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NAS CECIL FIELD, FL
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SIT ASSESSMENT REPORT ADDENDUM LETTER REPORT FOR OIL-WATER SEPARATOR 312-OW NAS CECIL FIELD FL

9/5/2003

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Project Number N3996

Mr. David Grabka
Florida Department of Environmental Protection
Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Reference: CLEAN III Contract Number N62467-94-D-0888
Contract Task Order Number 0168

Subject: Site Assessment Report Addendum
Oil-Water Separator 312-OW
Naval Air Station Cecil Field
Jacksonville, Florida

Dear Mr. Grabka:

Tetra Tech NUS, Inc. (TtNUS) is pleased to submit this Site Assessment Report Addendum (SARA) for the subject site. This report has been prepared for the U.S. Navy Southern Division Naval Facilities Engineering Command (SOUTHNAVFACENGCOM) under Contract Task Order (CTO) 0058, for the Comprehensive Long-term Environmental Action Navy (CLEAN) III Contract Number N62467-94-D-0888. This SARA addresses comments issued by the Florida Department of Environmental Protection (FDEP) in a technical review letter dated August 26, 2002.

BACKGROUND

Oil-Water Separator 312-OW (OWS 312-OW) is located on the north side of Building 312. Building 312 was formerly used as a corrosion control hangar for Naval Air Station (NAS) Cecil Field. OWS 312-OW was installed in 1988 and has a 900-gallon capacity. A Confirmatory Sampling Report (CSR) was submitted for this site in June 1999. The CSR indicated that petroleum impacted soil was present at the site and recommended that a source removal be conducted to remove the petroleum impacted soil. No groundwater contamination was identified in the CSR.

A source removal was performed in January 2000. A Source Removal Report (SRR) was submitted in November 2000. The SRR indicated that a total of 99.7 tons of petroleum-contaminated soil was removed from the site. The SRR also indicated that contaminated groundwater was present at the site. As a result, the SRR recommended that a Natural Attenuation Monitoring Plan be prepared for the site. The FDEP issued a response to the SRR on April 5, 2001. The FDEP response letter requested that a site assessment be conducted at the site.

Site assessment activities were initiated in September 2001. A Site Assessment Report (SAR) was submitted in April 2002. The SAR indicated that concentrations of contaminants of concern (COCs) in soil exceeded the Soil Cleanup Target Levels (SCTLs) specified in Chapter 62-770, Florida Administrative Code (FAC). The SAR also indicated that concentrations of COCs in groundwater samples collected from

permanent monitoring wells were below the Groundwater Cleanup Target Levels (GCTLs) specified in Chapter 62-770, FAC. The SAR recommended that a supplemental source removal be conducted to remove additional contaminated soil identified during the site assessment. In addition, the SAR recommended that the groundwater be resampled after the source removal was completed to verify that the concentrations of COCs in groundwater remained below GCTLs.

A SAR review letter was issued by the FDEP on August 26, 2002. The FDEP response letter (Attachment A) requested further assessment and clarification of some of the information provided in the SAR. Each of the comments from the FDEP review letter is addressed below.

Comment 1

I cannot resolve the detection by the mobile laboratory of benzene above its leachability soil cleanup target level (SCTL) in two soil samples located within the area excavated by CH2M Hill Constructors, Inc. (CCI) in early 2000 without there having been a subsequent discharge from the Oil-Water Separator after the source removal. It is presumed that CCI backfilled the excavation with clean soil. It is also possible that the mobile laboratory analyses are incorrect.

Response 1

It is assumed that the two soil samples referred to in the comment are 001 and 004 which are shown on Figure 3-1, and are synonymous with soil samples B001 and B004 on Figure 3-2. Upon further investigation, it has been determined that the area of excavation depicted on Figures 3-1 and 3-2 (from the SAR) was inaccurate. The figures have been revised to depict the correct area of excavation. The revised figures are attached. Based on the revised figures, soil sample 001 (Figure 3-1) is located outside the area of CCI's excavation. However, sample 004 is located within the area of excavation.

In addition to confirming the limits of the excavation, TtNUS personnel mobilized to the site on April 4, 2003 to collect soil samples from both locations for fixed-base laboratory analysis to confirm the results of the mobile laboratory screening. The samples were collected from the same depth as the mobile laboratory samples, approximately 3 feet (ft) below land surface (bls). The samples were sent to Accutest Laboratories for used oil group analyses. Table 3-2 has been revised to include the data from the April 4, 2003 sampling event. The revised Table 3-2 is attached for your reference. A log of the sampling event is included in Attachment B. The laboratory report is included as Attachment C.

The fixed-base laboratory results from soil sample B003 indicate that the concentration of benzo(a)pyrene exceeded the SCTL. The fixed-base laboratory results for B004 indicate that the concentrations of all COCs were below the SCTLs.

The fixed-base laboratory results indicate that the clean fill placed by CCI was not recontaminated by a subsequent discharge between the time of the excavation and the completion of our investigation. However, the data for soil boring B001-03 does indicate that the excavation did not go far enough to the north to remove some remaining contaminated soil. This point is discussed further in the following comment and response section.

Comment 2

The mobile laboratory analysis of soil sample CEF-312-SB-002 did not correlate at all with the fixed-base laboratory analysis. The mobile laboratory identified benzene, toluene, and total xylenes in the soil sample at that location, while the fixed-base laboratory identified no priority pollutant volatile organic compounds as being detected, only total recoverable petroleum hydrocarbons (TRPH) and tentatively identified semi-volatile compounds.

Response 2

The mobile laboratory analysis is a screening tool used strictly to aid in determining the optimum number and location of fixed-base soil samples. The sample collection and preparation methods used for the mobile laboratory samples are significantly different than those used for the fixed-base laboratory samples. Therefore, the mobile laboratory results cannot be compared directly to fixed-base laboratory results. Past experience has shown that the mobile laboratory results are often consistent with fixed-base laboratory results; however, significant discrepancies do occur.

On April 4, 2003, and later on May 2, 2003, TtNUS mobilized to the site to collect additional soil samples to rectify the occurrence of COCs reported in B002-04 (Figure 3-2) and to delineate the extent of the remaining soil contamination. During both events, TtNUS personnel collected samples for used oil group analyses and sent them to Accutest Laboratories. The following samples were collected: B001-03, B004-02, B012-03, B013-03, B014-03, B015-03, B016-03, B017-03, B018-03, and B019-03. The last two digits of the sample identification indicate the bottom of the sampled interval in ft bls. Soil sampling logs of the event are included in Attachment B.

The laboratory analytical results from the recent sampling events indicate that the concentrations of COCs exceeded their respective SCTLs in several locations. The additional data is tabulated on Table 3-2. The SCTL exceedances are shown on Figure 3-2. The laboratory reports associated with these two events are included as Attachments C and D, respectively.

Comment 3

Direct-push groundwater sampling results from the mobile laboratory at CEF-312-GW-007 identified benzene, total xylenes and naphthalene at concentrations greatly exceeding the GCTLs. However, groundwater samples collected from monitoring well CEF-312LS-3S identified only trace amounts of ethylbenzene, total xylenes, and naphthalene at concentrations below their respective GCTLs. According to various figures in the SAR, the direct push sample is at the same location as monitoring well CEF-312LS-3S. The differences between the two samples and analyses need to be reconciled.

Response 3

Mobile laboratory sample location CEF-312-GW-007 and permanent monitoring well location CEF-312LS-3S are approximately the same location. However, the mobile laboratory analysis is a screening tool used strictly to aid in determining the optimum number and location of permanent monitoring wells. The sample collection and preparation methods used for the mobile laboratory samples are significantly different than those used for the fixed-base laboratory samples. Therefore, the mobile laboratory results cannot be compared directly to fixed-base laboratory results. Past experience has shown that the mobile laboratory results are often consistent with fixed-base laboratory results; however, significant discrepancies do occur. Therefore, any regulatory decisions made regarding the delineation of petroleum impacted groundwater or the disposition of this site must be made based on fixed-base laboratory analysis of samples collected from permanent monitoring wells.

On April 4, 2003, a groundwater sample was collected from monitoring well CEF-312LS-3S to confirm the results previously reported in the SAR. The laboratory results from the April 4, 2003, sampling event indicate that the concentrations of all COCs were below the GCTLs. The groundwater sample log sheet and associated low flow purge data sheet for this event are included in Attachment E. The results are tabulated in revised SAR Table 3-5 (attached), and depicted on revised SAR Figure 3-5 (attached). The laboratory report is included in Attachment C.

Comment 4

Please note that for the tentatively identified compound 1,2,4-trimethylbenzene, the Department has a GCTL of 10 µg/L per Chapter 62-777FAC. It is shown as not having a GCTL on Table 3-5.

Response 4

Table 3-5 (attached) has been revised to show the correct GCTL for 1,2,4-trimethylbenzene.

Comment 5

In drainage ditch sediment sample CEF-312-SD-C001, polynuclear aromatic hydrocarbons (PAHs) and TRPH were detected at elevated concentrations, some being greater than residential, industrial, leachability to groundwater, and leachability to freshwater surface water SCTLs. These contaminants are at concentrations that would require remediation. Contaminated sediment in the ditch has not been delineated, and possible impacts to groundwater and surface water in that area have not been adequately addressed. The detection limits reported for PAHs in sediment sample CEF-312-SD-C002 were higher than residential, industrial, and leachability SCTLs for some constituents.

Response 5

On April 4, 2003; May 2, 2003; and June 25, 2003, TtNUS mobilized to the site to collect additional sediment samples to delineate the extent of contamination in the ditch. During each event, TtNUS personnel collected samples for used oil group analyses and sent them to Accutest Laboratories. The following samples were collected: C001-02, C003-01, C004-01, C005-01, C006-01, C007-01, C008-01, C009-01, C010-01, C011-01, C012-01, C013-01, C014-01, and C015-01. The last two digits of the sample identification indicate the bottom of the sampled interval in ft bls. Sediment sampling logs are provided in Attachment B. The laboratory analytical results from the April, May and June sampling events indicate that the concentrations of COCs exceeded the SCTLs at several locations. The additional data is tabulated on revised SAR Table 3-3 (attached). The SCTL exceedances are shown on Figure 3-2. .The laboratory reports associated with those three events are included as Attachments C, D, and F, respectively.

In addition to the additional soil sampling, permanent monitoring well CEF-312LS-5S was installed approximately 5 ft south of sediment sample C001-01 to evaluate any potential impacts to the groundwater in the vicinity of the drainage ditch. This location was chosen over something downgradient of sediment sample C002-01 since the concentrations of COCs were evidently higher at location C001-01 (Figure 3-2). The groundwater flow was established in the SAR as being easterly, and this well is recognized as being side-gradient to the sediment sample C001-01. However, the location chosen for CEF-312LS-5S was as close as physically feasible to C001-01. The well was installed on February 5, 2003, in the location shown on Figure 3-5. The well was installed using direct-push technology (DPT); therefore, no boring log was generated. The monitoring well construction log and certificate of conformance are included in Attachment G. On March 14, 2003, this well was sampled for the used oil group analyses and the samples were shipped to Accutest Laboratories. The groundwater sample log sheet and associated low flow purge data sheet for this event are included in Attachment E. The COCs detected by the laboratory are summarized on Table 3-5, and the data is displayed on Figure 3-5. No COCs were detected in the sample from CEF-312LS-5S, thus it appears there has been no impact to groundwater in the area of sediment sample C001-01. The laboratory report is included in Attachment H.

Comment 6

I would propose the following supplemental site assessment activities:

(a) Resample soils in the area previously excavated by CCI and analyze the samples at a fixed-base laboratory to determine whether the benzene exceedances detected previously by the mobile laboratory are indeed present or whether the excavation by CCI adequately addressed this area.

(b) Conduct further sampling and analysis in the ditch to the north of the site to delineate the boundaries of the sediment contamination. If water is in the ditch at the time of sampling, a surface water sample should be collected.

(c) Install a permanent monitoring well in the immediate vicinity of DPT location CEF-312-GW-002. This location is hydraulically downgradient of the area previously excavated by CCI and in an area where some soil contamination has been detected in soil samples.

(d) Delineation of soil contamination outside of the previously excavated area to determine the extent of soil contamination.

(e) A complete set of water level measurements.

(f) Groundwater sampling and analysis of all monitoring wells for the used oil parameters, excluding lead.

(g) It is not clear from the report whether the oil-water separator and its associated tank still exist or whether they were removed at the time of CCI's source removal activities. If these structures still exist, contaminated soil may have been left so as not to compromise the system.

Response 6

(a) This comment was addressed in the responses to Comments 1 and 2.

(b) This comment was addressed in the response to Comment 5. During the soil/sediment sampling events conducted in April, May, and June 2003, no surface water was present in the ditch. Therefore, no surface water sample was collected.

(c) TtNUS installed permanent well CEF-312LS-6S (Figure 3-5) approximately at the former location of the DPT groundwater sample location CEF-312-GW-002. The well was installed on February 5, 2003, using DPT; therefore, no boring log was generated. The monitoring well construction log and certificate of conformance are included in Attachment G. On March 14, 2003, the well was sampled for the used oil group analyses, and the samples were shipped to Accutest Laboratories. The groundwater sample log sheet and associated low flow purge data sheet for this event are included in Attachment E. The COCs detected by the laboratory are summarized on Table 3-5, and the data is displayed on Figure 3-5. Several PAHs and TRPH were detected in the sample from CEF-312LS-6S, but none of the concentrations exceeded applicable GCTLs (Table 3-5).

(d) This comment was addressed in the responses to Comments 1 and 2.

(e) A complete round of water level measurements was collected on March 13 and April 4, 2003. SAR Table 2-1 was revised and attached to reflect this additional data. New Figures 3-8 and 3-9 were generated to show the direction of groundwater flow established during these two events, respectively. The groundwater flow direction, shown by the figures, continues to be easterly.

(f) The existing six wells from of the SAR investigation were re-sampled for used oil group analyses without lead on April 4, 2003. The samples were shipped to Accutest Laboratories. The groundwater sample log sheets and associated low flow purge data sheets for this event are included in

Attachment E. The COCs detected by the laboratory are summarized on Table 3-5, and the data is displayed on Figure 3-5. A few COCs were detected in the water table wells, but no GCTLs were exceeded. No COCs were detected in the intermediate well. It should be noted that metal fractions analyzed from the groundwater samples during both the SAR investigation and the subsequent SARA investigation were not included on Table 3-5; however, the detectable concentrations of those fractions did not exceed GCTLs for any of the groundwater samples.

(g) The OWS system is still present at the site. However the results of the supplemental assessment indicate that the soil in the immediate vicinity of the OWS has not been impacted by petroleum products (see responses to Comments 1 and 2 above).

CONCLUSIONS AND RECOMMENDATIONS

The laboratory analytical results form the supplemental assessment indicate that the concentrations of COCs from all soil samples collected from within the area excavated during the source removal were below the applicable SCTLs. However, the concentrations of COCs exceeded the SCTLs in several locations outside the original excavation area. The laboratory analytical results for the groundwater samples collected during the supplemental assessment indicate that the concentrations of all COCs were below the applicable GCTLs.

Based on the results of the supplemental assessment, TtNUS recommends that a supplemental source removal be conducted to remove the remaining petroleum impacted soil from the site. The proposed limits of the supplemental soil excavation are depicted on Figure 3-2. During the July 2003 Cecil Field partnering meeting, the Base Closure Team agreed to the proposed limits pending approval from the FDEP management. On July 30, 2003, TtNUS received e-mail confirmation from FDEP indicating that the proposed excavation limits were acceptable to the FDEP management.

TtNUS recommends no further action for the groundwater at this time. Subsequent to completion of the supplemental source removal, TtNUS recommends that a Site Rehabilitation Completion Order be issued for the site.

If you have any questions regarding the information presented in this document, please contact me by phone at (813) 806-0202, or via e-mail at calliganp@ttnus.com.

Sincerely,

Paul E. Calligan, P.G.
Task Order Manager

Mervin W. Dale, P.G.
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Enclosures (18)

pc: Gabriel Magwood, SOUTHNAVFACENGCOM
Mark Perry, TtNUS (Project File Unbound)
Debbie Wroblewski, TtNUS (Cover Letter Only)
CTO 168 Project File

TABLES

TABLE 2-1
MONITORING WELL CONSTRUCTION AND WATER ELEVATION DATA

BUILDING 312, OWS 312-OW
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Monitoring Well Identification	Well Depth (ft, btoc)	Top-of-Casing Elevation (ft, msl)	December 12, 2001		January 11, 2002		March 13, 2003		April 4, 2003	
			Depth to Water (ft, btoc)	Water-Level Elevation (ft, msl)	Depth to Water (ft, btoc)	Water-Level Elevation (ft, msl)	Depth to Water (ft, btoc)	Water-Level Elevation (ft, msl)	Depth to Water (ft, btoc)	Water-Level Elevation (ft, msl)
CEF-312LS-1S	15.58	74.32	7.56	66.76	8.00	66.32	4.82	69.50	6.02	68.30
CEF-312LS-1Sa	15.89	75.25	8.14	67.11	8.70	66.55	5.21	70.04	6.54	68.71
CEF-312-02	13.03	74.77	5.91	68.86	8.37	66.40	NM	NM	6.37	68.40
CEF-312LS-3S	12.96	74.89	7.92	66.97	8.42	66.47	4.96	69.93	6.33	68.56
CEF-312LS-4S	13.97	76.57	9.62	66.95	10.10	66.47	6.77	69.80	8.06	68.51
CEF-312LS-5S	13.50	74.57	NI	NI	NI	NI	4.60	69.97	5.90	68.67
CEF-312LS-6S	14.00	74.30	NI	NI	NI	NI	4.62	69.68	6.01	68.29
CEF-312LS-1I	30.27	74.66	5.71	68.95	8.19	66.47	4.87	69.79	6.15	68.51

Notes:
msl = mean sea level
btoc = below top of casing
NI = not indicated
NM = not measured

TABLE 3-2
SUMMARY OF FIXED-BASE ANALYTICAL DATA IN SOIL

BUILDING 312, OWS 312-O2
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Direct Exposure Residential Criteria	Leachability to Groundwater Criteria	Sample	CEF-312-SB-										
		Sample ID	B002-04	B001-03	B004-02	B012-03	B013-03	B014-03	B015-03	B016-03	B017-03	B018-03	B019-03
		Sample Date	10/4/01	4/4/2003	4/4/2003	4/4/2003	4/4/2003	4/4/2003	4/4/2003	4/4/2003	5/2/2003	5/2/2003	5/2/2003
		Depth (ft)	4	3	2	3	3	3	3	3	3	3	3
		Priority Pollutant Volatile Organic Compounds (µg/kg)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Priority Pollutant Extractable Organic Compounds (µg/kg)											
1900000	2100	ACENAPHTHENE	360 U	72 U	73 U	84 U	84 U	190 U	75 U	72 U	1040	76 U	65 U
18000000	2500000	ANTHRACENE	360 U	36 U	36 U	42 U	42 U	93 U	37 U	36 U	1730	38 U	33 U
1400	3200	BENZO(A)ANTHRACENE	360 U	34 J	15 U	71.4	17 U	349	47.4 J	16.7 J	**3310**	15 U	13 U
100	8000	BENZO(A)PYRENE	**360 U**	**143**	15 U	**109**	17 U	**574**	75.8	42.5 J	**3130**	15 U	13 U
1400	10000	BENZO(B)FLUORANTHENE	360 U	132	17.2 J	136	17 U	708	92.7	51.4 J	**4570**	15 U	13 U
2300000	32000000	BENZO(G,H,I)PERYLENE	360 U	300	15 U	82.8	17 U	733	77.8	44.7 J	1730	15 U	13 U
15000	25000	BENZO(K)FLUORANTHENE	360 U	32 J	15 U	40.8 J	17 U	215	27.9 J	14.4 J	1370	15 U	13 U
76000	3600000	BIS(2-ETHYLHEXYL)PHTHALATE	360 U	180 U	180 U	210 U	210 U	322 J	190 U	180 U	190 U	180 U	170 U
15000000	310000	BUTYL BENZYL PHTHALATE	235 J	90 U	91 U	102 J	110 U	2420	94 U	90 U	127 J	90 U	86 U
140000	77000	CHRYSENE	360 U	38.6 J	15 U	81.1	17 U	391	52.7 J	18.7 J	3360	15 U	13 U
100	30000	DIBENZO(A,H)ANTHRACENE	**360 U**	39.6 J	15 U	19.5 J	17 U	93.6 J	16.1 J	14 U	**304**	15 U	13 U
2900000	1200000	FLUORANTHENE	360 U	42.6 J	36 U	139 J	42 U	612 J	78.9 J	36 U	7880	38 U	33 U
2200000	160000	FLUORENE	360 U	36 U	36 U	42 U	42 U	93 U	37 U	36 U	932	38 U	33 U
1500	28000	INDENO(1,2,3-CD)PYRENE	360 U	207	15 U	81.4	17 U	559	62.2	33.7 J	**2120**	15 U	13 U
68000	2200	1-METHYLNAPHTHALENE	NA	36 U	36 U	42 U	42 U	93 U	37 U	36 U	147 J	38 U	33 U
80000	6100	2-METHYLNAPHTHALENE	NA	36 U	36 U	42 U	42 U	93 U	37 U	36 U	230 J	38 U	33 U
40000	1700	NAPHTHALENE	360 U	36 U	36 U	42 U	42 U	93 U	37 U	36 U	529 J	38 U	33 U
2000000	250000	PHENANTHRENE	360 U	36 U	36 U	85 J	42 U	240 J	37 U	36 U	6510	38 U	33 U
2200000	880000	PYRENE	360 U	44.7 J	36 U	111 J	42 U	446 J	56.2 J	36 U	5970	38 U	33 U
		TRPH (mg/kg)											
340	340	TRPH	**549**	38.2	16.3	32.3	7.2 U	58.8	42.4	18.5	**724**	44.3	5.6 U
		Tentatively Identified Compounds (Volatiles) (µg/kg)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Tentatively Identified Compounds (Semi-volatiles) (µg/kg)											
NE	NE	1-PENTADECENE						530 JN					
700	2	1,1,2,2-TETRACHLOROETHANE					**440 JN**				**420 JN**	**410 JN**	**370 JN**
NE	NE	1-TETRADECENE	480 JN										
NE	NE	1-TRIDECENE	520 JN										
NE	NE	2-(DODECLOXY)-ETHANOL							3100 JN				
NE	NE	2-METHYL-3-PENTEN-1-OL	1300 JN										
NE	NE	2-PHENYLNAPHTHALENE											
NE	NE	2-PROPENOIC ACID, 2-METHYL-, DECYL ESTER										2000 JN	
NE	NE	2-PROPENOIC ACID, 2-METHYL-, DODECYL ESTER									470 JN	2300 JN	
NE	NE	3-METHYL-NONADECANE						820 JN					
NE	NE	3,8-DIMETHYL-DECANE		430 JN									
NE	NE	4H-CYCLOPENTA(DEF)PHENANTHRENE											
NE	NE	9-METHYL-NONADECANE				1900 JN							

See notes at end of table.

TABLE 3-2
SUMMARY OF FIXED-BASE ANALYTICAL DATA IN SOIL

BUILDING 312, OWS 312-O2
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Direct Exposure Residential Criteria	Leachability to Groundwater Criteria	Sample	CEF-312-SB-										
		Sample ID	B002-04	B001-03	B004-02	B012-03	B013-03	B014-03	B015-03	B016-03	B017-03	B018-03	B019-03
		Sample Date	10/4/01	4/4/2003	4/4/2003	4/4/2003	4/4/2003	4/4/2003	4/4/2003	4/4/2003	5/2/2003	5/2/2003	5/2/2003
		Depth (ft)	4	3	2	3	3	3	3	3	3	3	3
		Tentatively Identified Compounds continued (Semi-volatiles) (µg/kg)											
1400	10	BENZO(B)FLUORANTHENE											
NE	NE	BENZO(J)FLUORANTHENE											
NE	NE	CYCLODODECANE	460 JN										
NE	NE	CYCLOPENTANE, PROPYL-										2500 JN	
NE	NE	CYCLOPROPANE, 1,1,2-TRIMETHYL-	1300 JN										
NE	NE	DOCOSANE	570 JN										
NE	NE	DOTRIACONTANE				1400 JN							
NE	NE	HENEICOSANE							630 JN				
NE	NE	HEPTADECANE						390 JN			470 JN		
NE	NE	HEPTADECANE, 2,6,10,15-TETRAMETHYL-	930 JN										
NE	NE	HEXADECANE		1200 JN							1500		
NE	NE	HEXATRIACONTANE		370 JN		710 JN			4000 JN				
NE	NE	EICOSANE							1700 JN				
NE	NE	NONADECANE							1200 JN				
NE	NE	OCTADECANE, 1-CHLORO-	3000 JN										
NE	NE	PENTATRIACONTANE	1700 JN										
NE	NE	PERYLENE						540 JN					
NE	NE	STEARYL CHLORIDE											
NE	NE	TETRATETRACONTANE	9200 JN	1700 JN							1900		
NE	NE	TRICOSANE	3100 JN										
NE	NE	TRITETRACOSANE	12000 JN										
NE	NE	UNKNOWN HYDROCARBON	760 J										
NE	NE	UNKNOWN	4600 J			1200 J		3130 J					
		Metals (mg/kg)											
0.8	29	ARSENIC	0.42	0.30 U	0.31 U	0.37	0.34 U	0.31 U	0.37	0.29 U	0.51 B	0.29 U	0.30 U
75	8	CADMIUM	0.36	0.49 J	0.03 U	0.03 U	0.03 U	6.1	0.53	0.12	0.27 B	0.027 U	0.027 U
1470	266	CHROMIUM	7.5	8.5	4.0	4.9	1.6	36.3	7.8	5.0	8.8	2.9	0.74 B
400	NA	LEAD	11.7	18.3 J	5.7	5.8	1.3	87.7	14.2	11.1	33.7	5.6 B	1.1 B

Notes:
Direct Exposure Residential Criteria based on Chapter 62-777, FAC.
Leachability to Groundwater Criteria based on Chapter 62-777, FAC.
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
Bold indicates concentrations exceeding SCTLs.

U = not detected
J = estimated
N = presumptive evidence of a compound

ND = none detected
NA = not analyzed
NE = not established

TABLE 3-3
SUMMARY OF FIXED-BASE ANALYTICAL DATA IN SEDIMENT

BUILDING 312, OWS 312-OW
NAS CECIL FIELD
JACKOSNVILLE, FLORIDA

Direct Exposure Residential Criteria	Leachability to Groundwater Criteria	Sample	CEF-312-SD-															
		Sampled ID	C001-01	C001-02	C002-01	C003-01	C004-01	C005-01	SD-C006-01	C007-01	C008-01	C009-01	C010-01	C011-01	C012-01	C013-01	C014-01	C015-01
		Sample Date	9/5/2001	4/4/2003	9/5/2001	4/4/2003	4/4/2003	4/4/2003	4/4/2003	5/2/2003	5/2/2003	5/2/2003	5/2/2003	5/2/2003	6/25/2003	6/25/2003	6/25/2003	6/25/2003
		Depth (ft)	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Priority Pollutant Volatile Organic Compounds (µg/kg)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
		Priority Pollutant Extractable Organic Compounds (µg/kg)																
910000	1700	2,4-DIMETHYLPHENOL	**4200 U**	42 U	**4500 U**	38 U	42 U	43 U	36 U	48 U	36 U	150 U	34 U	213 J	NA	NA	NA	NA
1900000	2100	ACENAPHTHENE	**6470**	1310 J	1800 U	1040 J	84 U	270 J	72 U	98 U	75 U	1060	170 U	**4350**	**5400 U**	180 U	700 U	170 U
18000000	2500000	ANTHRACENE	10800	2150 J	1800 U	1690 J	42 U	459 J	36 U	49 U	55.2 J	1740	261 J	6850	989 J	180 U	180 U	170 U
1400	3200	BENZO(A)ANTHRACENE	**20000**	**4570**	**1800 U**	**3700**	50.8 J	1200	45.8 J	110	173	**3710**	716	**17700**	**2060**	90 U	375	410
100	8000	BENZO(A)PYRENE	**17200**	**5200**	**1800 U**	**4360**	82.8	**1420**	88.1	**128**	**222**	**3640**	**743**	**17200**	**1390**	18 U	**338**	**383**
1400	10000	BENZO(B)FLUORANTHENE	**22100**	**6050**	828 J	**5130**	108	**1550**	108	214	340	**5430**	1090	**23700**	**1670**	72 U	480	574
2300000	32000000	BENZO(G,H,I)PERYLENE	16800	2490	967 J	2100	73.3	937	84.7	120	236	2410	603	12200	968	72 U	340	373
15000	25000	BENZO(K)FLUORANTHENE	7080	1800	1800 U	1550	31.9 J	583	31.2 J	53.4 J	112	1610	360	8100	712	18 U	242	316
76000	3600000	BIS(2-ETHYLHEXYL)PHTHALATE	1700 U	804	1800 U	384	210 U	371 J	180 U	240 U	417	730 U	629	730 U	NA	NA	NA	NA
15000000	310000	BUTYL BENZYL PHTHALATE	1700 U	122 J	1800 U	186 J	150 J	113 J	122 J	120 U	476	370 U	573	360 U	NA	NA	NA	NA
140000	77000	CHRYSENE	17800	4110	1800 U	3480	57.4 J	1120	51.2 J	131	200	3860	712	16800	1730	90 U	348 J	460
100	30000	DIBENZO(A,H)ANTHRACENE	**3250**	**553 J**	**1800 U**	**461 J**	17 U	**189**	18.8 J	41.8 J	36.2 J	**433**	**128 J**	**2800 J**	**200 J**	18 U	67.0 J	86.2
2900000	1200000	FLUORANTHENE	47500	10200	1800 U	7960	88.5 J	2360	59.4 J	242 J	328	8250	1510	30400	5170	90 U	925	807
2200000	160000	FLUORENE	5830	1140 J	1800 U	882 J	42 U	214 J	36 U	49 U	37 U	889	119 J	3800	680 U	180 U	180 U	170 U
1500	28000	INDENO(1,2,3-CD)PYRENE	**18300**	**2860**	719	**2460**	65.7 J	1070	76.8	121	193	**2580**	589	**12000**	1290	18 U	317	361
68000	2200	1-METHYLNAPHTHALENE	NA	420 U	NA	380 U	42 U	110 U	36 U	49 U	37 U	136 J	87 U	628 J	2800 U	90 U	350 U	350 U
80000	6100	2-METHYLNAPHTHALENE	NA	420 U	NA	380 U	42 U	110 U	36 U	49 U	37 U	184 J	87 U	973 J	2800 U	90 U	350 U	350 U
40000	1700	NAPHTHALENE	**3960**	629 J	**1800 U**	469 J	42 U	110 U	36 U	49 U	37 U	382 J	87 U	**2430 J**	1400 U	90 U	88 U	87 U
2000000	250000	PHENANTHRENE	38900	8050	1800 U	6110	49.8 J	1760	36 U	158 J	178 J	6780	1090	25900	3690	180 U	430	170 U
900000	50	PHENOL	**1700 U**	42 U	**1800 U**	38 U	42 U	43 U	36 U	48 U	36 U	150 U	34 U	283 J	NA	NA	NA	NA
2200000	880000	PYRENE	30900	7360	1800 U	5680	75.7 J	2060	76.8 J	199 J	310	7250	1220	25000	3390	90 U	678	87 U
		TRPH (mg/kg)																
340	340	TRPH	**786**	24.4	152	56.3	33.4	153	133	117	70.9	297	83.3	**632**	NA	NA	NA	NA
		Tentatively Identified Compounds (Volatiles) (µg/kg)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
		Tentatively Identified Compounds (Semi-volatiles) (µg/kg)																
NE	NE	1-CHLORO-OCTADECANE							1600 JN									
NE	NE	1-METHYL-PHENANTHRENE	2500 JN															
NE	NE	1-PHENYL-CYCLOHEXANECARBOXYLIC ACID					920 JN											
NE	NE	2-METHYL-ANTHRACENE				520 JN						1500 JN		5500 JN				
NE	NE	2-METHYL-NONADECANE							830 JN									
NE	NE	2-METHYL-UNDECANE					610 JN											
NE	NE	3-METHYL-PHENANTHRENE												2300 JN				
NE	NE	4-METHYL-PHENANTHRENE	3600 JN															
700	2	1,1,2,2-TETRACHLOROETHANE								**540 JN**	**440 JN**		**350 JN**					
NE	NE	1,2:7,8-DIBENZPHENANTHRENE	2200 JN	790 J		780 J												
NE	NE	1,12-BENZPERYLENE	4900 JN	1100 JN														
NE	NE	2-PHENYLNAPHTHALENE		1000 JN		730 JN								4100 JN				

See notes at end of table.

TABLE 3-3
SUMMARY OF FIXED-BASE ANALYTICAL DATA IN SEDIMENT

BUILDING 312, OWS 312-OW
NAS CECIL FIELD
JACKOSNVILLE, FLORIDA

Direct Exposure Residential Criteria	Leachability to Groundwater Criteria	Sample	CEF-312-SD-															
		Sampled ID	C001-01	C001-02	C002-01	C003-01	C004-01	C005-01	SD-C006-01	C007-01	C008-01	C009-01	C010-01	C011-01	C012-01	C013-01	C014-01	C015-01
		Sample Date	9/5/2001	4/4/2003	9/5/2001	4/4/2003	4/4/2003	4/4/2003	4/4/2003	5/2/2003	5/2/2003	5/2/2003	5/2/2003	5/2/2003	6/25/2003	6/25/2003	6/25/2003	6/25/2003
		Depth (ft)	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Tentatively Identified Compounds continued (Semi-volatiles) (µg/kg)																
NE	NE	2-PROPENOIC ACID, 2-METHYL-, DECYL ESTER									440 JN							
NE	NE	2-PROPENOIC ACID, 2-METHYL-, DODECYL ESTER									650 JN							
NE	NE	2,6,6-TRIMETHYL-BICYCLO[3.1.1]HEPTANE								540 JN								
NE	NE	4H-CYCLOPENTA(DEF)PHENANTHRENE	5000 JN	1300 JN								2000 JN		9800 JN				
NE	NE	5,12-NAPHTHACENEDIONE	2300 JN	1000 JN														
NE	NE	9H-FLUORENE, 1-METHYL-												1800 JN				
NE	NE	9H-FLUOREN-9-ONE												2100 JN				
NE	NE	9-METHYL-NONADECANE					3700 JN		1100 JN									
NE	NE	9,10-ANTHRACENEDIONE	3700 JN									1800 JN		2500 JN				
NE	NE	11H-BENZO[B]FLUORENE	2100 JN															
NE	NE	BENZ[E]ACEPHENANTHRYLENE		1200 JN						500 JN			920 JN	8200 JN				
NE	NE	BENZ[J]ACEANTHRYLENE, 3-METHYL-	2100 JN															
NE	NE	BENZO[B]CHRYSENE				600 JN												
1400	10000	BENZO(B)FLUORANTHENE		1200 JN														
NE	NE	BENZO[B]TRIPHENYLENE	3700 JN	1000 JN		990 JN								4900 JN				
NE	NE	BENZO[E]PYRENE												18000 JN				
NE	NE	BENZO[F]QUINOLINE												1900 JN				
NE	NE	BENZO(J)FLUORANTHENE	4400 JN			880 JN						2100 JN						
NE	NE	DIBENZO[DEF,MNO]CHRYSENE	4700 JN	1400 JN		1000 JN						2400 JN						
NE	NE	DIBENZOTHIOPHENE	2500 JN											4400 JN				
NE	NE	EICOSANE			6200 JN		820 JN		590 JN									
NE	NE	.GAMMA.-SITOSTEROL								1900 JN								
NE	NE	HEPTADECANE			4100 JN													
NE	NE	HEXADECANE		940 JN														
NE	NE	HEXATRIACONTANE					2800 JN											
NE	NE	INDENO(1,2,3-CD)FLUORANTHENE										1500 JN						
NE	NE	METHYLCARBAZOLE												2000 JN				
NE	NE	PENTAPHENE										1800 JN						
NE	NE	PERYLENE	13000 JN	3400 JN		2600 JN		850 JN				6100 JN						
NE	NE	STEARYL CHLORIDE							1600 JN									
NE	NE	STIGMAST-4-EN-3-ONE								690 JN								
NE	NE	TETRATETRACONTANE							3400 JN									
NE	NE	TRIACONTANE								890 JN								
NE	NE	TRICOSANE								580 JN								
NE	NE	TRITETRACONTANE					1000 JN		2700 JN									
NE	NE	UNKNOWN	2200 JN			1510 J	1200 J											
NE	NE	VITAMIN E								880 JN								

See notes at end of table.

TABLE 3-3
SUMMARY OF FIXED-BASE ANALYTICAL DATA IN SEDIMENT

BUILDING 312, OWS 312-OW
NAS CECIL FIELD
JACKOSNVILLE, FLORIDA

Direct Exposure Residential Criteria	Leachability to Groundwater Criteria	Sample	CEF-312-SD-															
		Sampled ID	C001-01	C001-02	C002-01	C003-01	C004-01	C005-01	SD-C006-01	C007-01	C008-01	C009-01	C010-01	C011-01	C012-01	C013-01	C014-01	C015-01
		Sample Date	9/5/2001	4/4/2003	9/5/2001	4/4/2003	4/4/2003	4/4/2003	4/4/2003	5/2/2003	5/2/2003	5/2/2003	5/2/2003	5/2/2003	6/25/2003	6/25/2003	6/25/2003	6/25/2003
		Depth (ft)	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Metals (mg/kg)																
0.8	29	ARSENIC	**4.1**	0.57	**0.97**	0.42	0.34 U	0.67	0.41	0.40 U	0.35 B	0.43 B	0.30 U	0.31 U	NA	NA	NA	NA
75	8	CADMIUM	0.71	0.33	1.9	0.90	1.3	0.94	1.0	0.037 U	2.1	1.3	0.96	0.18 B	NA	NA	NA	NA
1470	266	CHROMIUM	8.8	8.4	13.6	9.2	9.4	8.7	6.1	4.7	36.3	10.8	8.8	6.4	NA	NA	NA	NA
400	NA	LEAD	25.7	21.4	48.6	48.5	45.0	40.0	19.5	20.7	200	51.8	80.7	44.1	NA	NA	NA	NA

Notes:
Direct Exposure Residential Criteria based on Chapter 62-777, FAC.
Leachability to Groundwater Criteria based on Chapter 62-777, FAC.
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
Bold indicates concentrations exceeding SCTLs.
Sample identifications shown with depth of bottom of sample interval.

U = not detected
J = estimated
N = presumptive evidence of a compound

ND = not analyzed
NA = not analyzed
NE = not established

TABLE 3-5
SUMMARY OF DETECTIONS IN GROUNDWATER

BUILDING 312, OWS 312-OW
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Compounds	GCTLs[1]	Monitoring Well Number CEF-312															
		02	02	02*	LS-3S	LS-3S*	LS-3S	LS-01S	LS-01S	LS-1Sa	LS-1Sa	LS-4S	LS-4S	LS-5S	LS-6S	LS-1I	LS-1I
		12/12/01	4/4/03	4/4/03	12/12/01	12/12/01	4/4/03	12/12/01	4/4/03	12/12/01	4/4/03	12/12/01	4/4/03	3/14/03	3/14/03	12/12/01	4/4/03
Priority Pollutant Volatile Organic Compounds (µg/L)																	
Ethylbenzene	30	2.0 U	1.0 U	1.0 U	5.3	5.4	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
Xylenes, total	20	6.0 U	3.0 U	3.0 U	12.7	12.9	3.0 U	6.0 U	3.0 U	6.0 U	3.0 U	6.0 U	3.0 U	3.0 U	3.0 U	6.0 U	3.0 U
Chlorobenzene	100	2.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	2.0 U	0.88 J	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
Priority Pollutant Extractable Organic Compounds (µg/L)																	
Naphthalene	20	5.0 U	0.77 J	0.35 J	19.1	5.0 U	1.4	5.0 U	3.5	5.0 U	1.0 U	5.0 U	1.1 U	1.0 U	9.7	5.0 U	1.0 U
1-Methylnaphthalene	20	NA	1.6	0.58 J	NA	NA	1.0 U	NA	2.6	NA	1.0 U	NA	1.1 U	1.0 U	5.2	NA	1.0 U
2-Methylnaphthalene	20	NA	1.1 U	1.1 U	NA	NA	1.0 U	NA	1.3	NA	1.0 U	NA	1.1 U	1.0 U	5.1	NA	1.0 U
1,4-Dichlorobenzene	75	5.0 U	5.4 U	5.3 U	5.0 U	5.0 U	5.1 U	5.0 U	2.1 J	5.0 U	5.1 U	5.0 U	5.5 U	5.1 U	5.2 U	5.0 U	5.1 U
TRPH (mg/L)																	
TRPH	5	1.2	0.378	0.424	1.89	1.94	0.73	0.28 U	0.281	0.28 U	0.25 U	0.28 U	0.26 U	0.25 U	0.324	0.28 U	0.26 U
Tentatively Identified Compounds (µg/L)																	
Benzene, 1,2-diethyl-	NE				16												
Benzene, 1,3-diethyl-5-methyl-	NE					21											
Benzene, 1-ethyl-2-methyl-	NE				24	23											
Benzene, 1-ethyl-2,3-dimethyl-	NE				29	27											
Benzene, 2-ethyl-1,3-dimethyl-	NE				29	53											
Benzene, 2-ethyl-1,4-dimethyl-	NE					30											
Benzene, 4-ethyl-1,2-dimethyl-	NE				52	25											
Benzene, 1-methyl-2-propyl-	NE				16												
Benzene, 1-methyl-3-propyl-	NE				19												
Benzene, 1-methyl-4-propyl-	NE					19											
Benzene, 1-methyl-2-(1-methylethyl	NE				46	31											
Benzene, 1-methyl-4-(1-methylethyl	NE				35	18											
Benzene, 1-methyl-3-(1-methylethyl	NE				23												
Benzene, (1-methyl-1-propenyl)-,(Z)-	NE				74												
Benzene, (2-methyl-1-propenyl)-	NE					31											
Benzene, (2-methyl-2-propenyl)-	NE				30												
Benzene, 1,2,3,4-tetramethyl-	NE				42	30											
Benzene, 1,2,3,5-tetramethyl-	NE				41												
Benzene, 1,2,4,5-tetramethyl-	NE				25												
Benzene, 1,2,4-trimethyl-	10				**65**												
Benzene, methyl(1-methylethyl)-	NE				18												
1H-Indene, 2,3-dihydro-4-methyl-	NE		30		24	26											

See notes at end of table.

