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	**0.58**	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	**0.92**	0.02	0.10	ug/L
Phenanthrene	85-01-8	**0.13**	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	3.52	5.00	70 %	10-167

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ANALYTICAL REPORT

Sample ID:	CEF-502-3S-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-03	Work Order #:	B610164
Prep. Method:	EPA 3510C	Matrix:	Water
Analyzed:	11/28/06 By: jbh	Unit:	mg/L
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:	BA00072		
QC Batch:	6K27003		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	**0.166 J**	0.094	0.170	mg/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	0.0724	0.100	72 %	22-137
o-Terphenyl	84-15-1	0.0349	0.0500	70 %	33-133

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ANALYTICAL REPORT

Sample ID:	CEF-502-85-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-04	Work Order #:	B610164
Prep. Method:	EPA 5030B_MS	Matrix:	Water
Analyzed:	12/04/06 By: jdb	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	BA00076		
QC Batch:	6L04023		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1,2,4-Trimethylbenzene	95-63-6	0.2 U	0.2	1.0	ug/L
1,3,5-Trimethylbenzene	108-67-8	0.2 U	0.2	1.0	ug/L
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
Isopropylbenzene	98-82-8	0.1 U	0.1	1.0	ug/L
Methyl-tert-Butyl Ether	1634-04-4	0.2 U	0.2	1.0	ug/L
Toluene	108-88-3	0.2 U	0.2	1.0	ug/L
Xylenes (Total)	NA	0.3 U	0.3	1.0	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	49.9	50.0	100 %	75-120
Dibromofluoromethane	1868-53-7	49.1	50.0	98 %	85-115
Toluene-d8	2037-26-5	50.6	50.0	101 %	85-120

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ANALYTICAL REPORT

Sample ID:	CEF-502-85-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-04	Work Order #:	B610164
Prep. Method:	EPA 3510C_MS	Matrix:	Water
Analyzed:	11/30/06 By: jj	Unit:	ug/L
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00071		
QC Batch:	6K27016		

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	3.77	5.00	75 %	10-167

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ANALYTICAL REPORT

Sample ID:	CEF-502-85-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-04	Work Order #:	B610164
Prep. Method:	EPA 3510C	Matrix:	Water
Analyzed:	11/28/06 By: jbh	Unit:	mg/L
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:	BA00072		
QC Batch:	6K27003		

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	0.0906	0.100	91 %	22-137
o-Terphenyl	84-15-1	0.0435	0.0500	87 %	33-133

ANALYTICAL REPORT

Sample ID:	CEF-502-GW-DUP-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-05	Work Order #:	B610164
Prep. Method:	EPA 5030B_MS	Matrix:	Water
Analyzed:	12/04/06 By: jdb	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	BA00076		
QC Batch:	6L04023		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1,2,4-Trimethylbenzene	95-63-6	0.2 U	0.2	1.0	ug/L
1,3,5-Trimethylbenzene	108-67-8	0.2 U	0.2	1.0	ug/L
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
Isopropylbenzene	98-82-8	0.1 U	0.1	1.0	ug/L
Methyl-tert-Butyl Ether	1634-04-4	0.2 U	0.2	1.0	ug/L
Toluene	108-88-3	0.2 U	0.2	1.0	ug/L
Xylenes (Total)	NA	0.3 U	0.3	1.0	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	49.6	50.0	99 %	75-120
Dibromofluoromethane	1868-53-7	52.0	50.0	104 %	85-115
Toluene-d8	2037-26-5	50.3	50.0	101 %	85-120

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ANALYTICAL REPORT

Sample ID:	CEF-502-GW-DUP-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-05	Work Order #:	B610164
Prep. Method:	EPA 3510C_MS	Matrix:	Water
Analyzed:	11/30/06 By: jj	Unit:	ug/L
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00071		
QC Batch:	6K27016		

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	3.73	5.00	75 %	10-167

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ANALYTICAL REPORT

Sample ID:	CEF-502-GW-DUP-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-05	Work Order #:	B610164
Prep. Method:	EPA 3510C	Matrix:	Water
Analyzed:	11/28/06 By: jbh	Unit:	mg/L
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:	BA00072		
QC Batch:	6K27003		

