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TECHNICAL MEMORANDUM FOURTH QUARTER 2005 OPERATIONS AND MAINTENANCE STATUS REPORT FOR SOUTH FUEL FARM NAS CECIL FIELD FL

3/21/2006

CH2MHILL CONSTRUCTORS INC

Fourth Quarter 2005 Operations and Maintenance Status Report South Fuel Farm, Naval Air Station, Cecil Field, Jacksonville, Florida

PREPARED FOR: NAVFAC EFD SOUTH

PREPARED BY: David Beverly/CH2M HILL

COPIES: Sam Naik/CH2M HILL

DATE: March 21, 2006

CH2M HILL Constructors, Inc. (CH2M HILL) has been contracted by the Department of the Navy, Naval Facilities Engineering Command, Southern Division (NAVFAC EFD SOUTH) to provide operations and maintenance (O&M) services at the South Fuel Farm (SFF), Former Naval Air Station (NAS) Cecil Field, Jacksonville, Florida, under Response Action Contract No. N62467-98-D-0995, Contract Task Order (CTO) No. 0086.

Bioventing and biosparging systems were installed at SFF to reduce petroleum hydrocarbon contaminant concentrations in site groundwater and unsaturated soils. The purpose of this Technical Memorandum is to provide a summary of the O&M activities performed at the site during the period of October 1, 2005, to December 31, 2005. The locations of the bioventing and biosparging systems are shown on Figure 1.

Remedial Action Objective

The objective of the remedial action at the SFF is to reduce the concentrations of petroleum contaminants in the groundwater and unsaturated soils to Florida Department of Environmental Protection (FDEP) Groundwater Cleanup Target Levels (GCTLs) and Soil Cleanup Target Levels (SCTLs), respectively, as specified in Tables I and II of Chapter 62-777, Florida Administrative Code (FAC). Bioventing and biosparging systems have been installed and are currently operational at the site to achieve this objective.

System Performance Monitoring

Routine O&M checks of the system were performed weekly. During an O&M check, a preventative maintenance checklist (based upon manufacturer's recommendations) was completed, and any required maintenance activity was performed. The meters and gauges in the equipment area were read and recorded during the O&M check on a weekly basis. The meters and gauges in the bioventing and biosparging well vaults were read and recorded during the O&M check on a monthly basis.

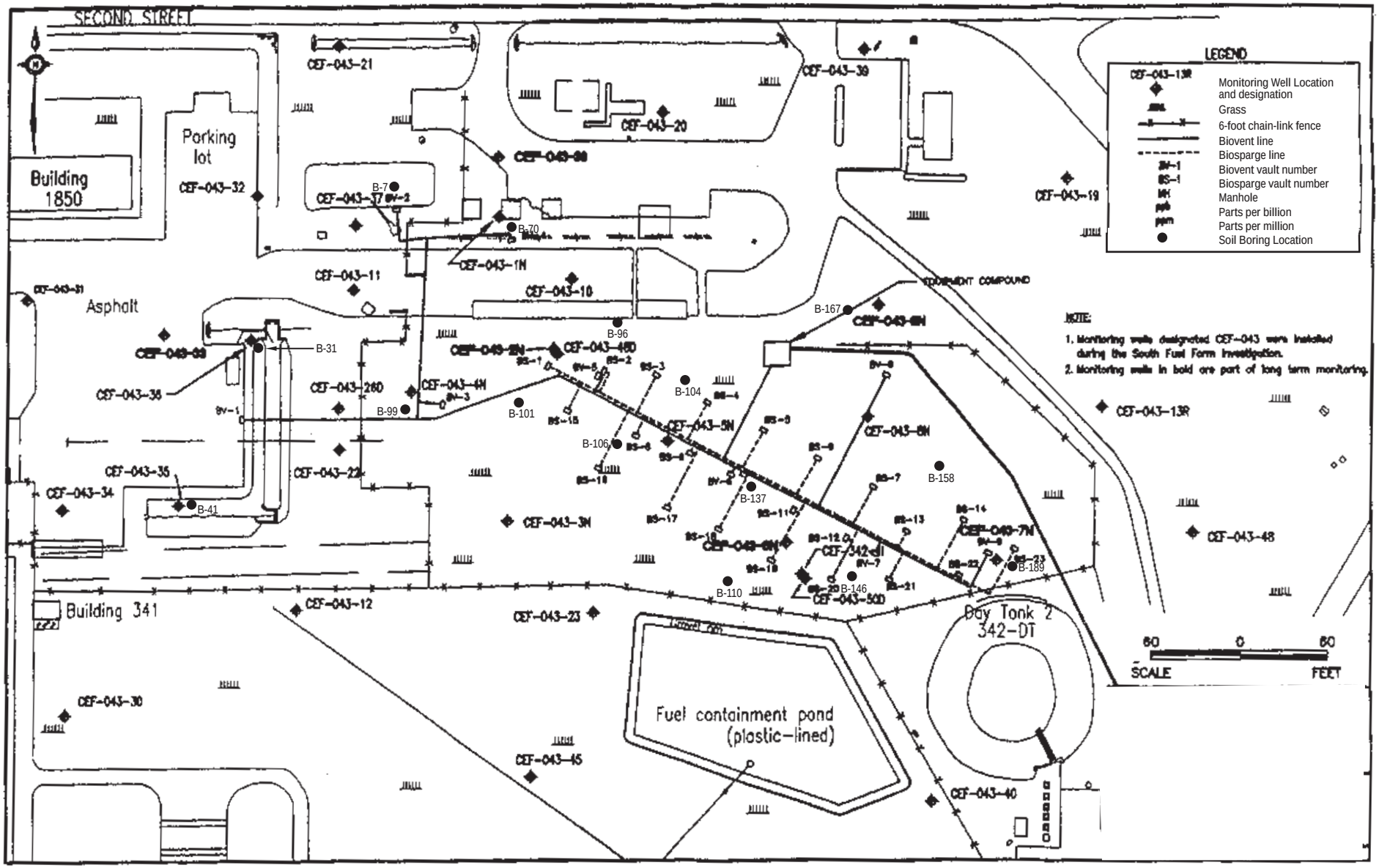


FIGURE 1
Site Plan
South Fuel Farm
NAS Cecil Field
Jacksonville, Florida

During the O&M activities, the injection pressures and individual well air flow rates were adjusted and rebalanced in attempt to achieve the design specifications.