TABLE 3-5
SUMMARY OF DETECTIONS IN GROUNDWATER

BUILDING 312, OWS 312-OW
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

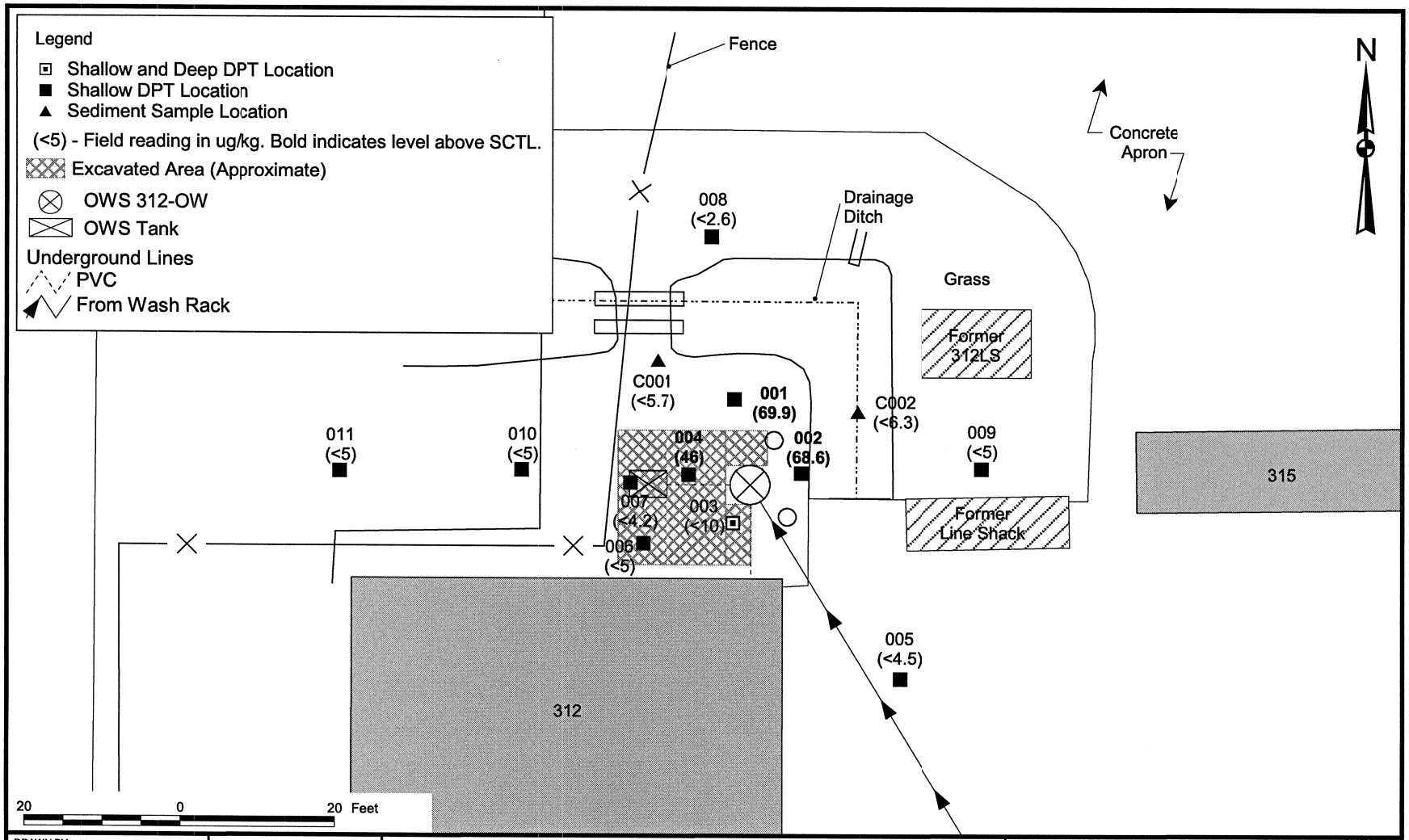
Compounds	GCTLs[1]	Monitoring Well Number CEF-312															
		02	02	02*	LS-3S	LS-3S*	LS-3S	LS-01S	LS-01S	LS-1Sa	LS-1Sa	LS-4S	LS-4S	LS-5S	LS-6S	LS-1I	LS-1I
		12/12/01	4/4/03	4/4/03	12/12/01	12/12/01	4/4/03	12/12/01	4/4/03	12/12/01	4/4/03	12/12/01	4/4/03	3/14/03	3/14/03	12/12/01	4/4/03
Tentatively Identified Compounds continued (µg/L)																	
1H-Indene, 2,3-dihydro-5-methyl-	NE				44												
Indan, 1-methyl-	NE			13 JN		48											
Indane	NE	20			20												
Naphthalene, 1,2,3,4-tetrahydro-	NE				36	40											
Phenothiazine	NE								12 JN								
Unknown	NE				29										18 J		

Notes:
[1] GCTLs based on Chapter 62-770, FAC.
* Duplicate sample
mg/L = milligrams per liter
µg/L = micrograms per liter

U = not detected
J = estimated
N = presumptive evidence of a compound
Bold indicates concentrations exceeding GCTLs.

NE = not established
NA = not analyzed

FIGURES



DRAWN BY MJJ	DATE 11Oct01	FIELD SOIL RESULTS (BENZENE) DPT INVESTIGATION BUILDING 312, OWS 312-OW NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NUMBER 3996
CHECKED BY	DATE		APPROVED BY DATE
COST/SCHEDULE-AREA			APPROVED BY DATE
SCALE AS NOTED			DRAWING NO. FIGURE 3-1 / REV 1

P:\GIS\NAS_CecilField\bldg0312-ows03.apr 12Jun02 MJJ Layout4

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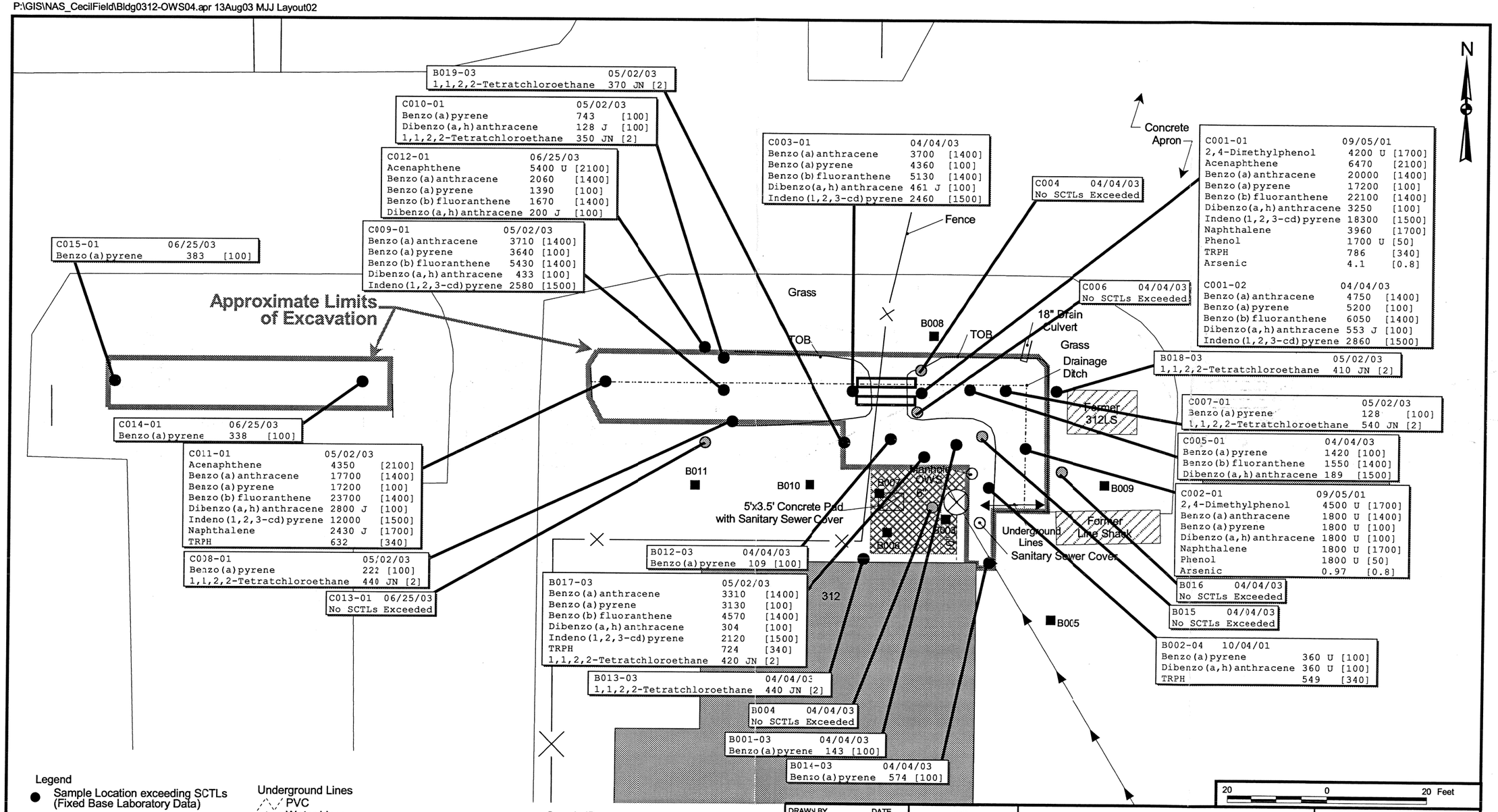


Legend

- Sample Location exceeding SCTLs (Fixed Base Laboratory Data)
- Sample Location not exceeding SCTLs (Fixed Base Laboratory Data)
- Sample Location (Mobile Laboratory Data Only)
- Previsouly Excavated Area (Approximate)
- Limits of Proposed Excavation (Approximate)

Underground Lines
- PVC
- Water Lines
- From Wash Rack

TOB - Top of Bank
- OWS 312-OW
- OWS Tank

C003-01 03/03/03
Benzo(a)anthracene 3700 [1400]

Sample ID
Sample Date
SCTL lesser of residential or leachability to groundwater.
Parameter

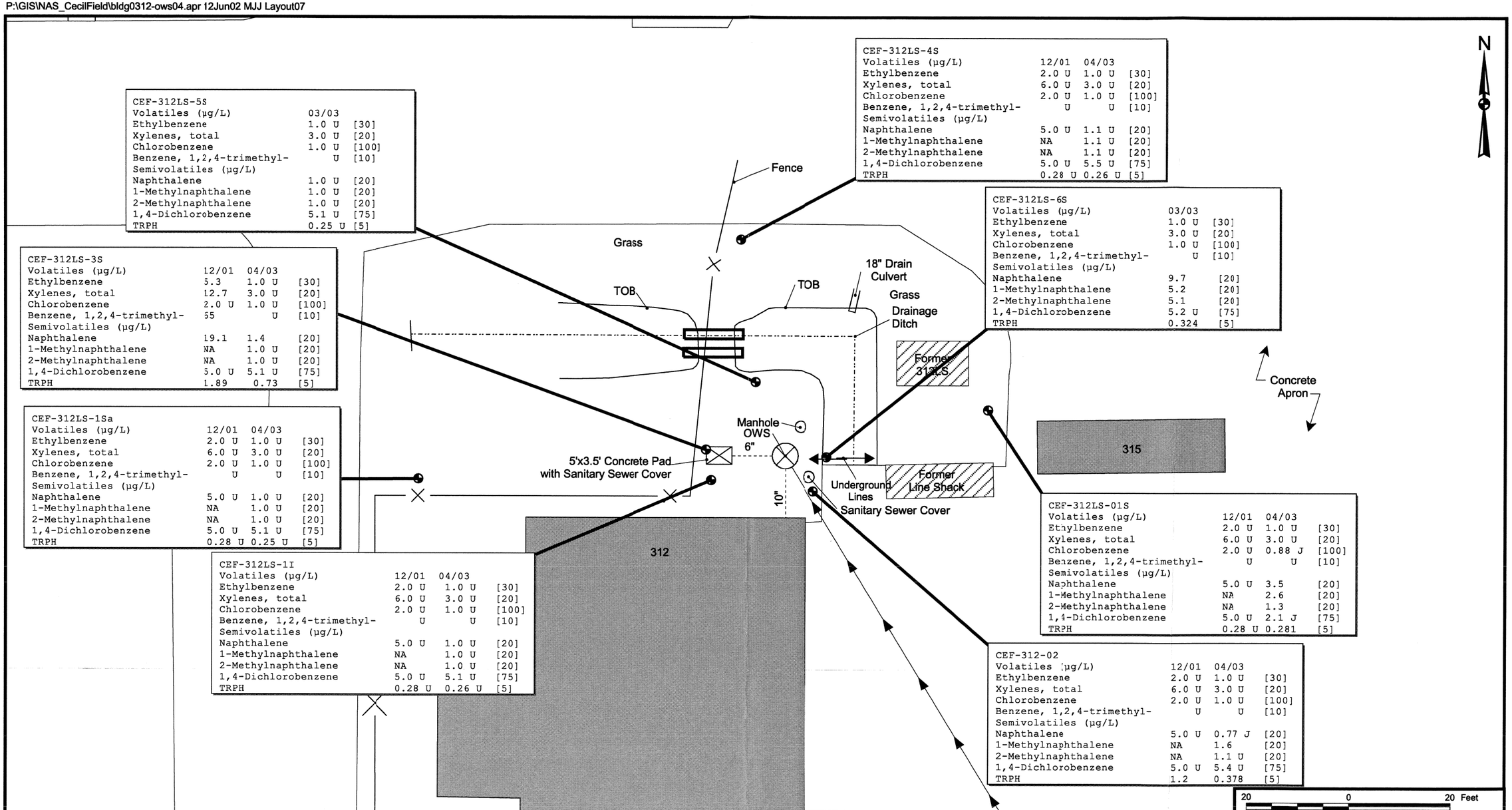
Detection Concentration
Parameters reported in ug/kg, except TRPH mg/kg
J = estimated
U = Below Detection Limits
N = indicates presumptive evidence of a compound

DRAWN BY MJJ	DATE 11Oct01
CHECKED BY	DATE
COST/SCHED-AREA	
SCALE AS NOTED	

FIXED-BASE SOIL AND SEDIMENT RESULT MAP
SITE ASSESSMENT REPORT
BUILDING 312, OWS 312-OW
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

CONTRACT NO. 3996	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 3-2	REV. 1

P:\GIS\NAS_CecilField\bldg0312-ows04.apr 12Jun02 MJJ Layout07



CEF-312LS-4S

Volatiles (µg/L)	12/01	04/03	
Ethylbenzene	2.0 U	1.0 U	[30]
Xylenes, total	6.0 U	3.0 U	[20]
Chlorobenzene	2.0 U	1.0 U	[100]
Benzene, 1,2,4-trimethyl-	U	U	[10]
Semivolatiles (µg/L)			
Naphthalene	5.0 U	1.1 U	[20]
1-Methylnaphthalene	NA	1.1 U	[20]
2-Methylnaphthalene	NA	1.1 U	[20]
1,4-Dichlorobenzene	5.0 U	5.5 U	[75]
TRPH	0.28 U	0.26 U	[5]

CEF-312LS-5S

Volatiles (µg/L)	03/03	
Ethylbenzene	1.0 U	[30]
Xylenes, total	3.0 U	[20]
Chlorobenzene	1.0 U	[100]
Benzene, 1,2,4-trimethyl-	U	[10]
Semivolatiles (µg/L)		
Naphthalene	1.0 U	[20]
1-Methylnaphthalene	1.0 U	[20]
2-Methylnaphthalene	1.0 U	[20]
1,4-Dichlorobenzene	5.1 U	[75]
TRPH	0.25 U	[5]

CEF-312LS-6S

Volatiles (µg/L)	03/03	
Ethylbenzene	1.0 U	[30]
Xylenes, total	3.0 U	[20]
Chlorobenzene	1.0 U	[100]
Benzene, 1,2,4-trimethyl-	U	[10]
Semivolatiles (µg/L)		
Naphthalene	9.7	[20]
1-Methylnaphthalene	5.2	[20]
2-Methylnaphthalene	5.1	[20]
1,4-Dichlorobenzene	5.2 U	[75]
TRPH	0.324	[5]

CEF-312LS-3S

Volatiles (µg/L)	12/01	04/03	
Ethylbenzene	5.3	1.0 U	[30]
Xylenes, total	12.7	3.0 U	[20]
Chlorobenzene	2.0 U	1.0 U	[100]
Benzene, 1,2,4-trimethyl-	55	U	[10]
Semivolatiles (µg/L)			
Naphthalene	19.1	1.4	[20]
1-Methylnaphthalene	NA	1.0 U	[20]
2-Methylnaphthalene	NA	1.0 U	[20]
1,4-Dichlorobenzene	5.0 U	5.1 U	[75]
TRPH	1.89	0.73	[5]

CEF-312LS-1Sa

Volatiles (µg/L)	12/01	04/03	
Ethylbenzene	2.0 U	1.0 U	[30]
Xylenes, total	6.0 U	3.0 U	[20]
Chlorobenzene	2.0 U	1.0 U	[100]
Benzene, 1,2,4-trimethyl-	U	U	[10]
Semivolatiles (µg/L)			
Naphthalene	5.0 U	1.0 U	[20]
1-Methylnaphthalene	NA	1.0 U	[20]
2-Methylnaphthalene	NA	1.0 U	[20]
1,4-Dichlorobenzene	5.0 U	5.1 U	[75]
TRPH	0.28 U	0.25 U	[5]

CEF-312LS-01S

Volatiles (µg/L)	12/01	04/03	
Ethylbenzene	2.0 U	1.0 U	[30]
Xylenes, total	6.0 U	3.0 U	[20]
Chlorobenzene	2.0 U	0.88 J	[100]
Benzene, 1,2,4-trimethyl-	U	U	[10]
Semivolatiles (µg/L)			
Naphthalene	5.0 U	3.5	[20]
1-Methylnaphthalene	NA	2.6	[20]
2-Methylnaphthalene	NA	1.3	[20]
1,4-Dichlorobenzene	5.0 U	2.1 J	[75]
TRPH	0.28 U	0.281	[5]

CEF-312LS-1I

Volatiles (µg/L)	12/01	04/03	
Ethylbenzene	2.0 U	1.0 U	[30]
Xylenes, total	6.0 U	3.0 U	[20]
Chlorobenzene	2.0 U	1.0 U	[100]
Benzene, 1,2,4-trimethyl-	U	U	[10]
Semivolatiles (µg/L)			
Naphthalene	5.0 U	1.0 U	[20]
1-Methylnaphthalene	NA	1.0 U	[20]
2-Methylnaphthalene	NA	1.0 U	[20]
1,4-Dichlorobenzene	5.0 U	5.1 U	[75]
TRPH	0.28 U	0.26 U	[5]

CEF-312-02

Volatiles (µg/L)	12/01	04/03	
Ethylbenzene	2.0 U	1.0 U	[30]
Xylenes, total	6.0 U	3.0 U	[20]
Chlorobenzene	2.0 U	1.0 U	[100]
Benzene, 1,2,4-trimethyl-	U	U	[10]
Semivolatiles (µg/L)			
Naphthalene	5.0 U	0.77 J	[20]
1-Methylnaphthalene	NA	1.6	[20]
2-Methylnaphthalene	NA	1.1 U	[20]
1,4-Dichlorobenzene	5.0 U	5.4 U	[75]
TRPH	1.2	0.378	[5]

Legend
- Monitoring Well
- OWS 312-OW
- OWS Tank

Underground Lines
- PVC
- Water Lines
- From Wash Rack

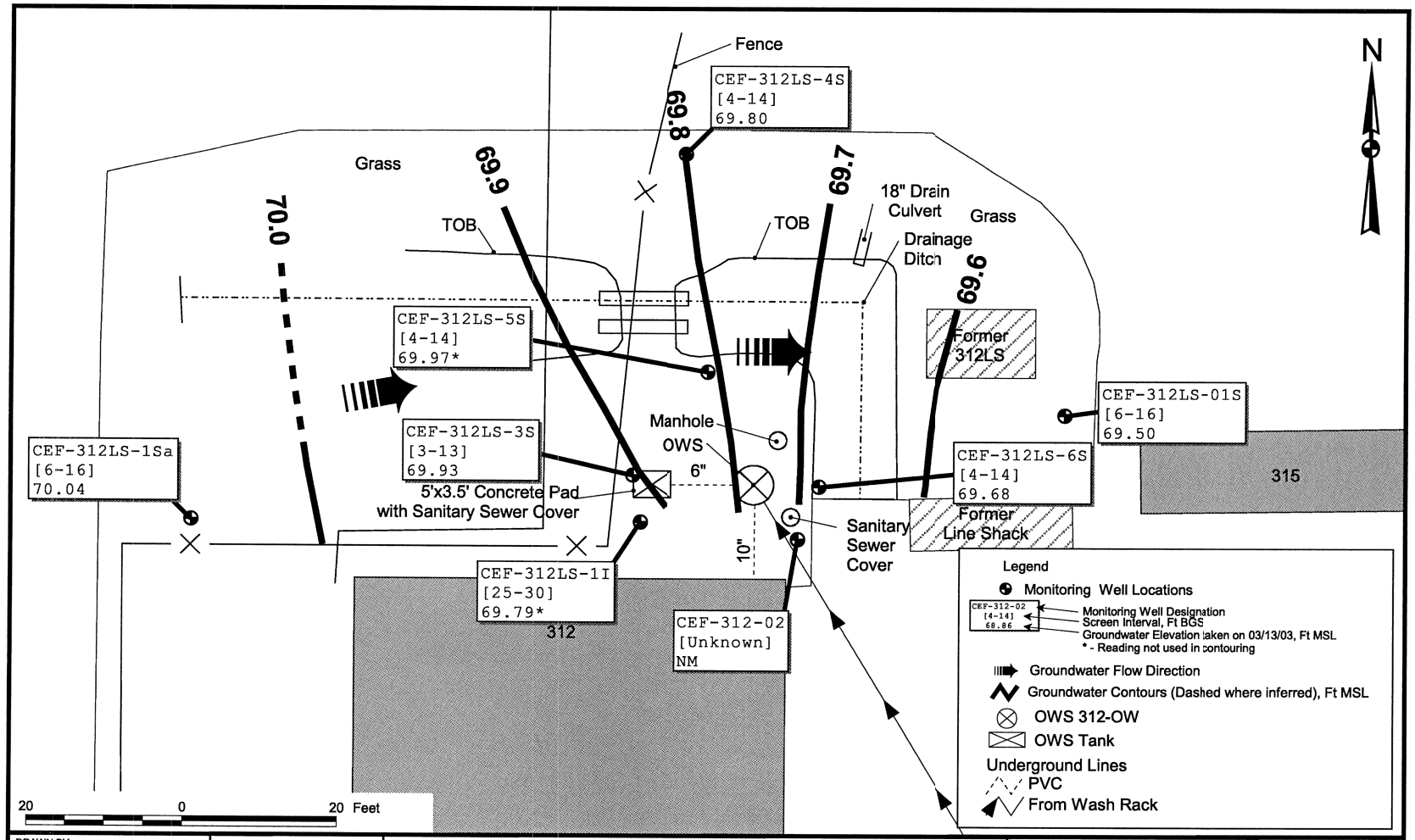
TOB - Top of Bank

Well ID
Sample Date
GCTLs
Detection Concentration
J = estimated
U = Below Detection Limits
Parameter

DRAWN BY	DATE
MJJ	10Jan02
CHECKED BY	DATE
COST/SCHED-AREA	
SCALE	AS NOTED

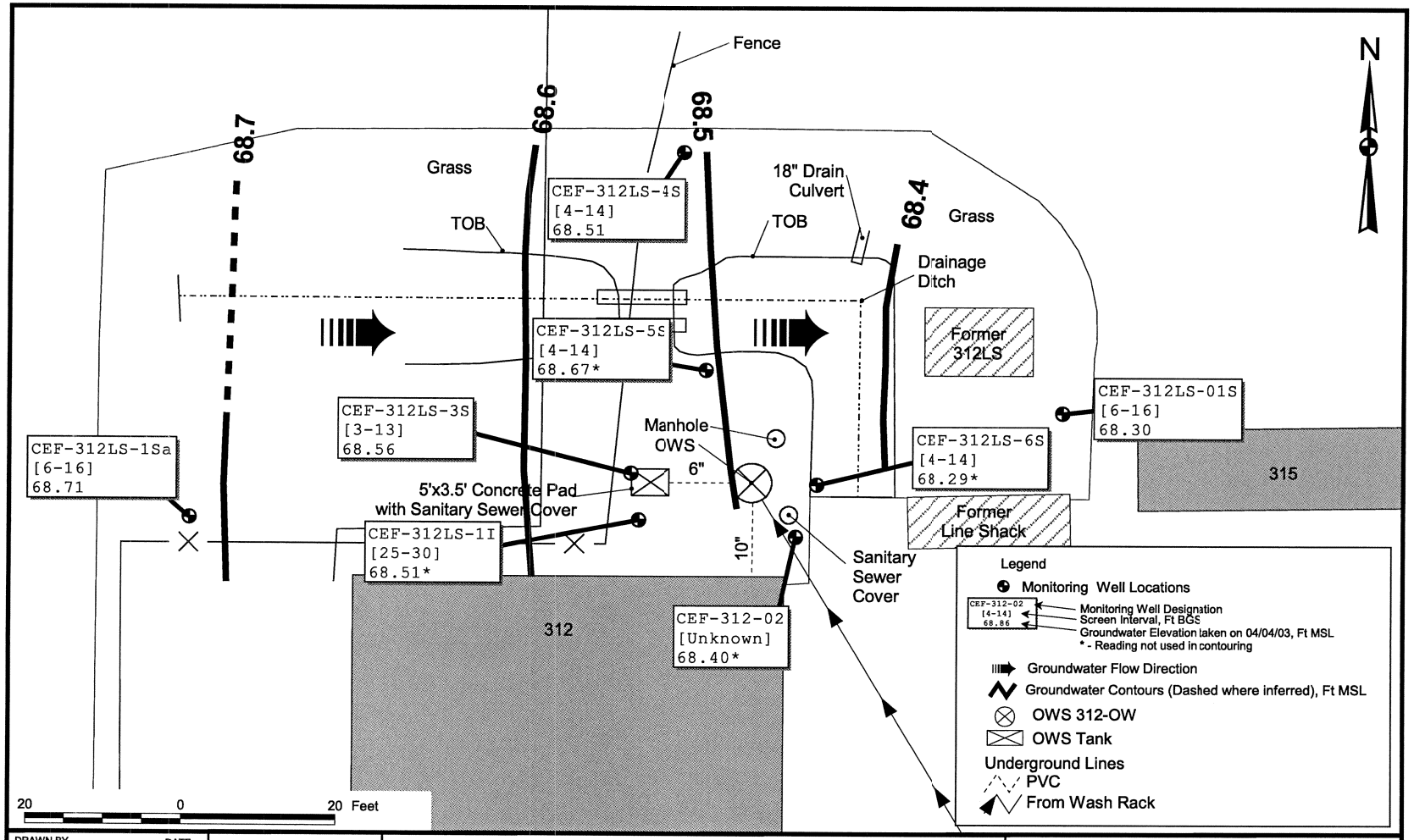
FIXED-BASE
GROUNDWATER CONCENTRATION MAP
SITE ASSESSMENT REPORT
BUILDING 312, OWS 312-OW
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

CONTRACT NO. 3996	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 3-5	REV. 1



DRAWN BY MJJ	DATE 11Oct01	GROUNDWATER FLOW MAP (03/13/03) SITE ASSESSMENT REPORT BUILDING 312, OWS 312-OW NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NUMBER 3996
CHECKED BY	DATE		APPROVED BY DATE
COST/SCHEDULE-AREA			APPROVED BY DATE
SCALE AS NOTED			DRAWING NO. FIGURE 3-8 / REV 0

P:\GIS\NAS_CecilField\Bldg0312-OWS04.apr 13Aug03 MJJ Layout13



DRAWN BY MJJ	DATE 11Oct01	GROUNDWATER FLOW MAP (04/04/03) SITE ASSESSMENT REPORT BUILDING 312, OWS 312-OW NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NUMBER 3996
CHECKED BY	DATE		APPROVED BY DATE
COST/SCHEDULE-AREA			APPROVED BY DATE
SCALE AS NOTED			DRAWING NO. FIGURE 3-9 / REV 0

P:\GIS\NAS_CecilField\Bldg0312-OWS04.apr 13Aug03 MJJ Layout14

ATTACHMENT A

FDEP RESPONSE TO OWS 312-OW

dup.

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

August 26, 2002

RECEIVED
SEP - 5 2002
TETRA TECH NUS
JACKSONVILLE FL

Mr. Wayne Hansel
Code ES245 (UST RPM)
Southern Division
Naval Facilities Engineering Command
Post Office Box 190010
North Charleston, South Carolina 29419-9010

RE: Site Assessment Report for Building 312, Oil-Water Separator 312-OW, Naval Air Station Cecil Field, Jacksonville, Florida

Dear Mr. Hansel:

I have reviewed the Site Assessment Report for Building 312, Oil-Water Separator 312-OW, Naval Air Station Cecil Field, dated April 2002 (received April 10, 2002), prepared and submitted by Tetra Tech NUS, Inc. I have the following comments that should be addressed in a Site Assessment Report Addendum:

(1) I cannot resolve the detections by the mobile laboratory of benzene above its leachability soil cleanup target level (SCTL) in two soil samples located within the area excavated by CH2M Hill Constructors Inc. (CCI) in early 2000 without there having been a subsequent discharge from the Oil-Water Separator after the source removal. It is presumed that CCI backfilled the excavation with clean soil. It is also possible that the mobile laboratory analyses are incorrect.

(2) The mobile laboratory analysis of soil sample CEF-312-SB-002 did not correlate at all with the fixed-based laboratory analysis. The mobile laboratory identified benzene, toluene and total xylenes in the soil sample at that location, while the fixed-based laboratory identified no priority pollutant volatile organic compounds as being detected, only TRPH and tentatively identified semi-volatile compounds.

(3) Direct-push groundwater sampling results from the mobile laboratory at CEF-312-GW-007 identified benzene, total xylenes and naphthalene at concentration greatly exceeding groundwater cleanup target levels (GCTLs). However, groundwater samples collected from monitoring well CEF-312LS-3S identified only trace amounts of ethylbenzene,

total xylenes and naphthalene at concentrations below their respective GCTLs. According to various figures in the SAR, the direct push sample is at the same location as monitoring well CEF-312LS-3S. The differences between the two samples and analyses needs to be reconciled.

(4) Please note that for the tentatively identified compound 1,2,4-trimethylbenzene, the Department has a GCTL of 10 µg/L per Chapter 62-777, Florida Administrative Code. It is shown as not having a GCTL on Table 3-5.

(5) In drainage ditch sediment sample CEF-312-SD-C001, polynuclear aromatic hydrocarbons and TRPH were detected at elevated concentrations, some being greater than residential, industrial, leachability to groundwater and leachability to freshwater surface water SCTLs. These contaminants are at concentrations that would require remediation. Contaminated sediment in the ditch has not been delineated and possible impacts to groundwater and surface water in that area have not been adequately addressed. The detection limits reported for PAHs in sediment sample CEF-312-SD-C002 were higher than residential, industrial and leachability SCTLs for some constituents.

(6) I would propose the following supplemental site assessment activities:

(a) Resample soils in the area previously excavated by CCI and analyze the samples at a fixed-based laboratory to determine whether the benzene exceedances detected previously by the mobile laboratory are indeed present or whether the excavation by CCI adequately addressed this area.

(b) Conduct further sampling and analysis in the ditch to the north of the site to delineate the boundaries of sediment contamination. If water is in the ditch at the time of sampling, a surface water sample should be collected.

(c) Install a permanent monitoring well in the immediate vicinity of DPT location CEF-312-GW-002. This location is hydraulically downgradient of the area previously excavated by CCI and in an area where some soil contamination has been detected in soil samples.

(d) Delineation of soil contamination outside of the previously excavated area to determine the extent of soil contamination.
(e) A complete set of water level measurements.
(f) Groundwater sampling and analysis of all monitoring wells for the used oil parameters, excluding lead.
(g) It is not clear from the report whether the oil-water separator and its associated tank still exist or whether they were removed at the time of CCI's source removal activities. If these structures still exist, contaminated soil may have been left so as not to compromise the system.

Please respond to the above comments and recommendations for further assessment in a Site Assessment Report Addendum. If I can be of any further assistance with this matter, please contact me at (850) 921-9991.

Sincerely,

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

cc: Scott Glass, Southern Division
Debbie Vaughn-Wright, USEPA Region 4
Mark Speranza, TetraTech NUS, Pittsburgh
Paul Malewicki, CH2M Hill Constructors, Inc.
Mike Fitzsimmons, FDEP Northeast District

TJB _____ JJC _____ ESN _____

ATTACHMENT B

SOIL AND SEDIMENT SAMPLE LOG SHEETS

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312 OWS
Project No.: N3996JG0050170

[X] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SB-B001-03
Sample Location: CEF-312-SB-B001-03
Sampled By: MD/MF
C.O.C. No.: 2240

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

BZ = 0
BG = 0
BH = 0

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4/9/03 Time: 1250 Method: SS Hand Auger Monitor Reading (ppm): —	3'	Brown	Silty fine sand, damp USCS - SM

COMPOSITE SAMPLE DATA:

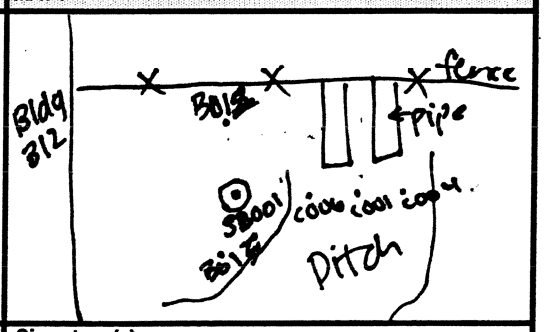
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICs	3 VOC vials w/ methanol or water	✓	accutest
PPL SVOCs w/TICs	1-4 oz. jar	✓	accutest
PAHs	1-4oz. Jar	✓	accutest
TRPH	1-4oz. Jar	✓	accutest
Total As, Cd, Cr, Pb	1-8oz. Jar	✓	accutest

OBSERVATIONS / NOTES:

MAP:



Check if Applicable:

ID No.: [ ] MSMSD [X] DUPLICATE

CEF-312-DU01-SB-02

Signature(s): MCF

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312 OWS
Project No.: N3996JG0050170

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SB-B004-02
Sample Location: CEF-312-SB-B004-02
Sampled By: MD/MF
C.O.C. No.: 2240

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

BZ, BH, BK > 0.0 ppm

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4.4.03 Time: 1325 Method: SS Hand Auger Monitor Reading (ppm): —	2'	dark Brown	Silty fine sand, damp USCS SM

COMPOSITE SAMPLE DATA:

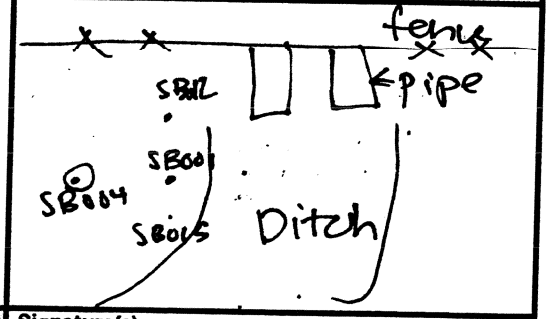
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICs	3 VOC vials w/ methanol or water	✓	accutest
PPL SVOCs w/TICs	1-4 oz. jar	✓	accutest
PAHs	1-4oz. Jar	✓	accutest
TRPH	1-4oz. Jar	✓	accutest
Total As, Cd, Cr, Pb	1-8oz. Jar	✓	accutest

OBSERVATIONS / NOTES:

MAP:



Check if Applicable:

ID No.: [X] MSMSD [ ] DUPLICATE

Same ID as Sample

Signature(s): MJF

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312 OWS
Project No.: N3996JG0050170

[X] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SB-B012-03
Sample Location: CEF-312-SB-B012-03
Sampled By: MD/MF
C.O.C. No.: 2240

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

BG = 0
Bt = 0
BA = 0

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4.4.03 Time: 1345 Method: SS Hand Auger Monitor Reading (ppm):	3'	grey Brown	moist Silty fine Sand USCS-SM

COMPOSITE SAMPLE DATA:

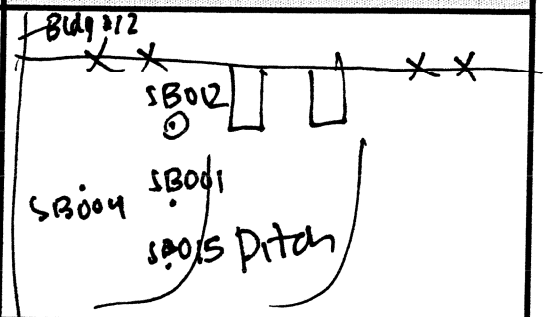
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICs	3 VOC vials w/ methanol or water	✓	accutest
PPL SVOCs w/TICs	1-4 oz. jar	✓	accutest
PAHs	1-4oz. Jar	✓	accutest
TRPH	1-4oz. Jar	✓	accutest
Total As, Cd, Cr, Pb	1-8oz. Jar		accutest

OBSERVATIONS / NOTES:

MAP:



Check if Applicable:

ID No.: [ ] MSMSD [ ] DUPLICATE

None

Signature(s): MCF

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312 OWS
Project No.: N3996JG0050170

[ ] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SB-B013-03
Sample Location: CEF-312-SB-B013-03
Sampled By: MD/MF
C.O.C. No.: 2240

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

BZ BG=0
BH=0

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4.4.03 Time: 1430 Method: SS Hand Auger Monitor Reading (ppm):	3'	White	damp - Silty Sand USCS - SM

COMPOSITE SAMPLE DATA:

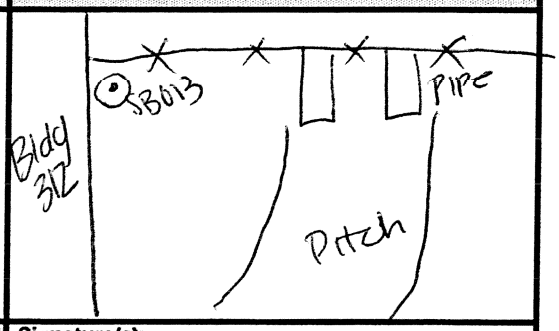
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICs	3 VOC vials w/ methanol or water	✓	accutest
PPL SVOCs w/TICs	1-4 oz. jar	✓	accutest
PAHs	1-4oz. Jar 2.2oz	✓	accutest
TRPH	1-4oz. Jar - 2.2oz	✓	accutest
Total As, Cd, Cr, Pb	1-8oz. Jar	✓	accutest

OBSERVATIONS / NOTES:

MAP:



Check if Applicable:

ID No.: [ ] MSMSD [ ] DUPLICATE

None

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312 OWS
Project No.: N3996JG0050170

[ ] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: CEF-312-SB-B014-03
Sample Location: CEF-312-SB-B014-03
Sampled By: MD/MF
C.O.C. No.: 2240

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4.4.03 Time: 1500 Method: SS Hand Auger Monitor Reading (ppm):	3'	lt Brown	damp silty fine sand USCS-SM

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICs	3 VOC vials w/ methanol or water	3	accutest
PPL SVOCs w/TICs	1-4 oz. jar	1	accutest
PAHs	1-4oz. Jar	1	accutest
TRPH	1-4oz. Jar	1	accutest
Total As, Cd, Cr, Pb	1-8oz. Jar	1	accutest

OBSERVATIONS / NOTES:

MAP:

Check if Applicable:

ID No.: ☐ MSMSD ☐ DUPLICATE

None

Signature(s):

MEF

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312 OWS
Project No.: N3996JG0050170

[X] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SB-B015-03
Sample Location: CEF-312-SB-B015-03
Sampled By: MD/MF
C.O.C. No.: 2240

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

BZ=0
BH=0
BG=0

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4.4.03 Time: 1400 Method: SS Hand Auger Monitor Reading (ppm):	3'	grey Brown	damp-moist silty fine sand USCS-SM

COMPOSITE SAMPLE DATA:

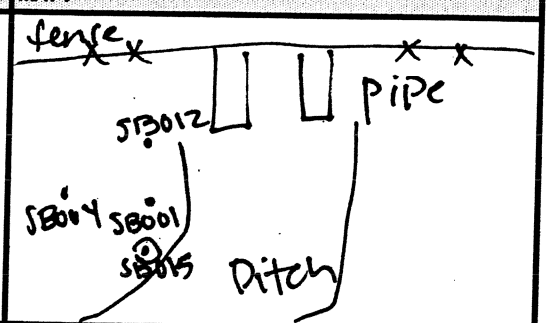
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICs	3 VOC vials w/ methanol or water	✓	accutest
PPL SVOCs w/TICs	1-4 oz. jar	✓	accutest
PAHs	1-4oz. Jar	✓	accutest
TRPH	1-4oz. Jar	✓	accutest
Total As, Cd, Cr, Pb	1-8oz. Jar	✓	accutest

OBSERVATIONS / NOTES:

MAP:



Check if Applicable:

ID No.: [ ] MSMSD [ ] DUPLICATE

None

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312 OWS
Project No.: N3996JG0050170

[X] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SB-B016-03
Sample Location: CEF-312-SB-B016-03
Sampled By: MD/MF
C.O.C. No.: 2240

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4.4.03 Time: 1415 Method: SS Hand Auger Monitor Reading (ppm):	3'	lt Brown	damp - Silty fine sand USCS-SM

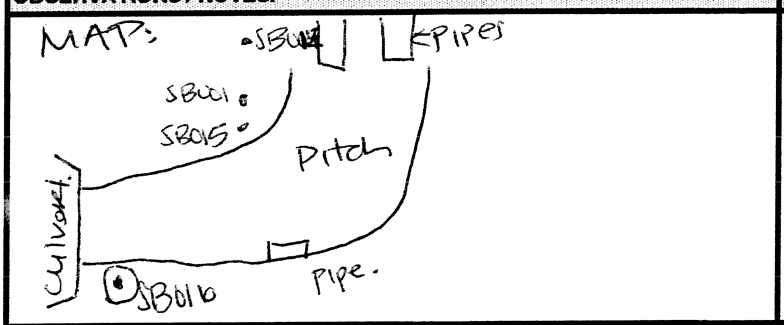
COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICs	3 VOC vials w/ methanol or water	✓	accutest
PPL SVOCs w/TICs	1-4 oz. jar	✓	accutest
PAHs	1-4oz. Jar	✓	accutest
TRPH	1-4oz. Jar	✓	accutest
Total As, Cd, Cr, Pb	1-8oz. Jar	✓	accutest

OBSERVATIONS / NOTES:



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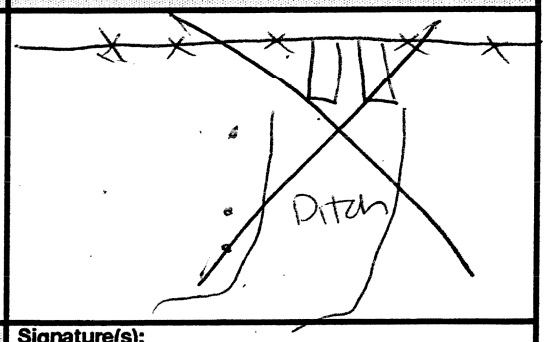


Check if Applicable:

ID No.: [ ] MSMSD [ ] DUPLICATE

None

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312
Project No.: N3996, CTO 168

[ ] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[] Other:
[ ] QA Sample Type:

Sample ID No.: CEF- 312-SB-B017-03
Sample Location: CEF- 312-SB-B017
Sampled By: MD / CG
C.O.C. No.:

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 5/2/03	2-3'	brown	silty fine sand with coarse grain limestone, damp SM
Time: 1335			
Method: SS Hand Auger			
Monitor Reading (ppm): 1.9			

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

	Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICS	SW 846 5035/8260B	2 VOC vials w/ water and 1 w/ methanol	✓	accutest
PPL SVOCs w/TICS	SW 846 5035/8260B	~~1-4 oz. jar~~		accutest
PAHs	SW 846 8310	~~1-4oz. Jar~~ 1 8oz jar	✓	accutest
TRPH	FL-PRO	~~1-4oz. Jar~~		accutest
Total As, Cd, Cr, Pb	6010B or 7421	1 8 oz. jar	✓	

OBSERVATIONS / NOTES:

Depth (ft bls)	Unfilter (ppm)	Filtered (ppm)	Net (ppm)

BZ/BK = 0.0 ppm

MAP:

See logbook

Check if Applicable:

ID No.: [ ] MSMSD [ ] DUPLICATE

None

Signature(s): M. W. Dale

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312
Project No.: N3996, CTO 168

[ ] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[] Other:
[ ] QA Sample Type:

Sample ID No.: CEF- 312-SB-B018-03
Sample Location: CEF- 312-SB-B018
Sampled By: MD / CG
C.O.C. No.:

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 5/2/03	2-3'	lt. gray	silty sand, fine, damp SM
Time: 1353			
Method: SS Hand Auger			
Monitor Reading (ppm): 0.0			

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

	Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICS	SW 846 5035/8260B	2 VOC vials w/ water and 1 w/ methanol	✓	accutest
PPL SVOCs w/TICS	SW 846 5035/8260B	1-4 oz. jar	✓	accutest
PAHs	SW 846 8310	1-4oz. Jar	✓	accutest
TRPH	FL-PRO	1-4oz. Jar	✓	accutest
Total As, Cd, Cr, Pb	6010B or 7421	1 8 oz. jar	✓	

OBSERVATIONS / NOTES:

Depth (ft bls) | Unfilter (ppm) | Filtered (ppm) | Net (ppm)

BK = BZ = 0.0 ppm

MAP:

See log book.