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	0.0812	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:	CEF-502-15R-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-06	Work Order #:	B610164
Prep. Method:	EPA 5030B_MS	Matrix:	Water
Analyzed:	12/04/06 By: jdb	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	BA00076		
QC Batch:	6L04023		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1,2,4-Trimethylbenzene	95-63-6	**6.9**	0.2	1.0	ug/L
1,3,5-Trimethylbenzene	108-67-8	**2.8**	0.2	1.0	ug/L
Benzene	71-43-2	0.2 U	0.2	1.0	ug/L
Ethylbenzene	100-41-4	**2.5**	0.3	1.0	ug/L
Isopropylbenzene	98-82-8	**2.7**	0.1	1.0	ug/L
Methyl-tert-Butyl Ether	1634-04-4	0.2 U	0.2	1.0	ug/L
Toluene	108-88-3	0.2 U	0.2	1.0	ug/L
Xylenes (Total)	NA	0.3 U	0.3	1.0	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	49.6	50.0	99 %	75-120
Dibromofluoromethane	1868-53-7	49.3	50.0	99 %	85-115
Toluene-d8	2037-26-5	50.7	50.0	101 %	85-120

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ANALYTICAL REPORT

Sample ID:	CEF-502-15R-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-06	Work Order #:	B610164
Prep. Method:	EPA 3510C_MS	Matrix:	Water
Analyzed:	11/30/06 By: jj	Unit:	ug/L
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00071		
QC Batch:	6K27016		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
Acenaphthene	83-32-9	**1.72**	0.02	0.10	ug/L
Acenaphthylene	208-96-8	0.01 U	0.01	0.10	ug/L
Anthracene	120-12-7	**0.07 J**	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	**2.78**	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	**11.2**	0.02	0.10	ug/L
Phenanthrene	85-01-8	**2.40**	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	2.92	5.00	58 %	10-167

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ANALYTICAL REPORT

Sample ID:	CEF-502-15R-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-06	Work Order #:	B610164
Prep. Method:	EPA 3510C	Matrix:	Water
Analyzed:	11/28/06 By: jbh	Unit:	mg/L
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:	BA00072		
QC Batch:	6K27003		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	**2.11**	0.094	0.170	mg/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	0.0837	0.100	84 %	22-137
o-Terphenyl	84-15-1	0.0471	0.0500	94 %	33-133

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ANALYTICAL REPORT

Sample ID:	CEF-502-15R-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-06RE1	Work Order #:	B610164
Prep. Method:	EPA 3510C_MS	Matrix:	Water
Analyzed:	11/30/06 By: jj	Unit:	ug/L
Anal. Method:	EPA 8270C	Dilution Factor:	10
Anal. Batch:	BA00071		
QC Batch:	6K27016		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	**52.8** D	0.21	1.00	ug/L
2-Methylnaphthalene	91-57-6	**110** D	0.21	1.00	ug/L

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ANALYTICAL REPORT

Sample ID:	CEF-502-FB-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-07	Work Order #:	B610164
Prep. Method:	EPA 5030B_MS	Matrix:	Water
Analyzed:	12/04/06 By: jdb	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	BA00076		
QC Batch:	6L04023		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1,2,4-Trimethylbenzene	95-63-6	0.2 U	0.2	1.0	ug/L
1,3,5-Trimethylbenzene	108-67-8	0.2 U	0.2	1.0	ug/L
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
Isopropylbenzene	98-82-8	0.1 U	0.1	1.0	ug/L
Methyl-tert-Butyl Ether	1634-04-4	0.2 U	0.2	1.0	ug/L
Toluene	108-88-3	0.2 U	0.2	1.0	ug/L
Xylenes (Total)	NA	0.3 U	0.3	1.0	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	48.5	50.0	97 %	75-120
Dibromofluoromethane	1868-53-7	49.0	50.0	98 %	85-115
Toluene-d8	2037-26-5	48.7	50.0	97 %	85-120