Operational Efficiencies

Bioventing System

	Operational Period	To Date
Hours of Possible Operation	2208	67848
Hours of Actual Operation	2208	51462.3
Percent Hours of Operation	100%	75.8%

Biosparging System

	Operational Period	To Date
Hours of Possible Operation	2208	67848
Hours of Actual Operation	1291.1	55299.9
Percent Hours of Operation	58.5%	81.5%

Summary of Maintenance and System Downtime

Bioventing System

During the 4th quarter 2005, the bioventing system ran a total of 92 days out of a possible 92 days, resulting in 0 hours of downtime.

Biosparging System

During the 4th quarter 2005, the biosparging system ran a total of 53.8 days out of a possible 92 days, resulting in 916.9 hours of downtime. The biosparging system downtime is detailed as follows:

- Down for a total of 823 hours due to a motor fault alarm on the biosparging air compressor. After each occurrence the air compressor was inspected and restarted.
- Electric motor failure on the biosparging air compressor resulting in a total of 93.9 hours downtime.

Pressure/Flow Rate Monitoring

Bioventing System

During the 4th quarter 2005, the blower discharge pressure averaged 50.3 inches of water compared to the design blower discharge pressure of 40 inches of water. The total air injection flow rate at the blower averaged 65 standard cubic feet per minute (scfm), compared to the design blower flow rate of 80 scfm. Bioventing system data for the 4th quarter 2005 are summarized in Table 1.

TABLE 1
Bioventing System Data

Date	Blower Discharge Pressure (inches of water)	Blower Discharge Temperature (^oF)	Blower Air Flow Rate (scfm)
10/6/2005	52	138	55
11/21/2005	48	118	65
12/2/2005	50	112	70
12/9/2005	50	99	65
12/16/2005	50	110	67
12/21/2005	52	114	65
12/30/2005	50	121	65

^oF - degrees Fahrenheit

scfm - standard cubic feet per minute

Biosparging System

During the 4th quarter 2005, the injection header discharge pressure averaged 15.3 pounds per square inch (psig), compared to the design injection pressure of 15 psig. The 4th quarter 2005 biosparging system data are tabulated in Table 2.

TABLE 2
Biosparging System Data

Date	Air Compressor Supply Pressure (psig)	Air Compressor Discharge Temperature (^oF)	Receiver Tank Supply Pressure (psig)	Header Discharge Pressure (psig)
10/6/2005	105	200	95	15
11/21/2005	100	195	90	16
12/2/2005	105	80	90	15
12/9/2005	110	180	90	16
12/16/2005	100	185	90	15
12/21/2005	100	185	95	15
12/30/2005	NM	NM	NM	NM

psig - pounds per square inch gauge

^oF - degrees Fahrenheit

NM – Not measured; resulting from blown fuses and damaged contacts.

Water Level Measurements

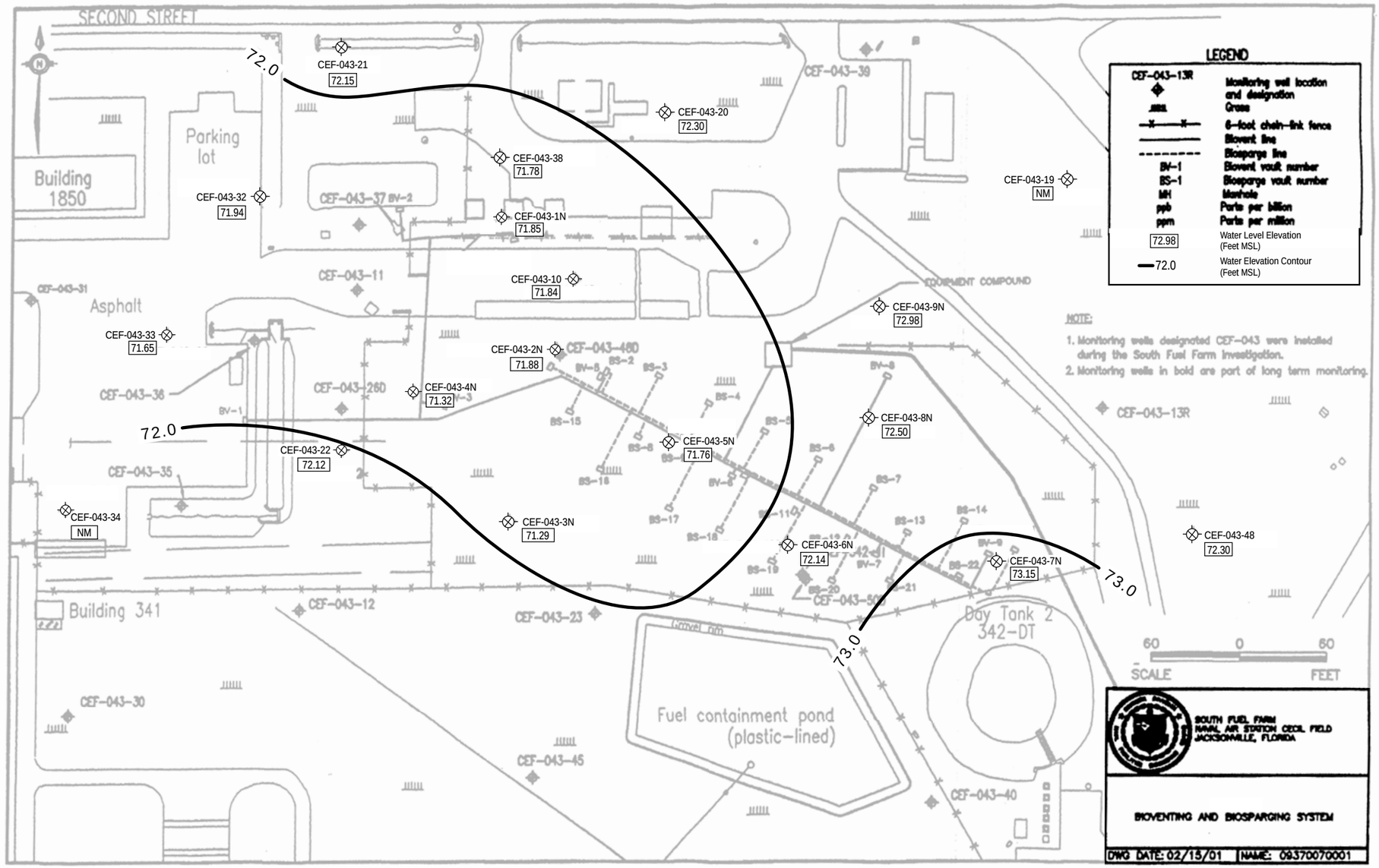
Groundwater elevation measurements were recorded on a monthly basis from 20 monitoring wells during the 4th quarter 2005. The results from the 4th quarter 2005 groundwater level measurement surveys are provided in Table 3. Light non-aqueous phase liquid (LNAPL) was not detected in monitoring wells during the 4th quarter 2005.