Check if Applicable:

ID No.: [ ] MSMSD [X] DUPLICATE

CEF-312-DU01-SB-03

Signature(s): M.V. Dale

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312
Project No.: N3996, CTO 168

[ ] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SB-B019-03
Sample Location: CEF-312-SB-B019
Sampled By: MD / CG
C.O.C. No.:

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 8/2/03			
Time: 1526			
Method: SS Hand Auger			
Monitor Reading (ppm): 0.0	0-2-3'	lt. gray	sl. silty fine sd. damp SM

MD

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

	Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICS	SW 846 5035/8260B	2 VOC vials w/ water and 1 w/ methanol	✓	accutest
PPL SVOCs w/TICS	SW 846 5035/8260B	1-4 oz. jar		accutest
PAHs	SW 846 8310	1-4oz. Jar	✓	accutest
TRPH	FL-PRO	1-4oz. Jar	✓	accutest
Total As, Cd, Cr, Pb	6010B or 7421	1 8 oz. jar	✓	

OBSERVATIONS / NOTES:

Depth (ft bls) Unfilter (ppm) Filtered (ppm) Net (ppm)

BG = BZ = 0.0 ppm
BH = 0.0 ppm

MAP:

see logbook

Check if Applicable:

ID No.: ☐ MSMSD ☐ DUPLICATE

None

Signature(s): M.d. Dale

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312 OWS
Project No.: N3996JG0050170

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SD-C001-02
Sample Location: CEF-312-SD-C001-02
Sampled By: MD/MF
C.O.C. No.: 2240

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

BG=0
BZ=0
BH=0.3

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4/9/03 Time: 1130 Method: SS Hand Auger Monitor Reading (ppm):	2'	dark Brown	silty fine sand, damp USCS-SM

COMPOSITE SAMPLE DATA:

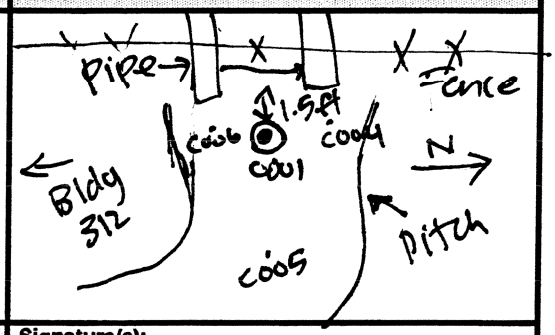
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICs	3 VOC vials w/ methanol or water	✓	accutest
PPL SVOCs w/TICs	1-4 oz. jar	✓	accutest
PAHs	1-4oz. Jar	✓	accutest
TRPH	1-4oz. Jar	✓	accutest
Total As, Cd, Cr, Pb	1-8oz. Jar	✓	accutest

OBSERVATIONS / NOTES:

MAP:



Check if Applicable:

ID No.: [ ] MSMSD [ ] DUPLICATE

None

Signature(s):

MJ

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312 OWS
Project No.: N3996JG0050170

[ ] Surface Soil
[ ] Subsurface Soil
[X] Sediment
[ ] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SD-C003-01
Sample Location: CEF-312-SD-C003
Sampled By: MD/MF
C.O.C. No.: 2240

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

BK = 0.0 ppm
BZ = 0.0 ppm
BH = 0.0 ppm

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4/4/03 Time: 1515 Method: SS Hand Auger Monitor Reading (ppm): —	1'	Lt. brown	silty, fine sand USCS=SM damp

COMPOSITE SAMPLE DATA:

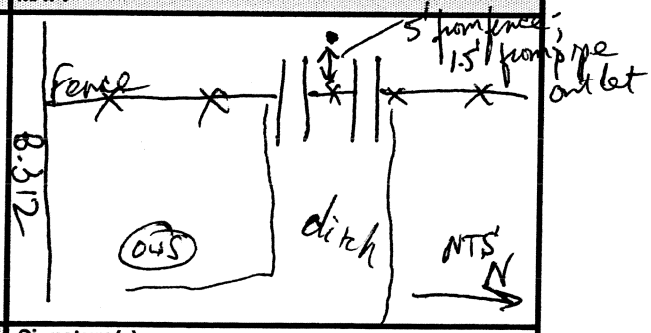
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICs	3 VOC vials w/ methanol or water	3	accutest
PPL SVOCs w/TICs	1-~~4~~6z. jar	2	accutest
PAHs	1-~~4~~8z. Jar	2	accutest
TRPH	1-~~4~~8z. Jar	2	accutest
Total As, Cd, Cr, Pb	1-8oz. Jar	1	accutest

OBSERVATIONS / NOTES:

MAP:



Check if Applicable:

ID No.: [ ] MSMSD [ ] DUPLICATE

None

Signature(s): Maurin W. Dale

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312 OWS
Project No.: N3996JG0050170

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SD-C004-01
Sample Location: CEF-312-SD-C004-01
Sampled By: MD/MF
C.O.C. No.: 2240

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

BZ=0.
BG=0
BH=385

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4/9/03 Time: 1150 Method: SS Hand Auger Monitor Reading (ppm):	1'	Brown	Silty fine sand, dry USCS-SM

COMPOSITE SAMPLE DATA:

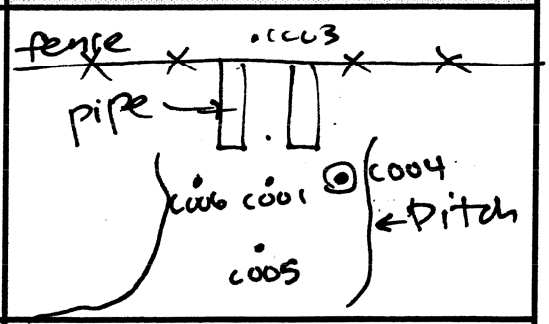
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICs	3 VOC vials w/ methanol or water	✓	accutest
PPL SVOCs w/TICs	1-4 oz. jar	✓	accutest
PAHs	1-4oz. Jar	✓	accutest
TRPH	1-4oz. Jar	✓	accutest
Total As, Cd, Cr, Pb	1-8oz. Jar	✓	accutest

OBSERVATIONS / NOTES:

MAP:



Check if Applicable:

ID No.: [ ] MSMSD [ ] DUPLICATE

None

Signature(s):

MCF

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312 OWS
Project No.: N3996JG0050170

Sample ID No.: CEF-312-SD-C005-01
Sample Location: CEF-312-SD-C005-01
Sampled By: MD/MF
C.O.C. No.: 2240

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

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

BG = 0
BZ = 0
BH = 0

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4/4/03			
Time: 1240			
Method: SS Hand Auger	1'		
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

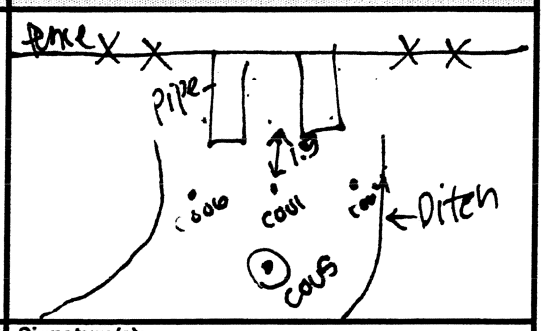
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICs	3 VOC vials w/ methanol or water	✓	accutest
PPL SVOCs w/TICs	1-4 oz. jar	✓	accutest
PAHs	1-4oz. Jar	✓	accutest
TRPH	1-4oz. Jar	✓	accutest
Total As, Cd, Cr, Pb	1-8oz. Jar	✓	accutest

OBSERVATIONS / NOTES:

MAP:



Check if Applicable:

ID No.: [ ] MSMSD [ ] DUPLICATE

None

Signature(s): MCF

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312 OWS
Project No.: N3996JG0050170

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SD-C006-01
Sample Location: CEF-312-SD-C006-01
Sampled By: MD/MF
C.O.C. No.: 2240

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

BK=0
BZ=0
BX=0

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 4/4/03 Time: 1210 Method: SS Hand Auger Monitor Reading (ppm):	1'	lt Brown	Silty fine sand, damp USCS-SM

COMPOSITE SAMPLE DATA:

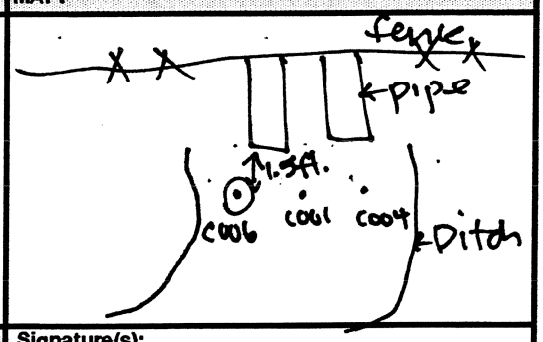
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICs	3 VOC vials w/ methanol or water	✓	accutest
PPL SVOCs w/TICs	1-4 oz. jar	✓	accutest
PAHs	1-4oz. Jar	✓	accutest
TRPH	1-4oz. Jar	✓	accutest
Total As, Cd, Cr, Pb	1-8oz. Jar	✓	accutest

OBSERVATIONS / NOTES:

MAP:



Check if Applicable:

ID No.: [ ] MSMSD [ ] DUPLICATE

None

Signature(s):

MEF

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312
Project No.: N3996, CTO 168

[ ] Surface Soil
[ ] Subsurface Soil
[X] Sediment
[] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SD-C007-01
Sample Location: CEF-312-SD-C007
Sampled By: MD / CG
C.O.C. No.:

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 5/2/03 Time: 1420 Method: SS Hand Auger Monitor Reading (ppm): 0.0	0-1	black	organic silty sd. SM moist

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

	Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICS	SW 846 5035/8260B	2 VOC vials w/ water and 1 w/ methanol	✓	accutest
PPL SVOCs w/TICS	SW 846 5035/8260B	1-4 oz. jar	✓	accutest
PAHs	SW 846 8310	1-4oz. Jar	✓	accutest
TRPH	FL-PRO	1-4oz. Jar	✓	accutest
Total As, Cd, Cr, Pb	6010B or 7421	1 8 oz. jar	✓	

OBSERVATIONS / NOTES:

Depth (ft bls) Unfilter (ppm) Filtered (ppm) Net (ppm)

BG = BH = BZ = 0.0 ppm

MAP:

see logbook

Check if Applicable:

ID No.: ☐ MSMSD ☐ DUPLICATE

None

Signature(s): M.W. Dale

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312
Project No.: N3996, CTO 168

[ ] Surface Soil
[ ] Subsurface Soil
[X] Sediment
[] Other:
[ ] QA Sample Type:

Sample ID No.: CEF- 312-SD-C003-01
Sample Location: CEF- 312-SD-C008
Sampled By: MD / CG
C.O.C. No.:

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 5/2/05	0-1'	dk. brn	silty fine sd. SM moist
Time: 1514			
Method: SS Hand Auger			
Monitor Reading (ppm): 0.0			

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

	Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICS	SW 846 5035/8260B	2 VOC vials w/ water and 1 w/ methanol	✓	accutest
PPL SVOCs w/TICS	SW 846 5035/8260B	1-4 oz. jar		accutest
PAHs	SW 846 8310	1-4oz. Jar	✓	accutest
TRPH	FL-PRO	1-4oz. Jar		accutest
Total As, Cd, Cr, Pb	6010B or 7421	1 8 oz. jar	✓	

OBSERVATIONS / NOTES:

Depth (ft bls) Unfilter (ppm) Filtered (ppm) Net (ppm)

BG = BZ = BH = 0.0 ppm

MAP:

See logbook

Check if Applicable:

ID No.: ☐ MSMSD ☐ DUPLICATE

None

Signature(s): M. W. Dale

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312
Project No.: N3996, CTO 168

[ ] Surface Soil
[ ] Subsurface Soil
[X] Sediment
[] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SD-C009-01
Sample Location: CEF-312-SD-C009
Sampled By: MD / CG
C.O.C. No.:

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 5/2/05	0-1'	dk.brn	silty fine sd. SM
Time: 1506			
Method: SS Hand Auger			
Monitor Reading (ppm): 0.0			

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

	Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICS	SW 846 5035/8260B	2 VOC vials w/ water and 1 w/ methanol	✓	accutest
PPL SVOCs w/TICS	SW 846 5035/8260B	1-4 oz. jar		accutest
PAHs	SW 846 8310	1-4oz. Jar	✓	accutest
TRPH	FL-PRO	1-4oz. Jar	✓	accutest
Total As, Cd, Cr, Pb	6010B or 7421	1 8 oz. jar	✓	

OBSERVATIONS / NOTES:

Depth (ft bls)	Unfilter (ppm)	Filtered (ppm)	Net (ppm)

BG = BZ = BH = 0.0 ppm

MAP:

see logbook

Check if Applicable:

ID No.: ☐ MSMSD ☐ DUPLICATE

NTE

Signature(s): M.V. Dale

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312
Project No.: N3996, CTO 168

[ ] Surface Soil
[ ] Subsurface Soil
[X] Sediment
[ ] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SD-C010-01
Sample Location: CEF-312-SD-C010
Sampled By: MD / CG
C.O.C. No.:

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 5/2/03 Time: 1301 Method: SS Hand Auger Monitor Reading (ppm): 0.0	0-1'	brown	silty fine sand, dry SM

COMPOSITE SAMPLE DATA:

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

N/A

SAMPLE COLLECTION INFORMATION:

	Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICS	SW 846 5035/8260B	2 VOC vials w/ water and 1 w/ methanol	✓	accutest
PPL SVOCs w/TICS	SW 846 5035/8260B	1-4 oz. jar		accutest
PAHs	SW 846 8310	1-4oz. Jar	✓	accutest
TRPH	FL-PRO	1-4oz. Jar		accutest
Total As, Cd, Cr, Pb	6010B or 7421	1 8 oz. jar	✓	

OBSERVATIONS / NOTES:

Depth (ft bls)	Unfilter (ppm)	Filtered (ppm)	Net (ppm)

BZ = BG = BH = 0.0 ppm

MAP:

see logbook

Check if Applicable:

ID No.: [ ] MSMSD [ ] DUPLICATE

None

Signature(s): M.W. Dale

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Building 312
Project No.: N3996, CTO 168

[ ] Surface Soil
[ ] Subsurface Soil
[X] Sediment
[] Other:
[ ] QA Sample Type:

Sample ID No.: CEF- 312-SD-C011-01
Sample Location: CEF- 312-SD-C011
Sampled By: MD / CG
C.O.C. No.:

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 5/2/03 Time: 1452 Method: SS Hand Auger Monitor Reading (ppm): 0.0	0-1'	dK. brn	very silty fine sd. SM damp organics

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

	Analysis	Container Requirements	Collected	LAB
PPL VOCs w/TICS	SW 846 5035/8260B	2 VOC vials w/ water and 1 w/ methanol	✓	accutest
PPL SVOCs w/TICS	SW 846 5035/8260B	1-4 oz. jar		accutest
PAHs	SW 846 8310	1-4oz. Jar	✓	accutest
TRPH	FL-PRO	1-4oz. Jar		accutest
Total As, Cd, Cr, Pb	6010B or 7421	1 8 oz. jar	✓	

OBSERVATIONS / NOTES:

Depth (ft bls)	Unfilter (ppm)	Filtered (ppm)	Net (ppm)

BH = BZ = BG = 0.0 ppm

MAP:

see logbook

Check if Applicable:

ID No.: [ ] MSMSD [ ] DUPLICATE

None

Signature(s): M. W. [illegible]

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Bldg. 312 OWS
Project No.: N3996, CTO 168

[ ] Surface Soil
[ ] Subsurface Soil
[x] Sediment
[] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SD-C012-01
Sample Location: CEF-312-SD-C012-01
Sampled By: PL/SM
C.O.C. No.: 2322

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

GRAB SAMPLE DATA:

Date: 6/25/03
Time: 1348
Method: Disposable Trowel
Monitor Reading (ppm): 0

Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
0-1'	Brown	Sand (Fine), Dry

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
PAHs	SW 846 8310	1-4oz. Jar	✓	accutest

OBSERVATIONS / NOTES:

MAP:

Check if Applicable:

ID No.: ☐ MSMSD ☐ DUPLICATE

None

Signature(s): Pete Lentto
Scott R. McCl

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Bldg. 312 OWS
Project No.: N3996, CTO 168

[ ] Surface Soil
[ ] Subsurface Soil
[x] Sediment
[] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SD-C013-01
Sample Location: CEF-312-SD-C013-01
Sampled By: PL/SM
C.O.C. No.: 2322

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 6/25/03 Time: 1350 Method: Disposable Trowel Monitor Reading (ppm): 0	0-1'	Brown	Sand (fine), Dry

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
PAHs	SW 846 8310	1-4oz. Jar	✓	accutest

OBSERVATIONS / NOTES:

MAP:

Check if Applicable:

ID No.: ☐ MSMSD ☐ DUPLICATE

None

Signature(s): Pat Lewis
Scott R. Mott

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Bldg. 312 OWS
Project No.: N3996, CTO 168

[ ] Surface Soil
[ ] Subsurface Soil
[x] Sediment
[] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SD-C014-01
Sample Location: CEF-312-SD-C014-01
Sampled By:
C.O.C. No.: 2322

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 6/25/03 Time: 1352 Method: Disposable Trowel Monitor Reading (ppm): 0	0-1"	Brownish Grey	Fine Sand, Dry

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
PAHs	SW 846 8310	1-4oz. Jar	✓	accutest

OBSERVATIONS / NOTES:

MAP:

Check if Applicable:

ID No.: ☐ MSMSD ☒ DUPLICATE

CEF-312-DUP1-SB-04

Signature(s): Pat Smith
Scott R. McG

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Cecil Field Bldg. 312 OWS
Project No.: N3996, CTO 168

[ ] Surface Soil
[ ] Subsurface Soil
[x] Sediment
[] Other:
[ ] QA Sample Type:

Sample ID No.: CEF-312-SD-C015-01
Sample Location: CEF-312-SD-C015-01
Sampled By: PL/SM
C.O.C. No.: 2322

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

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 6/25/03 Time: 1354 Method: Disposable Trowel Monitor Reading (ppm): 0	0-1'	Brownish Grey	Fine Sand, Dry

COMPOSITE SAMPLE DATA:

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

SAMPLE COLLECTION INFORMATION:

Analysis		Container Requirements	Collected	LAB
PAHs	SW 846 8310	1-4oz. Jar	✓	accutest

OBSERVATIONS / NOTES:

MAP:

Check if Applicable:

ID No.: ☐ MSMSD ☐ DUPLICATE

None

Signature(s):

ATTACHMENT C

APRIL 2003 SOIL/SEDIMENT/GROUNDWATER LABORATORY REPORT

Southeast ACCUTEST Laboratories

06/06/03

Technical Report for

Tetra Tech, NUS

Cecil Field CTO168

WORK RELEASE N3996-WR316

Accutest Job Number: F17248

Report to:

Tetra Tech, NUS

dalem@ttnus.com

ATTN: Merv Dale

Total number of pages in report: 338

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

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Sample Summary

Tetra Tech, NUS

Job No: F17248

Cecil Field CTO168
Project No: WORK RELEASE N3996-WR316

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F17248-1	04/04/03	11:30	MD	04/05/03	SO	Soil	CEF-312-SD-C001-02
F17248-2	04/04/03	15:15	MD	04/05/03	SO	Soil	CEF-312-SD-C003-01
F17248-3	04/04/03	11:50	MD	04/05/03	SO	Soil	CEF-312-SD-C004-01
F17248-4	04/04/03	12:40	MD	04/05/03	SO	Soil	CEF-312-SD-C005-01
F17248-5	04/04/03	12:10	MD	04/05/03	SO	Soil	CEF-312-SD-C006-01
F17248-6	04/04/03	12:50	MD	04/05/03	SO	Soil	CEF-312-SB-B001-03
F17248-7	04/04/03	13:25	MD	04/05/03	SO	Soil	CEF-312-SB-B004-02
F17248-8	04/04/03	13:45	MD	04/05/03	SO	Soil	CEF-312-SB-B012-03
F17248-9	04/04/03	14:30	MD	04/05/03	SO	Soil	CEF-312-SB-B013-03
F17248-10	04/04/03	15:00	MD	04/05/03	SO	Soil	CEF-312-SB-B014-03
F17248-11	04/04/03	14:00	MD	04/05/03	SO	Soil	CEF-312-SB-B015-03
F17248-12	04/04/03	14:15	MD	04/05/03	SO	Soil	CEF-312-SB-B016-03
F17248-13	04/04/03	00:00	MD	04/05/03	SO	Soil	CEF-312-DU01-SB-02

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Tetra Tech, NUS

Job No: F17248

Cecil Field CTO168
Project No: WORK RELEASE N3996-WR316

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F17248-14	04/04/03	09:55	MD	04/05/03	AQ	Ground Water	CEF-312-GW-02-02
F17248-15	04/04/03	10:00	MD	04/05/03	AQ	Ground Water	CEF-312-LS-GW-1I-02
F17248-16	04/04/03	12:10	MD	04/05/03	AQ	Ground Water	CEF-312LS-GW-01S-02
F17248-17	04/04/03	12:55	MD	04/05/03	AQ	Ground Water	CEF-312LS-GW-3S-02
F17248-18	04/04/03	13:40	MD	04/05/03	AQ	Ground Water	CEF-312LS-GW-4S-02
F17248-19	04/04/03	14:35	MD	04/05/03	AQ	Ground Water	CEF-312LS-GW-1SA-02
F17248-20	04/04/03	00:00	MD	04/05/03	AQ	Ground Water	CEF-312LS-DU01-GW-02

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Client Sample ID:	CEF-312-SD-C001-02		
Lab Sample ID:	F17248-1	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	80.9
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H020649.D	1	04/11/03	NAF	n/a	n/a	VH740
Run #2							

	Initial Weight
Run #1	4.27 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	7.2	2.9	ug/kg	
75-27-4	Bromodichloromethane	ND	7.2	2.9	ug/kg	
75-25-2	Bromoform	ND	7.2	2.9	ug/kg	
108-90-7	Chlorobenzene	ND	7.2	2.9	ug/kg	
75-00-3	Chloroethane	ND	7.2	4.3	ug/kg	
67-66-3	Chloroform	ND	7.2	2.9	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	36	14	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.2	2.9	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.2	2.9	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	7.2	2.9	ug/kg	
107-06-2	1,2-Dichloroethane	ND	7.2	2.9	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.2	2.9	ug/kg	
124-48-1	Dibromochloromethane	ND	7.2	2.9	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	7.2	2.9	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.2	2.9	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	7.2	2.9	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.2	2.9	ug/kg	
100-41-4	Ethylbenzene	ND	7.2	2.9	ug/kg	
74-83-9	Methyl bromide	ND	7.2	2.9	ug/kg	
74-87-3	Methyl chloride	ND	7.2	2.9	ug/kg	
75-09-2	Methylene chloride	ND	14	7.2	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	7.2	2.9	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.2	2.9	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.2	2.9	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.2	2.9	ug/kg	
127-18-4	Tetrachloroethylene	ND	7.2	2.9	ug/kg	
108-88-3	Toluene	ND	7.2	2.9	ug/kg	
79-01-6	Trichloroethylene	ND	7.2	2.9	ug/kg	
75-01-4	Vinyl chloride	ND	7.2	2.9	ug/kg	
1330-20-7	Xylene (total)	ND	22	5.8	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C001-02		
Lab Sample ID:	F17248-1	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	80.9
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%
2037-26-5	Toluene-D8	107%		79-121%
460-00-4	4-Bromofluorobenzene	121%		77-133%
17060-07-0	1,2-Dichloroethane-D4	93%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C001-02		
Lab Sample ID:	F17248-1	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	80.9
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W014965.D	1	04/15/03	ME	04/08/03	OP7284	SW783
Run #2							

	Initial Weight	Final Volume
Run #1	29.1 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	210	42	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	42	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	42	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	42	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	420	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	420	85	ug/kg	
88-75-5	2-Nitrophenol	ND	210	42	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	420	ug/kg	
87-86-5	Pentachlorophenol	ND	1100	420	ug/kg	
108-95-2	Phenol	ND	210	42	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	42	ug/kg	
92-87-5	Benzidine	ND	2100	1100	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	210	42	ug/kg	
85-68-7	Butyl benzyl phthalate	122	420	110	ug/kg	J
91-58-7	2-Chloronaphthalene	ND	210	42	ug/kg	
106-47-8	4-Chloroaniline	ND	420	170	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	210	42	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	210	85	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	210	42	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	210	42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	210	42	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	210	42	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	210	42	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	210	42	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	210	85	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	210	85	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	420	210	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	420	110	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	420	210	ug/kg	
84-66-2	Diethyl phthalate	ND	420	110	ug/kg	
131-11-3	Dimethyl phthalate	ND	420	110	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	804	420	210	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C001-02		
Lab Sample ID:	F17248-1	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	80.9
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	210	42	ug/kg	
87-68-3	Hexachlorobutadiene	ND	210	85	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	210	85	ug/kg	
67-72-1	Hexachloroethane	ND	210	85	ug/kg	
78-59-1	Isophorone	ND	210	42	ug/kg	
98-95-3	Nitrobenzene	ND	210	42	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	420	110	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	210	85	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	42	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	210	42	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	67%		45-114%
4165-62-2	Phenol-d5	74%		44-124%
118-79-6	2,4,6-Tribromophenol	89%		50-128%
4165-60-0	Nitrobenzene-d5	68%		41-123%
321-60-8	2-Fluorobiphenyl	71%		46-122%
1718-51-0	Terphenyl-d14	96%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
203-64-5	4H-Cyclopenta[def]phenanthrene	12.21	1300	ug/kg	JN
612-94-2	Naphthalene, 2-phenyl-	12.61	1000	ug/kg	JN
1090-13-7	5,12-Naphthacenedione	17.36	1000	ug/kg	JN
544-76-3	Hexadecane	17.66	940	ug/kg	JN
205-99-2	Benz[e]acephenanthrylene	18.08	1200	ug/kg	JN
198-55-0	Perylene	18.36	3400	ug/kg	JN
	1,12-Benzperylene	19.98	1100	ug/kg	J
215-58-7	Benzo[b]triphenylene	20.29	1000	ug/kg	JN
	1,2:7,8-Dibenzphenanthrene	20.33	790	ug/kg	J
191-26-4	Dibenzo[def,mno]chrysene	20.64	1400	ug/kg	JN
	Total TIC, Semi-Volatile		13130	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C001-02		
Lab Sample ID:	F17248-1	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	80.9
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001594.D	40	04/10/03	MRE	04/08/03	OP7285	SF99
Run #2							

	Initial Weight	Final Volume
Run #1	29.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	1310	3400	850	ug/kg	J
208-96-8	Acenaphthylene	ND	3400	850	ug/kg	
120-12-7	Anthracene	2150	3400	420	ug/kg	J
56-55-3	Benzo(a)anthracene	4570	680	170	ug/kg	
50-32-8	Benzo(a)pyrene	5200	680	170	ug/kg	
205-99-2	Benzo(b)fluoranthene	6050	680	170	ug/kg	
191-24-2	Benzo(g,h,i)perylene	2490	680	170	ug/kg	
207-08-9	Benzo(k)fluoranthene	1800	680	170	ug/kg	
218-01-9	Chrysene	4110	680	170	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	553	680	170	ug/kg	J
206-44-0	Fluoranthene	10200	3400	420	ug/kg	
86-73-7	Fluorene	1140	3400	420	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	2860	680	170	ug/kg	
90-12-0	1-Methylnaphthalene	ND	3400	420	ug/kg	
91-57-6	2-Methylnaphthalene	ND	3400	420	ug/kg	
91-20-3	Naphthalene	629	3400	420	ug/kg	J
85-01-8	Phenanthrene	8050	3400	420	ug/kg	
129-00-0	Pyrene	7360	3400	420	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C001-02		
Lab Sample ID:	F17248-1	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	80.9
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28412.D	1	04/08/03	SM	04/07/03	OP7280	GOP965
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	24.4	10	6.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	71%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C001-02		
Lab Sample ID:	F17248-1	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
		Percent Solids:	80.9
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.57 B	0.61	0.34	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Cadmium	0.33 B	0.48	0.032	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Chromium	8.4	1.2	0.052	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Lead	21.4	12	0.15	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SD-C003-01		
Lab Sample ID:	F17248-2	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	88.6
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H020650.D	1	04/11/03	NAF	n/a	n/a	VH740
Run #2							

	Initial Weight
Run #1	3.90 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	7.2	2.9	ug/kg	
75-27-4	Bromodichloromethane	ND	7.2	2.9	ug/kg	
75-25-2	Bromoform	ND	7.2	2.9	ug/kg	
108-90-7	Chlorobenzene	ND	7.2	2.9	ug/kg	
75-00-3	Chloroethane	ND	7.2	4.3	ug/kg	
67-66-3	Chloroform	ND	7.2	2.9	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	36	14	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.2	2.9	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.2	2.9	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	7.2	2.9	ug/kg	
107-06-2	1,2-Dichloroethane	ND	7.2	2.9	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.2	2.9	ug/kg	
124-48-1	Dibromochloromethane	ND	7.2	2.9	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	7.2	2.9	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.2	2.9	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	7.2	2.9	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.2	2.9	ug/kg	
100-41-4	Ethylbenzene	ND	7.2	2.9	ug/kg	
74-83-9	Methyl bromide	ND	7.2	2.9	ug/kg	
74-87-3	Methyl chloride	ND	7.2	2.9	ug/kg	
75-09-2	Methylene chloride	ND	14	7.2	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	7.2	2.9	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.2	2.9	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.2	2.9	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.2	2.9	ug/kg	
127-18-4	Tetrachloroethylene	ND	7.2	2.9	ug/kg	
108-88-3	Toluene	ND	7.2	2.9	ug/kg	
79-01-6	Trichloroethylene	ND	7.2	2.9	ug/kg	
75-01-4	Vinyl chloride	ND	7.2	2.9	ug/kg	
1330-20-7	Xylene (total)	ND	22	5.8	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C003-01		
Lab Sample ID:	F17248-2	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	88.6
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
2037-26-5	Toluene-D8	107%		79-121%
460-00-4	4-Bromofluorobenzene	115%		77-133%
17060-07-0	1,2-Dichloroethane-D4	97%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C003-01		
Lab Sample ID:	F17248-2	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	88.6
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W014966.D	1	04/15/03	ME	04/08/03	OP7284	SW783
Run #2							

	Initial Weight	Final Volume
Run #1	29.4 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	190	38	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	38	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	38	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	38	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	960	380	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	380	77	ug/kg	
88-75-5	2-Nitrophenol	ND	190	38	ug/kg	
100-02-7	4-Nitrophenol	ND	960	380	ug/kg	
87-86-5	Pentachlorophenol	ND	960	380	ug/kg	
108-95-2	Phenol	ND	190	38	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	38	ug/kg	
92-87-5	Benzidine	ND	1900	960	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	190	38	ug/kg	
85-68-7	Butyl benzyl phthalate	186	380	96	ug/kg	J
91-58-7	2-Chloronaphthalene	ND	190	38	ug/kg	
106-47-8	4-Chloroaniline	ND	380	150	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	190	38	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	190	77	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	190	38	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	190	38	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	190	38	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	190	38	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	190	38	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	190	38	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	190	77	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	190	77	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	380	190	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	380	96	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	380	190	ug/kg	
84-66-2	Diethyl phthalate	ND	380	96	ug/kg	
131-11-3	Dimethyl phthalate	ND	380	96	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	384	380	190	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C003-01		
Lab Sample ID:	F17248-2	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	88.6
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	190	38	ug/kg	
87-68-3	Hexachlorobutadiene	ND	190	77	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	190	77	ug/kg	
67-72-1	Hexachloroethane	ND	190	77	ug/kg	
78-59-1	Isophorone	ND	190	38	ug/kg	
98-95-3	Nitrobenzene	ND	190	38	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	380	96	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	190	77	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	38	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	190	38	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	60%		45-114%
4165-62-2	Phenol-d5	69%		44-124%
118-79-6	2,4,6-Tribromophenol	78%		50-128%
4165-60-0	Nitrobenzene-d5	64%		41-123%
321-60-8	2-Fluorobiphenyl	66%		46-122%
1718-51-0	Terphenyl-d14	80%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
613-12-7	Anthracene, 2-methyl-	12.08	520	ug/kg	JN
	unknown	12.21	910	ug/kg	J
612-94-2	Naphthalene, 2-phenyl-	12.61	730	ug/kg	JN
205-82-3	Benzo[j]fluoranthene	18.09	880	ug/kg	JN
198-55-0	Perylene	18.36	2600	ug/kg	JN
	1,2:7,8-Dibenzphenanthrene	19.98	780	ug/kg	J
215-58-7	Benzo[b]triphenylene	20.29	990	ug/kg	JN
214-17-5	Benzo[b]chrysene	20.33	600	ug/kg	JN
191-26-4	Dibenzo[def,mno]chrysene	20.66	1000	ug/kg	JN
	unknown	21.31	600	ug/kg	J
	Total TIC, Semi-Volatile		9610	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C003-01		
Lab Sample ID:	F17248-2	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	88.6
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001595.D	40	04/10/03	MRE	04/08/03	OP7285	SF99
Run #2							

	Initial Weight	Final Volume
Run #1	29.4 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	1040	3100	770	ug/kg	J
208-96-8	Acenaphthylene	ND	3100	770	ug/kg	
120-12-7	Anthracene	1690	3100	380	ug/kg	J
56-55-3	Benzo(a)anthracene	3700	610	150	ug/kg	
50-32-8	Benzo(a)pyrene	4360	610	150	ug/kg	
205-99-2	Benzo(b)fluoranthene	5130	610	150	ug/kg	
191-24-2	Benzo(g,h,i)perylene	2100	610	150	ug/kg	
207-08-9	Benzo(k)fluoranthene	1550	610	150	ug/kg	
218-01-9	Chrysene	3480	610	150	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	461	610	150	ug/kg	J
206-44-0	Fluoranthene	7960	3100	380	ug/kg	
86-73-7	Fluorene	882	3100	380	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	2460	610	150	ug/kg	
90-12-0	1-Methylnaphthalene	ND	3100	380	ug/kg	
91-57-6	2-Methylnaphthalene	ND	3100	380	ug/kg	
91-20-3	Naphthalene	469	3100	380	ug/kg	J
85-01-8	Phenanthrene	6110	3100	380	ug/kg	
129-00-0	Pyrene	5680	3100	380	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C003-01		
Lab Sample ID:	F17248-2	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	88.6
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28413.D	1	04/08/03	SM	04/07/03	OP7280	GOP965
Run #2							

	Initial Weight	Final Volume
Run #1	29.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	56.3	9.6	6.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	65%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C003-01		
Lab Sample ID:	F17248-2	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
		Percent Solids:	88.6
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.42 B	0.56	0.32	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Cadmium	0.90	0.45	0.029	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Chromium	9.2	1.1	0.049	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Lead	48.5	11	0.14	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SD-C004-01		
Lab Sample ID:	F17248-3	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	82.2
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H020651.D	1	04/11/03	NAF	n/a	n/a	VH740
Run #2							

	Initial Weight
Run #1	4.11 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	7.4	3.0	ug/kg	
75-27-4	Bromodichloromethane	ND	7.4	3.0	ug/kg	
75-25-2	Bromoform	ND	7.4	3.0	ug/kg	
108-90-7	Chlorobenzene	ND	7.4	3.0	ug/kg	
75-00-3	Chloroethane	ND	7.4	4.4	ug/kg	
67-66-3	Chloroform	ND	7.4	3.0	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	37	15	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.4	3.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.4	3.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	7.4	3.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	7.4	3.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.4	3.0	ug/kg	
124-48-1	Dibromochloromethane	ND	7.4	3.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	7.4	3.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.4	3.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	7.4	3.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.4	3.0	ug/kg	
100-41-4	Ethylbenzene	ND	7.4	3.0	ug/kg	
74-83-9	Methyl bromide	ND	7.4	3.0	ug/kg	
74-87-3	Methyl chloride	ND	7.4	3.0	ug/kg	
75-09-2	Methylene chloride	ND	15	7.4	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	7.4	3.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.4	3.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.4	3.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.4	3.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	7.4	3.0	ug/kg	
108-88-3	Toluene	ND	7.4	3.0	ug/kg	
79-01-6	Trichloroethylene	ND	7.4	3.0	ug/kg	
75-01-4	Vinyl chloride	ND	7.4	3.0	ug/kg	
1330-20-7	Xylene (total)	ND	22	5.9	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C004-01		
Lab Sample ID:	F17248-3	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	82.2
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
2037-26-5	Toluene-D8	106%		79-121%
460-00-4	4-Bromofluorobenzene	120%		77-133%
17060-07-0	1,2-Dichloroethane-D4	100%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C004-01		
Lab Sample ID:	F17248-3	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	82.2
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W014952.D	1	04/15/03	ME	04/08/03	OP7284	SW783
Run #2							

	Initial Weight	Final Volume
Run #1	29.1 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	210	42	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	42	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	42	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	42	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1000	420	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	420	84	ug/kg	
88-75-5	2-Nitrophenol	ND	210	42	ug/kg	
100-02-7	4-Nitrophenol	ND	1000	420	ug/kg	
87-86-5	Pentachlorophenol	ND	1000	420	ug/kg	
108-95-2	Phenol	ND	210	42	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	42	ug/kg	
92-87-5	Benzidine	ND	2100	1000	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	210	42	ug/kg	
85-68-7	Butyl benzyl phthalate	150	420	100	ug/kg	J
91-58-7	2-Chloronaphthalene	ND	210	42	ug/kg	
106-47-8	4-Chloroaniline	ND	420	170	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	210	42	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	210	84	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	210	42	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	210	42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	210	42	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	210	42	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	210	42	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	210	42	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	210	84	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	210	84	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	420	210	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	420	100	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	420	210	ug/kg	
84-66-2	Diethyl phthalate	ND	420	100	ug/kg	
131-11-3	Dimethyl phthalate	ND	420	100	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	420	210	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C004-01		
Lab Sample ID:	F17248-3	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	82.2
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	210	42	ug/kg	
87-68-3	Hexachlorobutadiene	ND	210	84	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	210	84	ug/kg	
67-72-1	Hexachloroethane	ND	210	84	ug/kg	
78-59-1	Isophorone	ND	210	42	ug/kg	
98-95-3	Nitrobenzene	ND	210	42	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	420	100	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	210	84	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	42	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	210	42	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	60%		45-114%
4165-62-2	Phenol-d5	68%		44-124%
118-79-6	2,4,6-Tribromophenol	74%		50-128%
4165-60-0	Nitrobenzene-d5	64%		41-123%
321-60-8	2-Fluorobiphenyl	67%		46-122%
1718-51-0	Terphenyl-d14	78%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
17380-78-8	Cyclohexanecarboxylic acid, 1-phenyl-, m	15.81	920	ug/kg	JN
	unknown	16.39	480	ug/kg	J
	unknown	16.48	720	ug/kg	J
7098-21-7	Tritetracontane	17.00	1000	ug/kg	JN
13287-24-6	Nonadecane, 9-methyl-	17.10	1500	ug/kg	JN
7045-71-8	Undecane, 2-methyl-	17.16	610	ug/kg	JN
630-06-8	Hexatriacontane	17.35	2800	ug/kg	JN
112-95-8	Eicosane	17.45	820	ug/kg	JN
13287-24-6	Nonadecane, 9-methyl-	17.66	3700	ug/kg	JN
	Total TIC, Semi-Volatile		12550	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C004-01		
Lab Sample ID:	F17248-3	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	82.2
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001593.D	4	04/10/03	MRE	04/08/03	OP7285	SF99
Run #2							

	Initial Weight	Final Volume
Run #1	29.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	330	84	ug/kg	
208-96-8	Acenaphthylene	ND	330	84	ug/kg	
120-12-7	Anthracene	ND	330	42	ug/kg	
56-55-3	Benzo(a)anthracene	50.8	67	17	ug/kg	J
50-32-8	Benzo(a)pyrene	82.8	67	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	108	67	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	73.3	67	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	31.9	67	17	ug/kg	J
218-01-9	Chrysene	57.4	67	17	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	67	17	ug/kg	
206-44-0	Fluoranthene	88.5	330	42	ug/kg	J
86-73-7	Fluorene	ND	330	42	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	65.7	67	17	ug/kg	J
90-12-0	1-Methylnaphthalene	ND	330	42	ug/kg	
91-57-6	2-Methylnaphthalene	ND	330	42	ug/kg	
91-20-3	Naphthalene	ND	330	42	ug/kg	
85-01-8	Phenanthrene	49.8	330	42	ug/kg	J
129-00-0	Pyrene	75.7	330	42	ug/kg	J

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C004-01		
Lab Sample ID:	F17248-3	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	82.2
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28414.D	1	04/08/03	SM	04/07/03	OP7280	GOP965
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	33.4	10	6.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C004-01		
Lab Sample ID:	F17248-3	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
		Percent Solids:	82.2
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.34 U	0.61	0.34	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Cadmium	1.3	0.49	0.032	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Chromium	9.4	1.2	0.052	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Lead	45.0	12	0.15	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SD-C005-01		
Lab Sample ID:	F17248-4	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	75.7
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H020668.D	1	04/14/03	NAF	n/a	n/a	VH741
Run #2							