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ANALYTICAL REPORT

Sample ID:	CEF-502-FB-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-07	Work Order #:	B610164
Prep. Method:	EPA 3510C_MS	Matrix:	Water
Analyzed:	11/30/06 By: jj	Unit:	ug/L
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00071		
QC Batch:	6K27016		

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	3.42	5.00	68 %	10-167

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ANALYTICAL REPORT

Sample ID:	CEF-502-FB-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-07	Work Order #:	B610164
Prep. Method:	EPA 3510C	Matrix:	Water
Analyzed:	11/28/06 By: jbh	Unit:	mg/L
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:	BA00072		
QC Batch:	6K27003		

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	0.0971	0.100	97 %	22-137
o-Terphenyl	84-15-1	0.0465	0.0500	93 %	33-133

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ANALYTICAL REPORT

Sample ID:	CEF-502-4S-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-08	Work Order #:	B610164
Prep. Method:	EPA 5030B_MS	Matrix:	Water
Analyzed:	12/04/06 By: jdb	Unit:	ug/L
Anal. Method:	EPA 8260B	Dilution Factor:	1
Anal. Batch:	BA00076		
QC Batch:	6L04023		

Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1,2,4-Trimethylbenzene	95-63-6	**0.6 J**	0.2	1.0	ug/L
1,3,5-Trimethylbenzene	108-67-8	**0.6 J**	0.2	1.0	ug/L
Benzene	71-43-2	**0.3 J**	0.2	1.0	ug/L
Ethylbenzene	100-41-4	**2.2**	0.3	1.0	ug/L
Isopropylbenzene	98-82-8	**1.2**	0.1	1.0	ug/L
Methyl-tert-Butyl Ether	1634-04-4	0.2 U	0.2	1.0	ug/L
Toluene	108-88-3	0.2 U	0.2	1.0	ug/L
Xylenes (Total)	NA	**0.9 J**	0.3	1.0	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	48.5	50.0	97 %	75-120
Dibromofluoromethane	1868-53-7	48.3	50.0	97 %	85-115
Toluene-d8	2037-26-5	49.6	50.0	99 %	85-120

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ANALYTICAL REPORT

Sample ID:	CEF-502-4S-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-08	Work Order #:	B610164
Prep. Method:	EPA 3510C_MS	Matrix:	Water
Analyzed:	11/30/06 By: jj	Unit:	ug/L
Anal. Method:	EPA 8270C	Dilution Factor:	1
Anal. Batch:	BA00071		
QC Batch:	6K27016		

Semivolatile Organic Compounds by GCMS SIM

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1-Methylnaphthalene	90-12-0	**1.48**	0.02	0.10	ug/L
2-Methylnaphthalene	91-57-6	**8.37**	0.02	0.10	ug/L
Acenaphthene	83-32-9	**0.29**	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	**0.22**	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	**2.69**	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	2.65	5.00	53 %	10-167

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ANALYTICAL REPORT

Sample ID:	CEF-502-4S-01	Project:	NAS Cecil Field CTO #0025
Lab #:	B610164-08	Work Order #:	B610164
Prep. Method:	EPA 3510C	Matrix:	Water
Analyzed:	11/28/06 By: jbh	Unit:	mg/L
Anal. Method:	FLPRO	Dilution Factor:	1
Anal. Batch:	BA00072		
QC Batch:	6K27003		

FL Petroleum Range Organics

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
TPH (C8-C40)	NA	**0.496**	0.094	0.170	mg/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
n-Nonatriacontane	7194-86-7	0.0964	0.100	96 %	22-137
o-Terphenyl	84-15-1	0.0476	0.0500	95 %	33-133