The potentiometric surface of the groundwater at the site based on December 21, 2005 water levels is depicted on Figure 2. In general, the groundwater flow in the vicinity of the bioventing and biosparging systems is radially to the north, south, and east.

TABLE 2-3
Water Level Measurements

Well Identification	Date	Top of Casing Elevation (feet NGVD)	Depth to Water (feet bls)	Water Level Elevation (feet NGVD)
CEF-043-1N	12/21/2005	78.15	6.30	71.85
CEF-043-2N	12/21/2005	78.00	6.12	71.88
CEF-043-3N	12/21/2005	78.26	6.97	71.29
CEF-043-4N	12/21/2005	78.07	6.75	71.32
CEF-043-5N	12/21/2005	78.46	6.70	71.76
CEF-043-6N	12/21/2005	77.79	5.65	72.14
CEF-043-7N	12/21/2005	77.61	4.46	73.15
CEF-043-8N	12/21/2005	78.41	5.91	72.50
CEF-043-9N	12/21/2005	77.50	4.52	72.98
CEF-043-10	12/21/2005	78.55	6.71	71.84
CEF-043-19	12/21/2005	78.47	NM	NM
CEF-043-20	12/21/2005	78.59	6.29	72.30
CEF-043-21	12/21/2005	76.71	4.56	72.15
CEF-043-22	12/21/2005	77.24	5.12	72.12
CEF-043-32	12/21/2005	76.53	4.59	71.94
CEF-043-33	12/21/2005	76.97	5.32	71.65
CEF-043-34	12/21/2005	76.84	NM	NM
CEF-043-38	12/21/2005	77.62	5.84	71.78
CEF-043-48	12/21/2005	77.10	4.80	72.30
CEF-043-50D	12/21/2005	77.23	7.19	70.04

bls - below land surface
NGVD - National Geodetic Vertical Datum 1929 (NGVD 1929)
NM – not measured



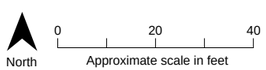


FIGURE 2
Potentiometric Surface Map - December 5, 2005
South Fuel Farm
Former Naval Air Station, Cecil Field
Jacksonville, Florida

Summary of Sampling and Laboratory Analytical Results

Soil Monitoring

Soil screening and sampling is conducted on an annual basis in the 4th quarter of each year. The 2005 annual soil screening and sampling event was performed on December 1, 2005. Fifteen soil borings were installed at the locations shown on Figure 1. The soil was screened using an organic vapor analyzer (OVA) equipped with a flame ionization detector (FID) at depths from 2 to 4 feet bls. The water table was encountered at 4 to 5 feet bls. The OVA/FID readings are tabulated in Table 4. Soil borings B-41 and B-167 exhibited net OVA/FID readings in excess of 50 parts per million (ppm).

One laboratory soil sample was collected from each of the 15 soil borings at the depth interval with the highest net OVA/FID reading. These soil samples were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) and methyl tert butyl ether (MTBE) by U.S. Environmental Protection Agency (EPA) Method 8260B, naphthalene and polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8310, and total recoverable petroleum hydrocarbon (TRPH) by the Florida Petroleum Residual Organic (FL PRO) Method. The analytical results are summarized in Table 5. Historical soil analytical results are presented in Table A-1 of Attachment A. The analytical laboratory report from the soil sampling event is provided in Attachment B.

The results indicated that TRPH was detected at concentrations that exceeded the Leachability-based Groundwater Criteria and the Direct Exposure Residential SCTLs in soil samples from two boring locations (B-41 and B-104). However, analyses of Total Hydrocarbon Criteria Working Group Analyses (THCWGA) was performed on the B-41 and B-104 soil samples and indicated that the concentrations of the individual fractions of TRPH are below their respective SCTLs. In addition, benzo(a)pyrene and dibenz(a,h)-athracene in boring B-70 exceeded the Direct Exposure Residential SCTL. With the exception of TRPH in boring B-41, this is the first time these parameters were detected in their associated borings at concentrations above the regulatory standard. TRPH concentrations in boring B-41 show a decreasing trend since 2003.

TABLE 4
Soil Screening OVA Readings

Soil Boring Number	Date	Depth (feet bls)	Unfiltered OVA Reading (ppm)	Filtered OVA Reading (ppm)	Net OVA Reading (ppm)
B-7	12/01/05	2	29.9	4.7	25.2
		4	26	4.12	21.88
B-31	12/01/05	2	3.5	0	3.5
		4	2.84	0	2.84
B-41	12/01/05	2	2.31	0	2.31
		4	**257**	3.2	**253.8**
B-70	12/01/05	2	2.56	0	2.56
		4	2.2	0	2.2
B-96	12/01/05	2	1.11	0	1.11
		4	1.56	0	1.56
B-99	12/01/05	2	1.43	0	1.43
		4	8.65	0	8.65
B-101	12/01/05	2	1.01	0	1.01
		4	2.57	0	2.57
B-104	12/01/05	2	2.3	0	2.3
		4	11.24	0	11.24
B-106	12/01/05	2	1.42	0	1.42
		4	0.91	0	0.91
B-110	12/01/05	2	1.27	0	1.27
		4	1.34	0	1.34
B-137	12/01/05	2	1.21	0	1.21
		4	1.49	0	1.49
B-146	12/01/05	2	1.46	0	1.46
		4	1.12	0	1.12
B-158	12/01/05	2	0.41	0	0.41
		4	1.01	0	1.01
B-167	12/01/05	2	0.31	0	0.31
		4	**1265**	0	**1265**
B-189	12/01/05	2	0.22	0	0.22
		4	0.24	0	0.24

OVA = organic vapor analyzer
bls = below land surface
ppm = parts per million
Filtered readings obtained using an activated charcoal filter
Net Reading = unfiltered reading - filtered reading
OVA readings taken using an OVA meter equipped with a flame ionization detector (FID).
Bolded values indicate the Net OVA readings that exceed 50 ppm.