	Initial Weight
Run #1	3.63 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	9.1	3.6	ug/kg	
75-27-4	Bromodichloromethane	ND	9.1	3.6	ug/kg	
75-25-2	Bromoform	ND	9.1	3.6	ug/kg	
108-90-7	Chlorobenzene	ND	9.1	3.6	ug/kg	
75-00-3	Chloroethane	ND	9.1	5.5	ug/kg	
67-66-3	Chloroform	ND	9.1	3.6	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	45	18	ug/kg	
56-23-5	Carbon tetrachloride	ND	9.1	3.6	ug/kg	
75-34-3	1,1-Dichloroethane	ND	9.1	3.6	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	9.1	3.6	ug/kg	
107-06-2	1,2-Dichloroethane	ND	9.1	3.6	ug/kg	
78-87-5	1,2-Dichloropropane	ND	9.1	3.6	ug/kg	
124-48-1	Dibromochloromethane	ND	9.1	3.6	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	9.1	3.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	9.1	3.6	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	9.1	3.6	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	9.1	3.6	ug/kg	
100-41-4	Ethylbenzene	ND	9.1	3.6	ug/kg	
74-83-9	Methyl bromide	ND	9.1	3.6	ug/kg	
74-87-3	Methyl chloride	ND	9.1	3.6	ug/kg	
75-09-2	Methylene chloride	ND	18	9.1	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	9.1	3.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	9.1	3.6	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	9.1	3.6	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	9.1	3.6	ug/kg	
127-18-4	Tetrachloroethylene	ND	9.1	3.6	ug/kg	
108-88-3	Toluene	ND	9.1	3.6	ug/kg	
79-01-6	Trichloroethylene	ND	9.1	3.6	ug/kg	
75-01-4	Vinyl chloride	ND	9.1	3.6	ug/kg	
1330-20-7	Xylene (total)	ND	27	7.3	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C005-01		
Lab Sample ID:	F17248-4	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	75.7
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%
2037-26-5	Toluene-D8	114%		79-121%
460-00-4	4-Bromofluorobenzene	129%		77-133%
17060-07-0	1,2-Dichloroethane-D4	78%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C005-01		
Lab Sample ID:	F17248-4	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	75.7
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W014967.D	1	04/15/03	ME	04/08/03	OP7284	SW783
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	220	43	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	220	43	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	220	43	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	220	43	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	430	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	430	87	ug/kg	
88-75-5	2-Nitrophenol	ND	220	43	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	430	ug/kg	
87-86-5	Pentachlorophenol	ND	1100	430	ug/kg	
108-95-2	Phenol	ND	220	43	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	220	43	ug/kg	
92-87-5	Benzidine	ND	2200	1100	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	220	43	ug/kg	
85-68-7	Butyl benzyl phthalate	113	430	110	ug/kg	J
91-58-7	2-Chloronaphthalene	ND	220	43	ug/kg	
106-47-8	4-Chloroaniline	ND	430	170	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	220	43	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	220	87	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	220	43	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	220	43	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	220	43	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	220	43	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	220	43	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	220	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	220	87	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	220	87	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	430	220	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	430	110	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	430	220	ug/kg	
84-66-2	Diethyl phthalate	ND	430	110	ug/kg	
131-11-3	Dimethyl phthalate	ND	430	110	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	371	430	220	ug/kg	J

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C005-01		
Lab Sample ID:	F17248-4	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	75.7
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	220	43	ug/kg	
87-68-3	Hexachlorobutadiene	ND	220	87	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	220	87	ug/kg	
67-72-1	Hexachloroethane	ND	220	87	ug/kg	
78-59-1	Isophorone	ND	220	43	ug/kg	
98-95-3	Nitrobenzene	ND	220	43	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	430	110	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	220	87	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	220	43	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	220	43	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	57%		45-114%
4165-62-2	Phenol-d5	64%		44-124%
118-79-6	2,4,6-Tribromophenol	73%		50-128%
4165-60-0	Nitrobenzene-d5	61%		41-123%
321-60-8	2-Fluorobiphenyl	62%		46-122%
1718-51-0	Terphenyl-d14	74%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
198-55-0	Perylene	18.35	850	ug/kg	JN
	Total TIC, Semi-Volatile		850	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C005-01		
Lab Sample ID:	F17248-4	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	75.7
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001586.D	10	04/09/03	MRE	04/08/03	OP7285	SF98
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	270	870	220	ug/kg	J
208-96-8	Acenaphthylene	ND	870	220	ug/kg	
120-12-7	Anthracene	459	870	110	ug/kg	J
56-55-3	Benzo(a)anthracene	1200	170	43	ug/kg	
50-32-8	Benzo(a)pyrene	1420	170	43	ug/kg	
205-99-2	Benzo(b)fluoranthene	1550	170	43	ug/kg	
191-24-2	Benzo(g,h,i)perylene	937	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	583	170	43	ug/kg	
218-01-9	Chrysene	1120	170	43	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	189	170	43	ug/kg	
206-44-0	Fluoranthene	2360	870	110	ug/kg	
86-73-7	Fluorene	214	870	110	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	1070	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	870	110	ug/kg	
91-57-6	2-Methylnaphthalene	ND	870	110	ug/kg	
91-20-3	Naphthalene	ND	870	110	ug/kg	
85-01-8	Phenanthrene	1760	870	110	ug/kg	
129-00-0	Pyrene	2060	870	110	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C005-01		
Lab Sample ID:	F17248-4	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	75.7
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28416.D	1	04/09/03	SM	04/07/03	OP7280	GOP965
Run #2							

	Initial Weight	Final Volume
Run #1	29.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	153	11	7.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	67%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C005-01		
Lab Sample ID:	F17248-4	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
		Percent Solids:	75.7
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.67	0.65	0.37	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Cadmium	0.94	0.52	0.034	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Chromium	8.7	1.3	0.056	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Lead	40.0	13	0.16	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SD-C006-01		
Lab Sample ID:	F17248-5	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	90.8
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H020653.D	1	04/11/03	NAF	n/a	n/a	VH740
Run #2							

	Initial Weight
Run #1	3.82 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	7.2	2.9	ug/kg	
75-27-4	Bromodichloromethane	ND	7.2	2.9	ug/kg	
75-25-2	Bromoform	ND	7.2	2.9	ug/kg	
108-90-7	Chlorobenzene	ND	7.2	2.9	ug/kg	
75-00-3	Chloroethane	ND	7.2	4.3	ug/kg	
67-66-3	Chloroform	ND	7.2	2.9	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	36	14	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.2	2.9	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.2	2.9	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	7.2	2.9	ug/kg	
107-06-2	1,2-Dichloroethane	ND	7.2	2.9	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.2	2.9	ug/kg	
124-48-1	Dibromochloromethane	ND	7.2	2.9	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	7.2	2.9	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.2	2.9	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	7.2	2.9	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.2	2.9	ug/kg	
100-41-4	Ethylbenzene	ND	7.2	2.9	ug/kg	
74-83-9	Methyl bromide	ND	7.2	2.9	ug/kg	
74-87-3	Methyl chloride	ND	7.2	2.9	ug/kg	
75-09-2	Methylene chloride	ND	14	7.2	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	7.2	2.9	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.2	2.9	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.2	2.9	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.2	2.9	ug/kg	
127-18-4	Tetrachloroethylene	ND	7.2	2.9	ug/kg	
108-88-3	Toluene	ND	7.2	2.9	ug/kg	
79-01-6	Trichloroethylene	ND	7.2	2.9	ug/kg	
75-01-4	Vinyl chloride	ND	7.2	2.9	ug/kg	
1330-20-7	Xylene (total)	ND	22	5.8	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C006-01		
Lab Sample ID:	F17248-5	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	90.8
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		70-130%
2037-26-5	Toluene-D8	108%		79-121%
460-00-4	4-Bromofluorobenzene	124%		77-133%
17060-07-0	1,2-Dichloroethane-D4	102%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C006-01		
Lab Sample ID:	F17248-5	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	90.8
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W014954.D	1	04/15/03	ME	04/08/03	OP7284	SW783
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	180	36	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	36	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	36	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	36	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	900	360	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	360	72	ug/kg	
88-75-5	2-Nitrophenol	ND	180	36	ug/kg	
100-02-7	4-Nitrophenol	ND	900	360	ug/kg	
87-86-5	Pentachlorophenol	ND	900	360	ug/kg	
108-95-2	Phenol	ND	180	36	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	36	ug/kg	
92-87-5	Benzidine	ND	1800	900	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	180	36	ug/kg	
85-68-7	Butyl benzyl phthalate	122	360	90	ug/kg	J
91-58-7	2-Chloronaphthalene	ND	180	36	ug/kg	
106-47-8	4-Chloroaniline	ND	360	140	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	180	36	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	180	72	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	180	36	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	180	36	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	180	36	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	180	36	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	180	36	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	180	36	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	180	72	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	180	72	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	360	180	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	360	90	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	360	180	ug/kg	
84-66-2	Diethyl phthalate	ND	360	90	ug/kg	
131-11-3	Dimethyl phthalate	ND	360	90	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	360	180	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C006-01		
Lab Sample ID:	F17248-5	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	90.8
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	180	36	ug/kg	
87-68-3	Hexachlorobutadiene	ND	180	72	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	180	72	ug/kg	
67-72-1	Hexachloroethane	ND	180	72	ug/kg	
78-59-1	Isophorone	ND	180	36	ug/kg	
98-95-3	Nitrobenzene	ND	180	36	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	360	90	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	180	72	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	36	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	180	36	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	61%		45-114%
4165-62-2	Phenol-d5	67%		44-124%
118-79-6	2,4,6-Tribromophenol	77%		50-128%
4165-60-0	Nitrobenzene-d5	62%		41-123%
321-60-8	2-Fluorobiphenyl	66%		46-122%
1718-51-0	Terphenyl-d14	82%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
13287-24-6	Nonadecane, 9-methyl-	17.00	1100	ug/kg	JN
3386-33-2	Octadecane, 1-chloro-	17.10	1600	ug/kg	JN
112-95-8	Eicosane	17.15	590	ug/kg	JN
7098-21-7	Tritetracontane	17.35	2700	ug/kg	JN
1560-86-7	Nonadecane, 2-methyl-	17.45	830	ug/kg	JN
7098-22-8	Tetratetracontane	17.66	3400	ug/kg	JN
	Total TIC, Semi-Volatile		10220	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C006-01		
Lab Sample ID:	F17248-5	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	90.8
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001587.D	4	04/09/03	MRE	04/08/03	OP7285	SF98
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	290	72	ug/kg	
208-96-8	Acenaphthylene	ND	290	72	ug/kg	
120-12-7	Anthracene	ND	290	36	ug/kg	
56-55-3	Benzo(a)anthracene	45.8	58	14	ug/kg	J
50-32-8	Benzo(a)pyrene	88.1	58	14	ug/kg	
205-99-2	Benzo(b)fluoranthene	108	58	14	ug/kg	
191-24-2	Benzo(g,h,i)perylene	84.7	58	14	ug/kg	
207-08-9	Benzo(k)fluoranthene	31.2	58	14	ug/kg	J
218-01-9	Chrysene	51.2	58	14	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	18.8	58	14	ug/kg	J
206-44-0	Fluoranthene	59.4	290	36	ug/kg	J
86-73-7	Fluorene	ND	290	36	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	76.8	58	14	ug/kg	
90-12-0	1-Methylnaphthalene	ND	290	36	ug/kg	
91-57-6	2-Methylnaphthalene	ND	290	36	ug/kg	
91-20-3	Naphthalene	ND	290	36	ug/kg	
85-01-8	Phenanthrene	ND	290	36	ug/kg	
129-00-0	Pyrene	76.8	290	36	ug/kg	J

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C006-01		
Lab Sample ID:	F17248-5	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	90.8
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28417.D	1	04/09/03	SM	04/07/03	OP7280	GOP965
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	133	9.2	6.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	67%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C006-01		
Lab Sample ID:	F17248-5	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
		Percent Solids:	90.8
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.41 B	0.53	0.30	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Cadmium	1.0	0.42	0.028	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Chromium	6.1	1.1	0.046	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Lead	19.5	11	0.13	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SB-B001-03		
Lab Sample ID:	F17248-6	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	91.5
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H020654.D	1	04/11/03	NAF	n/a	n/a	VH740
Run #2							

	Initial Weight
Run #1	3.85 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	7.1	2.8	ug/kg	
75-27-4	Bromodichloromethane	ND	7.1	2.8	ug/kg	
75-25-2	Bromoform	ND	7.1	2.8	ug/kg	
108-90-7	Chlorobenzene	ND	7.1	2.8	ug/kg	
75-00-3	Chloroethane	ND	7.1	4.3	ug/kg	
67-66-3	Chloroform	ND	7.1	2.8	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	35	14	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.1	2.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.1	2.8	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	7.1	2.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	7.1	2.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.1	2.8	ug/kg	
124-48-1	Dibromochloromethane	ND	7.1	2.8	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	7.1	2.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.1	2.8	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	7.1	2.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.1	2.8	ug/kg	
100-41-4	Ethylbenzene	ND	7.1	2.8	ug/kg	
74-83-9	Methyl bromide	ND	7.1	2.8	ug/kg	
74-87-3	Methyl chloride	ND	7.1	2.8	ug/kg	
75-09-2	Methylene chloride	ND	14	7.1	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	7.1	2.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.1	2.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.1	2.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.1	2.8	ug/kg	
127-18-4	Tetrachloroethylene	ND	7.1	2.8	ug/kg	
108-88-3	Toluene	ND	7.1	2.8	ug/kg	
79-01-6	Trichloroethylene	ND	7.1	2.8	ug/kg	
75-01-4	Vinyl chloride	ND	7.1	2.8	ug/kg	
1330-20-7	Xylene (total)	ND	21	5.7	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B001-03		
Lab Sample ID:	F17248-6	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	91.5
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		70-130%
2037-26-5	Toluene-D8	106%		79-121%
460-00-4	4-Bromofluorobenzene	116%		77-133%
17060-07-0	1,2-Dichloroethane-D4	102%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B001-03		
Lab Sample ID:	F17248-6	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	91.5
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W014955.D	1	04/15/03	ME	04/08/03	OP7284	SW783
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	180	36	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	36	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	36	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	36	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	900	360	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	360	72	ug/kg	
88-75-5	2-Nitrophenol	ND	180	36	ug/kg	
100-02-7	4-Nitrophenol	ND	900	360	ug/kg	
87-86-5	Pentachlorophenol	ND	900	360	ug/kg	
108-95-2	Phenol	ND	180	36	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	36	ug/kg	
92-87-5	Benzidine	ND	1800	900	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	180	36	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	360	90	ug/kg	
91-58-7	2-Chloronaphthalene	ND	180	36	ug/kg	
106-47-8	4-Chloroaniline	ND	360	140	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	180	36	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	180	72	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	180	36	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	180	36	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	180	36	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	180	36	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	180	36	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	180	36	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	180	72	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	180	72	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	360	180	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	360	90	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	360	180	ug/kg	
84-66-2	Diethyl phthalate	ND	360	90	ug/kg	
131-11-3	Dimethyl phthalate	ND	360	90	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	360	180	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B001-03		
Lab Sample ID:	F17248-6	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	91.5
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	180	36	ug/kg	
87-68-3	Hexachlorobutadiene	ND	180	72	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	180	72	ug/kg	
67-72-1	Hexachloroethane	ND	180	72	ug/kg	
78-59-1	Isophorone	ND	180	36	ug/kg	
98-95-3	Nitrobenzene	ND	180	36	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	360	90	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	180	72	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	36	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	180	36	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		45-114%
4165-62-2	Phenol-d5	71%		44-124%
118-79-6	2,4,6-Tribromophenol	81%		50-128%
4165-60-0	Nitrobenzene-d5	66%		41-123%
321-60-8	2-Fluorobiphenyl	67%		46-122%
1718-51-0	Terphenyl-d14	84%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
17312-55-9	Decane, 3,8-dimethyl-	16.99	430	ug/kg	JN
544-76-3	Hexadecane	17.10	620	ug/kg	JN
544-76-3	Hexadecane	17.35	1200	ug/kg	JN
630-06-8	Hexatriacontane	17.45	370	ug/kg	JN
7098-22-8	Tetratetracontane	17.65	1700	ug/kg	JN
	Total TIC, Semi-Volatile		4320	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B001-03		
Lab Sample ID:	F17248-6	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	91.5
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001588.D	4	04/09/03	MRE	04/08/03	OP7285	SF98
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	290	72	ug/kg	
208-96-8	Acenaphthylene	ND	290	72	ug/kg	
120-12-7	Anthracene	ND	290	36	ug/kg	
56-55-3	Benzo(a)anthracene	34.0	58	14	ug/kg	J
50-32-8	Benzo(a)pyrene	143	58	14	ug/kg	
205-99-2	Benzo(b)fluoranthene	132	58	14	ug/kg	
191-24-2	Benzo(g,h,i)perylene	300	58	14	ug/kg	
207-08-9	Benzo(k)fluoranthene	32.0	58	14	ug/kg	J
218-01-9	Chrysene	38.6	58	14	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	39.6	58	14	ug/kg	J
206-44-0	Fluoranthene	42.6	290	36	ug/kg	J
86-73-7	Fluorene	ND	290	36	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	207	58	14	ug/kg	
90-12-0	1-Methylnaphthalene	ND	290	36	ug/kg	
91-57-6	2-Methylnaphthalene	ND	290	36	ug/kg	
91-20-3	Naphthalene	ND	290	36	ug/kg	
85-01-8	Phenanthrene	ND	290	36	ug/kg	
129-00-0	Pyrene	44.7	290	36	ug/kg	J

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B001-03		
Lab Sample ID:	F17248-6	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	91.5
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28418.D	1	04/09/03	SM	04/07/03	OP7280	GOP965
Run #2							

	Initial Weight	Final Volume
Run #1	29.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	38.2	9.4	6.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	75%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B001-03		
Lab Sample ID:	F17248-6	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
		Percent Solids:	91.5
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.30 U	0.53	0.30	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Cadmium	0.49	0.42	0.027	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Chromium	8.5	1.1	0.045	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Lead	18.3	11	0.13	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SB-B004-02		
Lab Sample ID:	F17248-7	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	91.1
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H020657.D	1	04/11/03	NAF	n/a	n/a	VH740
Run #2							

	Initial Weight
Run #1	3.99 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	6.9	2.8	ug/kg	
75-27-4	Bromodichloromethane	ND	6.9	2.8	ug/kg	
75-25-2	Bromoform	ND	6.9	2.8	ug/kg	
108-90-7	Chlorobenzene	ND	6.9	2.8	ug/kg	
75-00-3	Chloroethane	ND	6.9	4.1	ug/kg	
67-66-3	Chloroform	ND	6.9	2.8	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	34	14	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.9	2.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.9	2.8	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.9	2.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.9	2.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.9	2.8	ug/kg	
124-48-1	Dibromochloromethane	ND	6.9	2.8	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.9	2.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.9	2.8	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.9	2.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.9	2.8	ug/kg	
100-41-4	Ethylbenzene	ND	6.9	2.8	ug/kg	
74-83-9	Methyl bromide	ND	6.9	2.8	ug/kg	
74-87-3	Methyl chloride	ND	6.9	2.8	ug/kg	
75-09-2	Methylene chloride	ND	14	6.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.9	2.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.9	2.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.9	2.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.9	2.8	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.9	2.8	ug/kg	
108-88-3	Toluene	ND	6.9	2.8	ug/kg	
79-01-6	Trichloroethylene	ND	6.9	2.8	ug/kg	
75-01-4	Vinyl chloride	ND	6.9	2.8	ug/kg	
1330-20-7	Xylene (total)	ND	21	5.5	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B004-02		
Lab Sample ID:	F17248-7	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	91.1
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		70-130%
2037-26-5	Toluene-D8	107%		79-121%
460-00-4	4-Bromofluorobenzene	115%		77-133%
17060-07-0	1,2-Dichloroethane-D4	100%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B004-02		
Lab Sample ID:	F17248-7	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	91.1
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W014956.D	1	04/15/03	ME	04/08/03	OP7284	SW783
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	180	36	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	36	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	36	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	36	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	910	360	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	360	73	ug/kg	
88-75-5	2-Nitrophenol	ND	180	36	ug/kg	
100-02-7	4-Nitrophenol	ND	910	360	ug/kg	
87-86-5	Pentachlorophenol	ND	910	360	ug/kg	
108-95-2	Phenol	ND	180	36	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	36	ug/kg	
92-87-5	Benzidine	ND	1800	910	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	180	36	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	360	91	ug/kg	
91-58-7	2-Chloronaphthalene	ND	180	36	ug/kg	
106-47-8	4-Chloroaniline	ND	360	150	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	180	36	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	180	73	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	180	36	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	180	36	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	180	36	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	180	36	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	180	36	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	180	36	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	180	73	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	180	73	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	360	180	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	360	91	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	360	180	ug/kg	
84-66-2	Diethyl phthalate	ND	360	91	ug/kg	
131-11-3	Dimethyl phthalate	ND	360	91	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	360	180	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B004-02		
Lab Sample ID:	F17248-7	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	91.1
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	180	36	ug/kg	
87-68-3	Hexachlorobutadiene	ND	180	73	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	180	73	ug/kg	
67-72-1	Hexachloroethane	ND	180	73	ug/kg	
78-59-1	Isophorone	ND	180	36	ug/kg	
98-95-3	Nitrobenzene	ND	180	36	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	360	91	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	180	73	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	36	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	180	36	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	59%		45-114%
4165-62-2	Phenol-d5	63%		44-124%
118-79-6	2,4,6-Tribromophenol	74%		50-128%
4165-60-0	Nitrobenzene-d5	61%		41-123%
321-60-8	2-Fluorobiphenyl	62%		46-122%
1718-51-0	Terphenyl-d14	82%		45-135%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B004-02		
Lab Sample ID:	F17248-7	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	91.1
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001596.D	4	04/10/03	MRE	04/08/03	OP7285	SF99
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	290	73	ug/kg	
208-96-8	Acenaphthylene	ND	290	73	ug/kg	
120-12-7	Anthracene	ND	290	36	ug/kg	
56-55-3	Benzo(a)anthracene	ND	58	15	ug/kg	
50-32-8	Benzo(a)pyrene	ND	58	15	ug/kg	
205-99-2	Benzo(b)fluoranthene	17.2	58	15	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	58	15	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	58	15	ug/kg	
218-01-9	Chrysene	ND	58	15	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	58	15	ug/kg	
206-44-0	Fluoranthene	ND	290	36	ug/kg	
86-73-7	Fluorene	ND	290	36	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	58	15	ug/kg	
90-12-0	1-Methylnaphthalene	ND	290	36	ug/kg	
91-57-6	2-Methylnaphthalene	ND	290	36	ug/kg	
91-20-3	Naphthalene	ND	290	36	ug/kg	
85-01-8	Phenanthrene	ND	290	36	ug/kg	
129-00-0	Pyrene	ND	290	36	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B004-02		
Lab Sample ID:	F17248-7	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	91.1
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28419.D	1	04/09/03	SM	04/07/03	OP7280	GOP965
Run #2							

	Initial Weight	Final Volume
Run #1	29.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	16.3	9.3	6.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	104%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B004-02		
Lab Sample ID:	F17248-7	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
		Percent Solids:	91.1
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.31 U	0.55	0.31	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Cadmium	0.029 U	0.44	0.029	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Chromium	4.0	1.1	0.047	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Lead	5.7 B	11	0.13	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SB-B012-03		
Lab Sample ID:	F17248-8	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	80.9
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H020658.D	1	04/11/03	NAF	n/a	n/a	VH740
Run #2							

	Initial Weight
Run #1	4.41 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	7.0	2.8	ug/kg	
75-27-4	Bromodichloromethane	ND	7.0	2.8	ug/kg	
75-25-2	Bromoform	ND	7.0	2.8	ug/kg	
108-90-7	Chlorobenzene	ND	7.0	2.8	ug/kg	
75-00-3	Chloroethane	ND	7.0	4.2	ug/kg	
67-66-3	Chloroform	ND	7.0	2.8	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	35	14	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.0	2.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.0	2.8	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	7.0	2.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	7.0	2.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.0	2.8	ug/kg	
124-48-1	Dibromochloromethane	ND	7.0	2.8	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	7.0	2.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.0	2.8	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	7.0	2.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.0	2.8	ug/kg	
100-41-4	Ethylbenzene	ND	7.0	2.8	ug/kg	
74-83-9	Methyl bromide	ND	7.0	2.8	ug/kg	
74-87-3	Methyl chloride	ND	7.0	2.8	ug/kg	
75-09-2	Methylene chloride	ND	14	7.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	7.0	2.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.0	2.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.0	2.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.0	2.8	ug/kg	
127-18-4	Tetrachloroethylene	ND	7.0	2.8	ug/kg	
108-88-3	Toluene	ND	7.0	2.8	ug/kg	
79-01-6	Trichloroethylene	ND	7.0	2.8	ug/kg	
75-01-4	Vinyl chloride	ND	7.0	2.8	ug/kg	
1330-20-7	Xylene (total)	ND	21	5.6	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B012-03		
Lab Sample ID:	F17248-8	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	80.9
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%
2037-26-5	Toluene-D8	108%		79-121%
460-00-4	4-Bromofluorobenzene	129%		77-133%
17060-07-0	1,2-Dichloroethane-D4	99%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B012-03		
Lab Sample ID:	F17248-8	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	80.9
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W014959.D	1	04/15/03	ME	04/08/03	OP7284	SW783
Run #2							

	Initial Weight	Final Volume
Run #1	29.5 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	210	42	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	42	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	42	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	42	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1000	420	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	420	84	ug/kg	
88-75-5	2-Nitrophenol	ND	210	42	ug/kg	
100-02-7	4-Nitrophenol	ND	1000	420	ug/kg	
87-86-5	Pentachlorophenol	ND	1000	420	ug/kg	
108-95-2	Phenol	ND	210	42	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	42	ug/kg	
92-87-5	Benzidine	ND	2100	1000	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	210	42	ug/kg	
85-68-7	Butyl benzyl phthalate	102	420	100	ug/kg	J
91-58-7	2-Chloronaphthalene	ND	210	42	ug/kg	
106-47-8	4-Chloroaniline	ND	420	170	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	210	42	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	210	84	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	210	42	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	210	42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	210	42	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	210	42	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	210	42	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	210	42	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	210	84	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	210	84	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	420	210	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	420	100	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	420	210	ug/kg	
84-66-2	Diethyl phthalate	ND	420	100	ug/kg	
131-11-3	Dimethyl phthalate	ND	420	100	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	420	210	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B012-03		
Lab Sample ID:	F17248-8	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	80.9
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	210	42	ug/kg	
87-68-3	Hexachlorobutadiene	ND	210	84	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	210	84	ug/kg	
67-72-1	Hexachloroethane	ND	210	84	ug/kg	
78-59-1	Isophorone	ND	210	42	ug/kg	
98-95-3	Nitrobenzene	ND	210	42	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	420	100	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	210	84	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	42	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	210	42	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	58%		45-114%
4165-62-2	Phenol-d5	62%		44-124%
118-79-6	2,4,6-Tribromophenol	74%		50-128%
4165-60-0	Nitrobenzene-d5	58%		41-123%
321-60-8	2-Fluorobiphenyl	61%		46-122%
1718-51-0	Terphenyl-d14	76%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
13287-24-6	Nonadecane, 9-methyl-	16.99	500	ug/kg	JN
630-06-8	Hexatriacontane	17.10	710	ug/kg	JN
544-85-4	Dotriacontane	17.35	1400	ug/kg	JN
13287-24-6	Nonadecane, 9-methyl-	17.65	1900	ug/kg	JN
	unknown	21.29	1200	ug/kg	J
	Total TIC, Semi-Volatile		5710	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B012-03		
Lab Sample ID:	F17248-8	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	80.9
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001599.D	4	04/10/03	MRE	04/08/03	OP7285	SF99
Run #2							

	Initial Weight	Final Volume
Run #1	29.5 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	340	84	ug/kg	
208-96-8	Acenaphthylene	ND	340	84	ug/kg	
120-12-7	Anthracene	ND	340	42	ug/kg	
56-55-3	Benzo(a)anthracene	71.4	67	17	ug/kg	
50-32-8	Benzo(a)pyrene	109	67	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	136	67	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	82.8	67	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	40.8	67	17	ug/kg	J
218-01-9	Chrysene	81.1	67	17	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	19.5	67	17	ug/kg	J
206-44-0	Fluoranthene	139	340	42	ug/kg	J
86-73-7	Fluorene	ND	340	42	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	81.4	67	17	ug/kg	
90-12-0	1-Methylnaphthalene	ND	340	42	ug/kg	
91-57-6	2-Methylnaphthalene	ND	340	42	ug/kg	
91-20-3	Naphthalene	ND	340	42	ug/kg	
85-01-8	Phenanthrene	85.0	340	42	ug/kg	J
129-00-0	Pyrene	111	340	42	ug/kg	J

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B012-03		
Lab Sample ID:	F17248-8	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	80.9
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28422.D	1	04/09/03	SM	04/07/03	OP7280	GOP965
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	32.3	10	7.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	76%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B012-03		
Lab Sample ID:	F17248-8	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
		Percent Solids:	80.9
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.37 B	0.62	0.35	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Cadmium	0.032 U	0.49	0.032	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Chromium	4.9	1.2	0.053	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Lead	5.8 B	12	0.15	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SB-B013-03		
Lab Sample ID:	F17248-9	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	80.3
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H020659.D	1	04/11/03	NAF	n/a	n/a	VH740
Run #2							

	Initial Weight
Run #1	3.99 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	7.8	3.1	ug/kg	
75-27-4	Bromodichloromethane	ND	7.8	3.1	ug/kg	
75-25-2	Bromoform	ND	7.8	3.1	ug/kg	
108-90-7	Chlorobenzene	ND	7.8	3.1	ug/kg	
75-00-3	Chloroethane	ND	7.8	4.7	ug/kg	
67-66-3	Chloroform	ND	7.8	3.1	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	39	16	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.8	3.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.8	3.1	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	7.8	3.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	7.8	3.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.8	3.1	ug/kg	
124-48-1	Dibromochloromethane	ND	7.8	3.1	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	7.8	3.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.8	3.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	7.8	3.1	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.8	3.1	ug/kg	
100-41-4	Ethylbenzene	ND	7.8	3.1	ug/kg	
74-83-9	Methyl bromide	ND	7.8	3.1	ug/kg	
74-87-3	Methyl chloride	ND	7.8	3.1	ug/kg	
75-09-2	Methylene chloride	ND	16	7.8	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	7.8	3.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.8	3.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.8	3.1	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.8	3.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	7.8	3.1	ug/kg	
108-88-3	Toluene	ND	7.8	3.1	ug/kg	
79-01-6	Trichloroethylene	ND	7.8	3.1	ug/kg	
75-01-4	Vinyl chloride	ND	7.8	3.1	ug/kg	
1330-20-7	Xylene (total)	ND	23	6.2	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B013-03		
Lab Sample ID:	F17248-9	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	80.3
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		70-130%
2037-26-5	Toluene-D8	105%		79-121%
460-00-4	4-Bromofluorobenzene	108%		77-133%
17060-07-0	1,2-Dichloroethane-D4	103%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B013-03		
Lab Sample ID:	F17248-9	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	80.3
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W014960.D	1	04/15/03	ME	04/08/03	OP7284	SW783
Run #2							

	Initial Weight	Final Volume
Run #1	29.5 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	210	42	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	42	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	42	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	42	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	420	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	420	84	ug/kg	
88-75-5	2-Nitrophenol	ND	210	42	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	420	ug/kg	
87-86-5	Pentachlorophenol	ND	1100	420	ug/kg	
108-95-2	Phenol	ND	210	42	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	42	ug/kg	
92-87-5	Benzidine	ND	2100	1100	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	210	42	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	420	110	ug/kg	
91-58-7	2-Chloronaphthalene	ND	210	42	ug/kg	
106-47-8	4-Chloroaniline	ND	420	170	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	210	42	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	210	84	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	210	42	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	210	42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	210	42	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	210	42	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	210	42	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	210	42	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	210	84	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	210	84	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	420	210	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	420	110	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	420	210	ug/kg	
84-66-2	Diethyl phthalate	ND	420	110	ug/kg	
131-11-3	Dimethyl phthalate	ND	420	110	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	420	210	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B013-03		
Lab Sample ID:	F17248-9	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	80.3
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	210	42	ug/kg	
87-68-3	Hexachlorobutadiene	ND	210	84	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	210	84	ug/kg	
67-72-1	Hexachloroethane	ND	210	84	ug/kg	
78-59-1	Isophorone	ND	210	42	ug/kg	
98-95-3	Nitrobenzene	ND	210	42	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	420	110	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	210	84	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	42	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	210	42	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	84%		45-114%
4165-62-2	Phenol-d5	86%		44-124%
118-79-6	2,4,6-Tribromophenol	86%		50-128%
4165-60-0	Nitrobenzene-d5	84%		41-123%
321-60-8	2-Fluorobiphenyl	79%		46-122%
1718-51-0	Terphenyl-d14	94%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
79-34-5	Ethane, 1,1,2,2-tetrachloro- [a]	4.34	440	ug/kg	JN
	Total TIC, Semi-Volatile		440	ug/kg	

(a) Extraction solvent impurity

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B013-03		
Lab Sample ID:	F17248-9	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	80.3
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001600.D	4	04/10/03	MRE	04/08/03	OP7285	SF99
Run #2							

	Initial Weight	Final Volume
Run #1	29.5 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	340	84	ug/kg	
208-96-8	Acenaphthylene	ND	340	84	ug/kg	
120-12-7	Anthracene	ND	340	42	ug/kg	
56-55-3	Benzo(a)anthracene	ND	68	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	68	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	68	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	68	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	68	17	ug/kg	
218-01-9	Chrysene	ND	68	17	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	68	17	ug/kg	
206-44-0	Fluoranthene	ND	340	42	ug/kg	
86-73-7	Fluorene	ND	340	42	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	68	17	ug/kg	
90-12-0	1-Methylnaphthalene	ND	340	42	ug/kg	
91-57-6	2-Methylnaphthalene	ND	340	42	ug/kg	
91-20-3	Naphthalene	ND	340	42	ug/kg	
85-01-8	Phenanthrene	ND	340	42	ug/kg	
129-00-0	Pyrene	ND	340	42	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B013-03		
Lab Sample ID:	F17248-9	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	80.3
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28423.D	1	04/09/03	SM	04/07/03	OP7280	GOP965
Run #2							

	Initial Weight	Final Volume
Run #1	29.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	ND	11	7.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	83%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B013-03		
Lab Sample ID:	F17248-9	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
		Percent Solids:	80.3
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.34 U	0.60	0.34	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Cadmium	0.031 U	0.48	0.031	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Chromium	1.6	1.2	0.051	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Lead	1.3 B	12	0.15	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SB-B014-03		
Lab Sample ID:	F17248-10	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	91.8
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H020660.D	1	04/11/03	NAF	n/a	n/a	VH740
Run #2							

	Initial Weight
Run #1	4.46 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	6.1	2.4	ug/kg	
75-27-4	Bromodichloromethane	ND	6.1	2.4	ug/kg	
75-25-2	Bromoform	ND	6.1	2.4	ug/kg	
108-90-7	Chlorobenzene	ND	6.1	2.4	ug/kg	
75-00-3	Chloroethane	ND	6.1	3.7	ug/kg	
67-66-3	Chloroform	ND	6.1	2.4	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	31	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.1	2.4	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.1	2.4	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.1	2.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.1	2.4	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.1	2.4	ug/kg	
124-48-1	Dibromochloromethane	ND	6.1	2.4	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.1	2.4	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.1	2.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.1	2.4	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.1	2.4	ug/kg	
100-41-4	Ethylbenzene	ND	6.1	2.4	ug/kg	
74-83-9	Methyl bromide	ND	6.1	2.4	ug/kg	
74-87-3	Methyl chloride	ND	6.1	2.4	ug/kg	
75-09-2	Methylene chloride	ND	12	6.1	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.1	2.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.1	2.4	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.1	2.4	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.1	2.4	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.1	2.4	ug/kg	
108-88-3	Toluene	ND	6.1	2.4	ug/kg	
79-01-6	Trichloroethylene	ND	6.1	2.4	ug/kg	
75-01-4	Vinyl chloride	ND	6.1	2.4	ug/kg	
1330-20-7	Xylene (total)	ND	18	4.9	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B014-03		
Lab Sample ID:	F17248-10	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	91.8
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%
2037-26-5	Toluene-D8	105%		79-121%
460-00-4	4-Bromofluorobenzene	117%		77-133%
17060-07-0	1,2-Dichloroethane-D4	104%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B014-03		
Lab Sample ID:	F17248-10	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	91.8
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W014961.D	1	04/15/03	ME	04/08/03	OP7284	SW783
Run #2							

	Initial Weight	Final Volume
Run #1	29.3 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	190	37	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	37	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	37	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	37	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	930	370	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	370	74	ug/kg	
88-75-5	2-Nitrophenol	ND	190	37	ug/kg	
100-02-7	4-Nitrophenol	ND	930	370	ug/kg	
87-86-5	Pentachlorophenol	ND	930	370	ug/kg	
108-95-2	Phenol	ND	190	37	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	37	ug/kg	
92-87-5	Benzidine	ND	1900	930	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	190	37	ug/kg	
85-68-7	Butyl benzyl phthalate	2420	370	93	ug/kg	
91-58-7	2-Chloronaphthalene	ND	190	37	ug/kg	
106-47-8	4-Chloroaniline	ND	370	150	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	190	37	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	190	74	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	190	37	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	190	37	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	190	37	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	190	37	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	190	37	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	190	37	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	190	74	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	190	74	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	370	190	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	370	93	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	370	190	ug/kg	
84-66-2	Diethyl phthalate	ND	370	93	ug/kg	
131-11-3	Dimethyl phthalate	ND	370	93	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	322	370	190	ug/kg	J

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B014-03		
Lab Sample ID:	F17248-10	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	91.8
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	190	37	ug/kg	
87-68-3	Hexachlorobutadiene	ND	190	74	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	190	74	ug/kg	
67-72-1	Hexachloroethane	ND	190	74	ug/kg	
78-59-1	Isophorone	ND	190	37	ug/kg	
98-95-3	Nitrobenzene	ND	190	37	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	370	93	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	190	74	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	37	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	190	37	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	57%		45-114%
4165-62-2	Phenol-d5	64%		44-124%
118-79-6	2,4,6-Tribromophenol	73%		50-128%
4165-60-0	Nitrobenzene-d5	59%		41-123%
321-60-8	2-Fluorobiphenyl	63%		46-122%
1718-51-0	Terphenyl-d14	73%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
13360-61-7	1-Pentadecene	10.19	530	ug/kg	JN
629-78-7	Heptadecane	17.35	390	ug/kg	JN
6418-45-7	Nonadecane, 3-methyl-	17.66	820	ug/kg	JN
198-55-0	Perylene	18.34	540	ug/kg	JN
	unknown	18.81	2600	ug/kg	J
	unknown	21.30	530	ug/kg	J
	Total TIC, Semi-Volatile		5410	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B014-03		
Lab Sample ID:	F17248-10	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	91.8
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001624.D	10	04/11/03	MRE	04/08/03	OP7285	SF100
Run #2							

	Initial Weight	Final Volume
Run #1	29.3 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	740	190	ug/kg	
208-96-8	Acenaphthylene	ND	740	190	ug/kg	
120-12-7	Anthracene	ND	740	93	ug/kg	
56-55-3	Benzo(a)anthracene	349	150	37	ug/kg	
50-32-8	Benzo(a)pyrene	574	150	37	ug/kg	
205-99-2	Benzo(b)fluoranthene	708	150	37	ug/kg	
191-24-2	Benzo(g,h,i)perylene	733	150	37	ug/kg	
207-08-9	Benzo(k)fluoranthene	215	150	37	ug/kg	
218-01-9	Chrysene	391	150	37	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	93.6	150	37	ug/kg	J
206-44-0	Fluoranthene	612	740	93	ug/kg	J
86-73-7	Fluorene	ND	740	93	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	559	150	37	ug/kg	
90-12-0	1-Methylnaphthalene	ND	740	93	ug/kg	
91-57-6	2-Methylnaphthalene	ND	740	93	ug/kg	
91-20-3	Naphthalene	ND	740	93	ug/kg	
85-01-8	Phenanthrene	240	740	93	ug/kg	J
129-00-0	Pyrene	446	740	93	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B014-03		
Lab Sample ID:	F17248-10	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	91.8
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28424.D	1	04/09/03	SM	04/07/03	OP7280	GOP965
Run #2							

	Initial Weight	Final Volume
Run #1	29.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	58.8	9.2	6.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	72%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B014-03		
Lab Sample ID:	F17248-10	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
		Percent Solids:	91.8
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.31 U	0.54	0.31	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Cadmium	6.1	0.44	0.028	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Chromium	36.3	1.1	0.047	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Lead	87.7	11	0.13	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SB-B015-03		
Lab Sample ID:	F17248-11	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	89.3
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H020661.D	1	04/11/03	NAF	n/a	n/a	VH740
Run #2							

	Initial Weight
Run #1	4.22 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	6.6	2.7	ug/kg	
75-27-4	Bromodichloromethane	ND	6.6	2.7	ug/kg	
75-25-2	Bromoform	ND	6.6	2.7	ug/kg	
108-90-7	Chlorobenzene	ND	6.6	2.7	ug/kg	
75-00-3	Chloroethane	ND	6.6	4.0	ug/kg	
67-66-3	Chloroform	ND	6.6	2.7	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	33	13	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.6	2.7	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.6	2.7	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.6	2.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.6	2.7	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.6	2.7	ug/kg	
124-48-1	Dibromochloromethane	ND	6.6	2.7	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.6	2.7	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.6	2.7	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.6	2.7	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.6	2.7	ug/kg	
100-41-4	Ethylbenzene	ND	6.6	2.7	ug/kg	
74-83-9	Methyl bromide	ND	6.6	2.7	ug/kg	
74-87-3	Methyl chloride	ND	6.6	2.7	ug/kg	
75-09-2	Methylene chloride	ND	13	6.6	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.6	2.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.6	2.7	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.6	2.7	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.6	2.7	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.6	2.7	ug/kg	
108-88-3	Toluene	ND	6.6	2.7	ug/kg	
79-01-6	Trichloroethylene	ND	6.6	2.7	ug/kg	
75-01-4	Vinyl chloride	ND	6.6	2.7	ug/kg	
1330-20-7	Xylene (total)	ND	20	5.3	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B015-03		
Lab Sample ID:	F17248-11	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	89.3
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%
2037-26-5	Toluene-D8	119%		79-121%
460-00-4	4-Bromofluorobenzene	113%		77-133%
17060-07-0	1,2-Dichloroethane-D4	107%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B015-03		
Lab Sample ID:	F17248-11	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	89.3
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W014962.D	1	04/15/03	ME	04/08/03	OP7284	SW783
Run #2							