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 6L04023 - EPA 5030B_MS										
Blank (6L04023-BLK1)				Prepared: 12/04/2006 09:00 Analyzed: 12/04/2006 11:31						
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							
Isopropylbenzene	0.1 U	1.0	ug/L							
1,3,5-Trimethylbenzene	0.2 U	1.0	ug/L							
1,2,4-Trimethylbenzene	0.2 U	1.0	ug/L							
Xylenes (Total)	0.3 U	1.0	ug/L							
Surrogate: Dibromofluoromethane	*52.9*		*ug/L*	*50.0*		*106*	*85-115*			
Surrogate: Toluene-d8	*50.2*		*ug/L*	*50.0*		*100*	*85-120*			
Surrogate: 4-Bromofluorobenzene	*49.1*		*ug/L*	*50.0*		*98*	*75-120*			
Blank (6L04023-BLK2)				Prepared: 12/04/2006 09:00 Analyzed: 12/05/2006 00:50						
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							
Isopropylbenzene	0.1 U	1.0	ug/L							
1,3,5-Trimethylbenzene	0.2 U	1.0	ug/L							
1,2,4-Trimethylbenzene	0.2 U	1.0	ug/L							
Xylenes (Total)	0.3 U	1.0	ug/L							
Surrogate: Dibromofluoromethane	*48.0*		*ug/L*	*50.0*		*96*	*85-115*			
Surrogate: Toluene-d8	*49.9*		*ug/L*	*50.0*		*100*	*85-120*			
Surrogate: 4-Bromofluorobenzene	*49.2*		*ug/L*	*50.0*		*98*	*75-120*			
LCS (6L04023-BS1)				Prepared: 12/04/2006 09:00 Analyzed: 12/04/2006 12:02						
Methyl-tert-Butyl Ether	19.7	1.0	ug/L	20.0		99	39-98			
Benzene	19.3	1.0	ug/L	20.0		96	80-120			
Toluene	17.0	1.0	ug/L	20.0		85	75-120			
Ethylbenzene	16.5	1.0	ug/L	20.0		82	75-112			
Isopropylbenzene	19.3	1.0	ug/L	20.0		96	75-125			
1,3,5-Trimethylbenzene	16.9	1.0	ug/L	20.0		85	75-122			
1,2,4-Trimethylbenzene	17.5	1.0	ug/L	20.0		88	75-124			
Xylenes (Total)	52.1	1.0	ug/L				0-200			
Matrix Spike (6L04023-MS1)		**Source: B610107-08**		Prepared: 12/04/2006 09:00 Analyzed: 12/04/2006 12:33						
Methyl-tert-Butyl Ether	19.7	1.0	ug/L	20.0	0.2 U	99	0-200			
Benzene	19.6	1.0	ug/L	20.0	0.2 U	98	64-138			
Toluene	17.6	1.0	ug/L	20.0	0.2 U	88	72-124			
Ethylbenzene	18.0	1.0	ug/L	20.0	0.3 U	90	0-200			
Isopropylbenzene	20.0	1.0	ug/L	20.0	0.1 U	100	0-200			
1,3,5-Trimethylbenzene	17.8	1.0	ug/L	20.0	0.2 U	89	0-200			
1,2,4-Trimethylbenzene	18.3	1.0	ug/L	20.0	0.2 U	92	0-200			
Xylenes (Total)	53.7	1.0	ug/L		0.810		0-200			
Matrix Spike Dup (6L04023-MSD1)		**Source: B610107-08**		Prepared: 12/04/2006 09:00 Analyzed: 12/04/2006 13:04						
Methyl-tert-Butyl Ether	20.9	1.0	ug/L	20.0	0.2 U	105	0-200	6	23	