TABLE 5
Soil Analytical Results
South Fuel Farm; 4th Quarter 2005

			Leachability to GW Criteria[1]	0.007	0.6	0.5	0.2	0.09	1.2	2.2	6.1	2.1	27
			Direct Exposure Residential[1]	1.2	1500	7500	130	4200	55	200	210	2400	1800
Station ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Benzene	Ethylbenzene	Toluene	Xylenes, total	tert-butyl methyl ether	Naphthalene	1-methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene
				Unit in mg/kg									
B-7	86-B7-S-1201-05	2	12/1/2005	0.00493 U	0.00493 U	0.00493 U	0.00986 U	0.00493 U	0.00933 U	0.0374 U	0.0374 U	0.0374 U	0.0374 U
B-31	86-B31-S-1201-05	2	12/1/2005	0.00517 U	0.00517 U	0.00517 U	0.0103 U	0.00517 U	0.0216 J	0.0359 U	0.0359 U	0.0232 J	0.0359 U
B-41	86-B41-S-1201-05	4	12/1/2005	0.23 U	0.23 U	0.23 U	0.459 U	0.23 U	0.112 J	1.75 J	1.38 J	0.189 U	0.0322 J
B-70	86-B70-S-1201-05	4	12/1/2005	0.00263 J	0.00123 J	0.00451 J	0.00569 J	0.00529 U	0.0873 U	0.35 U	0.35 U	0.35 U	0.35 U
B-96	86-B96-S-1201-05	4	12/1/2005	0.249 U	0.249 U	0.249 U	0.498 U	0.249 U	0.017 U	0.0682 U	0.0682 U	0.0682 U	0.0682 U
B-99	86-B99-S-1201-05	4	12/1/2005	0.00439 U	0.00439 U	0.00439 U	0.00879 U	0.00439 U	0.0376 J	0.0287 J	0.0385 U	0.0385 U	0.0385 U
B-101	86-B101-S-1201-05	4	12/1/2005	0.00508 U	0.00508 U	0.00508 U	0.0102 U	0.00508 U	0.00885 U	0.0355 U	0.0355 U	0.0355 U	0.0355 U
B-104	86-B104-S-1201-05	4	12/1/2005	0.00514 U	0.00514 U	0.00779	0.00502 J	0.00514 U	0.0455 U	0.182 U	0.182 U	0.182 U	0.182 U
B-106	86-B106-S-1201-05	4	12/1/2005	0.00503 U	0.00503 U	0.00503 U	0.0101 U	0.00503 U	0.0453 U	0.182 U	0.182 U	0.182 U	0.182 U
B-110	86-B110-S-1201-05	2	12/1/2005	0.00508 U	0.00508 U	0.00508 U	0.0102 U	0.00508 U	0.00996 U	0.04 U	0.04 U	0.04 U	0.04 U
B-137	86-B137-S-1201-05	4	12/1/2005	0.00529 U	0.00529 U	0.00529 U	0.0106 U	0.00529 U	0.0091 U	0.0365 U	0.0365 U	0.0365 U	0.0365 U
B-146	86-B146-S-1201-05	4	12/1/2005	0.00523 U	0.00523 U	0.000974 J	0.00248 J	0.00523 U	0.00886 U	0.0356 U	0.0132 J	0.0356 U	0.0356 U
B-158	86-B158-S-1201-05	2	12/1/2005	0.00515 U	0.00515 U	0.00515 U	0.0103 U	0.00515 U	0.009 U	0.0361 U	0.0361 U	0.0361 U	0.0361 U
B-167	86-B167-S-1201-05	2	12/1/2005	0.00571 U	0.00571 U	0.00571 U	0.0114 U	0.00571 U	0.00996 U	0.0399 U	0.0399 U	0.0399 U	0.0399 U
B-189	86-B189-S-1201-05	4	12/1/2005	0.00534 U	0.00534 U	0.00534 U	0.0107 U	0.00534 U	0.00892 U	0.0358 U	0.0358 U	0.0358 U	0.0358 U

Notes:

All concentrations reported in micrograms per kilogram (mg/kg) unless otherwise noted.

1 = Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

U - The analyte was analyzed for , but not detected.

J - Result is estimated

UJ- Value non-detected estimated.

JB- Estimate value..The analyte was detected in the associated method and/or calibration blank.