	Initial Weight	Final Volume
Run #1	29.9 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	190	37	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	37	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	37	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	37	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	940	370	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	370	75	ug/kg	
88-75-5	2-Nitrophenol	ND	190	37	ug/kg	
100-02-7	4-Nitrophenol	ND	940	370	ug/kg	
87-86-5	Pentachlorophenol	ND	940	370	ug/kg	
108-95-2	Phenol	ND	190	37	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	37	ug/kg	
92-87-5	Benzidine	ND	1900	940	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	190	37	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	370	94	ug/kg	
91-58-7	2-Chloronaphthalene	ND	190	37	ug/kg	
106-47-8	4-Chloroaniline	ND	370	150	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	190	37	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	190	75	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	190	37	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	190	37	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	190	37	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	190	37	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	190	37	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	190	37	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	190	75	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	190	75	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	370	190	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	370	94	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	370	190	ug/kg	
84-66-2	Diethyl phthalate	ND	370	94	ug/kg	
131-11-3	Dimethyl phthalate	ND	370	94	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	370	190	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B015-03		
Lab Sample ID:	F17248-11	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	89.3
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	190	37	ug/kg	
87-68-3	Hexachlorobutadiene	ND	190	75	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	190	75	ug/kg	
67-72-1	Hexachloroethane	ND	190	75	ug/kg	
78-59-1	Isophorone	ND	190	37	ug/kg	
98-95-3	Nitrobenzene	ND	190	37	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	370	94	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	190	75	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	37	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	190	37	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		45-114%
4165-62-2	Phenol-d5	70%		44-124%
118-79-6	2,4,6-Tribromophenol	79%		50-128%
4165-60-0	Nitrobenzene-d5	66%		41-123%
321-60-8	2-Fluorobiphenyl	66%		46-122%
1718-51-0	Terphenyl-d14	89%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
629-92-5	Nonadecane	17.00	1200	ug/kg	JN
112-95-8	Eicosane	17.10	1700	ug/kg	JN
629-94-7	Heneicosane	17.15	630	ug/kg	JN
4536-30-5	Ethanol, 2-(dodecyloxy)-	17.35	3100	ug/kg	JN
112-95-8	Eicosane	17.46	910	ug/kg	JN
630-06-8	Hexatriacontane	17.66	4000	ug/kg	JN
	Total TIC, Semi-Volatile		11540	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B015-03		
Lab Sample ID:	F17248-11	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	89.3
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001602.D	4	04/10/03	MRE	04/08/03	OP7285	SF99
Run #2							

	Initial Weight	Final Volume
Run #1	29.9 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	300	75	ug/kg	
208-96-8	Acenaphthylene	ND	300	75	ug/kg	
120-12-7	Anthracene	ND	300	37	ug/kg	
56-55-3	Benzo(a)anthracene	47.4	60	15	ug/kg	J
50-32-8	Benzo(a)pyrene	75.8	60	15	ug/kg	
205-99-2	Benzo(b)fluoranthene	92.7	60	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	77.8	60	15	ug/kg	
207-08-9	Benzo(k)fluoranthene	27.9	60	15	ug/kg	J
218-01-9	Chrysene	52.7	60	15	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	16.1	60	15	ug/kg	J
206-44-0	Fluoranthene	78.9	300	37	ug/kg	J
86-73-7	Fluorene	ND	300	37	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	62.2	60	15	ug/kg	
90-12-0	1-Methylnaphthalene	ND	300	37	ug/kg	
91-57-6	2-Methylnaphthalene	ND	300	37	ug/kg	
91-20-3	Naphthalene	ND	300	37	ug/kg	
85-01-8	Phenanthrene	ND	300	37	ug/kg	
129-00-0	Pyrene	56.2	300	37	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B015-03		
Lab Sample ID:	F17248-11	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	89.3
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28426.D	1	04/09/03	SM	04/07/03	OP7280	GOP965
Run #2							

	Initial Weight	Final Volume
Run #1	29.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	42.4	9.5	6.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	72%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B015-03		
Lab Sample ID:	F17248-11	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
		Percent Solids:	89.3
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.37 B	0.55	0.31	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Cadmium	0.53	0.44	0.029	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Chromium	7.8	1.1	0.047	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Lead	14.2	11	0.13	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SB-B016-03		
Lab Sample ID:	F17248-12	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	92.3
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H020670.D	1	04/14/03	NAF	n/a	n/a	VH741
Run #2							

	Initial Weight
Run #1	4.16 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	6.5	2.6	ug/kg	
75-27-4	Bromodichloromethane	ND	6.5	2.6	ug/kg	
75-25-2	Bromoform	ND	6.5	2.6	ug/kg	
108-90-7	Chlorobenzene	ND	6.5	2.6	ug/kg	
75-00-3	Chloroethane	ND	6.5	3.9	ug/kg	
67-66-3	Chloroform	ND	6.5	2.6	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	33	13	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.5	2.6	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.5	2.6	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.5	2.6	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.5	2.6	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.5	2.6	ug/kg	
124-48-1	Dibromochloromethane	ND	6.5	2.6	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.5	2.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.5	2.6	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.5	2.6	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.5	2.6	ug/kg	
100-41-4	Ethylbenzene	ND	6.5	2.6	ug/kg	
74-83-9	Methyl bromide	ND	6.5	2.6	ug/kg	
74-87-3	Methyl chloride	ND	6.5	2.6	ug/kg	
75-09-2	Methylene chloride	ND	13	6.5	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.5	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.5	2.6	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.5	2.6	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.5	2.6	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.5	2.6	ug/kg	
108-88-3	Toluene	ND	6.5	2.6	ug/kg	
79-01-6	Trichloroethylene	ND	6.5	2.6	ug/kg	
75-01-4	Vinyl chloride	ND	6.5	2.6	ug/kg	
1330-20-7	Xylene (total)	ND	20	5.2	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B016-03		
Lab Sample ID:	F17248-12	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	92.3
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%
2037-26-5	Toluene-D8	102%		79-121%
460-00-4	4-Bromofluorobenzene	111%		77-133%
17060-07-0	1,2-Dichloroethane-D4	93%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B016-03		
Lab Sample ID:	F17248-12	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	92.3
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W014963.D	1	04/15/03	ME	04/08/03	OP7284	SW783
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	180	36	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	36	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	36	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	36	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	900	360	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	360	72	ug/kg	
88-75-5	2-Nitrophenol	ND	180	36	ug/kg	
100-02-7	4-Nitrophenol	ND	900	360	ug/kg	
87-86-5	Pentachlorophenol	ND	900	360	ug/kg	
108-95-2	Phenol	ND	180	36	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	36	ug/kg	
92-87-5	Benzidine	ND	1800	900	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	180	36	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	360	90	ug/kg	
91-58-7	2-Chloronaphthalene	ND	180	36	ug/kg	
106-47-8	4-Chloroaniline	ND	360	140	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	180	36	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	180	72	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	180	36	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	180	36	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	180	36	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	180	36	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	180	36	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	180	36	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	180	72	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	180	72	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	360	180	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	360	90	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	360	180	ug/kg	
84-66-2	Diethyl phthalate	ND	360	90	ug/kg	
131-11-3	Dimethyl phthalate	ND	360	90	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	360	180	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B016-03		
Lab Sample ID:	F17248-12	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	92.3
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	180	36	ug/kg	
87-68-3	Hexachlorobutadiene	ND	180	72	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	180	72	ug/kg	
67-72-1	Hexachloroethane	ND	180	72	ug/kg	
78-59-1	Isophorone	ND	180	36	ug/kg	
98-95-3	Nitrobenzene	ND	180	36	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	360	90	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	180	72	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	36	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	180	36	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	70%		45-114%
4165-62-2	Phenol-d5	75%		44-124%
118-79-6	2,4,6-Tribromophenol	84%		50-128%
4165-60-0	Nitrobenzene-d5	73%		41-123%
321-60-8	2-Fluorobiphenyl	74%		46-122%
1718-51-0	Terphenyl-d14	90%		45-135%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B016-03		
Lab Sample ID:	F17248-12	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	92.3
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001603.D	4	04/10/03	MRE	04/08/03	OP7285	SF99
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	290	72	ug/kg	
208-96-8	Acenaphthylene	ND	290	72	ug/kg	
120-12-7	Anthracene	ND	290	36	ug/kg	
56-55-3	Benzo(a)anthracene	16.7	58	14	ug/kg	J
50-32-8	Benzo(a)pyrene	42.5	58	14	ug/kg	J
205-99-2	Benzo(b)fluoranthene	51.4	58	14	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	44.7	58	14	ug/kg	J
207-08-9	Benzo(k)fluoranthene	14.4	58	14	ug/kg	J
218-01-9	Chrysene	18.7	58	14	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	58	14	ug/kg	
206-44-0	Fluoranthene	ND	290	36	ug/kg	
86-73-7	Fluorene	ND	290	36	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	33.7	58	14	ug/kg	J
90-12-0	1-Methylnaphthalene	ND	290	36	ug/kg	
91-57-6	2-Methylnaphthalene	ND	290	36	ug/kg	
91-20-3	Naphthalene	ND	290	36	ug/kg	
85-01-8	Phenanthrene	ND	290	36	ug/kg	
129-00-0	Pyrene	ND	290	36	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B016-03		
Lab Sample ID:	F17248-12	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	92.3
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28427.D	1	04/09/03	SM	04/07/03	OP7280	GOP965
Run #2							

	Initial Weight	Final Volume
Run #1	29.9 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	18.5	9.1	6.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	87%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B016-03		
Lab Sample ID:	F17248-12	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
		Percent Solids:	92.3
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.29 U	0.52	0.29	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Cadmium	0.12 B	0.42	0.027	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Chromium	5.0	1.0	0.045	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Lead	11.1	10	0.13	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-DU01-SB-02		
Lab Sample ID:	F17248-13	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	71.1
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H020671.D	1	04/14/03	NAF	n/a	n/a	VH741
Run #2							

	Initial Weight
Run #1	3.91 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	9.0	3.6	ug/kg	
75-27-4	Bromodichloromethane	ND	9.0	3.6	ug/kg	
75-25-2	Bromoform	ND	9.0	3.6	ug/kg	
108-90-7	Chlorobenzene	ND	9.0	3.6	ug/kg	
75-00-3	Chloroethane	ND	9.0	5.4	ug/kg	
67-66-3	Chloroform	ND	9.0	3.6	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	45	18	ug/kg	
56-23-5	Carbon tetrachloride	ND	9.0	3.6	ug/kg	
75-34-3	1,1-Dichloroethane	ND	9.0	3.6	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	9.0	3.6	ug/kg	
107-06-2	1,2-Dichloroethane	ND	9.0	3.6	ug/kg	
78-87-5	1,2-Dichloropropane	ND	9.0	3.6	ug/kg	
124-48-1	Dibromochloromethane	ND	9.0	3.6	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	9.0	3.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	9.0	3.6	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	9.0	3.6	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	9.0	3.6	ug/kg	
100-41-4	Ethylbenzene	ND	9.0	3.6	ug/kg	
74-83-9	Methyl bromide	ND	9.0	3.6	ug/kg	
74-87-3	Methyl chloride	ND	9.0	3.6	ug/kg	
75-09-2	Methylene chloride	ND	18	9.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	9.0	3.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	9.0	3.6	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	9.0	3.6	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	9.0	3.6	ug/kg	
127-18-4	Tetrachloroethylene	ND	9.0	3.6	ug/kg	
108-88-3	Toluene	ND	9.0	3.6	ug/kg	
79-01-6	Trichloroethylene	ND	9.0	3.6	ug/kg	
75-01-4	Vinyl chloride	ND	9.0	3.6	ug/kg	
1330-20-7	Xylene (total)	ND	27	7.2	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-DU01-SB-02		
Lab Sample ID:	F17248-13	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	71.1
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
2037-26-5	Toluene-D8	105%		79-121%
460-00-4	4-Bromofluorobenzene	112%		77-133%
17060-07-0	1,2-Dichloroethane-D4	96%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-DU01-SB-02		
Lab Sample ID:	F17248-13	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	71.1
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W014964.D	1	04/15/03	ME	04/08/03	OP7284	SW783
Run #2							

	Initial Weight	Final Volume
Run #1	29.7 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	240	47	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	240	47	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	240	47	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	240	47	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	470	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	470	95	ug/kg	
88-75-5	2-Nitrophenol	ND	240	47	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	470	ug/kg	
87-86-5	Pentachlorophenol	ND	1200	470	ug/kg	
108-95-2	Phenol	ND	240	47	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	240	47	ug/kg	
92-87-5	Benzidine	ND	2400	1200	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	240	47	ug/kg	
85-68-7	Butyl benzyl phthalate	135	470	120	ug/kg	J
91-58-7	2-Chloronaphthalene	ND	240	47	ug/kg	
106-47-8	4-Chloroaniline	ND	470	190	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	240	47	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	240	95	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	240	47	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	240	47	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	240	47	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	240	47	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	240	47	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	240	47	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	240	95	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	240	95	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	470	240	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	470	120	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	470	240	ug/kg	
84-66-2	Diethyl phthalate	ND	470	120	ug/kg	
131-11-3	Dimethyl phthalate	ND	470	120	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	470	240	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-DU01-SB-02		
Lab Sample ID:	F17248-13	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	71.1
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	240	47	ug/kg	
87-68-3	Hexachlorobutadiene	ND	240	95	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	240	95	ug/kg	
67-72-1	Hexachloroethane	ND	240	95	ug/kg	
78-59-1	Isophorone	ND	240	47	ug/kg	
98-95-3	Nitrobenzene	ND	240	47	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	470	120	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	240	95	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	240	47	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	240	47	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	56%		45-114%
4165-62-2	Phenol-d5	59%		44-124%
118-79-6	2,4,6-Tribromophenol	77%		50-128%
4165-60-0	Nitrobenzene-d5	58%		41-123%
321-60-8	2-Fluorobiphenyl	59%		46-122%
1718-51-0	Terphenyl-d14	81%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
629-92-5	Nonadecane	17.00	1400	ug/kg	JN
3386-33-2	Octadecane, 1-chloro-	17.10	2000	ug/kg	JN
21164-95-4	Hexadecane, 7,9-dimethyl-	17.15	720	ug/kg	JN
629-92-5	Nonadecane	17.35	3500	ug/kg	JN
544-76-3	Hexadecane	17.46	1100	ug/kg	JN
13287-24-6	Nonadecane, 9-methyl-	17.66	4700	ug/kg	JN
	Total TIC, Semi-Volatile		13420	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-DU01-SB-02		
Lab Sample ID:	F17248-13	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	71.1
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001604.D	4	04/10/03	MRE	04/08/03	OP7285	SF99
Run #2							

	Initial Weight	Final Volume
Run #1	29.7 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	380	95	ug/kg	
208-96-8	Acenaphthylene	ND	380	95	ug/kg	
120-12-7	Anthracene	ND	380	47	ug/kg	
56-55-3	Benzo(a)anthracene	64.7	76	19	ug/kg	J
50-32-8	Benzo(a)pyrene	97.2	76	19	ug/kg	
205-99-2	Benzo(b)fluoranthene	124	76	19	ug/kg	
191-24-2	Benzo(g,h,i)perylene	71.2	76	19	ug/kg	J
207-08-9	Benzo(k)fluoranthene	36.1	76	19	ug/kg	J
218-01-9	Chrysene	66.9	76	19	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	76	19	ug/kg	
206-44-0	Fluoranthene	108	380	47	ug/kg	J
86-73-7	Fluorene	ND	380	47	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	65.5	76	19	ug/kg	J
90-12-0	1-Methylnaphthalene	ND	380	47	ug/kg	
91-57-6	2-Methylnaphthalene	ND	380	47	ug/kg	
91-20-3	Naphthalene	ND	380	47	ug/kg	
85-01-8	Phenanthrene	59.0	380	47	ug/kg	J
129-00-0	Pyrene	82.8	380	47	ug/kg	J

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-DU01-SB-02		
Lab Sample ID:	F17248-13	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	71.1
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28428.D	1	04/09/03	SM	04/07/03	OP7280	GOP965
Run #2							

	Initial Weight	Final Volume
Run #1	29.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	45.6	12	8.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	77%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-DU01-SB-02		
Lab Sample ID:	F17248-13	Date Sampled:	04/04/03
Matrix:	SO - Soil	Date Received:	04/05/03
		Percent Solids:	71.1
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.53 B	0.68	0.38	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Cadmium	0.097 B	0.54	0.035	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Chromium	7.8	1.4	0.058	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B
Lead	10.4 B	14	0.16	mg/kg	1	04/09/03	04/11/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-GW-02-02		
Lab Sample ID:	F17248-14	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J001939.D	1	04/10/03	RA	n/a	n/a	VJ89
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.70	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-GW-02-02		
Lab Sample ID:	F17248-14	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		86-115%
17060-07-0	1,2-Dichloroethane-D4	94%		78-125%
2037-26-5	Toluene-D8	95%		87-113%
460-00-4	4-Bromofluorobenzene	99%		84-117%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-GW-02-02		
Lab Sample ID:	F17248-14	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L017125.D	1	04/14/03	ME	04/08/03	OP7293	SL929
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.4	2.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.4	2.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.4	2.2	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.4	2.2	ug/l	
51-28-5	2,4-Dinitrophenol	ND	27	11	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	8.1	ug/l	
88-75-5	2-Nitrophenol	ND	5.4	2.2	ug/l	
100-02-7	4-Nitrophenol	ND	27	11	ug/l	
87-86-5	Pentachlorophenol	ND	27	11	ug/l	
108-95-2	Phenol	ND	5.4	2.2	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.4	2.2	ug/l	
92-87-5	Benzidine	ND	54	27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	1.1	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	2.2	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.4	2.2	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	1.1	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.4	2.2	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	1.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	1.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.4	1.1	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.4	1.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.4	1.1	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.4	1.1	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.4	2.2	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.4	2.2	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	11	5.4	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.4	2.2	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.4	2.7	ug/l	
84-66-2	Diethyl phthalate	ND	5.4	2.2	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.4	2.7	ug/l	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-GW-02-02		
Lab Sample ID:	F17248-14	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	5.4	1.1	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.4	2.2	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.4	2.2	ug/l	
67-72-1	Hexachloroethane	ND	5.4	2.2	ug/l	
78-59-1	Isophorone	ND	5.4	1.1	ug/l	
98-95-3	Nitrobenzene	ND	5.4	1.1	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.4	2.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	2.2	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	2.2	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	51%		19-90%
4165-62-2	Phenol-d5	35%		10-68%
118-79-6	2,4,6-Tribromophenol	84%		36-137%
4165-60-0	Nitrobenzene-d5	82%		49-119%
321-60-8	2-Fluorobiphenyl	83%		45-118%
1718-51-0	Terphenyl-d14	78%		46-135%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-GW-02-02		
Lab Sample ID:	F17248-14	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001607.D	1	04/10/03	MRE	04/09/03	OP7302	SF99
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.1	0.53	ug/l	
208-96-8	Acenaphthylene	ND	1.1	0.53	ug/l	
120-12-7	Anthracene	ND	1.1	0.26	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.21	0.11	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.21	0.11	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.21	0.11	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.21	0.11	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.21	0.11	ug/l	
218-01-9	Chrysene	ND	0.21	0.11	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.21	0.11	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.26	ug/l	
86-73-7	Fluorene	ND	1.1	0.26	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.21	0.11	ug/l	
90-12-0	1-Methylnaphthalene	1.6	1.1	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.26	ug/l	
91-20-3	Naphthalene	0.77	1.1	0.26	ug/l	J
85-01-8	Phenanthrene	ND	1.1	0.26	ug/l	
129-00-0	Pyrene	ND	1.1	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%		49-119%
321-60-8	2-Fluorobiphenyl	74%		45-118%
1718-51-0	Terphenyl-d14	80%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-GW-02-02		
Lab Sample ID:	F17248-14	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	EPA 504.1 EPA 504	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB25085.D	1	04/08/03	SM	04/08/03	OP7289	GAB917
Run #2							

	Initial Volume	Final Volume
Run #1	38.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0091	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	106%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-GW-02-02		
Lab Sample ID:	F17248-14	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28447.D	1	04/09/03	SM	04/09/03	OP7300	GOP966
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.378	0.27	0.18	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		51-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-GW-02-02		
Lab Sample ID:	F17248-14	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
		Percent Solids:	n/a
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	5.2 B	10	2.8	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A
Cadmium	0.26 U	5.0	0.26	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A
Chromium	2.4 B	10	0.43	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-LS-GW-1I-02		
Lab Sample ID:	F17248-15	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J001938.D	1	04/10/03	RA	n/a	n/a	VJ89
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.70	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-LS-GW-1I-02		
Lab Sample ID:	F17248-15	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		86-115%
17060-07-0	1,2-Dichloroethane-D4	96%		78-125%
2037-26-5	Toluene-D8	94%		87-113%
460-00-4	4-Bromofluorobenzene	102%		84-117%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-LS-GW-1I-02		
Lab Sample ID:	F17248-15	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L017126.D	1	04/14/03	ME	04/08/03	OP7293	SL929
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	2.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	2.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.1	2.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.6	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	25	10	ug/l	
87-86-5	Pentachlorophenol	ND	25	10	ug/l	
108-95-2	Phenol	ND	5.1	2.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	2.0	ug/l	
92-87-5	Benzidine	ND	51	25	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.1	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.1	2.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	2.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.1	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.1	2.0	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.1	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.1	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.1	1.0	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.1	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.1	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.1	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.1	2.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.1	2.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.1	2.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.1	2.5	ug/l	
84-66-2	Diethyl phthalate	ND	5.1	2.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.1	2.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.1	2.5	ug/l	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-LS-GW-1I-02		
Lab Sample ID:	F17248-15	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	5.1	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.1	2.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.1	2.0	ug/l	
67-72-1	Hexachloroethane	ND	5.1	2.0	ug/l	
78-59-1	Isophorone	ND	5.1	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.1	1.0	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.1	2.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.1	2.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		19-90%
4165-62-2	Phenol-d5	33%		10-68%
118-79-6	2,4,6-Tribromophenol	80%		36-137%
4165-60-0	Nitrobenzene-d5	77%		49-119%
321-60-8	2-Fluorobiphenyl	78%		45-118%
1718-51-0	Terphenyl-d14	75%		46-135%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-LS-GW-1I-02		
Lab Sample ID:	F17248-15	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001608.D	1	04/10/03	MRE	04/09/03	OP7302	SF99
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	0.51	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.51	ug/l	
120-12-7	Anthracene	ND	1.0	0.26	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.20	0.10	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.10	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.10	ug/l	
218-01-9	Chrysene	ND	0.20	0.10	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.10	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.26	ug/l	
86-73-7	Fluorene	ND	1.0	0.26	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.10	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-20-3	Naphthalene	ND	1.0	0.26	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.26	ug/l	
129-00-0	Pyrene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	82%		49-119%
321-60-8	2-Fluorobiphenyl	76%		45-118%
1718-51-0	Terphenyl-d14	75%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-LS-GW-1I-02		
Lab Sample ID:	F17248-15	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	EPA 504.1 EPA 504	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB25086.D	1	04/08/03	SM	04/08/03	OP7289	GAB917
Run #2							

	Initial Volume	Final Volume
Run #1	37.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	112%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-LS-GW-1I-02		
Lab Sample ID:	F17248-15	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28448.D	1	04/09/03	SM	04/09/03	OP7300	GOP966
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	ND	0.26	0.18	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	79%		51-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-LS-GW-1I-02		
Lab Sample ID:	F17248-15	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
		Percent Solids:	n/a
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A
Cadmium	0.26 U	5.0	0.26	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A
Chromium	0.43 U	10	0.43	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312LS-GW-01S-02		
Lab Sample ID:	F17248-16	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J001940.D	1	04/10/03	RA	n/a	n/a	VJ89
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	0.88	1.0	0.50	ug/l	J
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.70	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-01S-02		
Lab Sample ID:	F17248-16	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		86-115%
17060-07-0	1,2-Dichloroethane-D4	93%		78-125%
2037-26-5	Toluene-D8	96%		87-113%
460-00-4	4-Bromofluorobenzene	102%		84-117%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-01S-02		
Lab Sample ID:	F17248-16	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L017140.D	1	04/15/03	ME	04/08/03	OP7293	SL930
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.4	2.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.4	2.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.4	2.2	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.4	2.2	ug/l	
51-28-5	2,4-Dinitrophenol	ND	27	11	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	8.2	ug/l	
88-75-5	2-Nitrophenol	ND	5.4	2.2	ug/l	
100-02-7	4-Nitrophenol	ND	27	11	ug/l	
87-86-5	Pentachlorophenol	ND	27	11	ug/l	
108-95-2	Phenol	ND	5.4	2.2	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.4	2.2	ug/l	
92-87-5	Benzidine	ND	54	27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	1.1	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	2.2	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.4	2.2	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	1.1	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.4	2.2	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	1.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	1.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.4	1.1	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.4	1.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.4	1.1	ug/l	
106-46-7	1,4-Dichlorobenzene	2.1	5.4	1.1	ug/l	J
121-14-2	2,4-Dinitrotoluene	ND	5.4	2.2	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.4	2.2	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	11	5.4	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.4	2.2	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.4	2.7	ug/l	
84-66-2	Diethyl phthalate	ND	5.4	2.2	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.4	2.7	ug/l	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-01S-02		
Lab Sample ID:	F17248-16	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	5.4	1.1	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.4	2.2	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.4	2.2	ug/l	
67-72-1	Hexachloroethane	ND	5.4	2.2	ug/l	
78-59-1	Isophorone	ND	5.4	1.1	ug/l	
98-95-3	Nitrobenzene	ND	5.4	1.1	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.4	2.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	2.2	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	2.2	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	57%		19-90%
4165-62-2	Phenol-d5	40%		10-68%
118-79-6	2,4,6-Tribromophenol	88%		36-137%
4165-60-0	Nitrobenzene-d5	91%		49-119%
321-60-8	2-Fluorobiphenyl	87%		45-118%
1718-51-0	Terphenyl-d14	91%		46-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
92-84-2	Phenothiazine	13.42	12	ug/l	JN
	Total TIC, Semi-Volatile		12	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-01S-02		
Lab Sample ID:	F17248-16	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001611.D	1	04/10/03	MRE	04/09/03	OP7302	SF99
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.1	0.53	ug/l	
208-96-8	Acenaphthylene	ND	1.1	0.53	ug/l	
120-12-7	Anthracene	ND	1.1	0.27	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.21	0.11	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.21	0.11	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.21	0.11	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.21	0.11	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.21	0.11	ug/l	
218-01-9	Chrysene	ND	0.21	0.11	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.21	0.11	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.27	ug/l	
86-73-7	Fluorene	ND	1.1	0.27	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.21	0.11	ug/l	
90-12-0	1-Methylnaphthalene	2.6	1.1	0.27	ug/l	
91-57-6	2-Methylnaphthalene	1.3	1.1	0.27	ug/l	
91-20-3	Naphthalene	3.5	1.1	0.27	ug/l	
85-01-8	Phenanthrene	ND	1.1	0.27	ug/l	
129-00-0	Pyrene	ND	1.1	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	79%		49-119%
321-60-8	2-Fluorobiphenyl	72%		45-118%
1718-51-0	Terphenyl-d14	75%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-01S-02		
Lab Sample ID:	F17248-16	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	EPA 504.1 EPA 504	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB25089.D	1	04/09/03	SM	04/08/03	OP7289	GAB917
Run #2							

	Initial Volume	Final Volume
Run #1	38.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0091	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	78%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-01S-02		
Lab Sample ID:	F17248-16	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28451.D	1	04/09/03	SM	04/09/03	OP7300	GOP966
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.281	0.26	0.18	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	97%		51-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-01S-02		
Lab Sample ID:	F17248-16	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
		Percent Solids:	n/a
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	3.1 B	10	2.8	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A
Cadmium	0.26 U	5.0	0.26	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A
Chromium	0.43 U	10	0.43	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312LS-GW-3S-02		
Lab Sample ID:	F17248-17	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J001941.D	1	04/10/03	RA	n/a	n/a	VJ89
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.70	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-3S-02		
Lab Sample ID:	F17248-17	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		86-115%
17060-07-0	1,2-Dichloroethane-D4	92%		78-125%
2037-26-5	Toluene-D8	95%		87-113%
460-00-4	4-Bromofluorobenzene	98%		84-117%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-3S-02		
Lab Sample ID:	F17248-17	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L017141.D	1	04/15/03	ME	04/08/03	OP7293	SL930
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	2.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	2.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.1	2.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.6	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	25	10	ug/l	
87-86-5	Pentachlorophenol	ND	25	10	ug/l	
108-95-2	Phenol	ND	5.1	2.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	2.0	ug/l	
92-87-5	Benzidine	ND	51	25	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.1	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.1	2.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	2.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.1	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.1	2.0	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.1	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.1	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.1	1.0	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.1	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.1	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.1	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.1	2.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.1	2.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.1	2.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.1	2.5	ug/l	
84-66-2	Diethyl phthalate	ND	5.1	2.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.1	2.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.1	2.5	ug/l	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-3S-02		
Lab Sample ID:	F17248-17	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	5.1	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.1	2.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.1	2.0	ug/l	
67-72-1	Hexachloroethane	ND	5.1	2.0	ug/l	
78-59-1	Isophorone	ND	5.1	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.1	1.0	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.1	2.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.1	2.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%		19-90%
4165-62-2	Phenol-d5	35%		10-68%
118-79-6	2,4,6-Tribromophenol	86%		36-137%
4165-60-0	Nitrobenzene-d5	85%		49-119%
321-60-8	2-Fluorobiphenyl	83%		45-118%
1718-51-0	Terphenyl-d14	84%		46-135%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-3S-02		
Lab Sample ID:	F17248-17	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001612.D	1	04/11/03	MRE	04/09/03	OP7302	SF99
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	0.51	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.51	ug/l	
120-12-7	Anthracene	ND	1.0	0.25	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.20	0.10	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.10	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.10	ug/l	
218-01-9	Chrysene	ND	0.20	0.10	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.10	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.25	ug/l	
86-73-7	Fluorene	ND	1.0	0.25	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.10	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	1.4	1.0	0.25	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.25	ug/l	
129-00-0	Pyrene	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	90%		49-119%
321-60-8	2-Fluorobiphenyl	85%		45-118%
1718-51-0	Terphenyl-d14	86%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-3S-02		
Lab Sample ID:	F17248-17	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	EPA 504.1 EPA 504	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB25091.D	1	04/09/03	SM	04/08/03	OP7289	GAB917
Run #2							

	Initial Volume	Final Volume
Run #1	38.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0091	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	106%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-3S-02		
Lab Sample ID:	F17248-17	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28452.D	1	04/09/03	SM	04/09/03	OP7300	GOP966
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.730	0.26	0.18	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	104%		51-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-3S-02		
Lab Sample ID:	F17248-17	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
		Percent Solids:	n/a
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A
Cadmium	0.26 U	5.0	0.26	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A
Chromium	0.43 U	10	0.43	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312LS-GW-4S-02		
Lab Sample ID:	F17248-18	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J001942.D	1	04/10/03	RA	n/a	n/a	VJ89
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.70	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-4S-02		
Lab Sample ID:	F17248-18	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		86-115%
17060-07-0	1,2-Dichloroethane-D4	93%		78-125%
2037-26-5	Toluene-D8	96%		87-113%
460-00-4	4-Bromofluorobenzene	102%		84-117%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-4S-02		
Lab Sample ID:	F17248-18	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L017142.D	1	04/15/03	ME	04/08/03	OP7293	SL930
Run #2							

	Initial Volume	Final Volume
Run #1	910 ml	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.5	2.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.5	2.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.5	2.2	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.5	2.2	ug/l	
51-28-5	2,4-Dinitrophenol	ND	27	11	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	8.2	ug/l	
88-75-5	2-Nitrophenol	ND	5.5	2.2	ug/l	
100-02-7	4-Nitrophenol	ND	27	11	ug/l	
87-86-5	Pentachlorophenol	ND	27	11	ug/l	
108-95-2	Phenol	ND	5.5	2.2	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.5	2.2	ug/l	
92-87-5	Benzidine	ND	55	27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.5	1.1	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.5	2.2	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.5	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.5	2.2	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.5	1.1	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.5	2.2	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.5	1.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.5	1.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.5	1.1	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.5	1.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.5	1.1	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.5	1.1	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.5	2.2	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.5	2.2	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	11	5.5	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.5	2.2	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.5	2.7	ug/l	
84-66-2	Diethyl phthalate	ND	5.5	2.2	ug/l	
131-11-3	Dimethyl phthalate	ND	5.5	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.5	2.7	ug/l	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-4S-02		
Lab Sample ID:	F17248-18	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	5.5	1.1	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.5	2.2	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.5	2.2	ug/l	
67-72-1	Hexachloroethane	ND	5.5	2.2	ug/l	
78-59-1	Isophorone	ND	5.5	1.1	ug/l	
98-95-3	Nitrobenzene	ND	5.5	1.1	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.5	2.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.5	2.2	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.5	2.2	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.5	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	51%		19-90%
4165-62-2	Phenol-d5	35%		10-68%
118-79-6	2,4,6-Tribromophenol	81%		36-137%
4165-60-0	Nitrobenzene-d5	78%		49-119%
321-60-8	2-Fluorobiphenyl	76%		45-118%
1718-51-0	Terphenyl-d14	82%		46-135%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-4S-02		
Lab Sample ID:	F17248-18	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001613.D	1	04/11/03	MRE	04/09/03	OP7302	SF99
Run #2							

	Initial Volume	Final Volume
Run #1	910 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.1	0.55	ug/l	
208-96-8	Acenaphthylene	ND	1.1	0.55	ug/l	
120-12-7	Anthracene	ND	1.1	0.27	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.22	0.11	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.22	0.11	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.22	0.11	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.22	0.11	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.22	0.11	ug/l	
218-01-9	Chrysene	ND	0.22	0.11	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.22	0.11	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.27	ug/l	
86-73-7	Fluorene	ND	1.1	0.27	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.22	0.11	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.1	0.27	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.27	ug/l	
91-20-3	Naphthalene	ND	1.1	0.27	ug/l	
85-01-8	Phenanthrene	ND	1.1	0.27	ug/l	
129-00-0	Pyrene	ND	1.1	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	77%		49-119%
321-60-8	2-Fluorobiphenyl	71%		45-118%
1718-51-0	Terphenyl-d14	82%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-4S-02		
Lab Sample ID:	F17248-18	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	EPA 504.1 EPA 504	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB25092.D	1	04/09/03	SM	04/08/03	OP7289	GAB917
Run #2							

	Initial Volume	Final Volume
Run #1	38.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0091	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	112%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-4S-02		
Lab Sample ID:	F17248-18	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28454.D	1	04/09/03	SM	04/09/03	OP7300	GOP966
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	ND	0.26	0.18	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		51-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-4S-02		
Lab Sample ID:	F17248-18	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
		Percent Solids:	n/a
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A
Cadmium	0.26 U	5.0	0.26	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A
Chromium	0.43 U	10	0.43	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312LS-GW-1SA-02		
Lab Sample ID:	F17248-19	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J001943.D	1	04/10/03	RA	n/a	n/a	VJ89
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.70	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-1SA-02		
Lab Sample ID:	F17248-19	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		86-115%
17060-07-0	1,2-Dichloroethane-D4	92%		78-125%
2037-26-5	Toluene-D8	97%		87-113%
460-00-4	4-Bromofluorobenzene	99%		84-117%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-1SA-02		
Lab Sample ID:	F17248-19	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L017143.D	1	04/15/03	ME	04/08/03	OP7293	SL930
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	2.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	2.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.1	2.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.7	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	26	10	ug/l	
87-86-5	Pentachlorophenol	ND	26	10	ug/l	
108-95-2	Phenol	ND	5.1	2.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	2.0	ug/l	
92-87-5	Benzidine	ND	51	26	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.1	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.1	2.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	2.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.1	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.1	2.0	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.1	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.1	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.1	1.0	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.1	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.1	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.1	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.1	2.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.1	2.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.1	2.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.1	2.6	ug/l	
84-66-2	Diethyl phthalate	ND	5.1	2.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.1	2.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.1	2.6	ug/l	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-1SA-02		
Lab Sample ID:	F17248-19	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	5.1	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.1	2.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.1	2.0	ug/l	
67-72-1	Hexachloroethane	ND	5.1	2.0	ug/l	
78-59-1	Isophorone	ND	5.1	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.1	1.0	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.1	2.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.1	2.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%		19-90%
4165-62-2	Phenol-d5	32%		10-68%
118-79-6	2,4,6-Tribromophenol	74%		36-137%
4165-60-0	Nitrobenzene-d5	73%		49-119%
321-60-8	2-Fluorobiphenyl	73%		45-118%
1718-51-0	Terphenyl-d14	81%		46-135%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-1SA-02		
Lab Sample ID:	F17248-19	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001614.D	1	04/11/03	MRE	04/09/03	OP7302	SF99
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	0.51	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.51	ug/l	
120-12-7	Anthracene	ND	1.0	0.26	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.20	0.10	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.10	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.10	ug/l	
218-01-9	Chrysene	ND	0.20	0.10	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.10	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.26	ug/l	
86-73-7	Fluorene	ND	1.0	0.26	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.10	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-20-3	Naphthalene	ND	1.0	0.26	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.26	ug/l	
129-00-0	Pyrene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	88%		49-119%
321-60-8	2-Fluorobiphenyl	81%		45-118%
1718-51-0	Terphenyl-d14	87%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-1SA-02		
Lab Sample ID:	F17248-19	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	EPA 504.1 EPA 504	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB25093.D	1	04/09/03	SM	04/08/03	OP7289	GAB917
Run #2							

	Initial Volume	Final Volume
Run #1	37.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	111%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-1SA-02		
Lab Sample ID:	F17248-19	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28455.D	1	04/09/03	SM	04/09/03	OP7300	GOP966
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	ND	0.25	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		51-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-GW-1SA-02		
Lab Sample ID:	F17248-19	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
		Percent Solids:	n/a
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A
Cadmium	0.26 U	5.0	0.26	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A
Chromium	0.43 U	10	0.43	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312LS-DU01-GW-02		
Lab Sample ID:	F17248-20	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J001944.D	1	04/10/03	RA	n/a	n/a	VJ89
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.70	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-DU01-GW-02		
Lab Sample ID:	F17248-20	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		86-115%
17060-07-0	1,2-Dichloroethane-D4	92%		78-125%
2037-26-5	Toluene-D8	96%		87-113%
460-00-4	4-Bromofluorobenzene	98%		84-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
767-58-8	Indan, 1-methyl-	18.84	13	ug/l	JN
	Total TIC, Volatile		13	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-DU01-GW-02		
Lab Sample ID:	F17248-20	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L017144.D	1	04/15/03	ME	04/08/03	OP7293	SL930
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.3	2.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.3	2.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.3	2.1	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.3	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	11	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	7.9	ug/l	
88-75-5	2-Nitrophenol	ND	5.3	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	26	11	ug/l	
87-86-5	Pentachlorophenol	ND	26	11	ug/l	
108-95-2	Phenol	ND	5.3	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.3	2.1	ug/l	
92-87-5	Benzidine	ND	53	26	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.3	1.1	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.3	2.1	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.3	2.1	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.3	1.1	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.3	2.1	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.3	1.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.3	1.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.3	1.1	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.3	1.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.3	1.1	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.3	1.1	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.3	2.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.3	2.1	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	11	5.3	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.3	2.1	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.3	2.6	ug/l	
84-66-2	Diethyl phthalate	ND	5.3	2.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.3	2.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.3	2.6	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-DU01-GW-02		
Lab Sample ID:	F17248-20	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	5.3	1.1	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.3	2.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.3	2.1	ug/l	
67-72-1	Hexachloroethane	ND	5.3	2.1	ug/l	
78-59-1	Isophorone	ND	5.3	1.1	ug/l	
98-95-3	Nitrobenzene	ND	5.3	1.1	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.3	2.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.3	2.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	2.1	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		19-90%
4165-62-2	Phenol-d5	36%		10-68%
118-79-6	2,4,6-Tribromophenol	81%		36-137%
4165-60-0	Nitrobenzene-d5	82%		49-119%
321-60-8	2-Fluorobiphenyl	75%		45-118%
1718-51-0	Terphenyl-d14	77%		46-135%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-DU01-GW-02		
Lab Sample ID:	F17248-20	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	SW846 8270C BY SIM SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001626.D	1	04/11/03	MRE	04/09/03	OP7302	SF100
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.1	0.53	ug/l	
208-96-8	Acenaphthylene	ND	1.1	0.53	ug/l	
120-12-7	Anthracene	ND	1.1	0.26	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.21	0.11	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.21	0.11	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.21	0.11	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.21	0.11	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.21	0.11	ug/l	
218-01-9	Chrysene	ND	0.21	0.11	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.21	0.11	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.26	ug/l	
86-73-7	Fluorene	ND	1.1	0.26	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.21	0.11	ug/l	
90-12-0	1-Methylnaphthalene	0.58	1.1	0.26	ug/l	J
91-57-6	2-Methylnaphthalene	ND	1.1	0.26	ug/l	
91-20-3	Naphthalene	0.35	1.1	0.26	ug/l	J
85-01-8	Phenanthrene	ND	1.1	0.26	ug/l	
129-00-0	Pyrene	ND	1.1	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		49-119%
321-60-8	2-Fluorobiphenyl	74%		45-118%
1718-51-0	Terphenyl-d14	82%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-DU01-GW-02		
Lab Sample ID:	F17248-20	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	EPA 504.1 EPA 504	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB25094.D	1	04/09/03	SM	04/08/03	OP7289	GAB917
Run #2							

	Initial Volume	Final Volume
Run #1	38.1 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	106%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-DU01-GW-02		
Lab Sample ID:	F17248-20	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
Method:	FLORIDA-PRO SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28456.D	1	04/09/03	SM	04/09/03	OP7300	GOP966
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.424	0.27	0.18	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	98%		51-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312LS-DU01-GW-02		
Lab Sample ID:	F17248-20	Date Sampled:	04/04/03
Matrix:	AQ - Ground Water	Date Received:	04/05/03
		Percent Solids:	n/a
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A
Cadmium	0.26 U	5.0	0.26	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A
Chromium	1.6 B	10	0.43	ug/l	1	04/08/03	04/09/03	DM	SW846 6010B	SW846 3010A

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 2240 | PAGE 1 OF 1

PROJECT NO: N3596	FACILITY: Bldg 312	PROJECT MANAGER Paul Carlisle	PHONE NUMBER 813.886.0202	LABORATORY NAME AND CONTACT: Accutest. Sue Bell
SAMPLERS (SIGNATURE) Merrill Dale		FIELD OPERATIONS LEADER Merv Dale	PHONE NUMBER 904.636.6125	ADDRESS 4405 Vineland Rd. #C-15
		CARRIER/WAYBILL NUMBER Fedex 8371 1005 6326		CITY, STATE Orlando, FL