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 6L04023 - EPA 5030B_MS										
Matrix Spike Dup (6L04023-MSD1) Continued		**Source: B610107-08**		Prepared: 12/04/2006 09:00 Analyzed: 12/04/2006 13:04						
Benzene	19.0	1.0	ug/L	20.0	0.2 U	95	64-138	3	22	
Toluene	17.6	1.0	ug/L	20.0	0.2 U	88	72-124	0.2	24	
Ethylbenzene	18.0	1.0	ug/L	20.0	0.3 U	90	0-200	0.1	25	
Isopropylbenzene	20.5	1.0	ug/L	20.0	0.1 U	102	0-200	3	25	
1,3,5-Trimethylbenzene	18.5	1.0	ug/L	20.0	0.2 U	93	0-200	4	26	
1,2,4-Trimethylbenzene	18.7	1.0	ug/L	20.0	0.2 U	94	0-200	2	26	
Xylenes (Total)	55.0	1.0	ug/L		0.810		0-200	2	200	
Semivolatile Organic Compounds by GCMS SIM - Quality Control										
Batch 6K27016 - EPA 3510C_MS										
Blank (6K27016-BLK1)				Prepared: 11/27/2006 13:47 Analyzed: 11/30/2006 10:35						
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							
Surrogate: p-Terphenyl	*4.19*		*ug/L*	*5.00*		*84*	*10-167*			
LCS (6K27016-BS1)				Prepared: 11/27/2006 13:47 Analyzed: 11/30/2006 10:53						
Naphthalene	1.21	0.10	ug/L	2.00		60	33-100			
2-Methylnaphthalene	1.23	0.10	ug/L	2.00		62	36-98			
1-Methylnaphthalene	1.20	0.10	ug/L	2.00		60	34-95			
Acenaphthylene	1.23	0.10	ug/L	2.00		62	37-103			
Acenaphthene	1.23	0.10	ug/L	2.00		62	36-100			
Benzo(a)anthracene	1.38	0.10	ug/L	2.00		69	40-108			
Benzo(b)fluoranthene	1.33	0.10	ug/L	2.00		66	0-200			
Benzo(k)fluoranthene	1.41	0.10	ug/L	2.00		70	0-200			
Fluorene	1.27	0.10	ug/L	2.00		64	39-104			
Benzo(g,h,i)perylene	1.43	0.10	ug/L	2.00		72	19-118			
Benzo(a)pyrene	1.34	0.10	ug/L	2.00		67	33-108			
Phenanthrene	1.28	0.10	ug/L	2.00		64	38-104			
Anthracene	1.31	0.10	ug/L	2.00		66	36-109			