Bold values indicate compounds that exceed Residential Direct Exposure Level

Shaded values indicate compounds that exceed Leachability to GW Criteria

NA - Not Analyzed

NE - Not Established

TABLE 5
Soil Analytical Results
South Fuel Farm; 4th Quarter 2005

			Leachability to GW Criteria[1]	2500	0.8	8	2.4	25	32000	77	6.6	0.7	160
			Direct Exposure Residential[1]	21000	1.3	0.1	1.3	13	2500	130	1.3	0.1	2600
Station ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Indeno(1,2,3-c,d)pyrene	Dibenz(a,h)anthracene	Fluorene
				Unit in mg/kg									
B-7	86-B7-S-1201-05	2	12/1/2005	0.00371 U	0.00371 U	0.00371 U	0.00371 U	0.00371 U	0.00371 U	0.00371 U	0.00933 U	0.00371 U	0.0188 U
B-31	86-B31-S-1201-05	2	12/1/2005	0.00356 U	0.00356 U	0.00356 U	0.0199 J	0.00356 U	0.00356 U	0.00356 U	0.00896 U	0.00356 U	0.018 U
B-41	86-B41-S-1201-05	4	12/1/2005	0.0187 U	0.0187 U	0.0187 U	0.0187 U	0.0187 U	0.0187 U	0.0187 U	0.0471 U	0.0187 U	0.0592 J
B-70	86-B70-S-1201-05	4	12/1/2005	0.019 J	0.257 J	**0.705**	0.797	0.244 J	0.522 J	0.477 J	0.726 J	**0.545**	0.0948 J
B-96	86-B96-S-1201-05	4	12/1/2005	0.00676 U	0.00676 U	0.00676 U	0.00676 U	0.00676 U	0.00676 U	0.00676 U	0.017 U	0.00676 U	0.0342 U
B-99	86-B99-S-1201-05	4	12/1/2005	0.00381 U	0.00381 U	0.00735	0.00381 U	0.00381 U	0.179 J	0.00935	0.0517 J	0.00381 U	0.0193 U
B-101	86-B101-S-1201-05	4	12/1/2005	0.00352 U	0.00352 U	0.00352 U	0.00838	0.00352 U	0.00331 J	0.00352 U	0.00449 J	0.00352 U	0.0178 U
B-104	86-B104-S-1201-05	4	12/1/2005	0.0181 U	0.0181 U	0.0364	0.0353	0.0136 J	0.0181 U	0.0181 U	0.056 J	0.0181 U	0.0915 U
B-106	86-B106-S-1201-05	4	12/1/2005	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.0167 J	0.018 U	0.0911 U
B-110	86-B110-S-1201-05	2	12/1/2005	0.00396 U	0.00396 U	0.00396 U	0.00396 U	0.00396 U	0.00396 U	0.00396 U	0.00996 U	0.00396 U	0.02 U
B-137	86-B137-S-1201-05	4	12/1/2005	0.00362 U	0.00362 U	0.00362 U	0.00362 U	0.00362 U	0.00362 U	0.00362 U	0.0091 U	0.00362 U	0.0183 U
B-146	86-B146-S-1201-05	4	12/1/2005	0.00352 U	0.0228 J	0.00352 U	0.0105	0.00366 J	0.0258 J	0.00352 U	0.0164 J	0.038 J	0.0178 U
B-158	86-B158-S-1201-05	2	12/1/2005	0.00358 U	0.00358 U	0.00358 U	0.00358 U	0.00358 U	0.00358 U	0.00358 U	0.009 U	0.00358 U	0.0181 U
B-167	86-B167-S-1201-05	2	12/1/2005	0.00396 U	0.0097 J	0.0102 J	0.0202 J	0.00652 J	0.029 J	0.00638 J	0.0164 J	0.0749 J	0.02 U
B-189	86-B189-S-1201-05	4	12/1/2005	0.00355 U	0.00355 U	0.00355 U	0.00355 U	0.00355 U	0.00355 U	0.00355 U	0.00892 U	0.00355 U	0.0179 U

Notes:

All concentrations reported in micrograms per kilogram (mg/kg) unless otherwise noted.

1 = Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

U - The analyte was analyzed for , but not detected.

J - Result is estimated

UJ- Value non-detected estimated.

JB- Estimate value..The analyte was detected in the associated method and/or calibration blank.

Bold values indicate compounds that exceed Residential Direct Exposure Level

Shaded values indicate compounds that exceed Leachability to GW Criteria

NA - Not Analyzed

NE - Not Established

TABLE 5
Soil Analytical Results
South Fuel Farm; 4th Quarter 2005

Station ID	Sample ID	Sample Depth (ft bgs)	Sample Date	Fluoranthene	Phenanthrene	Pyrene	Petroleum Hydrocarbons	C10-C12 Petroleum Hydrocarbons	C12-C16 Petroleum Hydrocarbons	C16-C22 Petroleum Hydrocarbons	C22-C36 Petroleum Hydrocarbons	C8-C10 Petroleum Hydrocarbons
Leachability to GW Criteria[1]				1200	250	880	340	NE	NE	NE	NE	NE
Direct Exposure Residential[1]				3200	2200	2400	460	900	1500	1300	2300	460
				Unit in mg/kg								
B-7	86-B7-S-1201-05	2	12/1/2005	0.00371 U	0.00371 U	0.00371 U	8.99 UJ	NA	NA	NA	NA	NA
B-31	86-B31-S-1201-05	2	12/1/2005	0.00356 U	0.00356 U	0.00356 U	10.7 JB	NA	NA	NA	NA	NA
B-41	86-B41-S-1201-05	4	12/1/2005	0.0415 J	0.117 J	0.0372 J	**1970 JB**	504.927 JB	1130.903 JB	26.691 JB	11.221 JB	43.644 JB
B-70	86-B70-S-1201-05	4	12/1/2005	0.475 J	0.149 J	0.415 J	22.8 JB	NA	NA	NA	NA	NA
B-96	86-B96-S-1201-05	4	12/1/2005	0.00676 U	0.00676 U	0.00676 U	8.3 UJ	NA	NA	NA	NA	NA
B-99	86-B99-S-1201-05	4	12/1/2005	0.00381 U	0.00768	0.00381 U	43.9 JB	NA	NA	NA	NA	NA
B-101	86-B101-S-1201-05	4	12/1/2005	0.00352 U	0.00352 U	0.00352 U	8.53 UJ	NA	NA	NA	NA	NA
B-104	86-B104-S-1201-05	4	12/1/2005	0.0181 U	0.0181 U	0.0927 J	**1380 JB**	0.858 JB	331.275 JB	743.94 JB	139.018 JB	1.17 JB
B-106	86-B106-S-1201-05	4	12/1/2005	0.018 U	0.018 U	0.018 U	19.7 JB	NA	NA	NA	NA	NA
B-110	86-B110-S-1201-05	2	12/1/2005	0.00396 U	0.00396 U	0.00396 U	9.53 UJ	NA	NA	NA	NA	NA
B-137	86-B137-S-1201-05	4	12/1/2005	0.00362 U	0.00362 U	0.00362 U	9.5 JB	NA	NA	NA	NA	NA
B-146	86-B146-S-1201-05	4	12/1/2005	0.0092	0.00352 U	0.00516	13.4 JB	NA	NA	NA	NA	NA
B-158	86-B158-S-1201-05	2	12/1/2005	0.00358 U	0.00358 U	0.00358 U	6.36 JB	NA	NA	NA	NA	NA
B-167	86-B167-S-1201-05	2	12/1/2005	0.00693 J	0.00396 U	0.0145 J	14.9 JB	NA	NA	NA	NA	NA
B-189	86-B189-S-1201-05	4	12/1/2005	0.00355 U	0.00355 U	0.00355 U	7.38 JB	NA	NA	NA	NA	NA

Notes:

All concentrations reported in micrograms per kilogram (mg/kg) unless otherwise noted.