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

FT7248

	DATE YEAR 2003	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	8260B	6010B or 7421	8270C	8270C SIM	FL PRO				COMMENTS
									CONTAINER TYPE PLASTIC (P) or GLASS (G)	G	G	G	G	G				
									PRESERVATIVE USED	none	HNO3	none	none	none				
1	4/4	1130	CEF.312.SD.C001.02	C001	2	3	SO	G	7	3	1	1	1	1				Cool to 4°C
2	4/4	1515	CEF.312.SD.C003.01	C003	1	2	SO	G	07 MD	3	1	2	2	2				
3	4/4	1150	CEF.312.SD.C004.01	C004	1	2	SO	G	7	3	1	1	1	1				N3596-15R316
4	4/4	1240	CEF.312.SD.C005.01	C005	1	2	SO	G	7	3	1	1	1	1				
5	4/4	1210	CEF.312.SD.C006.01	C006	1	2	SO	G	7	3 MD	1	1	1	1				* use extra AS MS/MSD
6	4/4	1250	CEF.312.SB.B001.03	B001			SO	G	7	3 ~~2~~ 6	1	1	1	1				
7	4/4	1325	CEF.312.SB.B004.02	B004			SO	G	14	6	2	2	2	2	*			
8	4/4	1345	CEF.312.SB.B012.03	B012			SO	G	7	3	1	1	1	1				
9	4/4	1430	CEF.312.SB.B013.03	B013			SO	G	9	3	1	1	2	2				
10	4/4	1500	CEF.312.SB.B014.03	B014			SO	G	7	3	1	1	1	1				
11	4/4	1400	CEF.312.SB.B015.03	B015			SO	G	7	3	1	1	1	1				
12	4/4	1415	CEF.312.SB.B016.03	B016			SO	G	7	3	1	1	1	1				
13	4/4	0000	CEF.312.DU01.SB.02	DU01			SO	G	7	3	1	1	1	1				

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY Merrill W. Dale	4/4/03	1700	1. RECEIVED BY Fedex		
2. RELINQUISHED BY FEDEX			2. RECEIVED BY Munir Mohammed	4/5/03	0900
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS 3.2, 3.6, 2.8, 2.0, 2.2, 3.0, 2.4, 3.0

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

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 2239 | PAGE 1 OF ____

PROJECT NO: N3996, CTO168	FACILITY: BUILDING 312 OWS	PROJECT MANAGER PAUL CALLIGAN	PHONE NUMBER 813 806 0202	LABORATORY NAME AND CONTACT: ACCUTEST Sue Bell
SAMPLERS (SIGNATURE) Charles Mot / M.W. Dale for P.L.	CECIL FIELD	FIELD OPERATIONS LEADER MERV BALE	PHONE NUMBER 904 636 6125	ADDRESS 4405 Vineland Rd C-15
		CARRIER/WAYBILL NUMBER Fedex 8371 1005 6267		CITY, STATE ORLANDO, FL 32811

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

F17248

	DATE YEAR 2003	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	PPL VOCs w/ TICs SW846 8260B *	PAHs SW846 8270C SIM *	PPL SVOCs w/ TICs SW846 8270C	EDB	TOTAL AS, Cd, Cr SW846 6010B	TRPH	FL-PRO		COMMENTS
	CONTAINER TYPE PLASTIC (P) or GLASS (G)									G	G	G	G	P	G			
	PRESERVATIVE USED									HCl	None	None	HCl	HNO_3	H_2SO_4			
14	4/4	0955	CEF-312-GW-02-02				GW	G	13	3	2	2	3	1	2			Cool to 4°C
15	4/4	1000	CEF-312-LS-GW-II-02				GW	G	39	~~69~~	6	6	9	3	6	**		work release
16	4/4	1210	CEF-312LS-GW-~~9S-02~~ 015-02		MD		GW	G	13	5 MD	2	2	3	1	2			N3996-WR316
17	4/4	1255	CEF-312LS-GW-3S-02				GW	G	13	3	2	2	3	1	2			MOD 2
18	4/4	1340	CEF-312LS-GW-4S-02				GW	G	13	3	2	2	3	1	2			
19	4/4	1435	CEF-312LS-GW-15a-02				GW	G	13	3	2	2	3	1	2			* see work release
20	4/4	0000	CEF-312LS-DUP01-GW-02				GW	G	13	3	2	2	3	1	2			
																		** use as MS/MSD

1. RELINQUISHED BY Mawn W. Dale	DATE 4/4/03	TIME 1800	1. RECEIVED BY Fedex	DATE	TIME
2. RELINQUISHED BY FEDEX	DATE	TIME	2. RECEIVED BY Muna Mohammed	DATE 4/5/03	TIME 0900
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

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MAY 2003 SOIL/SEDIMENT LABORATORY REPORT

Southeast ACCUTEST Laboratories

05/29/03

Technical Report for

Tetra Tech, NUS

Cecil Field CTO168

WORK RELEASE 316 MOD2 3996

Accutest Job Number: F17638

Report to:

Tetra Tech, NUS

dalem@ttnus.com

ATTN: Merv Dale

Total number of pages in report: 65

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

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Sample Summary

Tetra Tech, NUS

Job No: F17638

Cecil Field CTO168
Project No: WORK RELEASE 316 MOD2 3996

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F17638-1	05/02/03	13:35	MD	05/03/03	SO	Soil	CEF-312-SB-B017-03
F17638-2	05/02/03	13:53	MD	05/03/03	SO	Soil	CEF-312-SB-B018-03
F17638-3	05/02/03	14:20	MD	05/03/03	SO	Soil	CEF-312-SD-C007-01
F17638-4	05/02/03	14:52	MD	05/03/03	SO	Soil	CEF-312-SD-C011-01
F17638-5	05/02/03	15:01	MD	05/03/03	SO	Soil	CEF-312-SD-C010-01
F17638-6	05/02/03	15:06	MD	05/03/03	SO	Soil	CEF-312-SD-C009-01
F17638-7	05/02/03	15:14	MD	05/03/03	SO	Soil	CEF-312-SD-C008-01
F17638-8	05/02/03	15:26	MD	05/03/03	SO	Soil	CEF-312-SB-B019-03
F17638-9	05/02/03	00:00	MD	05/03/03	SO	Soil	CEF-312-DU01-SB-03

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Client Sample ID:	CEF-312-SB-B017-03		
Lab Sample ID:	F17638-1	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	88.6
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K012778.D	1	05/09/03	NAF	n/a	n/a	VK532
Run #2							

	Initial Weight
Run #1	4.36 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	6.5	2.6	ug/kg	
75-27-4	Bromodichloromethane	ND	6.5	2.6	ug/kg	
75-25-2	Bromoform	ND	6.5	2.6	ug/kg	
108-90-7	Chlorobenzene	ND	6.5	2.6	ug/kg	
75-00-3	Chloroethane	ND	6.5	2.6	ug/kg	
67-66-3	Chloroform	ND	6.5	2.6	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	32	13	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.5	2.6	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.5	2.6	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.5	3.9	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.5	2.6	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.5	2.6	ug/kg	
124-48-1	Dibromochloromethane	ND	6.5	2.6	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.5	2.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.5	2.6	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.5	2.6	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.5	2.6	ug/kg	
100-41-4	Ethylbenzene	ND	6.5	2.6	ug/kg	
74-83-9	Methyl bromide	ND	6.5	2.6	ug/kg	
74-87-3	Methyl chloride	ND	6.5	2.6	ug/kg	
75-09-2	Methylene chloride	ND	13	6.5	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.5	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.5	2.6	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.5	2.6	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.5	2.6	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.5	2.6	ug/kg	
108-88-3	Toluene	ND	6.5	2.6	ug/kg	
79-01-6	Trichloroethylene	ND	6.5	2.6	ug/kg	
75-01-4	Vinyl chloride	ND	6.5	3.2	ug/kg	
1330-20-7	Xylene (total)	ND	19	5.8	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B017-03		
Lab Sample ID:	F17638-1	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	88.6
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
2037-26-5	Toluene-D8	106%		79-121%
460-00-4	4-Bromofluorobenzene	120%		77-133%
17060-07-0	1,2-Dichloroethane-D4	86%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B017-03		
Lab Sample ID:	F17638-1	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	88.6
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L017524.D	1	05/15/03	ME	05/15/03	OP7585	SL948
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	190	37	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	37	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	37	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	37	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	930	370	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	370	74	ug/kg	
88-75-5	2-Nitrophenol	ND	190	37	ug/kg	
100-02-7	4-Nitrophenol	ND	930	370	ug/kg	
87-86-5	Pentachlorophenol	ND	930	370	ug/kg	
108-95-2	Phenol	ND	190	37	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	37	ug/kg	
92-87-5	Benzidine	ND	1900	930	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	190	37	ug/kg	
85-68-7	Butyl benzyl phthalate	127	370	93	ug/kg	J
91-58-7	2-Chloronaphthalene	ND	190	37	ug/kg	
106-47-8	4-Chloroaniline	ND	370	150	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	190	37	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	190	74	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	190	37	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	190	37	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	190	37	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	190	37	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	190	37	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	190	37	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	190	74	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	190	74	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	370	190	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	370	93	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	370	190	ug/kg	
84-66-2	Diethyl phthalate	ND	370	93	ug/kg	
131-11-3	Dimethyl phthalate	ND	370	93	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	370	190	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B017-03		
Lab Sample ID:	F17638-1	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	88.6
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	190	37	ug/kg	
87-68-3	Hexachlorobutadiene	ND	190	74	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	190	74	ug/kg	
67-72-1	Hexachloroethane	ND	190	74	ug/kg	
78-59-1	Isophorone	ND	190	37	ug/kg	
98-95-3	Nitrobenzene	ND	190	37	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	370	93	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	190	74	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	37	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	190	37	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	67%		45-114%
4165-62-2	Phenol-d5	76%		44-124%
118-79-6	2,4,6-Tribromophenol	82%		50-128%
4165-60-0	Nitrobenzene-d5	68%		41-123%
321-60-8	2-Fluorobiphenyl	68%		46-122%
1718-51-0	Terphenyl-d14	78%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
79-34-5	Ethane, 1,1,2,2-tetrachloro- [a]	4.40	420	ug/kg	JN
142-90-5	2-Propenoic acid, 2-methyl-, dodecyl est	10.81	470	ug/kg	JN
629-78-7	Heptadecane	16.99	470	ug/kg	JN
544-76-3	Hexadecane	17.34	1500	ug/kg	JN
629-78-7	Heptadecane	17.45	440	ug/kg	JN
7098-22-8	Tetratetracontane	17.65	1900	ug/kg	JN
	Total TIC, Semi-Volatile		5200	ug/kg	J

(a) Extraction solvent impurity

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B017-03		
Lab Sample ID:	F17638-1	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	88.6
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001934.D	10	05/07/03	MRE	05/05/03	OP7507	SF117
Run #2	W015411.D	40	05/08/03	ME	05/05/03	OP7507	SW805

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2	30.1 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	1040	750	190	ug/kg	
208-96-8	Acenaphthylene	ND	750	190	ug/kg	
120-12-7	Anthracene	1730	750	94	ug/kg	
56-55-3	Benzo(a)anthracene	3310 [a]	600	150	ug/kg	
50-32-8	Benzo(a)pyrene	3130 [a]	600	150	ug/kg	
205-99-2	Benzo(b)fluoranthene	4570 [a]	600	150	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1730	150	37	ug/kg	
207-08-9	Benzo(k)fluoranthene	1370	150	37	ug/kg	
218-01-9	Chrysene	3360 [a]	600	150	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	304	150	37	ug/kg	
206-44-0	Fluoranthene	7880	750	94	ug/kg	
86-73-7	Fluorene	932	750	94	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	2120 [a]	600	150	ug/kg	
90-12-0	1-Methylnaphthalene	147	750	94	ug/kg	J
91-57-6	2-Methylnaphthalene	230	750	94	ug/kg	J
91-20-3	Naphthalene	529	750	94	ug/kg	J
85-01-8	Phenanthrene	6510	750	94	ug/kg	
129-00-0	Pyrene	5970	750	94	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	59%	0% [b]	41-123%
321-60-8	2-Fluorobiphenyl	68%	0% [b]	46-122%
1718-51-0	Terphenyl-d14	79%	0% [b]	45-135%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B017-03		
Lab Sample ID:	F17638-1	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	88.6
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP29098.D	10	05/07/03	SM	05/05/03	OP7509	GOP983
Run #2							

	Initial Weight	Final Volume
Run #1	30.9 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	724	91	62	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	119%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B017-03		
Lab Sample ID:	F17638-1	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
		Percent Solids:	88.6
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.51 B	0.54	0.31	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Cadmium	0.27 B	0.43	0.028	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Chromium	8.8	1.1	0.047	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Lead	33.7	11	0.13	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SB-B018-03		
Lab Sample ID:	F17638-2	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	89.4
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K012779.D	1	05/09/03	NAF	n/a	n/a	VK532
Run #2							

	Initial Weight
Run #1	4.29 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	6.5	2.6	ug/kg	
75-27-4	Bromodichloromethane	ND	6.5	2.6	ug/kg	
75-25-2	Bromoform	ND	6.5	2.6	ug/kg	
108-90-7	Chlorobenzene	ND	6.5	2.6	ug/kg	
75-00-3	Chloroethane	ND	6.5	2.6	ug/kg	
67-66-3	Chloroform	ND	6.5	2.6	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	33	13	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.5	2.6	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.5	2.6	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.5	3.9	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.5	2.6	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.5	2.6	ug/kg	
124-48-1	Dibromochloromethane	ND	6.5	2.6	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.5	2.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.5	2.6	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.5	2.6	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.5	2.6	ug/kg	
100-41-4	Ethylbenzene	ND	6.5	2.6	ug/kg	
74-83-9	Methyl bromide	ND	6.5	2.6	ug/kg	
74-87-3	Methyl chloride	ND	6.5	2.6	ug/kg	
75-09-2	Methylene chloride	ND	13	6.5	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.5	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.5	2.6	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.5	2.6	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.5	2.6	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.5	2.6	ug/kg	
108-88-3	Toluene	ND	6.5	2.6	ug/kg	
79-01-6	Trichloroethylene	ND	6.5	2.6	ug/kg	
75-01-4	Vinyl chloride	ND	6.5	3.3	ug/kg	
1330-20-7	Xylene (total)	ND	20	5.9	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B018-03		
Lab Sample ID:	F17638-2	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	89.4
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%
2037-26-5	Toluene-D8	102%		79-121%
460-00-4	4-Bromofluorobenzene	116%		77-133%
17060-07-0	1,2-Dichloroethane-D4	91%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B018-03		
Lab Sample ID:	F17638-2	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	89.4
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L017516.D	1	05/15/03	ME	05/15/03	OP7585	SL948
Run #2							

	Initial Weight	Final Volume
Run #1	30.9 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	180	36	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	36	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	36	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	36	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	900	360	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	360	72	ug/kg	
88-75-5	2-Nitrophenol	ND	180	36	ug/kg	
100-02-7	4-Nitrophenol	ND	900	360	ug/kg	
87-86-5	Pentachlorophenol	ND	900	360	ug/kg	
108-95-2	Phenol	ND	180	36	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	36	ug/kg	
92-87-5	Benzidine	ND	1800	900	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	180	36	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	360	90	ug/kg	
91-58-7	2-Chloronaphthalene	ND	180	36	ug/kg	
106-47-8	4-Chloroaniline	ND	360	140	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	180	36	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	180	72	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	180	36	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	180	36	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	180	36	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	180	36	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	180	36	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	180	36	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	180	72	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	180	72	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	360	180	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	360	90	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	360	180	ug/kg	
84-66-2	Diethyl phthalate	ND	360	90	ug/kg	
131-11-3	Dimethyl phthalate	ND	360	90	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	360	180	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B018-03		
Lab Sample ID:	F17638-2	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	89.4
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	180	36	ug/kg	
87-68-3	Hexachlorobutadiene	ND	180	72	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	180	72	ug/kg	
67-72-1	Hexachloroethane	ND	180	72	ug/kg	
78-59-1	Isophorone	ND	180	36	ug/kg	
98-95-3	Nitrobenzene	ND	180	36	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	360	90	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	180	72	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	36	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	180	36	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	67%		45-114%
4165-62-2	Phenol-d5	73%		44-124%
118-79-6	2,4,6-Tribromophenol	80%		50-128%
4165-60-0	Nitrobenzene-d5	70%		41-123%
321-60-8	2-Fluorobiphenyl	70%		46-122%
1718-51-0	Terphenyl-d14	78%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
79-34-5	Ethane, 1,1,2,2-tetrachloro- [a]	4.40	410	ug/kg	JN
2040-96-2	Cyclopentane, propyl-	7.47	2500	ug/kg	JN
3179-47-3	2-Propenoic acid, 2-methyl-, decyl ester	9.13	2000	ug/kg	JN
142-90-5	2-Propenoic acid, 2-methyl-, dodecyl est	10.81	2300	ug/kg	JN
142-90-5	2-Propenoic acid, 2-methyl-, dodecyl est	12.42	910	ug/kg	JN
	Total TIC, Semi-Volatile		8120	ug/kg	J

(a) Extraction solvent impurity

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B018-03		
Lab Sample ID:	F17638-2	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	89.4
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001929.D	4	05/07/03	MRE	05/05/03	OP7507	SF117
Run #2							

	Initial Weight	Final Volume
Run #1	29.6 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	300	76	ug/kg	
208-96-8	Acenaphthylene	ND	300	76	ug/kg	
120-12-7	Anthracene	ND	300	38	ug/kg	
56-55-3	Benzo(a)anthracene	ND	60	15	ug/kg	
50-32-8	Benzo(a)pyrene	ND	60	15	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	60	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	60	15	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	60	15	ug/kg	
218-01-9	Chrysene	ND	60	15	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	60	15	ug/kg	
206-44-0	Fluoranthene	ND	300	38	ug/kg	
86-73-7	Fluorene	ND	300	38	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	60	15	ug/kg	
90-12-0	1-Methylnaphthalene	ND	300	38	ug/kg	
91-57-6	2-Methylnaphthalene	ND	300	38	ug/kg	
91-20-3	Naphthalene	ND	300	38	ug/kg	
85-01-8	Phenanthrene	ND	300	38	ug/kg	
129-00-0	Pyrene	ND	300	38	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	69%		41-123%
321-60-8	2-Fluorobiphenyl	77%		46-122%
1718-51-0	Terphenyl-d14	87%		45-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B018-03		
Lab Sample ID:	F17638-2	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	89.4
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP29114.D	2	05/08/03	SM	05/05/03	OP7509	GOP984
Run #2							

	Initial Weight	Final Volume
Run #1	30.9 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	44.3	18	12	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B018-03		
Lab Sample ID:	F17638-2	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
		Percent Solids:	89.4
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.29 U	0.52	0.29	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Cadmium	0.027 U	0.41	0.027	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Chromium	2.9	1.0	0.045	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Lead	5.6 B	10	0.13	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SD-C007-01		
Lab Sample ID:	F17638-3	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	69.7
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K012780.D	1	05/09/03	NAF	n/a	n/a	VK532
Run #2							

	Initial Weight
Run #1	4.66 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	7.7	3.1	ug/kg	
75-27-4	Bromodichloromethane	ND	7.7	3.1	ug/kg	
75-25-2	Bromoform	ND	7.7	3.1	ug/kg	
108-90-7	Chlorobenzene	ND	7.7	3.1	ug/kg	
75-00-3	Chloroethane	ND	7.7	3.1	ug/kg	
67-66-3	Chloroform	ND	7.7	3.1	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	38	15	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.7	3.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.7	3.1	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	7.7	4.6	ug/kg	
107-06-2	1,2-Dichloroethane	ND	7.7	3.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.7	3.1	ug/kg	
124-48-1	Dibromochloromethane	ND	7.7	3.1	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	7.7	3.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.7	3.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	7.7	3.1	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.7	3.1	ug/kg	
100-41-4	Ethylbenzene	ND	7.7	3.1	ug/kg	
74-83-9	Methyl bromide	ND	7.7	3.1	ug/kg	
74-87-3	Methyl chloride	ND	7.7	3.1	ug/kg	
75-09-2	Methylene chloride	ND	15	7.7	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	7.7	3.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.7	3.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.7	3.1	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.7	3.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	7.7	3.1	ug/kg	
108-88-3	Toluene	ND	7.7	3.1	ug/kg	
79-01-6	Trichloroethylene	ND	7.7	3.1	ug/kg	
75-01-4	Vinyl chloride	ND	7.7	3.8	ug/kg	
1330-20-7	Xylene (total)	ND	23	6.9	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C007-01		
Lab Sample ID:	F17638-3	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	69.7
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%
2037-26-5	Toluene-D8	107%		79-121%
460-00-4	4-Bromofluorobenzene	124%		77-133%
17060-07-0	1,2-Dichloroethane-D4	94%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C007-01		
Lab Sample ID:	F17638-3	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	69.7
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L017525.D	1	05/15/03	ME	05/15/03	OP7585	SL948
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	240	48	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	240	48	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	240	48	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	240	48	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	480	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	480	95	ug/kg	
88-75-5	2-Nitrophenol	ND	240	48	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	480	ug/kg	
87-86-5	Pentachlorophenol	ND	1200	480	ug/kg	
108-95-2	Phenol	ND	240	48	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	240	48	ug/kg	
92-87-5	Benzidine	ND	2400	1200	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	240	48	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	480	120	ug/kg	
91-58-7	2-Chloronaphthalene	ND	240	48	ug/kg	
106-47-8	4-Chloroaniline	ND	480	190	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	240	48	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	240	95	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	240	48	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	240	48	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	240	48	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	240	48	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	240	48	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	240	48	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	240	95	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	240	95	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	480	240	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	480	120	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	480	240	ug/kg	
84-66-2	Diethyl phthalate	ND	480	120	ug/kg	
131-11-3	Dimethyl phthalate	ND	480	120	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	480	240	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C007-01		
Lab Sample ID:	F17638-3	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	69.7
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	240	48	ug/kg	
87-68-3	Hexachlorobutadiene	ND	240	95	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	240	95	ug/kg	
67-72-1	Hexachloroethane	ND	240	95	ug/kg	
78-59-1	Isophorone	ND	240	48	ug/kg	
98-95-3	Nitrobenzene	ND	240	48	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	480	120	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	240	95	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	240	48	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	240	48	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		45-114%
4165-62-2	Phenol-d5	74%		44-124%
118-79-6	2,4,6-Tribromophenol	82%		50-128%
4165-60-0	Nitrobenzene-d5	68%		41-123%
321-60-8	2-Fluorobiphenyl	70%		46-122%
1718-51-0	Terphenyl-d14	80%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
79-34-5	Ethane, 1,1,2,2-tetrachloro- [a]	4.40	540	ug/kg	JN
6876-13-7	Bicyclo[3.1.1]heptane, 2,6,6-trimethyl-,	11.34	540	ug/kg	JN
205-99-2	Benz[e]acephenanthrylene	18.36	500	ug/kg	JN
	unknown	19.46	620	ug/kg	J
638-67-5	Tricosane	19.55	580	ug/kg	JN
10191-41-0	Vitamin e	19.73	880	ug/kg	JN
	unknown	20.44	1000	ug/kg	J
638-68-6	Triacontane	20.59	890	ug/kg	JN
83-47-6	.gamma.-Sitosterol	20.78	1900	ug/kg	JN
1058-61-3	Stigmast-4-en-3-one	21.56	690	ug/kg	JN
	Total TIC, Semi-Volatile		8140	ug/kg	J

(a) Extraction solvent impurity

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C007-01		
Lab Sample ID:	F17638-3	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	69.7
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001943.D	4	05/07/03	MRE	05/05/03	OP7507	SF117
Run #2							

	Initial Weight	Final Volume
Run #1	29.3 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	390	98	ug/kg	
208-96-8	Acenaphthylene	ND	390	98	ug/kg	
120-12-7	Anthracene	ND	390	49	ug/kg	
56-55-3	Benzo(a)anthracene	110	78	20	ug/kg	
50-32-8	Benzo(a)pyrene	128	78	20	ug/kg	
205-99-2	Benzo(b)fluoranthene	214	78	20	ug/kg	
191-24-2	Benzo(g,h,i)perylene	120	78	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	53.4	78	20	ug/kg	J
218-01-9	Chrysene	131	78	20	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	41.8	78	20	ug/kg	J
206-44-0	Fluoranthene	242	390	49	ug/kg	J
86-73-7	Fluorene	ND	390	49	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	121	78	20	ug/kg	
90-12-0	1-Methylnaphthalene	ND	390	49	ug/kg	
91-57-6	2-Methylnaphthalene	ND	390	49	ug/kg	
91-20-3	Naphthalene	ND	390	49	ug/kg	
85-01-8	Phenanthrene	158	390	49	ug/kg	J
129-00-0	Pyrene	199	390	49	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	63%		41-123%
321-60-8	2-Fluorobiphenyl	72%		46-122%
1718-51-0	Terphenyl-d14	87%		45-135%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C007-01		
Lab Sample ID:	F17638-3	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	69.7
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP29115.D	5	05/08/03	SM	05/05/03	OP7509	GOP984
Run #2							

	Initial Weight	Final Volume
Run #1	29.9 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	117	60	41	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C007-01		
Lab Sample ID:	F17638-3	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
		Percent Solids:	69.7
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.40 U	0.70	0.40	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Cadmium	0.037 U	0.56	0.037	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Chromium	4.7	1.4	0.060	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Lead	20.7	14	0.17	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SD-C011-01		
Lab Sample ID:	F17638-4	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	89.0
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K012781.D	1	05/09/03	NAF	n/a	n/a	VK532
Run #2							

	Initial Weight
Run #1	4.00 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	7.0	2.8	ug/kg	
75-27-4	Bromodichloromethane	ND	7.0	2.8	ug/kg	
75-25-2	Bromoform	ND	7.0	2.8	ug/kg	
108-90-7	Chlorobenzene	ND	7.0	2.8	ug/kg	
75-00-3	Chloroethane	ND	7.0	2.8	ug/kg	
67-66-3	Chloroform	ND	7.0	2.8	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	35	14	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.0	2.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.0	2.8	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	7.0	4.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	7.0	2.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.0	2.8	ug/kg	
124-48-1	Dibromochloromethane	ND	7.0	2.8	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	7.0	2.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.0	2.8	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	7.0	2.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.0	2.8	ug/kg	
100-41-4	Ethylbenzene	ND	7.0	2.8	ug/kg	
74-83-9	Methyl bromide	ND	7.0	2.8	ug/kg	
74-87-3	Methyl chloride	ND	7.0	2.8	ug/kg	
75-09-2	Methylene chloride	ND	14	7.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	7.0	2.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.0	2.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.0	2.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.0	2.8	ug/kg	
127-18-4	Tetrachloroethylene	ND	7.0	2.8	ug/kg	
108-88-3	Toluene	ND	7.0	2.8	ug/kg	
79-01-6	Trichloroethylene	ND	7.0	2.8	ug/kg	
75-01-4	Vinyl chloride	ND	7.0	3.5	ug/kg	
1330-20-7	Xylene (total)	ND	21	6.3	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C011-01		
Lab Sample ID:	F17638-4	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	89.0
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
2037-26-5	Toluene-D8	105%		79-121%
460-00-4	4-Bromofluorobenzene	115%		77-133%
17060-07-0	1,2-Dichloroethane-D4	94%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C011-01		
Lab Sample ID:	F17638-4	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	89.0
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	L017526.D	4	05/15/03	ME	05/15/03	OP7585	SL948
Run #2							

	Initial Weight	Final Volume
Run #1	30.9 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	730	150	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	730	150	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	730	150	ug/kg	
105-67-9	2,4-Dimethylphenol	213	730	150	ug/kg	J
51-28-5	2,4-Dinitrophenol	ND	3600	1500	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	1500	290	ug/kg	
88-75-5	2-Nitrophenol	ND	730	150	ug/kg	
100-02-7	4-Nitrophenol	ND	3600	1500	ug/kg	
87-86-5	Pentachlorophenol	ND	3600	1500	ug/kg	
108-95-2	Phenol	283	730	150	ug/kg	J
88-06-2	2,4,6-Trichlorophenol	ND	730	150	ug/kg	
92-87-5	Benzidine	ND	7300	3600	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	730	150	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	1500	360	ug/kg	
91-58-7	2-Chloronaphthalene	ND	730	150	ug/kg	
106-47-8	4-Chloroaniline	ND	1500	580	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	730	150	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	730	290	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	730	150	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	730	150	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	730	150	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	730	150	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	730	150	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	730	150	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	730	290	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	730	290	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	1500	730	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	1500	360	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	1500	730	ug/kg	
84-66-2	Diethyl phthalate	ND	1500	360	ug/kg	
131-11-3	Dimethyl phthalate	ND	1500	360	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1500	730	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C011-01		
Lab Sample ID:	F17638-4	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	89.0
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	730	150	ug/kg	
87-68-3	Hexachlorobutadiene	ND	730	290	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	730	290	ug/kg	
67-72-1	Hexachloroethane	ND	730	290	ug/kg	
78-59-1	Isophorone	ND	730	150	ug/kg	
98-95-3	Nitrobenzene	ND	730	150	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	1500	360	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	730	290	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	730	150	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	730	150	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	61%		45-114%
4165-62-2	Phenol-d5	74%		44-124%
118-79-6	2,4,6-Tribromophenol	69%		50-128%
4165-60-0	Nitrobenzene-d5	68%		41-123%
321-60-8	2-Fluorobiphenyl	67%		46-122%
1718-51-0	Terphenyl-d14	84%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
1730-37-6	9H-Fluorene, 1-methyl-	10.40	1800	ug/kg	JN
486-25-9	9H-Fluoren-9-one	10.74	2100	ug/kg	JN
132-65-0	Dibenzothiophene	10.89	4400	ug/kg	JN
85-02-9	Benzo[f]quinoline	11.47	1900	ug/kg	JN
613-12-7	Anthracene, 2-methyl-	12.02	4400	ug/kg	JN
613-12-7	Anthracene, 2-methyl-	12.07	5500	ug/kg	JN
613-12-7	Anthracene, 2-methyl-	12.16	2600	ug/kg	JN
203-64-5	4H-Cyclopenta[def]phenanthrene	12.20	9800	ug/kg	JN
832-71-3	Phenanthrene, 3-methyl-	12.26	2300	ug/kg	JN
27323-29-1	Methylcarbazole	12.43	2000	ug/kg	JN
35465-71-5	2-Phenylnaphthalene	12.59	4100	ug/kg	JN
84-65-1	9,10-Anthracenedione	12.62	2500	ug/kg	JN
205-99-2	Benz[e]acephenanthrylene	18.13	8200	ug/kg	JN
192-97-2	Benzo[e]pyrene	18.42	18000	ug/kg	JN
215-58-7	Benzo[b]triphenylene	20.04	4900	ug/kg	JN
	Total TIC, Semi-Volatile		74500	ug/kg	J

(a) Dilution required due to matrix interference; extract was viscous.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C011-01		
Lab Sample ID:	F17638-4	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	89.0
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001936.D	40	05/07/03	MRE	05/05/03	OP7507	SF117
Run #2	F001944.D	200	05/07/03	MRE	05/05/03	OP7507	SF117

	Initial Weight	Final Volume
Run #1	31.3 g	1.0 ml
Run #2	31.3 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	4350	2900	720	ug/kg	
208-96-8	Acenaphthylene	ND	2900	720	ug/kg	
120-12-7	Anthracene	6850	2900	360	ug/kg	
56-55-3	Benzo(a)anthracene	17700 [a]	2900	720	ug/kg	
50-32-8	Benzo(a)pyrene	17200 [a]	2900	720	ug/kg	
205-99-2	Benzo(b)fluoranthene	23700 [a]	2900	720	ug/kg	
191-24-2	Benzo(g,h,i)perylene	12200 [a]	2900	720	ug/kg	
207-08-9	Benzo(k)fluoranthene	8100 [a]	2900	720	ug/kg	
218-01-9	Chrysene	16800 [a]	2900	720	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	2800 [a]	2900	720	ug/kg	J
206-44-0	Fluoranthene	30400	2900	360	ug/kg	
86-73-7	Fluorene	3800	2900	360	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	12000 [a]	2900	720	ug/kg	
90-12-0	1-Methylnaphthalene	628	2900	360	ug/kg	J
91-57-6	2-Methylnaphthalene	973	2900	360	ug/kg	J
91-20-3	Naphthalene	2430	2900	360	ug/kg	J
85-01-8	Phenanthrene	25900	2900	360	ug/kg	
129-00-0	Pyrene	25000	2900	360	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	67%	0% [b]	41-123%
321-60-8	2-Fluorobiphenyl	73%	0% [b]	46-122%
1718-51-0	Terphenyl-d14	81%	0% [b]	45-135%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C011-01		
Lab Sample ID:	F17638-4	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	89.0
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP29101.D	10	05/07/03	SM	05/05/03	OP7509	GOP983
Run #2							

	Initial Weight	Final Volume
Run #1	29.8 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	632	94	64	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	105%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C011-01		
Lab Sample ID:	F17638-4	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
		Percent Solids:	89.0
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.31 U	0.55	0.31	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Cadmium	0.18 B	0.44	0.029	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Chromium	6.4	1.1	0.047	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Lead	44.1	11	0.13	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SD-C010-01		
Lab Sample ID:	F17638-5	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	97.1
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K012782.D	1	05/09/03	NAF	n/a	n/a	VK532
Run #2							

	Initial Weight
Run #1	3.64 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	7.1	2.8	ug/kg	
75-27-4	Bromodichloromethane	ND	7.1	2.8	ug/kg	
75-25-2	Bromoform	ND	7.1	2.8	ug/kg	
108-90-7	Chlorobenzene	ND	7.1	2.8	ug/kg	
75-00-3	Chloroethane	ND	7.1	2.8	ug/kg	
67-66-3	Chloroform	ND	7.1	2.8	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	35	14	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.1	2.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.1	2.8	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	7.1	4.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	7.1	2.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.1	2.8	ug/kg	
124-48-1	Dibromochloromethane	ND	7.1	2.8	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	7.1	2.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.1	2.8	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	7.1	2.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.1	2.8	ug/kg	
100-41-4	Ethylbenzene	ND	7.1	2.8	ug/kg	
74-83-9	Methyl bromide	ND	7.1	2.8	ug/kg	
74-87-3	Methyl chloride	ND	7.1	2.8	ug/kg	
75-09-2	Methylene chloride	ND	14	7.1	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	7.1	2.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.1	2.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.1	2.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.1	2.8	ug/kg	
127-18-4	Tetrachloroethylene	ND	7.1	2.8	ug/kg	
108-88-3	Toluene	ND	7.1	2.8	ug/kg	
79-01-6	Trichloroethylene	ND	7.1	2.8	ug/kg	
75-01-4	Vinyl chloride	ND	7.1	3.5	ug/kg	
1330-20-7	Xylene (total)	ND	21	6.4	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C010-01		
Lab Sample ID:	F17638-5	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	97.1
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%
2037-26-5	Toluene-D8	103%		79-121%
460-00-4	4-Bromofluorobenzene	121%		77-133%
17060-07-0	1,2-Dichloroethane-D4	91%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C010-01		
Lab Sample ID:	F17638-5	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	97.1
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L017538.D	1	05/16/03	ME	05/15/03	OP7585	SL949
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	170	34	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	34	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	34	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	34	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	860	340	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	340	68	ug/kg	
88-75-5	2-Nitrophenol	ND	170	34	ug/kg	
100-02-7	4-Nitrophenol	ND	860	340	ug/kg	
87-86-5	Pentachlorophenol	ND	860	340	ug/kg	
108-95-2	Phenol	ND	170	34	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	34	ug/kg	
92-87-5	Benzidine	ND	1700	860	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	34	ug/kg	
85-68-7	Butyl benzyl phthalate	573	340	86	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	34	ug/kg	
106-47-8	4-Chloroaniline	ND	340	140	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	34	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	68	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	34	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	34	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	34	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	170	34	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	34	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	34	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	68	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	68	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	340	170	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	340	86	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	340	170	ug/kg	
84-66-2	Diethyl phthalate	ND	340	86	ug/kg	
131-11-3	Dimethyl phthalate	ND	340	86	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	629	340	170	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C010-01		
Lab Sample ID:	F17638-5	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	97.1
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	170	34	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	68	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	68	ug/kg	
67-72-1	Hexachloroethane	ND	170	68	ug/kg	
78-59-1	Isophorone	ND	170	34	ug/kg	
98-95-3	Nitrobenzene	ND	170	34	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	340	86	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	68	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	34	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	34	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		45-114%
4165-62-2	Phenol-d5	78%		44-124%
118-79-6	2,4,6-Tribromophenol	84%		50-128%
4165-60-0	Nitrobenzene-d5	76%		41-123%
321-60-8	2-Fluorobiphenyl	75%		46-122%
1718-51-0	Terphenyl-d14	82%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
79-34-5	Ethane, 1,1,2,2-tetrachloro- [a]	4.40	350	ug/kg	JN
205-99-2	Benz[e]acephenanthrylene	18.37	920	ug/kg	JN
	Total TIC, Semi-Volatile		1270	ug/kg	J

(a) Extraction solvent impurity

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C010-01		
Lab Sample ID:	F17638-5	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	97.1
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001937.D	10	05/07/03	MRE	05/05/03	OP7507	SF117
Run #2							

	Initial Weight	Final Volume
Run #1	29.6 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	700	170	ug/kg	
208-96-8	Acenaphthylene	ND	700	170	ug/kg	
120-12-7	Anthracene	261	700	87	ug/kg	J
56-55-3	Benzo(a)anthracene	716	140	35	ug/kg	
50-32-8	Benzo(a)pyrene	743	140	35	ug/kg	
205-99-2	Benzo(b)fluoranthene	1090	140	35	ug/kg	
191-24-2	Benzo(g,h,i)perylene	603	140	35	ug/kg	
207-08-9	Benzo(k)fluoranthene	360	140	35	ug/kg	
218-01-9	Chrysene	712	140	35	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	128	140	35	ug/kg	J
206-44-0	Fluoranthene	1510	700	87	ug/kg	
86-73-7	Fluorene	119	700	87	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	589	140	35	ug/kg	
90-12-0	1-Methylnaphthalene	ND	700	87	ug/kg	
91-57-6	2-Methylnaphthalene	ND	700	87	ug/kg	
91-20-3	Naphthalene	ND	700	87	ug/kg	
85-01-8	Phenanthrene	1090	700	87	ug/kg	
129-00-0	Pyrene	1220	700	87	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	59%		41-123%
321-60-8	2-Fluorobiphenyl	69%		46-122%
1718-51-0	Terphenyl-d14	82%		45-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C010-01		
Lab Sample ID:	F17638-5	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	97.1
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP29116.D	4	05/08/03	SM	05/05/03	OP7509	GOP984
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	83.3	34	23	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	79%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C010-01		
Lab Sample ID:	F17638-5	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
		Percent Solids:	97.1
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.30 U	0.53	0.30	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Cadmium	0.96	0.42	0.027	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Chromium	8.8	1.1	0.045	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Lead	80.7	11	0.13	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SD-C009-01		
Lab Sample ID:	F17638-6	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	90.4
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K012783.D	1	05/09/03	NAF	n/a	n/a	VK532
Run #2							

	Initial Weight
Run #1	4.40 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	6.3	2.5	ug/kg	
75-27-4	Bromodichloromethane	ND	6.3	2.5	ug/kg	
75-25-2	Bromoform	ND	6.3	2.5	ug/kg	
108-90-7	Chlorobenzene	ND	6.3	2.5	ug/kg	
75-00-3	Chloroethane	ND	6.3	2.5	ug/kg	
67-66-3	Chloroform	ND	6.3	2.5	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	31	13	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.3	2.5	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.3	2.5	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.3	3.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.3	2.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.3	2.5	ug/kg	
124-48-1	Dibromochloromethane	ND	6.3	2.5	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.3	2.5	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.3	2.5	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.3	2.5	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.3	2.5	ug/kg	
100-41-4	Ethylbenzene	ND	6.3	2.5	ug/kg	
74-83-9	Methyl bromide	ND	6.3	2.5	ug/kg	
74-87-3	Methyl chloride	ND	6.3	2.5	ug/kg	
75-09-2	Methylene chloride	ND	13	6.3	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.3	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.3	2.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.3	2.5	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.3	2.5	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.3	2.5	ug/kg	
108-88-3	Toluene	ND	6.3	2.5	ug/kg	
79-01-6	Trichloroethylene	ND	6.3	2.5	ug/kg	
75-01-4	Vinyl chloride	ND	6.3	3.1	ug/kg	
1330-20-7	Xylene (total)	ND	19	5.7	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C009-01		
Lab Sample ID:	F17638-6	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	90.4
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%
2037-26-5	Toluene-D8	111%		79-121%
460-00-4	4-Bromofluorobenzene	126%		77-133%
17060-07-0	1,2-Dichloroethane-D4	96%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C009-01		
Lab Sample ID:	F17638-6	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	90.4
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	L017528.D	4	05/15/03	ME	05/15/03	OP7585	SL948
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	730	150	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	730	150	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	730	150	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	730	150	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	3700	1500	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	1500	290	ug/kg	
88-75-5	2-Nitrophenol	ND	730	150	ug/kg	
100-02-7	4-Nitrophenol	ND	3700	1500	ug/kg	
87-86-5	Pentachlorophenol	ND	3700	1500	ug/kg	
108-95-2	Phenol	ND	730	150	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	730	150	ug/kg	
92-87-5	Benzidine	ND	7300	3700	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	730	150	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	1500	370	ug/kg	
91-58-7	2-Chloronaphthalene	ND	730	150	ug/kg	
106-47-8	4-Chloroaniline	ND	1500	580	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	730	150	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	730	290	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	730	150	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	730	150	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	730	150	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	730	150	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	730	150	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	730	150	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	730	290	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	730	290	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	1500	730	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	1500	370	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	1500	730	ug/kg	
84-66-2	Diethyl phthalate	ND	1500	370	ug/kg	
131-11-3	Dimethyl phthalate	ND	1500	370	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1500	730	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C009-01		
Lab Sample ID:	F17638-6	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	90.4
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	730	150	ug/kg	
87-68-3	Hexachlorobutadiene	ND	730	290	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	730	290	ug/kg	
67-72-1	Hexachloroethane	ND	730	290	ug/kg	
78-59-1	Isophorone	ND	730	150	ug/kg	
98-95-3	Nitrobenzene	ND	730	150	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	1500	370	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	730	290	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	730	150	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	730	150	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	67%		45-114%
4165-62-2	Phenol-d5	78%		44-124%
118-79-6	2,4,6-Tribromophenol	75%		50-128%
4165-60-0	Nitrobenzene-d5	72%		41-123%
321-60-8	2-Fluorobiphenyl	72%		46-122%
1718-51-0	Terphenyl-d14	83%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
613-12-7	Anthracene, 2-methyl-	12.06	1500	ug/kg	JN
203-64-5	4H-Cyclopenta[def]phenanthrene	12.20	2000	ug/kg	JN
84-65-1	9,10-Anthracenedione	12.61	1800	ug/kg	JN
205-82-3	Benzo[j]fluoranthene	18.11	2100	ug/kg	JN
198-55-0	Perylene	18.39	6100	ug/kg	JN
193-43-1	Indeno[1,2,3-cd]fluoranthene	20.02	1500	ug/kg	JN
222-93-5	Pentaphene	20.34	1800	ug/kg	JN
191-26-4	Dibenzo[def,mno]chrysene	20.72	2400	ug/kg	JN
	Total TIC, Semi-Volatile		19200	ug/kg	J