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 6K27016 - EPA 3510C_MS										
LCS (6K27016-BS1) Continued				Prepared: 11/27/2006 13:47 Analyzed: 11/30/2006 10:53						
Fluoranthene	1.55	0.10	ug/L	2.00		78	40-119			
Pyrene	1.53	0.10	ug/L	2.00		76	38-116			
Chrysene	1.35	0.10	ug/L	2.00		68	39-112			
Dibenzo(a,h)anthracene	1.72	0.10	ug/L	2.00		86	30-109			
Indeno(1,2,3-cd)pyrene	1.58	0.10	ug/L	2.00		79	33-112			
Surrogate: p-Terphenyl	*4.09*		*ug/L*	*5.00*		*82*	*10-167*			
Matrix Spike (6K27016-MS1)		**Source: B610161-02**		Prepared: 11/27/2006 13:47 Analyzed: 11/30/2006 11:10						
Naphthalene	1.31	0.10	ug/L	2.00	0.02 U	66	33-100			
2-Methylnaphthalene	1.32	0.10	ug/L	2.00	0.02 U	66	36-98			
1-Methylnaphthalene	1.28	0.10	ug/L	2.00	0.02 U	64	34-95			
Acenaphthylene	1.29	0.10	ug/L	2.00	0.01 U	64	37-103			
Acenaphthene	1.29	0.10	ug/L	2.00	0.02 U	64	36-100			
Benzo(a)anthracene	1.37	0.10	ug/L	2.00	0.01 U	68	40-108			
Benzo(b)fluoranthene	1.39	0.10	ug/L	2.00	0.03 U	70	0-200			
Benzo(k)fluoranthene	1.43	0.10	ug/L	2.00	0.02 U	72	0-200			
Fluorene	1.31	0.10	ug/L	2.00	0.02 U	66	39-104			
Benzo(g,h,i)perylene	1.44	0.10	ug/L	2.00	0.03 U	72	19-118			
Benzo(a)pyrene	1.37	0.10	ug/L	2.00	0.01 U	68	33-108			
Phenanthrene	1.32	0.10	ug/L	2.00	0.02 U	66	38-104			
Anthracene	1.34	0.10	ug/L	2.00	0.02 U	67	36-109			
Fluoranthene	1.60	0.10	ug/L	2.00	0.01 U	80	40-119			
Pyrene	1.57	0.10	ug/L	2.00	0.02 U	78	38-116			
Chrysene	1.39	0.10	ug/L	2.00	0.02 U	70	39-112			
Dibenzo(a,h)anthracene	1.74	0.10	ug/L	2.00	0.02 U	87	30-109			
Indeno(1,2,3-cd)pyrene	1.60	0.10	ug/L	2.00	0.02 U	80	33-112			
Surrogate: p-Terphenyl	*4.01*		*ug/L*	*5.00*		*80*	*10-167*			
Matrix Spike Dup (6K27016-MSD1)		**Source: B610161-02**		Prepared: 11/27/2006 13:47 Analyzed: 11/30/2006 11:28						
Naphthalene	1.26	0.10	ug/L	2.00	0.02 U	63	33-100	4	27	
2-Methylnaphthalene	1.27	0.10	ug/L	2.00	0.02 U	64	36-98	4	33	
1-Methylnaphthalene	1.24	0.10	ug/L	2.00	0.02 U	62	34-95	3	29	
Acenaphthylene	1.24	0.10	ug/L	2.00	0.01 U	62	37-103	4	24	
Acenaphthene	1.25	0.10	ug/L	2.00	0.02 U	62	36-100	3	23	
Benzo(a)anthracene	1.33	0.10	ug/L	2.00	0.01 U	66	40-108	3	22	
Benzo(b)fluoranthene	1.33	0.10	ug/L	2.00	0.03 U	66	0-200	4	200	
Benzo(k)fluoranthene	1.34	0.10	ug/L	2.00	0.02 U	67	0-200	6	200	
Fluorene	1.27	0.10	ug/L	2.00	0.02 U	64	39-104	3	22	
Benzo(g,h,i)perylene	1.38	0.10	ug/L	2.00	0.03 U	69	19-118	4	27	
Benzo(a)pyrene	1.30	0.10	ug/L	2.00	0.01 U	65	33-108	5	23	
Phenanthrene	1.27	0.10	ug/L	2.00	0.02 U	64	38-104	4	22	
Anthracene	1.29	0.10	ug/L	2.00	0.02 U	64	36-109	4	20	
Fluoranthene	1.51	0.10	ug/L	2.00	0.01 U	76	40-119	6	20	
Pyrene	1.48	0.10	ug/L	2.00	0.02 U	74	38-116	6	22	
Chrysene	1.32	0.10	ug/L	2.00	0.02 U	66	39-112	5	21	
Dibenzo(a,h)anthracene	1.68	0.10	ug/L	2.00	0.02 U	84	30-109	4	32	

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 6K27016 - EPA 3510C_MS										
Matrix Spike Dup (6K27016-MSD1) Continued		**Source: B610161-02**		Prepared: 11/27/2006 13:47 Analyzed: 11/30/2006 11:28						
Indeno(1,2,3-cd)pyrene	1.54	0.10	ug/L	2.00	0.02 U	77	33-112	4	22	
Surrogate: p-Terphenyl	*4.03*		*ug/L*	*5.00*		*81*	*10-167*			
FL Petroleum Range Organics - Quality Control										
Batch 6K27003 - EPA 3510C										
Blank (6K27003-BLK1)				Prepared: 11/27/2006 07:11 Analyzed: 11/27/2006 14:43						
TPH (C8-C40)	0.094 U	0.170	mg/L							
LCS (6K27003-BS1)				Prepared: 11/27/2006 07:11 Analyzed: 11/27/2006 15:06						
TPH (C8-C40)	1.36	0.170	mg/L	1.70		80	46-126			
Matrix Spike (6K27003-MS1)		**Source: B610184-01**		Prepared: 11/27/2006 07:11 Analyzed: 11/27/2006 15:28						
TPH (C8-C40)	1.37	0.170	mg/L	1.70	0.094 U	80	48-118			
Matrix Spike Dup (6K27003-MSD1)		**Source: B610184-01**		Prepared: 11/27/2006 07:11 Analyzed: 11/27/2006 15:50						
TPH (C8-C40)	1.44	0.170	mg/L	1.70	0.094 U	85	48-118	5	30	