1 = Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

U - The analyte was analyzed for , but not detected.

J - Result is estimated

UJ- Value non-detected estimated.

JB- Estimate value..The analyte was detected in the associated method and/or calibration blank.

Bold values indicate compounds that exceed Residential Direct Exposure Level

Shaded values indicate compounds that exceed Leachability to GW Criteria

NA - Not Analyzed

NE - Not Established

Groundwater Monitoring

Groundwater sampling is conducted on an annual basis during the second quarter of each year. The most recent groundwater analytical results from the 2nd quarter 2005 indicated that lead and TRPH were the only parameters detected at a concentration above GCTLs during the 2005 annual sampling event. The exceedence of lead was detected in the groundwater sample from well CEF 43-6N and TRPH was detected in the groundwater sample from CEF43-2N.

As documented in the 3rd Quarter 2005 O&M Report, benzene, ethylbenzene, toluene, and xylenes (BETX) concentrations have shown a decreasing trend in each well since the biosparging and bioventing systems became operational. In addition, benzene, ethyl-benzene, and toluene concentrations have been below their respective GCTLs since May 2002. TRPH concentrations have had a decreasing trend in wells CEF-6N and –7N. Lead concentrations have had a decreasing trend in each well. Based on an evaluation of historical groundwater data, the biosparging and bioventing systems are successful in reducing BETX and TRPH concentrations in groundwater.

Field tests were performed on the well headspace and groundwater samples collected from selected monitoring wells on a monthly basis during the 4th quarter 2005 to evaluate indications of biological activity and influence of the bioventing and biosparging systems. The headspace in each monitoring well was tested for percent methane, percent carbon dioxide, percent oxygen, pressure, and total volatile organic compounds (VOCs) using an OVA/FID. The groundwater in each monitoring well was tested for pH, conductivity, turbidity, dissolved oxygen (DO), temperature, and oxygen reduction potential (ORP). The results of the field tests are summarized in Table 6.

Methane, carbon dioxide, and oxygen levels are measured as an indication of biological activity. Pressure is measured as an indication of the influence of the bioventing and biosparging systems. FID readings are measured as an indication of the presence of total VOCs, namely petroleum hydrocarbons. As compared to upgradient wells (CEF-043-19, -20, -21, and –48), in general, elevated carbon dioxide levels and less than ambient oxygen levels were observed in most wells in the vicinity of the bioventing/biosparging systems. This suggests that biological activity is occurring. Elevated VOC levels (OVA) readings greater than 50 ppm) were noted in monitoring well CEF-043-2N. DO levels were greater than 1 milligram per liter (mg/L), which indicates favorable conditions for aerobic biological activity.

TABLE 6
Field Test Results

Well Identification	Sample Date	Air					Groundwater					
		Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Pressure (in Hg)	OVA (ppm)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (oC)	ORP (mV)
CEF-043-1N	12/21/2005	0.1	0.1	21.7	30.1	0.9	6.58	0.201	19.1	1.43	22.6	171
CEF-043-2N	12/21/2005	0.3	9.2	13.6	30.1	75	6.66	0.269	0	6.49	21.1	121
CEF-043-3N	12/21/2005	0.1	3.2	18.4	30.1	0	6.05	0.05	193	7.84	21.5	238
CEF-043-4N	12/21/2005	0.1	1.5	19.7	30.1	1.4	6.32	0.352	0	2.65	21.7	-41
CEF-043-5N	12/21/2005	0.1	0.1	21.4	30.1	0	6.04	0.114	41.9	9.96	22.4	234
CEF-043-6N	12/21/2005	0.1	2	19.9	30.1	0.2	6.25	0.09	37.9	7.87	22.3	195
CEF-043-7N	12/21/2005	0	0.3	21.5	30.2	0.3	6.45	0.145	11.7	9.26	20.4	222
CEF-043-8N	12/21/2005	0.1	3.8	18.8	30.1	0	6.02	0.061	13.6	4.7	21.9	219
CEF-043-9N	12/21/2005	0.1	1	20	30.1	0.4	6.94	0.098	56.3	6.03	20.7	198
CEF-043-10	12/21/2005	0.1	10.1	9	30.1	2.4	6.17	0.174	3.3	2.69	24.2	177
CEF-043-19	12/21/2005	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
CEF-043-20	12/21/2005	0.1	0.2	21.8	30.1	1.5	5.05	0.068	54.7	3.33	22.3	258
CEF-043-21	12/21/2005	0.1	0.1	21.7	30.1	0	6.34	0.156	0	4.23	21.2	209
CEF-043-22	12/21/2005	0.1	1.5	20.1	30.1	0	5.89	0.052	531	7.62	22.1	193
CEF-043-32	12/21/2005	0.1	1.1	20.9	30.1	0	6.14	0.297	33.5	3.48	22.9	196
CEF-043-33	12/21/2005	0.1	6.2	16.7	30.1	0	5.8	0.131	0	2.62	24	206
CEF-043-34	12/21/2005	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
CEF-043-38	12/21/2005	0.2	1.5	19.6	30.1	0.4	6.81	0.214	3.3	6.41	21.6	184
CEF-043-48	12/21/2005	0.1	1	21.4	30.1	0	6.89	0.092	7.7	8.95	20	193
CEF-043-50D	12/21/2005	0.1	1.4	19.6	30.2	5.2	6.57	0.105	0	6.31	22.4	221

Note: All measurements taken using direct reading instruments in the field.
% -percent
in Hg -inches of mercury
OVA - organic vapor analyzer
ppm - parts per million
mS/cm - millisiemans per centimeter
NTU - nephelometric turbidity units
mg/L - milligrams per liter
^{o}C - degrees Celsius
ORP - oxygen reducing potential
mV – millivolts
NM – not measured – due covered with dirt (CEF-043-19) or behind locked gate on Boeing property (CEF-043-34)

Conclusions and Recommendations

The bioventing system operated with minimal downtime during the monitoring period with a resulting operational efficiency of 100 percent. The biosparging system had an operational efficiency of 58.5 percent during the monitoring period. The majority of the downtime for the biosparging system was a result of motor fault alarm. The problem was corrected and the system should operate at an increased efficiency.