(a) Dilution required due to matrix interference; extract was viscous.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C009-01		
Lab Sample ID:	F17638-6	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	90.4
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001938.D	10	05/07/03	MRE	05/05/03	OP7507	SF117
Run #2	W015412.D	80	05/08/03	ME	05/05/03	OP7507	SW805

	Initial Weight	Final Volume
Run #1	30.9 g	1.0 ml
Run #2	30.9 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	1060	720	180	ug/kg	
208-96-8	Acenaphthylene	ND	720	180	ug/kg	
120-12-7	Anthracene	1740	720	89	ug/kg	
56-55-3	Benzo(a)anthracene	3710 [a]	1100	290	ug/kg	
50-32-8	Benzo(a)pyrene	3640 [a]	1100	290	ug/kg	
205-99-2	Benzo(b)fluoranthene	5430 [a]	1100	290	ug/kg	
191-24-2	Benzo(g,h,i)perylene	2410 [a]	1100	290	ug/kg	
207-08-9	Benzo(k)fluoranthene	1610	140	36	ug/kg	
218-01-9	Chrysene	3860 [a]	1100	290	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	433	140	36	ug/kg	
206-44-0	Fluoranthene	8250	720	89	ug/kg	
86-73-7	Fluorene	889	720	89	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	2580 [a]	1100	290	ug/kg	
90-12-0	1-Methylnaphthalene	136	720	89	ug/kg	J
91-57-6	2-Methylnaphthalene	184	720	89	ug/kg	J
91-20-3	Naphthalene	382	720	89	ug/kg	J
85-01-8	Phenanthrene	6780	720	89	ug/kg	
129-00-0	Pyrene	7250	720	89	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	65%	0% [b]	41-123%
321-60-8	2-Fluorobiphenyl	69%	0% [b]	46-122%
1718-51-0	Terphenyl-d14	81%	0% [b]	45-135%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C009-01		
Lab Sample ID:	F17638-6	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	90.4
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP29103.D	10	05/07/03	SM	05/05/03	OP7509	GOP983
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	297	92	63	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C009-01		
Lab Sample ID:	F17638-6	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
		Percent Solids:	90.4
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.43 B	0.55	0.31	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Cadmium	1.3	0.44	0.029	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Chromium	10.8	1.1	0.048	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Lead	51.8	11	0.13	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SD-C008-01		
Lab Sample ID:	F17638-7	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	90.6
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K012784.D	1	05/09/03	NAF	n/a	n/a	VK532
Run #2							

	Initial Weight
Run #1	4.33 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	6.4	2.5	ug/kg	
75-27-4	Bromodichloromethane	ND	6.4	2.5	ug/kg	
75-25-2	Bromoform	ND	6.4	2.5	ug/kg	
108-90-7	Chlorobenzene	ND	6.4	2.5	ug/kg	
75-00-3	Chloroethane	ND	6.4	2.5	ug/kg	
67-66-3	Chloroform	ND	6.4	2.5	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	32	13	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.4	2.5	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.4	2.5	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.4	3.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.4	2.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.4	2.5	ug/kg	
124-48-1	Dibromochloromethane	ND	6.4	2.5	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.4	2.5	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.4	2.5	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.4	2.5	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.4	2.5	ug/kg	
100-41-4	Ethylbenzene	ND	6.4	2.5	ug/kg	
74-83-9	Methyl bromide	ND	6.4	2.5	ug/kg	
74-87-3	Methyl chloride	ND	6.4	2.5	ug/kg	
75-09-2	Methylene chloride	ND	13	6.4	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.4	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.4	2.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.4	2.5	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.4	2.5	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.4	2.5	ug/kg	
108-88-3	Toluene	ND	6.4	2.5	ug/kg	
79-01-6	Trichloroethylene	ND	6.4	2.5	ug/kg	
75-01-4	Vinyl chloride	ND	6.4	3.2	ug/kg	
1330-20-7	Xylene (total)	ND	19	5.7	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C008-01		
Lab Sample ID:	F17638-7	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	90.6
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	104%		79-121%
460-00-4	4-Bromofluorobenzene	118%		77-133%
17060-07-0	1,2-Dichloroethane-D4	95%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C008-01		
Lab Sample ID:	F17638-7	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	90.6
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L017529.D	1	05/15/03	ME	05/15/03	OP7585	SL948
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	180	36	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	36	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	36	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	36	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	910	360	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	360	73	ug/kg	
88-75-5	2-Nitrophenol	ND	180	36	ug/kg	
100-02-7	4-Nitrophenol	ND	910	360	ug/kg	
87-86-5	Pentachlorophenol	ND	910	360	ug/kg	
108-95-2	Phenol	ND	180	36	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	36	ug/kg	
92-87-5	Benzidine	ND	1800	910	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	180	36	ug/kg	
85-68-7	Butyl benzyl phthalate	476	360	91	ug/kg	
91-58-7	2-Chloronaphthalene	ND	180	36	ug/kg	
106-47-8	4-Chloroaniline	ND	360	150	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	180	36	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	180	73	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	180	36	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	180	36	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	180	36	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	180	36	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	180	36	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	180	36	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	180	73	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	180	73	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	360	180	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	360	91	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	360	180	ug/kg	
84-66-2	Diethyl phthalate	ND	360	91	ug/kg	
131-11-3	Dimethyl phthalate	ND	360	91	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	417	360	180	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C008-01		
Lab Sample ID:	F17638-7	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	90.6
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	180	36	ug/kg	
87-68-3	Hexachlorobutadiene	ND	180	73	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	180	73	ug/kg	
67-72-1	Hexachloroethane	ND	180	73	ug/kg	
78-59-1	Isophorone	ND	180	36	ug/kg	
98-95-3	Nitrobenzene	ND	180	36	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	360	91	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	180	73	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	36	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	180	36	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	68%		45-114%
4165-62-2	Phenol-d5	82%		44-124%
118-79-6	2,4,6-Tribromophenol	89%		50-128%
4165-60-0	Nitrobenzene-d5	75%		41-123%
321-60-8	2-Fluorobiphenyl	74%		46-122%
1718-51-0	Terphenyl-d14	87%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
79-34-5	Ethane, 1,1,2,2-tetrachloro- [a]	4.41	440	ug/kg	JN
3179-47-3	2-Propenoic acid, 2-methyl-, decyl ester	9.13	440	ug/kg	JN
142-90-5	2-Propenoic acid, 2-methyl-, dodecyl est	10.82	650	ug/kg	JN
142-90-5	2-Propenoic acid, 2-methyl-, dodecyl est	12.43	520	ug/kg	JN
	Total TIC, Semi-Volatile		2050	ug/kg	J

(a) Extraction solvent impurity

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C008-01		
Lab Sample ID:	F17638-7	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	90.6
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W015410.D	4	05/08/03	ME	05/05/03	OP7507	SW805
Run #2							

	Initial Weight	Final Volume
Run #1	29.6 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	300	75	ug/kg	
208-96-8	Acenaphthylene	ND	300	75	ug/kg	
120-12-7	Anthracene	55.2	300	37	ug/kg	J
56-55-3	Benzo(a)anthracene	173	60	15	ug/kg	
50-32-8	Benzo(a)pyrene	222	60	15	ug/kg	
205-99-2	Benzo(b)fluoranthene	340	60	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	236	60	15	ug/kg	
207-08-9	Benzo(k)fluoranthene	112	60	15	ug/kg	
218-01-9	Chrysene	200	60	15	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	36.2	60	15	ug/kg	J
206-44-0	Fluoranthene	328	300	37	ug/kg	
86-73-7	Fluorene	ND	300	37	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	193	60	15	ug/kg	
90-12-0	1-Methylnaphthalene	ND	300	37	ug/kg	
91-57-6	2-Methylnaphthalene	ND	300	37	ug/kg	
91-20-3	Naphthalene	ND	300	37	ug/kg	
85-01-8	Phenanthrene	178	300	37	ug/kg	J
129-00-0	Pyrene	310	300	37	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	64%		41-123%
321-60-8	2-Fluorobiphenyl	71%		46-122%
1718-51-0	Terphenyl-d14	88%		45-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C008-01		
Lab Sample ID:	F17638-7	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	90.6
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP29117.D	2	05/08/03	SM	05/05/03	OP7509	GOP984
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	70.9	18	12	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C008-01		
Lab Sample ID:	F17638-7	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
		Percent Solids:	90.6
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.35 B	0.56	0.32	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Cadmium	2.1	0.45	0.029	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Chromium	36.3	1.1	0.048	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Lead	200	11	0.14	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-SB-B019-03		
Lab Sample ID:	F17638-8	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	95.8
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K012787.D	1	05/09/03	NAF	n/a	n/a	VK532
Run #2							

	Initial Weight
Run #1	4.00 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	6.5	2.6	ug/kg	
75-27-4	Bromodichloromethane	ND	6.5	2.6	ug/kg	
75-25-2	Bromoform	ND	6.5	2.6	ug/kg	
108-90-7	Chlorobenzene	ND	6.5	2.6	ug/kg	
75-00-3	Chloroethane	ND	6.5	2.6	ug/kg	
67-66-3	Chloroform	ND	6.5	2.6	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	33	13	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.5	2.6	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.5	2.6	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.5	3.9	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.5	2.6	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.5	2.6	ug/kg	
124-48-1	Dibromochloromethane	ND	6.5	2.6	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.5	2.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.5	2.6	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.5	2.6	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.5	2.6	ug/kg	
100-41-4	Ethylbenzene	ND	6.5	2.6	ug/kg	
74-83-9	Methyl bromide	ND	6.5	2.6	ug/kg	
74-87-3	Methyl chloride	ND	6.5	2.6	ug/kg	
75-09-2	Methylene chloride	ND	13	6.5	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.5	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.5	2.6	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.5	2.6	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.5	2.6	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.5	2.6	ug/kg	
108-88-3	Toluene	ND	6.5	2.6	ug/kg	
79-01-6	Trichloroethylene	ND	6.5	2.6	ug/kg	
75-01-4	Vinyl chloride	ND	6.5	3.3	ug/kg	
1330-20-7	Xylene (total)	ND	20	5.9	ug/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B019-03		
Lab Sample ID:	F17638-8	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	95.8
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%
2037-26-5	Toluene-D8	99%		79-121%
460-00-4	4-Bromofluorobenzene	100%		77-133%
17060-07-0	1,2-Dichloroethane-D4	99%		72-133%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B019-03		
Lab Sample ID:	F17638-8	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	95.8
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L017517.D	1	05/15/03	ME	05/15/03	OP7585	SL948
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	170	34	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	34	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	34	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	34	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	860	340	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	340	69	ug/kg	
88-75-5	2-Nitrophenol	ND	170	34	ug/kg	
100-02-7	4-Nitrophenol	ND	860	340	ug/kg	
87-86-5	Pentachlorophenol	ND	860	340	ug/kg	
108-95-2	Phenol	ND	170	34	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	34	ug/kg	
92-87-5	Benzidine	ND	1700	860	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	34	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	340	86	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	34	ug/kg	
106-47-8	4-Chloroaniline	ND	340	140	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	34	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	69	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	34	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	34	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	34	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	170	34	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	34	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	34	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	69	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	69	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	340	170	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	340	86	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	340	170	ug/kg	
84-66-2	Diethyl phthalate	ND	340	86	ug/kg	
131-11-3	Dimethyl phthalate	ND	340	86	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	340	170	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B019-03		
Lab Sample ID:	F17638-8	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	95.8
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	170	34	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	69	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	69	ug/kg	
67-72-1	Hexachloroethane	ND	170	69	ug/kg	
78-59-1	Isophorone	ND	170	34	ug/kg	
98-95-3	Nitrobenzene	ND	170	34	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	340	86	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	69	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	34	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	34	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	71%		45-114%
4165-62-2	Phenol-d5	77%		44-124%
118-79-6	2,4,6-Tribromophenol	77%		50-128%
4165-60-0	Nitrobenzene-d5	74%		41-123%
321-60-8	2-Fluorobiphenyl	73%		46-122%
1718-51-0	Terphenyl-d14	82%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
79-34-5	Ethane, 1,1,2,2-tetrachloro- [a]	4.40	370	ug/kg	JN
	Total TIC, Semi-Volatile		370	ug/kg	J

(a) Extraction solvent impurity

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B019-03		
Lab Sample ID:	F17638-8	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	95.8
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001930.D	4	05/07/03	MRE	05/05/03	OP7507	SF117
Run #2							

	Initial Weight	Final Volume
Run #1	32.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	260	65	ug/kg	
208-96-8	Acenaphthylene	ND	260	65	ug/kg	
120-12-7	Anthracene	ND	260	33	ug/kg	
56-55-3	Benzo(a)anthracene	ND	52	13	ug/kg	
50-32-8	Benzo(a)pyrene	ND	52	13	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	52	13	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	52	13	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	52	13	ug/kg	
218-01-9	Chrysene	ND	52	13	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	52	13	ug/kg	
206-44-0	Fluoranthene	ND	260	33	ug/kg	
86-73-7	Fluorene	ND	260	33	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	52	13	ug/kg	
90-12-0	1-Methylnaphthalene	ND	260	33	ug/kg	
91-57-6	2-Methylnaphthalene	ND	260	33	ug/kg	
91-20-3	Naphthalene	ND	260	33	ug/kg	
85-01-8	Phenanthrene	ND	260	33	ug/kg	
129-00-0	Pyrene	ND	260	33	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		41-123%
321-60-8	2-Fluorobiphenyl	86%		46-122%
1718-51-0	Terphenyl-d14	86%		45-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B019-03		
Lab Sample ID:	F17638-8	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	95.8
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP29106.D	1	05/07/03	SM	05/05/03	OP7509	GOP983
Run #2							

	Initial Weight	Final Volume
Run #1	31.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	ND	8.2	5.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	87%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SB-B019-03		
Lab Sample ID:	F17638-8	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
		Percent Solids:	95.8
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.30 U	0.52	0.30	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Cadmium	0.027 U	0.42	0.027	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Chromium	0.74 B	1.0	0.045	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Lead	1.1 B	10	0.13	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID:	CEF-312-DU01-SB-03		
Lab Sample ID:	F17638-9	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	86.9
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K012788.D	1	05/09/03	NAF	n/a	n/a	VK532
Run #2							

	Initial Weight
Run #1	4.56 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	6.3	2.5	ug/kg	
75-27-4	Bromodichloromethane	ND	6.3	2.5	ug/kg	
75-25-2	Bromoform	ND	6.3	2.5	ug/kg	
108-90-7	Chlorobenzene	ND	6.3	2.5	ug/kg	
75-00-3	Chloroethane	ND	6.3	2.5	ug/kg	
67-66-3	Chloroform	ND	6.3	2.5	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	32	13	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.3	2.5	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.3	2.5	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.3	3.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.3	2.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.3	2.5	ug/kg	
124-48-1	Dibromochloromethane	ND	6.3	2.5	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.3	2.5	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.3	2.5	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.3	2.5	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.3	2.5	ug/kg	
100-41-4	Ethylbenzene	ND	6.3	2.5	ug/kg	
74-83-9	Methyl bromide	ND	6.3	2.5	ug/kg	
74-87-3	Methyl chloride	ND	6.3	2.5	ug/kg	
75-09-2	Methylene chloride	ND	13	6.3	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.3	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.3	2.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.3	2.5	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.3	2.5	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.3	2.5	ug/kg	
108-88-3	Toluene	ND	6.3	2.5	ug/kg	
79-01-6	Trichloroethylene	ND	6.3	2.5	ug/kg	
75-01-4	Vinyl chloride	ND	6.3	3.2	ug/kg	
1330-20-7	Xylene (total)	ND	19	5.7	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-DU01-SB-03		
Lab Sample ID:	F17638-9	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8260B	Percent Solids:	86.9
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%
2037-26-5	Toluene-D8	103%		79-121%
460-00-4	4-Bromofluorobenzene	116%		77-133%
17060-07-0	1,2-Dichloroethane-D4	94%		72-133%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
16538-93-5	Cyclooctane, butyl-	16.93	16	ug/kg	JN
108-87-2	Cyclohexane, methyl-	13.93	18	ug/kg	JN
67-64-1	Acetone	8.64	14	ug/kg	JN
	Total TIC, Volatile		48	ug/kg	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-DU01-SB-03		
Lab Sample ID:	F17638-9	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	86.9
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L017520.D	1	05/15/03	ME	05/15/03	OP7585	SL948
Run #2							

	Initial Weight	Final Volume
Run #1	30.8 g	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	190	37	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	37	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	37	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	37	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	930	370	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	370	75	ug/kg	
88-75-5	2-Nitrophenol	ND	190	37	ug/kg	
100-02-7	4-Nitrophenol	ND	930	370	ug/kg	
87-86-5	Pentachlorophenol	ND	930	370	ug/kg	
108-95-2	Phenol	ND	190	37	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	37	ug/kg	
92-87-5	Benzidine	ND	1900	930	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	190	37	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	370	93	ug/kg	
91-58-7	2-Chloronaphthalene	ND	190	37	ug/kg	
106-47-8	4-Chloroaniline	ND	370	150	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	190	37	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	190	75	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	190	37	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	190	37	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	190	37	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	190	37	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	190	37	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	190	37	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	190	75	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	190	75	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	370	190	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	370	93	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	370	190	ug/kg	
84-66-2	Diethyl phthalate	ND	370	93	ug/kg	
131-11-3	Dimethyl phthalate	ND	370	93	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	370	190	ug/kg	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-DU01-SB-03		
Lab Sample ID:	F17638-9	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C SW846 3550B	Percent Solids:	86.9
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	190	37	ug/kg	
87-68-3	Hexachlorobutadiene	ND	190	75	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	190	75	ug/kg	
67-72-1	Hexachloroethane	ND	190	75	ug/kg	
78-59-1	Isophorone	ND	190	37	ug/kg	
98-95-3	Nitrobenzene	ND	190	37	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	370	93	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	190	75	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	37	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	190	37	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	68%		45-114%
4165-62-2	Phenol-d5	75%		44-124%
118-79-6	2,4,6-Tribromophenol	79%		50-128%
4165-60-0	Nitrobenzene-d5	70%		41-123%
321-60-8	2-Fluorobiphenyl	71%		46-122%
1718-51-0	Terphenyl-d14	77%		45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
79-34-5	Ethane, 1,1,2,2-tetrachloro- [a]	4.40	440	ug/kg	JN
2040-96-2	Cyclopentane, propyl-	7.47	2100	ug/kg	JN
3179-47-3	2-Propenoic acid, 2-methyl-, decyl ester	9.13	1700	ug/kg	JN
142-90-5	2-Propenoic acid, 2-methyl-, dodecyl est	10.81	2000	ug/kg	JN
142-90-5	2-Propenoic acid, 2-methyl-, dodecyl est	12.41	800	ug/kg	JN
	Total TIC, Semi-Volatile		7040	ug/kg	J

(a) Extraction solvent impurity

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-DU01-SB-03		
Lab Sample ID:	F17638-9	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	86.9
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001933.D	4	05/07/03	MRE	05/05/03	OP7507	SF117
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	310	77	ug/kg	
208-96-8	Acenaphthylene	ND	310	77	ug/kg	
120-12-7	Anthracene	ND	310	38	ug/kg	
56-55-3	Benzo(a)anthracene	ND	61	15	ug/kg	
50-32-8	Benzo(a)pyrene	ND	61	15	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	61	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	61	15	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	61	15	ug/kg	
218-01-9	Chrysene	ND	61	15	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	61	15	ug/kg	
206-44-0	Fluoranthene	ND	310	38	ug/kg	
86-73-7	Fluorene	ND	310	38	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	61	15	ug/kg	
90-12-0	1-Methylnaphthalene	ND	310	38	ug/kg	
91-57-6	2-Methylnaphthalene	ND	310	38	ug/kg	
91-20-3	Naphthalene	ND	310	38	ug/kg	
85-01-8	Phenanthrene	ND	310	38	ug/kg	
129-00-0	Pyrene	ND	310	38	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%		41-123%
321-60-8	2-Fluorobiphenyl	83%		46-122%
1718-51-0	Terphenyl-d14	101%		45-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-DU01-SB-03		
Lab Sample ID:	F17638-9	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
Method:	FLORIDA-PRO SW846 3550B	Percent Solids:	86.9
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP29107.D	1	05/07/03	SM	05/05/03	OP7509	GOP983
Run #2							

	Initial Weight	Final Volume
Run #1	29.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	52.9	9.7	6.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	90%		57-127%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-DU01-SB-03		
Lab Sample ID:	F17638-9	Date Sampled:	05/02/03
Matrix:	SO - Soil	Date Received:	05/03/03
		Percent Solids:	86.9
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	0.33 U	0.59	0.33	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Cadmium	0.031 U	0.47	0.031	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Chromium	4.7	1.2	0.050	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B
Lead	5.2 B	12	0.14	mg/kg	1	05/15/03	05/15/03	DM	SW846 6010B	SW846 3050B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 2301 | PAGE 1 OF 1

PROJECT NO: N3996, CTO 168	FACILITY: Bldg. 312 OWS, Cecil Field	PROJECT MANAGER: Paul Callahan	PHONE NUMBER: 813 806 0202	LABORATORY NAME AND CONTACT: Accutest Jim Bell
SAMPLERS (SIGNATURE): M.W. Dale, C Gladstone		FIELD OPERATIONS LEADER: Mark Dale	PHONE NUMBER: 904 636 6125	ADDRESS: 4405 Vineland Rd C-15
		CARRIER/WAYBILL NUMBER: Fedex 8371 1005 5915		CITY, STATE: Orlando, FL 32811

STANDARD TAT [X]
RUSH TAT [ ] 24 hr. [ ] 48 hr. [ ] 72 hr. [ ] 7 day [ ] 14 day

F17638

	DATE YEAR 2003	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	PPL VOCs + TICs SW846 8260B	PPL VOCs + TICs SW846 8260B	PPL SVOCs + TICs SW846 8270C	PAHs SW846 8270C	TRPH FL-PRO	Total As, Cd, Cr, Pb				COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)										G	G	G	G	G	G				
PRESERVATIVE USED										H_2O	CH_3OH	None	None	None	None				
1	5/2	1335	CEF-312-SB-B017-03		2	3	SO	G	5	2	1	1	✓	✓	1				Cool to 4°C
2	5/2	1353	CEF-312-SB-B018-03		2	3	SO	G	5	2	1	1	✓	✓	1				
3	5/2	1420	CEF-312-SD-C007-01		0	1	SO	G	5	2	1	1	✓	✓	1				N3996 WR 316
4	5/2	1452	CEF-312-SD-C011-01		0	1	SO	G	5	2	1	1	✓	✓	1				Mod 2
5	5/2	1501	CEF-312-SD-C010-01		0	1	SO	G	5	2	1	1	✓	✓	1				
6	5/2	1506	CEF-312-SD-C009-01		0	1	SO	G	5	2	1	1	✓	✓	1				
7	5/2	1514	CEF-312-SD-C008-01		0	1	SO	G	5	2	1	1	✓	✓	1				
8	5/2	1526	CEF-312-SB-B019-03		2	3	SO	G	5	2	1	1	✓	✓	1				
9	5/2	0000	CEF-312-DUC1-SB-03		2	3	SO	G	5	2	1	1	✓	✓	1				

1. RELINQUISHED BY: Mark W. Dale	DATE: 5/2/03	TIME: 1700	1. RECEIVED BY: Fedex	DATE	TIME
2. RELINQUISHED BY: FEDEX	DATE	TIME	2. RECEIVED BY: Munir Mohammed	DATE: 5/3/03	TIME: 0900
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS: 2.4

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

4/02R
FORM NO. TtNUS-001

ACCUTEST LABORATORIES SOUTHEAST
SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F77638

Client/Project: TetraTech / Bldg. 312 OWS

Date/Time Received: 5/3/03/0900 Total Number of Coolers min Ø 1

Method of Delivery: (FedEx) Greyhound UPS Pickup Delivery Other

Air Bill Number: 8371 1005 5915

Cooler Temperatures: 2.4°C

Custody Seals Intact ?	(YES)	NO	
Trip Blank Provided ?	YES	(NO)	
Trip Blank on COC ?	YES	(NO)	
Trip Blank Intact ?	YES	NO	(N/A)
Trip Blank Matrix ?	SOIL	H20	(N/A)
Chain Of Custody Provided?	(YES)	NO	
Chain Of Custody Match Bottles?	(YES)	NO	
Sample Labels Present?	(YES)	NO	
Are All Bottles Unbroken?	(YES)	NO	
Are All Appropriate Samples Preserved?	(YES)	NO	
Correct Containers Used?	(YES)	NO	
Sufficient Sample Volume?	(YES)	NO	

Number of Encores: Ø

COMMENTS:

Signature: Muna Mohammed Date: 5/3/03

Revised 02/20/03 ASBD

ATTACHMENT E

GROUNDWATER FIELD DATA SHEETS

Tetra Tech NUS, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: Building 312 OW
Project No.: N3996JG0050170
Location: Cecil Field
Personnel: D LEROLETTE / C METZ
Weather Conditions: 70°F SUNNY
Measuring Device: Heron W.L.I.
Tidally Influenced: Yes ___ No _x_
Remarks: BACKGROUND PID = 0.0 ppm

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 PID (ppm) BH
CEF-312LS-1S	4/4/03	0949	74.32	15.58	6.02			78.6
CEF-312LS-1Sa		0943	75.25	15.89	6.54			0.0
CEF-312-02		0950	74.77	13.03	6.37			12.4
CEF-312LS-3S		0946	74.89	12.96	6.33			186
CEF-312LS-4S		0948	76.57	13.97	8.06			363
CEF-312LS-1I		0945	74.66	30.27	6.15			25.4
CEF-312LS-5S		0951	Not determined	14	5.90			63.7
CEF-312LS-6S		0947	Not determined	14	6.01			35.5

* All measurements to the nearest 0.01 foot

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 312 OW
Project No.: N3996.JG0050170

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

Sample ID No.: CEF-312LS-GW-1S-02
Sample Location: CEF-312 - 1S
Sampled By: D.L.
C.O.C. No.: 2239
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA

Date: 4/4/03	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP	Other
Time: 1305								
Method: Low Flow Peristaltic	CLEAR	6.86	0.465	20.73	7.4	0.69	-83	

PURGE DATA

Date: 4/4/03	Time	pH	S.C.	Temp (°C)	Turbidity	DO		ORP
Method: Low Flow Peristaltic								
Monitor Reading (ppm): 78.6								
Well Casing Diameter: 2 In.								
Well Casing Material: PVC								
Total Well Depth (TD): 15.58	See Low Flow Purge Sheet							
Static Water Level (WL): 5.98								
One Casing Volume(gal/L): 6.0								
Start Purge (hrs): 1210								
End Purge (hrs): 1255								
Total Purge Time (min): 45								
Total Vol. Purged (gal/L): 18								

SAMPLE COLLECTION INFORMATION

Analysis		Preservative	Container Requirements	Collected
PPVO w/Tics	SW846 8260B	HCL	3-40 ml vials	✓
PPEO w/Tics	SW846 8270C	None	2 - 1liter glass ambers	✓
TRPH	FL-PRO	H2SO4	2 - 1liter glass ambers	✓
Total Metals*	SW846 6010B	HNO3	1 - 500 ml HDPE	✓
* Arsenic, Cadmium, Chromiium and Lead				
PAHs	SW846 8270C SIM	None	2 - 1 liter glass ambers	✓
EDB	504.1	HCL	3-40 ml vials	✓

OBSERVATIONS / NOTES

Circle if Applicable:

MS/MSD

Duplicate ID No.: None

Signature(s):

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Building 312 OW
PROJECT NUMBER: N3996.JG0050170

WELL ID.: CEF-312-01,8
DATE: 4/4/03

Time (Hrs.)	Water Level (Ft. below TOC)	Cum. Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1210	5.98	–	400	–	–	–	–	–	–	START PURGE
1220	6.15	4.0	400	6.71	0.433	38.5	1.30	20.65	-61	
1230	6.15	8.0	400	6.74	0.441	21.7	1.22	20.79	-64	
1240	6.15	12.0	400	6.80	0.454	13.4	0.95	20.69	-72	
1245	6.15	14.0	400	6.83	0.456	10.2	0.78	20.69	-76	
1250	6.15	16.0	400	6.83	0.458	8.2	0.51	20.75	-79	
1255	6.15	18.0	400	6.86	0.465	7.4	0.64	20.73	-83	

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 312 OW
Project No.: N3996.JG0050170

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

Sample ID No.: CEF-312-GW-13A -02
Sample Location: CEF-312-13a
Sampled By: C. McT
C.O.C. No.: 2239
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other
Date: 4-4-03 Time: 1525 Method: Low Flow Peristaltic	Clear	6.65	0.139	21.9	6.1	2.66	+125	

PURGE DATA

Date: 4-4-03	Time	pH	S.C.	Temp (°C)	Turbidity	DO		ORP
Method: Low Flow Peristaltic	See Low Flow Purge Sheet							
Monitor Reading (ppm): 0								
Well Casing Diameter: 2 In.								
Well Casing Material: PVC								
Total Well Depth (TD): 15.88								
Static Water Level (WL): 6.53								
One Casing Volume(gal/L): 5.9								
Start Purge (hrs): 1435								
End Purge (hrs): 1515								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): 18								

SAMPLE COLLECTION INFORMATION

Analysis		Preservative	Container Requirements	Collected
PPVO w/Tics	SW846 8260B	HCL	3-40 ml vials	✓
PPEO w/Tics	SW846 8270C	None	2 - 1liter glass ambers	✓
TRPH	FL-PRO	H2SO4	2 - 1liter glass ambers	✓
Total Metals*	SW846 6010B	HNO3	1 - 500 ml HDPE	✓
* Arsenic, Cadmium, Chromiium and Lead				
PAHs	SW846 8270C SIM	None	2 - 1 liter glass ambers	✓
EDB	504.1	HCL	3-40 ml vials	✓

OBSERVATIONS / NOTES

Circle if Applicable:

MS/MSD

Duplicate ID No.: None

Signature(s): Charles McT

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Building 312 OW
PROJECT NUMBER: N3996.JG0050170

WELL ID.: CEF-312LS-GW-1Sa-02
DATE: 4-4-03

Time (Hrs.)	Water Level (Ft. below TOC)	Cum. Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1435	6.53	0	300	—	—	—	—	—	—	Start Purge
1440	6.68	1.5	400	—	—	—	—			
1445	6.68	3.5	400	6.77	0.139	60.4	7.01	21.5	+116	
1450	6.68	5.5	400	6.71	0.138	30.8	3.56	21.6	117	
1455	6.74	8	500	6.71	0.138	17.7	3.40	21.7	119	
1500	6.75	10.5	500	6.71	0.139	12.4	3.43	21.8	120	
1505	6.75	13	500	6.68	0.139	10.1	3.16	22.0	+122	
1510	6.75	15.5	500	6.67	0.139	8.6	2.80	22.0	+124	
1512	6.75	16.5	500	6.66	0.139	6.2	2.71	21.9	+125	
1514	6.75	17.5	500	6.66	0.139	6.6	2.68	21.9	+125	
1515	6.75	18	500	6.65	0.139	6.1	2.66	21.9	+125	

1525 = Sample Time

SIGNATURE(S): Charles Mes

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 312 OW
Project No.: N3996.JG0050170

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

Sample ID No.: CEF-312 - 2 -02
Sample Location: CEF-312 - 2
Sampled By: P Lemoette
C.O.C. No.: 2239
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP	Other
Date: 4-4-03								
Time: 1040								
Method: Low Flow Peristaltic	CLEAR	6.86	0.604	19.27	7.7	1.99	-92	

PURGE DATA

	Time	pH	S.C.	Temp (°C)	Turbidity	DO		ORP
Date: 4-4-03								
Method: Low Flow Peristaltic								
Monitor Reading (ppm): 12.4								
Well Casing Diameter: 2 In.								
Well Casing Material: PVC								
Total Well Depth (TD): 13.03	See Low Flow Purge Sheet							
Static Water Level (WL): 6.37								
One Casing Volume(gal/L): 4.2								
Start Purge (hrs): 0955								
End Purge (hrs): 1030								
Total Purge Time (min): 35								
Total Vol. Purged (gal/L): 14								

SAMPLE COLLECTION INFORMATION

Analysis		Preservative	Container Requirements	Collected
PPVO w/Tics	SW846 8260B	HCL	3-40 ml vials	✓
PPEO w/Tics	SW846 8270C	None	2 - 1liter glass ambers	✓
TRPH	FL-PRO	H2SO4	2 - 1liter glass ambers	✓
Total Metals*	SW846 6010B	HNO3	1 - 500 ml HDPE	✓
* Arsenic, Cadmium, Chromiium and Lead				
PAHs	SW846 8270C SIM	None	2 - 1 liter glass ambers	✓
EDB	504.1	HCL	3-40 ml vials	✓

OBSERVATIONS / NOTES

Circle if Applicable:

MS/MSD

Duplicate ID No.: CEF-312CS-0401-GW-02

Signature(s):

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Building 312 OW
PROJECT NUMBER: N3996.JG0050170

WELL ID.: CEF-312-2
DATE: 4/4/03

Time (Hrs.)	Water Level (Ft. below TOC)	Cum. Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
0955	6.37	—	400	—	—	—	—	—	—	START PURGE
1005	6.54	4.0	400	6.65	0.595	38.2	1.33	19.17	-105	
1015	6.54	8.0	400	6.79	0.609	15.8	2.15	19.21	-95	
1020	6.54	10.0	400	6.81	0.609	12.7	2.15	19.23	-94	
1025	6.54	12.0	400	6.84	0.605	8.7	2.06	19.18	-93	
1030	6.54	14.0	400	6.86	0.604	7.7	1.99	19.27	-92	
	SAMPLE TIME 1040									

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 312 OW
Project No.: N3996.JG0050170

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

Sample ID No.: CEF-312LS ~~-35-02~~ -GW-35-02
Sample Location: CEF-312LS-35
Sampled By: C. METZ
C.O.C. No.: 2239
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA

Date: 9-4-03	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other
Time: 1355								
Method: Low Flow Peristaltic	Clear	6.72	0.377	20.3	0	0.20	+25	

PURGE DATA

Date: 9-4-03	Time	pH	S.C.	Temp (°C)	Turbidity	DO		ORP
Method: Low Flow Peristaltic								
Monitor Reading (ppm): 186								
Well Casing Diameter: 2 In.								
Well Casing Material: PVC								
Total Well Depth (TD): 13'	See Low Flow Purge Sheet							
Static Water Level (WL): 6.33								
One Casing Volume(gal): 4.1								
Start Purge (hrs): ~~1255~~ 1255								
End Purge (hrs): 1346								
Total Purge Time (min): 51								
Total Vol. Purged (gal): 12.5								

SAMPLE COLLECTION INFORMATION

Analysis		Preservative	Container Requirements	Collected
PPVO w/Tics	SW846 8260B	HCL	3-40 ml vials	✓
PPEO w/Tics	SW846 8270C	None	2 - 1liter glass ambers	✓
TRPH	FL-PRO	H2SO4	2 - 1liter glass ambers	✓
Total Metals*	SW846 6010B	HNO3	1 - 500 ml HDPE	✓
* Arsenic, Cadmium, Chromiium and Lead				
PAHs	SW846 8270C SIM	None	2 - 1 liter glass ambers	✓
EDB	504.1	HCL	3-40 ml vials	✓

OBSERVATIONS / NOTES

Circle if Applicable:

MS/MSD

Duplicate ID No.: None

Signature(s): Charles Metz

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Building 312 OW
PROJECT NUMBER: N3996.JG0050170

WELL ID.: CEF-312LS-GW-3S-02
DATE: 4-4-03

Time (Hrs.)	Water Level (Ft. below TOC)	Cum. Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP ±(mV)	Comments
1255	6.33	0	200	—	—	—	—	—	—	Start Purge
1306	6.52	1	200	6.83	0.382	15.1	0.29	20.4	+37	
1305	6.62	2.25	250	6.65	0.381	0	0.24	20.6	48	
1315	6.61	4.75	250	6.57	0.382	0	0.21	20.1	56	
1325	6.62	7.25	250	6.57	0.384	0	0.21	20.6	56	
1335	6.62	9.75	250	6.63	0.380	0	0.20	20.2	37	
1340	6.62	11	250	6.68	0.378	0.6	0.20	20.4	34	
1345	6.62	12.25	250	6.70	0.377	2.0	0.20	20.4	29	
1346	6.62	12.5	250	6.72	0.377	0	0.20	20.3	25	End Purge

1355 = Sample Time

SIGNATURE(S): Charles [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 312 OW
Project No.: N3996.JG0050170

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

Sample ID No.: CEF-312ES-MW-02
Sample Location: CEF-312-4S
Sampled By: D Cervantes
C.O.C. No.: 2239
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA

Date: 4/4/03	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other
Time: 1420								
Method: Low Flow Peristaltic	clear	5.64	0.164	22.06	6.8	6.10	-24	

PURGE DATA

Date: 4/8/03	Time	pH	S.C.	Temp (°C)	Turbidity	DO		ORP
Method: Low Flow Peristaltic								
Monitor Reading (ppm): 363								
Well Casing Diameter: 2 In.								
Well Casing Material: PVC								
Total Well Depth (TD): 13.97	See Low Flow Purge Sheet							
Static Water Level (WL): 8.02								
One Casing Volume(gal/L): 3.7								
Start Purge (hrs): 1340								
End Purge (hrs): 1410								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L) 12.0								

SAMPLE COLLECTION INFORMATION

Analysis		Preservative	Container Requirements	Collected
PPVO w/Tics	SW846 8260B	HCL	3-40 ml vials	✓
PPEO w/Tics	SW846 8270C	None	2 - 1liter glass ambers	✓
TRPH	FL-PRO	H2SO4	2 - 1liter glass ambers	✓
Total Metals*	SW846 6010B	HNO3	1 - 500 ml HDPE	✓
* Arsenic, Cadmium, Chromiium and Lead				
PAHs	SW846 8270C SIM	None	2 - 1 liter glass ambers	✓
EDB	504.1	HCL	3-40 ml vials	✓

OBSERVATIONS / NOTES

Circle if Applicable:

MS/MSD

Duplicate ID No.: None

Signature(s):

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Building 312 OW
PROJECT NUMBER: N3996.JG0050170

WELL ID.: CEF-312 – 45
DATE: 4/4/03

Time (Hrs.)	Water Level (Ft. below TOC)	Cum. Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1340	8.02	–	400	–	–	–	–	–	–	START PURGE
1350	8.24	4.0	400	5.48	0.149	42.5	6.47	21.97	-17	
1400	8.24	8.0	400	5.60	0.156	17.3	6.27	21.96	-20	
1405	8.24	10.0	400	5.66	0.163	8.7	6.14	22.02	-23	
1410	8.24	12.0	400	5.64	0.164	6.8	6.10	22.06	-24	

SAMPLE TIME 1420

SIGNATURE(S): [illegible]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 312 OW
Project No.: N3996.JG0050170

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

Sample ID No.: CEF-312-MW1i -02
Sample Location: CEF-312-mw1i
Sampled By: C. METZ
C.O.C. No.: 2239
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA

Date: 4-4-03	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other
Time: 1100								
Method: Low Flow Peristaltic	Clear	6.92	0.159	22.1	0.8	1.31	107	

PURGE DATA

Date: 4-4-03	Time	pH	S.C.	Temp (°C)	Turbidity	DO		ORP
Method: Low Flow Peristaltic								
Monitor Reading (ppm): 25.4								
Well Casing Diameter: 2 In.								
Well Casing Material: PVC								
Total Well Depth (TD): 30.2								
Static Water Level (WL): 6.21	See Low Flow Purge Sheet							
One Casing Volume(gal): 3.1 5' screen								
Start Purge (hrs): 1000								
End Purge (hrs): 1047								
Total Purge Time (min): 47								
Total Vol. Purged (gal): 9.5								

SAMPLE COLLECTION INFORMATION

Analysis		Preservative	Container Requirements	Collected
PPVO w/Tics	SW846 8260B	HCL	3-40 ml vials	✓
PPEO w/Tics	SW846 8270C	None	2 - 1liter glass ambers	✓
TRPH	FL-PRO	H2SO4	2 - 1liter glass ambers	✓
Total Metals*	SW846 6010B	HNO3	1 - 500 ml HDPE	✓
* Arsenic, Cadmium, Chromiium and Lead				
PAHs	SW846 8270C SIM	None	2 - 1 liter glass ambers	✓
EDB	504.1	HCL	3-40 ml vials	✓

OBSERVATIONS / NOTES

Circle if Applicable:
MS/MSD same ID as sample
Duplicate ID No.:

Signature(s): Charles Metz

CEF-312LS-GW-1I-0

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Building 312 OW
PROJECT NUMBER: N3996.JG0050170

WELL ID.: CEF-312-MW1i-02
DATE: 4-4-03

Time (Hrs.)	Water Level (Ft. below TOC)	Cum. Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1000	6.21	0	~~400~~ 250	—	—	—	—	—	—	Start Purge
1005	6.54	1	200	7.19	0.213	21.4	4.15	21.6	+113	
1010	6.52	2	200	7.24	0.206	15.5	2.85	21.6	111	
1015	6.52	3	200	7.17	0.193	14.4	2.42	21.7	110	
1020	6.52	4	200	7.05	0.185	15.5	2.17	21.8	113	
1025	6.52	5	200	6.96	0.178	8.8	1.99	21.9	115	
1030	6.52	6	200	6.90	0.169	2.8	1.69	21.9	115	
1035	6.52	7	200	6.88	0.165	4.8	1.58	22.0	114	
1040	6.52	8	200	6.88	0.163	3.7	1.47	22.0	113	
1045	6.52	9	200	6.90	0.162	1.8	1.39	22.1	110	
1047	6.52	9.5	200	6.92	0.159	0.8	1.31	22.1	107	End Purge

1100 = Sample Time

SIGNATURE(S): Charles M

Tetra Tech NUS, Inc.

DOCUMENTATION OF FIELD CALIBRATION

PROJECT NAME : NAS CECIL FIELD

SITE NAME: Building 312 OWS

PROJECT No.: N3996JG0050170

INSTRUMENT NAME/MODEL: see below

MANUFACTURER: See below

SERIAL NUMBER: see below

	Date of Calibration	Instrument Name and Model	Instrument I.D. Number	Person Performing Calibration	ORP Instrument Settings Pre-calibration	ORP Instrument Settings Post-calibration	PH Instrument Readings Pre-calibration	PH Instrument Readings Post-calibration	Calibration Standard (Lot No.)	Remarks and Comments
Horiba -	4-4-03	U-22	T0042014	CM		248	4.01	4.00	3128	exp (5-13-03) } US Env.
Horiba -		U-22	T2062032	CM		239	3.87		3128	exp (5-13-03) }
Photovac	✓	PID	EOHM318	CM			116	99.8	109-36-27769	exp (3-05) — Field Env. Ins (Micro Mat.
						↓				
						LOT # 5349 (exp 5-04) Hanna Instruments Redox Solution 200-275mV				

Horiba - 4-4-03 U-22 T0042014 CM 248 4.01 4.00 3128 exp (5-13-03)

Horiba - U-22 T2062032 CM 239 3.87 3128 exp (5-13-03)

Photovac ✓ PID EOHM318 CM 116 99.8 109-36-27769 exp (3-05) — Field Env. Ins (Micro Mat.