NOTES AND DEFINITIONS

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

LABORATORY CERTIFICATION SUMMARY

Analysis	Matrix	Cert ID	Cert Number
8260B Extended	Water	NELAC	E82277
8270C PAH SIM	Water	NELAC	E82277
FLPRO	Water	NELAC	E82277

B610164 & B610165

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 2486 | PAGE 1 OF 2

PROJECT NO: 112G00378	FACILITY: Building 502	PROJECT MANAGER Dave Sietken	PHONE NUMBER 904-636-6125	LABORATORY NAME AND CONTACT: ENCO
SAMPLERS (SIGNATURE) Kara J. Wimble		FIELD OPERATIONS LEADER Terry Cottenoir	PHONE NUMBER 904-636-6125	ADDRESS
		CARRIER/WAYBILL NUMBER hand-delivered		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	CONTAINER TYPE PLASTIC (P) or GLASS (G)									PRESERVATIVE USED									TYPE OF ANALYSIS									COMMENTS
									G	G	G	G						None	HCL	H_2SO_4	NNE						SW 846 - 8310	SW 846 8260B	FL-PRO	FL-Key					
11/20	1500	CEF-502-GS-01				GW	G	6	1		3	2																							
11/20	1544	CEF-502-GTD-01				GW	G	6	1		3	2																							
11/20	1640	CEF-502-3S-01				GW	G	6	1		3	2																							
11/20	1600	CEF-502-SB05-05				SO	G	1	1				1																						
11/20	1550	CEF-502-SB01-05				SO	G	1	1				1																						
11/21	0935	CEF-502-BS-01				GW	G	6	1		3	2																							
11/21	0955	CEF-502-GW-DUP-01				GW	G	6	1		3	2																							
11/21	1045	CEF-502-ISR-01				GW	G	6	1		3	2																							
11/21	1254	CEF-502-SB07-05				SO	G	1	1				1																						
11/21	1305	CEF-502-SB08-05				SO	G	1	1				1																						
11/21	1344	CEF-502-SB09-03				SO	G	1	1				1																						
11/21	1303	CEF-502-SB10-05				SO	G	1	1				1																						
11/21	0000	CEF-502-SB-DUP-01				SO	G	1	1				1																						

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	11-21-06	1620	1. RECEIVED BY	11/21/06	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)

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FORM NO. TtNUS-001

B610164 + B610165

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 2487 | PAGE 2 OF 2

PROJECT NO: 112G00378	FACILITY: Bldg 502	PROJECT MANAGER Dave Sieffken	PHONE NUMBER 904-636-6125	LABORATORY NAME AND CONTACT: ENCO
SAMPLERS (SIGNATURE) Kara Fawcett		FIELD OPERATIONS LEADER Terry Cottenair	PHONE NUMBER 904-636-6125	ADDRESS
		CARRIER/WAYBILL NUMBER hand-delivered		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	CONTAINER TYPE PLASTIC (P) or GLASS (G)									
									G	G	G	G						
									None	None	H_2SO_4	HCl						
									TYPE OF ANALYSIS									
									SW 846-8310	FL-PRO	FL-PRO	SW 846-8260B						
11/21	0855	CEF-502-SB03-05				SO	G	1	1	1								
11/21	1045	CEF-502-SB04-05				SO	G	1	1	1								
11/21	1055	CEF-502-SB06-05				SO	G	1	1	1								
11/21	0840	CEF-502-SB02-03				SO	G	1	1	1								
11/21	1513	CEF-502-FB01				GW	G	6	1		2	3						
11/21	1145	CEF-502-45-M				GW	G	4	1		1	2						low rec range

1. RELINQUISHED BY	DATE 11-21-06	TIME 1620	1. RECEIVED BY	DATE 11/21/06	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)

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FORM NO. TtNUS-001