The bioventing system actual blower discharge pressure averaged 50.3 inches of water, compared to the design blower discharge pressure of 40 inches of water. The total air injection flow rate averaged 65 scfm, compared to the design blower flow rate of 80 scfm. The biosparging system actual injection discharge pressure averaged 15.3 psig, compared to the design injection pressure of 15 psig.

The annual soil screening and sampling event indicated that 3 of the 15 soil boring locations continue to exhibit soil contamination concentrations in excess of Leachability based on Groundwater Criteria and/or Direct Exposure Residential SCTLs. Several parameters (benzo(a)pyrene and dibenzo(a,h)anthracene in boring B70 and TRPH in boring B104) were detected at concentrations above the regulatory standard in the borings for the first time. TRPH continues to be detected at B-41 at concentrations above the SCTL; however, analyses of Total Hydrocarbon Criteria Working Group Analyses (THCWGA) indicates that the concentrations of the individual fractions of TRPH are below their respective SCTLs.

Based on an evaluation of historical groundwater data, the biosparging and bioventing systems have been successful in reducing BETX and TRPH concentrations in groundwater. Based on field parameter testing results, biological activity is occurring at the site. The biosparging injection continues to provide sufficient oxygen as indicated by DO readings greater than 1 mg/L.

Based on a recent evaluation of site conditions, continuation of the biosparge system will be re-evaluated during April 2006, and a recommendation will be presented to the NAS Cecil Field BRAC Cleanup Team (BCT). Additional soil sampling and expansion of the existing bioventing system appear to be warranted at the site and these recommendations also will be presented to the BCT.