DN 3996: 4.4:114

Tetra Tech NUS, Inc.

DOCUMENTATION OF FIELD CALIBRATION

PROJECT NAME : NAS CECIL FIELD

INSTRUMENT NAME/MODEL: see below

SITE NAME: Tanks 81 ABC and Bldg. 312

MANUFACTURER: see below

PROJECT No.: N4248MW0050140 and N3996

SERIAL NUMBER: see below

Date of Calibration	Instrument Name and Model	Instrument I.D. Number	Person Performing Calibration	Instrument Settings Pre-calibration	Instrument Settings Post-calibration	Instrument Readings Pre-calibration	Instrument Readings Post-calibration	Calibration Standard (Lot No.)	Remarks and Comments
~~YSI 650 MB~~ ~~3/13/03~~	~~LaMotte~~	~~3117-H02~~	PL			0, 9.4	0.10 NTU	BLMT13	Exp 6/7/03
3-13-03	LaMotte	3660-3802	PL			0, 9.6	0.10 NTU	BLMT13	Exp 6/7/03
3/13/03	YSI 650 MB	02G1124AK	PL		COND	0.967	1.00	3127	Exp 05/13/03
					PH(4)	3.94	4.00	2760	Exp 8/07/03
					PH(10)	9.76	10.00	3126	Exp 11/10/03
					ORP	-	274.8	6230	HI720 Exp 08/05
	YSI 650 MB	00D1176AB	PL		COND	1.071	9.999	3127	Exp 05/13/03
					PH (4)	4.34	4.00	2760	Exp 8/07/03
					PH (10)	5.58	9.98	3126	Exp 11/10/03
					ORP		272.8	6230	HI720 Exp 08/05
	PID	110-001337				95.5	100		100 PPM Isobutylene
3/14/03	YSI 650 MB	02G1124AK	PL		COND	0.480	1.001	3127	Exp 05/13/03
					PH(4)	4.20	4.00	2760	Exp 8/07/03
					PH(10)	10.15	10.00	3126	Exp 11/10/03
					ORP		272.7	6230	HI720 Exp 08/05
	YSI 650 MB	00D1176AB	PL		COND	0.466	1.000	3127	Exp 05/13/03
					PH(4)	4.17	4.00	2760	Exp 8/07/03
					PH(10)	10.01	10.00	3126	Exp 11/10/03
					ORP		217.5	6230	HI720 Exp 08/05
3-14-03	LaMotte	3117-H02	CM			0, 8.2	0.10 NTU	BLMT13	Exp 6-7-03
3-14-03	LaMotte	3660-3802	CM			0.4, 9.1	0.10 NTU	BLMT13	Exp 6-7-03
3-14-03	Mini Rae	110-001337	CM			98.2	100	00210-03	Exp 2-10-04

Tetra Tech NUS, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: Building 312 OW
Project No.: N3996JG0050170
Location: Cecil Field
Personnel: P. Leverette and L. Middleton
Weather Conditions: Cloudy 67°F
Measuring Device: Heron (office model)
Tidally Influenced: Yes ___ No _x_
Remarks: None

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 PID
CEF-312LS-1S	3/13/2003	1016		15.55	4.82			0
CEF-312LS-1Sa	3/13/2003	0943		15.9	5.21			0
CEF-312-02	3/13/2003				~~5.60~~ PL			
CEF-312LS-3S	3/13/2003	1020		12.9	4.96			1.1
CEF-312LS-4S	3/13/2003	~~1050~~ 1019 PL		13.9	6.77			0
CEF-312LS-1I	3/13/2003	1017		30.3	4.87			0
CEF-312LS-5S	3/13/2003	1021		14'	4.60			1.1
CEF-312LS-6S	3/13/2003	1022		14'	4.62			0

Could not get well cap off

* All measurements to the nearest 0.01 foot

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 312 OW
Project No.: N3996.JG0050170

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

Sample ID No.: CEF-312-GW-5S-02
Sample Location: CEF-312LS-5S
Sampled By: C. MOTZ
C.O.C. No.: 2238
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other
Date: 3-14-03								
Time: 1140								
Method: Low Flow Peristaltic	Clear	6.08	0.679	19.92	5.4	6.78	488.8	

PURGE DATA

Date: 3-14-03	Time	pH	S.C.	Temp (°C)	Turbidity	DO		ORP
Method: Low Flow Peristaltic								
Monitor Reading (ppm): 0								
Well Casing Diameter: 1 In.								
Well Casing Material: PVC								
Total Well Depth (TD): 13.5	See Low Flow Purge Sheet							
Static Water Level (WL): 4.65								
One Casing Volume(gal/L): 2.1								
Start Purge (hrs): 1045								
End Purge (hrs): 1129								
Total Purge Time (min): 44								
Total Vol. Purged (gal/L): 6.5								

SAMPLE COLLECTION INFORMATION

Analysis		Preservative	Container Requirements	Collected	
PPVO w/Tics	SW846 8260B	HCL	3-40 ml vials	CM	9 via
PPEO w/Tics	SW846 8270C	None	2 - 1liter glass ambers	CM	6
TRPH	FL-PRO	H2SO4	2 - 1liter glass ambers	CM	6
Total Metals*	SW846 6010B	HNO3	1 - ~~500~~ 250 ml HDPE	CM	9
* Arsenic, Cadmium, Chromiium and Lead					
EDB	504.1	NONE	3-40 ml vials	CM	9 via

OBSERVATIONS / NOTES

Circle if Applicable:

MS/MSD: X

Duplicate ID No.: CEF-312-GW-5S-02

Signature(s): Charles Motz

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Building 312 OW
PROJECT NUMBER: N3996.JG0050170

WELL ID.: CEF-312LS- 55
DATE: 3-14-03

Time (Hrs.)	Water Level (Ft. below TOC)	Cum. Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1045	4.65	0	150	—	—	—	—	—	—	Start Purge
1050	4.95	0.75	150	6.40	0.685	39	7.40	19.62	290.9	
1055	4.94	1.5	150	6.08	0.684	24	6.94	19.74	355.6	
1100	4.95	2.25	150	5.97	0.682	21	6.86	19.73	350.7	
1105	4.95	3	150	5.77	0.676	16	6.82	19.60	430.1	
1110	4.95	3.75	150	5.85	0.680	14	6.78	19.83	456.4	
1115	4.95	4.5	150	5.97	0.678	8.8	6.78	19.80	487.6	
1120	4.95	5.25	150	6.09	0.678	6.1	6.76	19.82	451.8	
1125	4.95	6	150	6.15	0.678	5.9	6.72	19.82	465.5	
1129	4.95	6.5	150	6.08	0.679	5.4	6.73	19.92	488.8	End Purge (3vols, stable)
1140 = Sample Time										

SIGNATURE(S): Charles Mott

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Building 312 OW
Project No.: N3996.JG0050170

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

Sample ID No.: CEF-312-GW-65-02
Sample Location: CEF-312LS-65
Sampled By: P Lencioni
C.O.C. No.: 2238
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP	Other
Date: 3/14/03								
Time: 1145								
Method: Low Flow Peristaltic	CLEAR	6.74	0.759	19.52	6.38	2.97	235.1	

PURGE DATA

	Time	pH	S.C.	Temp (°C)	Turbidity	DO		ORP
Date: 3/14/03								
Method: Low Flow Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter: 1 In.								
Well Casing Material: PVC								
Total Well Depth (TD): ~~13.5~~ 14.0 ft								
Static Water Level (WL): [redacted] 4.62								
One Casing Volume(gal/L): 2.3								
Start Purge (hrs): 1045								
End Purge (hrs): 1135								
Total Purge Time (min): 50								
Total Vol. Purged (gal/L): 7.50								

See Low Flow Purge Sheet

SAMPLE COLLECTION INFORMATION

Analysis		Preservative	Container Requirements	Collected
PPVO w/Tics	SW846 8260B	HCL	3-40 ml vials	✓
PPEO w/Tics	SW846 8270C	None	2 - 1liter glass ambers	✓
TRPH	FL-PRO	H2SO4	2 - 1liter glass ambers	✓
Total Metals*	SW846 6010B	HNO3	1 - 500 ml HDPE	✓
* Arsenic, Cadmium, Chromiium and Lead				
EDB	504.1	NONE	3-40 ml vials	✓

OBSERVATIONS / NOTES

Circle if Applicable:

MS/MSD

Duplicate ID No.: None

Signature(s): Pat Lenciotti

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Building 312 OW
PROJECT NUMBER: N3996.JG0050170

WELL ID.: CEF-312LS-65
DATE: 3/14/03

Time (Hrs.)	Water Level (Ft. below TOC)	Cum. Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1045	4.62	—	150	—	—	—	—	—	—	START PURGE
1055	4.89	1.5	150	6.71	0.755	27.0	5.09	19.33	175.4	
1105	4.90	3.0	150	6.70	0.753	18.4	4.43	19.36	196.3	
1115	4.90	4.5	150	6.71	0.757	11.7	3.95	19.22	226.6	
1125	4.90	6.0	150	6.75	0.754	8.21	3.40	19.44	237.0	
1130	4.90	6.75	150	6.75	0.756	7.71	3.18	19.49	234.7	
1135	4.90	7.50	150	6.74	0.759	6.38	2.97	19.52	235.1	
	SAMPLE	TIME	1145							

SIGNATURE(S): [signature]

ATTACHMENT F

JUNE 2003 SEDIMENT LABORATORY REPORT

Southeast ACCUTEST Laboratories

07/14/03

Technical Report for

Tetra Tech, NUS

Cecil Field CTO168

N3996-WR361, Bldg 312 OWS

Accutest Job Number: F18318

Report to:

Tetra Tech, NUS

dalem@ttnus.com

ATTN: Merv Dale

Total number of pages in report: 7

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

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Sample Summary

Tetra Tech, NUS

Job No: F18318

Cecil Field CTO168
Project No: N3996-WR361, Bldg 312 OWS

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F18318-1	06/25/03	13:48	PL	06/26/03	SO	Soil	CEF-312-SD-C012-01
F18318-2	06/25/03	13:50	PL	06/26/03	SO	Soil	CEF-312-SD-C013-01
F18318-3	06/25/03	13:52	PL	06/26/03	SO	Soil	CEF-312-SD-C014-01
F18318-4	06/25/03	13:54	PL	06/26/03	SO	Soil	CEF-312-SD-C015-01
F18318-5	06/25/03	00:00	PL	06/26/03	SO	Soil	CEF-312-DU01-SB-04

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Client Sample ID:	CEF-312-SD-C012-01		
Lab Sample ID:	F18318-1	Date Sampled:	06/25/03
Matrix:	SO - Soil	Date Received:	06/26/03
Method:	EPA 8310 SW846 3550B	Percent Solids:	97.4
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EE016520.D	4	07/07/03	NJ	07/01/03	OP7878	GEE694
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	5.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene [b]	ND	5400	5400	ug/kg	
208-96-8	Acenaphthylene	ND	2700	680	ug/kg	
120-12-7	Anthracene	989	1400	680	ug/kg	J
56-55-3	Benzo(a)anthracene	2060	1400	340	ug/kg	
50-32-8	Benzo(a)pyrene	1390	270	68	ug/kg	
205-99-2	Benzo(b)fluoranthene	1670	270	68	ug/kg	
191-24-2	Benzo(g,h,i)perylene	968	270	68	ug/kg	
207-08-9	Benzo(k)fluoranthene	712	270	68	ug/kg	
218-01-9	Chrysene	1730	1400	340	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	200	270	68	ug/kg	J
206-44-0	Fluoranthene	5170	1400	340	ug/kg	
86-73-7	Fluorene	ND	1400	680	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1290	270	68	ug/kg	
91-20-3	Naphthalene	ND	1400	1400	ug/kg	
90-12-0	1-Methylnaphthalene [b]	ND	2800	2800	ug/kg	
91-57-6	2-Methylnaphthalene [b]	ND	2800	2800	ug/kg	
85-01-8	Phenanthrene	3690	1400	680	ug/kg	
129-00-0	Pyrene	3390	1400	340	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	63%		38-139%
92-94-4	p-Terphenyl	103%		46-149%

(a) All hits confirmed by spectral match using a diode array detector.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C013-01		
Lab Sample ID:	F18318-2	Date Sampled:	06/25/03
Matrix:	SO - Soil	Date Received:	06/26/03
Method:	EPA 8310 SW846 3550B	Percent Solids:	93.9
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE016521.D	1	07/07/03	NJ	07/01/03	OP7878	GEE694
Run #2							

	Initial Weight	Final Volume
Run #1	29.7 g	5.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	720	180	ug/kg	
208-96-8	Acenaphthylene	ND	720	180	ug/kg	
120-12-7	Anthracene	ND	360	180	ug/kg	
56-55-3	Benzo(a)anthracene	ND	360	90	ug/kg	
50-32-8	Benzo(a)pyrene	ND	72	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	72	72	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	72	72	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	72	18	ug/kg	
218-01-9	Chrysene	ND	360	90	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	72	18	ug/kg	
206-44-0	Fluoranthene	ND	360	90	ug/kg	
86-73-7	Fluorene	ND	360	180	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	72	18	ug/kg	
91-20-3	Naphthalene	ND	360	90	ug/kg	
90-12-0	1-Methylnaphthalene	ND	360	90	ug/kg	
91-57-6	2-Methylnaphthalene	ND	360	90	ug/kg	
85-01-8	Phenanthrene	ND	360	180	ug/kg	
129-00-0	Pyrene	ND	360	90	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		38-139%
92-94-4	p-Terphenyl	97%		46-149%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C014-01		
Lab Sample ID:	F18318-3	Date Sampled:	06/25/03
Matrix:	SO - Soil	Date Received:	06/26/03
Method:	EPA 8310 SW846 3550B	Percent Solids:	93.9
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EE016540.D	1	07/08/03	NJ	07/01/03	OP7878	GEE695
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	5.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	700	700	ug/kg	
208-96-8	Acenaphthylene	ND	700	180	ug/kg	
120-12-7	Anthracene	ND	350	180	ug/kg	
56-55-3	Benzo(a)anthracene	375	350	88	ug/kg	
50-32-8	Benzo(a)pyrene	338	70	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	480	70	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	340	70	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	242	70	18	ug/kg	
218-01-9	Chrysene	348	350	88	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	67.0	70	18	ug/kg	J
206-44-0	Fluoranthene	925	350	88	ug/kg	
86-73-7	Fluorene	ND	350	180	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	317	70	18	ug/kg	
91-20-3	Naphthalene	ND	350	88	ug/kg	
90-12-0	1-Methylnaphthalene	ND	350	350	ug/kg	
91-57-6	2-Methylnaphthalene	ND	350	350	ug/kg	
85-01-8	Phenanthrene	430	350	180	ug/kg	
129-00-0	Pyrene	678	350	88	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	69%		38-139%
92-94-4	p-Terphenyl	84%		46-149%

(a) All hits confirmed by spectral match using a diode array detector.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-SD-C015-01		
Lab Sample ID:	F18318-4	Date Sampled:	06/25/03
Matrix:	SO - Soil	Date Received:	06/26/03
Method:	EPA 8310 SW846 3550B	Percent Solids:	94.8
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EE016541.D	1	07/08/03	NJ	07/01/03	OP7878	GEE695
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	5.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	700	170	ug/kg	
208-96-8	Acenaphthylene	ND	700	170	ug/kg	
120-12-7	Anthracene	ND	350	170	ug/kg	
56-55-3	Benzo(a)anthracene	410	350	87	ug/kg	
50-32-8	Benzo(a)pyrene	383	70	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	574	70	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	373	70	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	316	70	17	ug/kg	
218-01-9	Chrysene	460	350	87	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	86.2	70	17	ug/kg	
206-44-0	Fluoranthene	807	350	87	ug/kg	
86-73-7	Fluorene	ND	350	170	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	361	70	17	ug/kg	
91-20-3	Naphthalene	ND	350	87	ug/kg	
90-12-0	1-Methylnaphthalene	ND	350	350	ug/kg	
91-57-6	2-Methylnaphthalene	ND	350	350	ug/kg	
85-01-8	Phenanthrene	ND	350	170	ug/kg	
129-00-0	Pyrene	595	350	87	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	70%		38-139%
92-94-4	p-Terphenyl	86%		46-149%

(a) All hits confirmed by spectral match using a diode array detector.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-DU01-SB-04		
Lab Sample ID:	F18318-5	Date Sampled:	06/25/03
Matrix:	SO - Soil	Date Received:	06/26/03
Method:	EPA 8310 SW846 3550B	Percent Solids:	91.8
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EE016542.D	1	07/08/03	NJ	07/01/03	OP7878	GEE695
Run #2							

	Initial Weight	Final Volume
Run #1	29.4 g	5.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	740	190	ug/kg	
208-96-8	Acenaphthylene	ND	740	190	ug/kg	
120-12-7	Anthracene	ND	370	190	ug/kg	
56-55-3	Benzo(a)anthracene	569	370	93	ug/kg	
50-32-8	Benzo(a)pyrene	501	74	19	ug/kg	
205-99-2	Benzo(b)fluoranthene	701	74	19	ug/kg	
191-24-2	Benzo(g,h,i)perylene	487	74	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	323	74	19	ug/kg	
218-01-9	Chrysene	556	370	93	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	95.3	74	19	ug/kg	
206-44-0	Fluoranthene	1530	370	93	ug/kg	
86-73-7	Fluorene	ND	370	190	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	445	74	19	ug/kg	
91-20-3	Naphthalene	ND	370	93	ug/kg	
90-12-0	1-Methylnaphthalene [b]	ND	740	740	ug/kg	
91-57-6	2-Methylnaphthalene [b]	ND	740	740	ug/kg	
85-01-8	Phenanthrene	797	370	190	ug/kg	
129-00-0	Pyrene	1070	370	93	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	75%		38-139%
92-94-4	p-Terphenyl	94%		46-149%

(a) All hits confirmed by spectral match using a diode array detector.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 2322 | PAGE 1 OF 1

PROJECT NO: N3996, CTO 168	FACILITY: Bldg 312 OWS, NASCF	PROJECT MANAGER: PAUL CALLIGAN	PHONE NUMBER: 813 806 0202
LABORATORY NAME AND CONTACT: ACCUTEST Sue Bell			
SAMPLERS (SIGNATURE): Pete [illegible] / Scott R. McGuire		FIELD OPERATIONS LEADER: MELV DAVIS	PHONE NUMBER: 904 636 6125
ADDRESS: 4405 Vineland Rd. C-15			
CARRIER/WAYBILL NUMBER: Fedex		CITY, STATE: ORLANDO, FL 32811	

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

CONTAINER TYPE PLASTIC (P) or GLASS (G): G
PRESERVATIVE USED: None

F18318

	DATE YEAR 2003	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS: PAHs SW846 8310	COMMENTS
1	6/25	1348	CEF-312-SD-C012-01		#	1'	SO	G	1	1	Cool to 4°C
2	6/25	1350	CEF-312-SD-C013-01			1'	SO	G	1	1	
3	6/25	1352	CEF-312-SD-C014-01			1'	SO	G	1	1	Work Release
4	6/25	1354	CEF-312-SD-C015-01			1'	SO	G	1	1	~~A13956~~ PL
5	6/25	0000	CEF-312-DU01-SB-04			—	SO	G	1	1	

1. RELINQUISHED BY: Pete [illegible]	DATE: 6/25/03	TIME: 1700	1. RECEIVED BY: FED EXP.	DATE	TIME
2. RELINQUISHED BY: FED EXP.	DATE	TIME	2. RECEIVED BY: Muna Mohammed	DATE: 06/26/03	TIME: 0945
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS: 4.0, 2.0, 2.6, 3.0, 3.2.

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

4/02R
FORM NO. TtNUS-001

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F18318

Client: Tetra Tech Project: Bldg. 312

Date Received: 6/26/03 Time Received: 0945

# of Coolers Received: 5 Cooler Temperatures: 4.0, 2.0, 2.6, 3.0, 3.2

Delivery Method: FedEx UPS Accutest Courier Greyhound Delivery Other

Air Bill Number:

Cooler Custody Seals Intact ?	Yes	No	
Chain of Custody Provided ?	Yes	No	
COC Match Bottle Label ID's ?	Yes	No	
Sample Labels Present on all bottles ?	Yes	No	
All Analyses Marked On COC ?	Yes	No	
Are All Bottles Intact ?	Yes	No	
Samples Preserved Correctly ?	Yes	No	
Correct Number of Containers Used ?	Yes	No	
Sufficient Sample Volume ?	Yes	No	
Trip Blank Provided ?	Yes	No	
Trip Blank on COC ?	Yes	No	
Trip Blank Intact ?	Yes	No	N/A
Trip Blank Matrix ?	Soil	Water	N/A
Number of Encores ?	0		
Number of Soil Field Kits ?	0		

Summary of Comments:

Signature: Muna Mohammed Date: 6/26/03.

ASBD/HW 05/11/03

ATTACHMENT G

MONITORING WELL FIELD DATA SHEETS

Tetra Tech NUS, Inc.

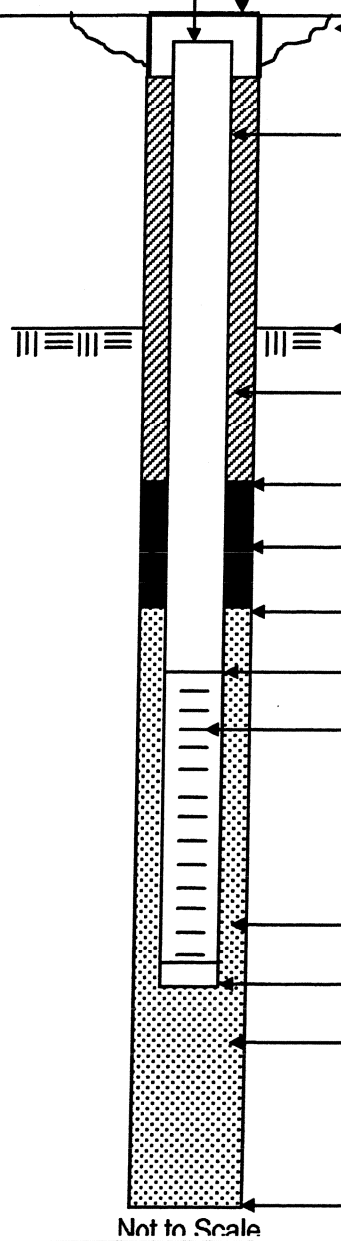
WELL No.: CEF-312LS-5S

MONITORING WELL SHEET

PROJECT:	NAS CECIL FIELD	DRILLING Co.:	TRANSAMERICAN	BORING No.:	001
PROJECT No.:	~~0039~~ 3996	DRILLER:	G. HEARNE	DATE COMPLETED:	2/5/03
SITE:	B.312, OWS	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	M. DALE	DEV. METHOD:	Centrifugal	EASTING:	

Ground Elevation =

Datum:



Not to Scale

Elevation / Depth of Top of Riser: 12" BLS

Elevation / Height of Top of Surface Casing: 10' BLS

I.D. of Surface Casing: 8 inch

Type of Surface Casing: Steel, boltdown manhole

Type of Surface Seal: QuikRete 2'x2'x6" PAD

I.D. of Riser: 1 inch

Type of Riser: Sch. 40 PVC

Borehole Diameter: 3.25 inch

Elevation / Depth Top of Rock: N/A

Type of Backfill: Type I Portland Cement

Elevation / Depth of Seal: 11.5' bls

Type of Seal: 30/65 FINE SAND

Elevation / Depth of Top of Filter Pack: 13' BLS

Elevation / Depth of Top of Screen: 14' BLS

Type of Screen: Sch. 40 PVC

Slot Size x Length: 0.010 inch x 10 FT.

I.D. of Screen: 1 inch

Type of Filter Pack: 20/30 Sand

Elevation / Depth of Bottom of Screen: 114' BLS

Elevation / Depth of Bottom of Filter Pack: 114' BLS

Type of Backfill Below Well: NATIVE SOIL

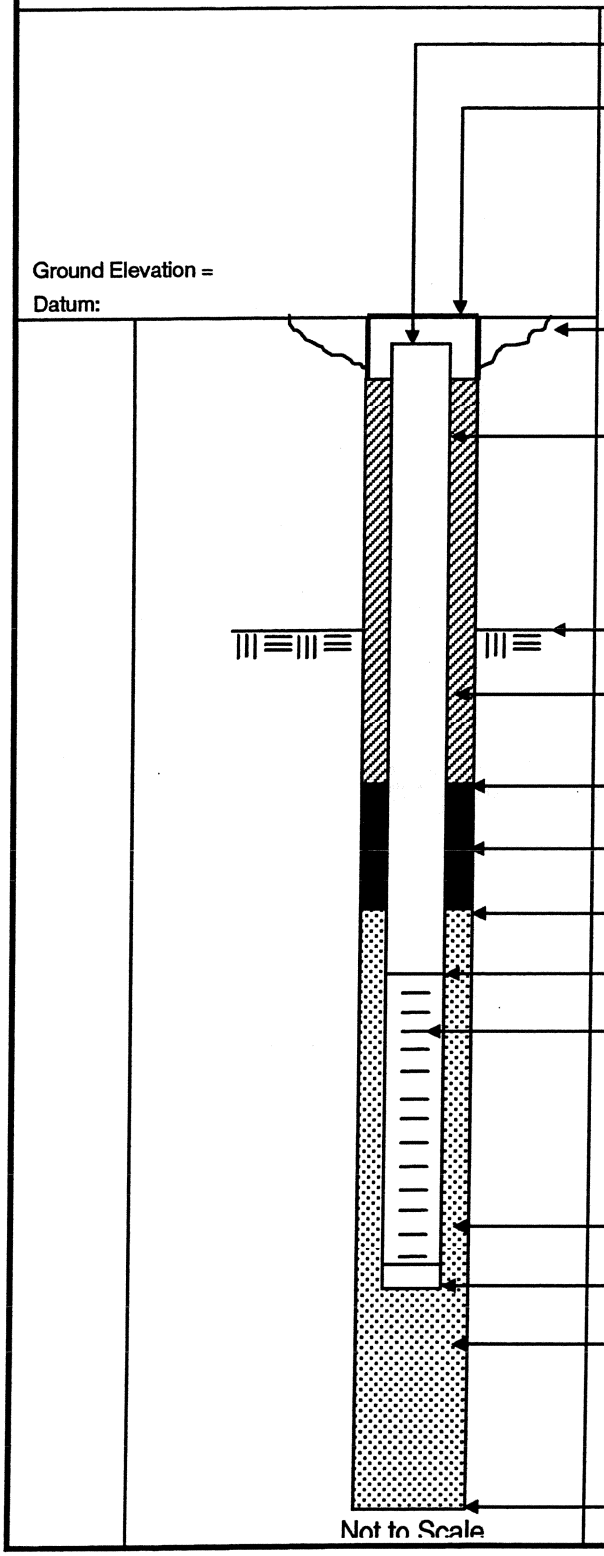
Elevation / Total Depth of Borehole: 114' BLS

Tetra Tech NUS, Inc.

WELL No.: CEF-312LS-6S

MONITORING WELL SHEET

PROJECT:	NAS CECIL FIELD	DRILLING Co.:	TRANSAMERICAN	BORING No.:	002
PROJECT No.:	~~0039~~ 3996	DRILLER:	G. HEARNE	DATE COMPLETED:	2/5/03
SITE:	B. 312, OWS	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	M. DALE	DEV. METHOD:	CENTRIFUGAL	EASTING:	



Elevation / Depth of Top of Riser: 12" BLS

Elevation / Height of Top of Surface Casing: 10' BLS

I.D. of Surface Casing: 8 inch

Type of Surface Casing: Steel, bolt down manhole

Type of Surface Seal: Quikrete

I.D. of Riser: 1 inch

Type of Riser: Sch. 40 PVC

Borehole Diameter: 3.25 inch

Elevation / Depth Top of Rock: N/A

Type of Backfill: Type I Portland cement

Elevation / Depth of Seal: ~11.5' BLS

Type of Seal: 30/65 Fine Sand

Elevation / Depth of Top of Filter Pack: 13' BLS

Elevation / Depth of Top of Screen: 14' BLS

Type of Screen: Sch. 40 PVC

Slot Size x Length: 0.010 inch x 10 FT.

I.D. of Screen: 1 inch

Type of Filter Pack: 20/30 Sand

Elevation / Depth of Bottom of Screen: 114' BLS

Elevation / Depth of Bottom of Filter Pack: 114' BLS

Type of Backfill Below Well: NATIVE SOIL

Elevation / Total Depth of Borehole: 114' BLS

MONITORING WELL MATERIALS
CERTIFICATE OF CONFORMANCE

Well Designation: CEF-312LS-55'
Site Name: Bldg. 312, OWS 312-OW
Date Installed: 2/5/03
Project Name: Bldg. 312, Oil-Water Separator Sar.

Site Geologist: Mervin W. Dale
Drilling Company: Transamerican
Driller: George Hearne
Project Number: N3996, G0168

Material	Brand/Description	Source/Supplier	Sample Collected ?
Well Casing	Sch. 40 PVC, 1" DIAM.	MONOFLEX, BOSTON, MA	NO
Well Screen	Sch. 40 PVC, 1" I.D., 2.5" O.D., 10', 10 SLOT,	PREPACK MONOFLEX, BOSTON, MA	NO
End Cap	Sch. 40 PVC	MONOFLEX BOSTON, MA	NO
Drilling Fluid	None		
Drilling Fluid Additives	None		
Backfill Material	None		
Annular Filter Pack	20/30 GRADE SAND	Standard Sand, JAX, FL	NO
Bentonite Seal	None		
Annular Grout	Portland Cement Type I	Quikrete Co, Atlanta, GA	NO
Surface Cement	Quikrete	Quikrete Co., Atlanta, GA	NO
Protective Casing	Steel, 8 IN. bolt down manhole	PEMCO, Hialeah, FL	NO
Paint	None		
Rod Lubricant	None		
Compressor Oil	None		
Well seal	30/65 Fine Sand	Standard Sand, JAX, FL	NO

To the best of my knowledge, I certify that the above described materials were used during installation of this monitoring well.

Signature of Site Geologist: Mervin W. Dale

MONITORING WELL MATERIALS
CERTIFICATE OF CONFORMANCE

Well Designation: CEF-312LS-6S
Site Name: BLDG 312, OWS 312-OW
Date Installed: 2/5/03
Project Name: Bldg. 312, OIL-WATER SEPARATOR SAR

Site Geologist: MERVIN W. DALE
Drilling Company: TRANSAMERICAN
Driller: GEORGE HEARNE
Project Number: N3996, CTO 168

Material	Brand/Description	Source/Supplier	Sample Collected ?
Well Casing	Sch. 40 PVC, 1" DIAM.	MONOFLEX, BOSTON, MA	NO
Well Screen	Sch. 40 PVC, 1" I.D., 2.5" O.D., 10', 10 SLOT	MONOFLEX, BOSTON, MA	NO
End Cap	Sch. 40 PVC	MONOFLEX, BOSTON, MA	NO
Drilling Fluid	NONE		
Drilling Fluid Additives	NONE		
Backfill Material	NONE		
Annular Filter Pack	20/30 GRADE SAND	STANDARD SAND, JAX, FL	NO
Bentonite Seal	None		
Annular Grout	PORTLAND, TYPE I CEMENT	QUIKRETE CO., ATLANTA, GA	NO
Surface Cement	QUIKRETE	QUIKRETE CO., ATLANTA, GA	NO
Protective Casing	STEEL, 8 IN. BOLTDOWN MANHOLE	PEMCO, HIALEAH, FL	NO
Paint	None		
Rod Lubricant	None		
Compressor Oil	None		
WELL SEAL	30/65 FINE SAND	STANDARD SAND, JAX, FL	NO

To the best of my knowledge, I certify that the above described materials were used during installation of this monitoring well.

Signature of Site Geologist: Mervin W. Dale

ATTACHMENT H

MARCH 2003 GROUNDWATER LABORATORY REPORT

Southeast ACCUTEST Laboratories

04/14/03

Technical Report for

Tetra Tech, NUS

Cecil Field CTO168

WORK RELEASE 316 N3996

Accutest Job Number: F16963

Report to:

Total number of pages in report: 111

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

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Southeast • 4405 Vineland Road • Suite C-15 • Orlando, FL 32811 • tel: 407-425-6700 • fax: 407-425-0707 • http://www.accutest.com

Sample Summary

Tetra Tech, NUS

Job No: F16963

Cecil Field CTO168
Project No: WORK RELEASE 316 N3996

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F16963-1	03/14/03	11:40	MD	03/15/03	AQ	Ground Water	CEF-312-GW-5S-02
F16963-2	03/14/03	11:45	MD	03/15/03	AQ	Ground Water	CEF-312-GW-6S-02

Report of Analysis

Client Sample ID:	CEF-312-GW-5S-02		
Lab Sample ID:	F16963-1	Date Sampled:	03/14/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0015106.D	1	03/25/03	KW	n/a	n/a	VC665
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.70	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-GW-5S-02		
Lab Sample ID:	F16963-1	Date Sampled:	03/14/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		86-115%
17060-07-0	1,2-Dichloroethane-D4	103%		78-125%
2037-26-5	Toluene-D8	102%		87-113%
460-00-4	4-Bromofluorobenzene	106%		84-117%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-312-GW-5S-02		
Lab Sample ID:	F16963-1	Date Sampled:	03/14/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W014541.D	1	03/20/03	MRE	03/19/03	OP7159	SW766
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	2.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	2.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.1	2.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.6	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	25	10	ug/l	
87-86-5	Pentachlorophenol	ND	25	10	ug/l	
108-95-2	Phenol	ND	5.1	2.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	2.0	ug/l	
92-87-5	Benzidine	ND	51	25	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.1	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.1	2.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	2.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.1	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.1	2.0	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.1	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.1	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.1	1.0	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.1	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.1	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.1	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.1	2.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.1	2.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.1	2.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.1	2.5	ug/l	
84-66-2	Diethyl phthalate	ND	5.1	2.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.1	2.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.1	2.5	ug/l	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-GW-5S-02		
Lab Sample ID:	F16963-1	Date Sampled:	03/14/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	5.1	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.1	2.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.1	2.0	ug/l	
67-72-1	Hexachloroethane	ND	5.1	2.0	ug/l	
78-59-1	Isophorone	ND	5.1	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.1	1.0	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.1	2.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.1	2.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	47%		19-90%
4165-62-2	Phenol-d5	31%		10-68%
118-79-6	2,4,6-Tribromophenol	86%		36-137%
4165-60-0	Nitrobenzene-d5	76%		49-119%
321-60-8	2-Fluorobiphenyl	77%		45-118%
1718-51-0	Terphenyl-d14	100%		46-135%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-312-GW-5S-02		
Lab Sample ID:	F16963-1	Date Sampled:	03/14/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	SW846 8270C BY SIM SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001420.D	1	03/27/03	ME	03/19/03	OP7161	SF90
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	0.51	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.51	ug/l	
120-12-7	Anthracene	ND	1.0	0.25	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.20	0.10	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.20	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.20	0.10	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.20	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.20	0.10	ug/l	
218-01-9	Chrysene	ND	0.20	0.10	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	0.10	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.25	ug/l	
86-73-7	Fluorene	ND	1.0	0.25	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	0.10	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	1.0	0.25	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.25	ug/l	
129-00-0	Pyrene	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	87%		49-119%
321-60-8	2-Fluorobiphenyl	86%		45-118%
1718-51-0	Terphenyl-d14	99%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-GW-5S-02		
Lab Sample ID:	F16963-1	Date Sampled:	03/14/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	EPA 504.1 EPA 504	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB24899.D	1	03/18/03	SKW	03/17/03	OP7142	GAB912
Run #2							

	Initial Volume	Final Volume
Run #1	35.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.0098	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	112%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-GW-5S-02		
Lab Sample ID:	F16963-1	Date Sampled:	03/14/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	FLORIDA-PRO SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28034.D	1	03/24/03	SM	03/18/03	OP7152	GOP954
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	ND	0.25	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%		51-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-312-GW-5S-02		
Lab Sample ID:	F16963-1	Date Sampled:	03/14/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
		Percent Solids:	n/a
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	03/24/03	03/25/03	DM	SW846 6010B	SW846 3010A
Cadmium	0.26 U	5.0	0.26	ug/l	1	03/24/03	03/25/03	DM	SW846 6010B	SW846 3010A
Chromium	0.78 B	10	0.43	ug/l	1	03/24/03	03/25/03	DM	SW846 6010B	SW846 3010A
Lead	1.2 U	5.0	1.2	ug/l	1	03/24/03	03/25/03	DM	SW846 6010B	SW846 3010A

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-312-GW-6S-02		
Lab Sample ID:	F16963-2	Date Sampled:	03/14/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0015109.D	1	03/25/03	KW	n/a	n/a	VC665
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.70	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-GW-6S-02		
Lab Sample ID:	F16963-2	Date Sampled:	03/14/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Cecil Field CTO168		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		86-115%
17060-07-0	1,2-Dichloroethane-D4	103%		78-125%
2037-26-5	Toluene-D8	103%		87-113%
460-00-4	4-Bromofluorobenzene	108%		84-117%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) No TICs detected.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-312-GW-6S-02		
Lab Sample ID:	F16963-2	Date Sampled:	03/14/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W014555.D	1	03/21/03	MRE	03/19/03	OP7159	SW767
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.2	2.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.2	2.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.2	2.1	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.2	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.8	ug/l	
88-75-5	2-Nitrophenol	ND	5.2	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	26	10	ug/l	
87-86-5	Pentachlorophenol	ND	26	10	ug/l	
108-95-2	Phenol	ND	5.2	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.2	2.1	ug/l	
92-87-5	Benzidine	ND	52	26	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	2.1	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.2	2.1	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	2.1	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.2	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.2	1.0	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.2	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.2	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.2	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.2	2.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.2	2.1	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.2	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.2	2.1	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.2	2.6	ug/l	
84-66-2	Diethyl phthalate	ND	5.2	2.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	2.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.2	2.6	ug/l	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-GW-6S-02		
Lab Sample ID:	F16963-2	Date Sampled:	03/14/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

ABN PPL List w/o PAHs

CAS No.	Compound	Result	RL	MDL	Units	Q
118-74-1	Hexachlorobenzene	ND	5.2	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.2	2.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.2	2.1	ug/l	
67-72-1	Hexachloroethane	ND	5.2	2.1	ug/l	
78-59-1	Isophorone	ND	5.2	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.2	1.0	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.2	2.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.2	2.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	2.1	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	48%		19-90%
4165-62-2	Phenol-d5	31%		10-68%
118-79-6	2,4,6-Tribromophenol	84%		36-137%
4165-60-0	Nitrobenzene-d5	73%		49-119%
321-60-8	2-Fluorobiphenyl	69%		45-118%
1718-51-0	Terphenyl-d14	83%		46-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	8.84	18	ug/l	J
	Total TIC, Semi-Volatile		18	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-312-GW-6S-02		
Lab Sample ID:	F16963-2	Date Sampled:	03/14/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	SW846 8270C BY SIM SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F001423.D	1	03/27/03	ME	03/19/03	OP7161	SF90
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.1	0.53	ug/l	
208-96-8	Acenaphthylene	ND	1.1	0.53	ug/l	
120-12-7	Anthracene	ND	1.1	0.27	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.21	0.11	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.21	0.11	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.21	0.11	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.21	0.11	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.21	0.11	ug/l	
218-01-9	Chrysene	ND	0.21	0.11	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.21	0.11	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.27	ug/l	
86-73-7	Fluorene	ND	1.1	0.27	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.21	0.11	ug/l	
90-12-0	1-Methylnaphthalene	5.2	1.1	0.27	ug/l	
91-57-6	2-Methylnaphthalene	5.1	1.1	0.27	ug/l	
91-20-3	Naphthalene	9.7	1.1	0.27	ug/l	
85-01-8	Phenanthrene	ND	1.1	0.27	ug/l	
129-00-0	Pyrene	ND	1.1	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		49-119%
321-60-8	2-Fluorobiphenyl	86%		45-118%
1718-51-0	Terphenyl-d14	94%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-GW-6S-02		
Lab Sample ID:	F16963-2	Date Sampled:	03/14/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	EPA 504.1 EPA 504	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB24902.D	1	03/18/03	SKW	03/17/03	OP7142	GAB912
Run #2							

	Initial Volume	Final Volume
Run #1	38.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0090	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-312-GW-6S-02		
Lab Sample ID:	F16963-2	Date Sampled:	03/14/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	FLORIDA-PRO SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field CTO168		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP28037.D	1	03/24/03	SM	03/18/03	OP7152	GOP954
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.324	0.27	0.18	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	100%		51-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-312-GW-6S-02		
Lab Sample ID:	F16963-2	Date Sampled:	03/14/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
		Percent Solids:	n/a
Project:	Cecil Field CTO168		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	2.8 U	10	2.8	ug/l	1	03/24/03	03/25/03	DM	SW846 6010B	SW846 3010A
Cadmium	0.26 U	5.0	0.26	ug/l	1	03/24/03	03/25/03	DM	SW846 6010B	SW846 3010A
Chromium	0.43 U	10	0.43	ug/l	1	03/24/03	03/25/03	DM	SW846 6010B	SW846 3010A
Lead	1.2 U	5.0	1.2	ug/l	1	03/24/03	03/25/03	DM	SW846 6010B	SW846 3010A

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 2238 | PAGE 1 OF 1

PROJECT NO: N3996 CTO 168	FACILITY: Bldg 312 OWS CECIL FIELD	PROJECT MANAGER: PAUL CALLIGAN	PHONE NUMBER: 813 806 0202
LABORATORY NAME AND CONTACT: ACCUTEST Sue Bell	SAMPLERS (SIGNATURE): [signature] Charles [signature]	FIELD OPERATIONS LEADER: MELV DAVE	PHONE NUMBER: 904 636 6125
ADDRESS: 4405 Vineland Rd. C-15	CARRIER/WAYBILL NUMBER: Fedex 8371 1005 6782/8778	CITY, STATE: ORLANDO, FL 32811	

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

F16963

	DATE YEAR 2003	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	PPVO w/ TICS SW846 8260B	PPEO w/ TICS SW846 8270C	TRPH FL-PRO	EDB	TOTAL METALS * SW846 6010B				COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)										G	G	G	G	P				
PRESERVATIVE USED										HCl	None	H_2SO_4	None	HNO_3				
1	3/14	1140	CEF-312-GW-5S-02 **				GW	G	39	9	6	6	9	9				Cool to 4°C
2	3/14	1145	CEF-312-GW-6S-02				GW	G	12	3	2	2	3	2				

~~Work Release~~ MA
~~& resampling~~ MA

* Arsenic, Cadmium, Chromium, & Lead.

Work Release N3996 WR316

** use for MSMSD

1. RELINQUISHED BY: [signature]	DATE: 3/14/03	TIME: 1500	1. RECEIVED BY: Fedex	DATE	TIME
2. RELINQUISHED BY: FEDEX	DATE	TIME	2. RECEIVED BY: [signature]	DATE: 3/15/03	TIME: 0915
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY) 2.6, 2.0

4/02R FORM NO. TtNUS-001