Attachment A
Historical Data

TABLE A-1
South Fuel Farm Historical Soil Analytical Results

Soil Boring Number	Sample Date	Sample Depth (feet bls)	Benzene	Ethyl Benzene	Toluene	Xylene	Methyl tert-butyl ether	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (g,h,i) perylene	Chrysene	Indeno (1, 2, 3-cd) pyrene	Dibenzo (a,h) anthracene	Fluorene	Fluoranthene	Phenanthrene	Pyrene	TRPH (mg/kg)
Direct Exposure Residential [1]			1.1	1100	380	5900	3200	40	68	80	1900	1100	18000	1.4	0.1	1.4	15	2300	140	1.5	0.1	2200	2900	2000	2200	340
Leachability from GW Criteria [1]			0.007	0.6	0.5	0.2	0.2	1.7	2.2	6.1	2.1	27	2500	3.2	8	10	25	32000	77	28	30	160	1200	250	880	340
B-7	3/22/99	N/A	<0.11	<0.11	<0.11	<0.33	<0.64	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	84
	9/13/00	N/A	<0.001	<0.001	<0.001	<0.003	<0.002	<0.018	<0.037	<0.037	<0.019	<0.037	<0.0018	<0.0018	<0.002	<0.0037	<0.0018	<0.003	<0.0018	<0.0018	<0.0036	<0.003	<0.0037	<0.037	<0.0018	8
	10/18/01	2	<0.001	<0.001	<0.001	<0.0031	<0.001	<0.597	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<18
	10/10/02	2	0.00102 J	0.00141 J	0.00325 J	0.0119 =	0.00589 U	0.00884 U	0.0177 U	0.0177 U	0.00353 U	0.0353 U	0.0177 U	0.00353 U	0.00353 U	0.00353 U	0.00353 U	0.00353 U	0.00353 U	0.00353 U	0.00353 U	0.0177 U	0.00353 U	0.00353 U	0.00353 U	9.42 U
	11/5/03	2	0.00486 U	0.00486 U	0.00486 U	0.00971 U	0.00486 U	0.00966 U	0.0387 U	0.0387 U	0.0387 U	0.0387 U	0.00384 U	0.00384 U	0.00384 U	0.00384 U	0.00384 U	0.00384 U	0.00384 U	0.00966 U	0.00384 U	0.0194 U	0.00384 U	0.00384 U	0.00384 U	127 =
	12/7/04	2	0.00504 U	0.00504 U	0.00504 U	0.0101 U	0.00504 U	0.00914 U	0.0367 U	0.0367 U	0.0367 U	0.0367 U	0.00363 U	0.00363 U	0.00363 U	0.00363 U	0.00363 U	0.00363 U	0.00363 U	0.00914 U	0.00363 U	0.0184 U	0.00363 U	0.00363 U	0.00363 U	35 JB
B-31	3/22/99	N/A	<0.012	<0.012	<0.012	<0.036	<0.071	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	170
	9/13/00	N/A	<0.0011	<0.0011	<0.0011	<0.0031	<0.002	<0.02	<0.04	<0.04	<0.02	<0.04	<0.002	<0.002	0.002	<0.004	<0.002	0.01	<0.002	0.0028	0.01	<0.004	<0.004	<0.04	<0.002	180
	10/18/01	4	<0.0011	<0.0011	<0.0011	<0.0033	<0.0011	<0.604	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	0.010 J	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<18
	10/10/02	3	0.225 U	0.225 U	0.0506 J	0.45 U	0.225 U	0.00863 U	0.0173 U	0.0173 U	0.00345 U	0.0345 U	0.0173 U	0.00345 U	0.00345 U	0.00345 U	0.00345 U	0.00345 U	0.00345 U	0.00345 U	0.00345 U	0.0173 U	0.0116 =	0.00345 U	0.00345 U	8.38 J
	11/5/03	2	0.00518 U	0.00518 U	0.00518 U	0.0104 U	0.00518 U	0.00935 U	0.0375 U	0.0375 U	0.0375 U	0.0375 U	0.00372 U	0.00372 U	0.00372 U	0.00372 U	0.00372 U	0.00372 U	0.00372 U	0.00935 U	0.00372 U	0.0188 U	0.00372 U	0.00372 U	0.00372 U	9.01 U
	12/7/04	2	0.461 U	1.04	0.278 J	6.81	0.461 U	1.2	4.18	3.49	0.392 U	0.392 U	0.0389 U	0.0389 U	0.0389 U	0.0389 U	0.0389 U	0.0389 U	0.0389 U	0.0978 U	0.0389 U	0.0531 J	0.0389 U	0.0389 U	0.0389 U	1440 JB
B-41	3/22/99	N/A	<0.013	<0.013	<0.013	<0.038	<0.076	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	30
	9/13/00	N/A	<0.55	<0.55	<0.55	24.9	<1.1	3.3	22	14	<1	<2	<0.098	<0.098	<0.099	<0.2	<0.098	<0.2	<0.098	<0.098	<0.19	0.21	0.88	<0.2	<0.098	460
	10/18/01	4	<0.0011	<0.0011	<0.0011	<0.0033	<0.0011	<0.579	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<0.058	<17
	10/10/02	4	0.219 U	0.219 U	0.219 U	0.437 U	0.219 U	0.00859 U	0.0172 U	0.0172 U	0.00344 U	0.0344 U	0.0172 U	0.00344 U	0.00344 U	0.00344 U	0.00344 U	0.00344 U	0.00344 U	0.00344 U	0.00344 U	0.0172 U	0.00344 U	0.00344 U	0.00344 U	1640 =
	11/5/03	4	0.212 U	0.212 U	0.212 U	1.56 =	0.212 U	0.00984 U	0.066 =	0.0395 U	0.0395 U	0.0395 U	0.00391 U	0.00391 U	0.00146 J	0.00147 J	0.00391 U	0.00391 U	0.00391 U	0.00984 U	0.00391 U	0.0198 U	0.00391 U	0.00391 U	0.00391 U	10400 =
	12/7/04	4	0.242 U	0.242 U	0.242 U	0.484 U	0.242 U	0.0145	0.0628	0.0394 U	0.0394 U	0.0394 U	0.0039 U	0.0443	0.0039 U	0.0039 U	0.0039 U	0.0039 U	0.0039 U	0.00981 U	0.0039 U	0.0197 U	0.0256	0.0039 U	0.0717	3200 JB
B-70	3/22/99	N/A	<0.13	<0.13	<0.13	<0.4	<0.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	830
	9/13/00	N/A	0.0014	<0.001	0.002	0.019	<0.002	<0.021	<0.041	<0.041	0.094	0.109	<0.0021	0.016	0.005	0.014	0.012	<0.004	0.043	0.0025	<0.004	<0.004	0.091	<0.041	0.148	100
	10/18/01	4	<0.0012	<0.0012	<0.0012	<0.0036	<0.0012	<0.565	<0.056	0.035 J	<0.056	>0.056	<0.056	0.0053J	0.007J	0.015J	<0.056	0.016J	0.008J	0.010J	<0.056	<0.056	<0.056	0.0049 J	0.0057J	64
	10/10/02	4	0.00141 J	0.00104 J	0.00337 J	0.0102 =	0.00495 U	0.151 J	0.0161 U	0.0161 U	0.00614 J	0.0322 U	0.0161 U	0.0554 J	0.0847 J	0.0795 J	0.0747 J	0.0746 J	0.0952 J	0.0588 J	0.0616 J	0.0161 U	0.168 J	0.0222 J	0.0621 J	114 J
	11/5/03	4	0.00547 =	0.00136 J	0.0175 B	0.0164 =	0.00496 U	1.97 =	7.77 =	9.7 =	0.738 U	0.738 U	0.0731 U	0.0731 U	0.0731 U	0.0731 U	0.0731 U	0.0731 U	0.0731 U	0.184 U	0.0731 U	0.37 U	0.0731 U	0.0731 U	0.134 =	93.5 =
	12/7/04	4	0.00465 U	0.00465 U	0.00465 U	0.00929 U	0.00465 U	0.00853 U	0.0342 U	0.0342 U	0.0342 U	0.0342 U	0.00339 U	0.00339 U	0.00339 U	0.00339 U	0.00339 U	0.00339 U	0.00339 U	0.00853 U	0.00339 U	0.0172 U	0.00339 U	0.00339 U	0.00339 U	9.33 JB
B-96	3/22/99	N/A	<0.1	0.25	<0.1	5.8	<.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	7600
	9/13/00	N/A	<0.22	<0.22	<0.22	<0.65	<0.43	0.074	0.48	0.58	0.032	0.058	0.039	0.015	0.012	0.02	0.011	0.005	0.021	0.0063	0.0087	0.11	<0.004	0.26	<0.002	1800
	10/18/01	4	0.024	0.017	0.0017	0.0141	<0.0014	0.562	<0.056	<0.056	<0.056	<0.056	<0.056	0.016	<0.056	0.033	0.015	0.016	0.018	0.014	<0.056	<0.056	<0.056	<0.056	0.128	969
	10/10/02	4	0.269 U	0.269 U	0.269 U	0.538 U	0.269 U	0.0404 U	0.0807 U	0.0807 U	0.0161 U	0.161 U	0.0807 U	0.0161 U	0.0161 U	0.0161 U	0.0161 U	0.0161 U	0.0161 U	0.0161 U	0.0161 U	0.0807 U	0.0274 J	0.0161 U	0.142 J	2710 J
	11/5/03	4	0.00517 U	0.00188 J	0.0013 B	0.00894 J	0.00517 U	0.135 =	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.00378 U	0.00378 U	0.00378 U	0.00378 U	0.00378 U	0.00378 U	0.00378 U	0.00952 U	0.00378 U	0.0191 U	0.00378 U	0.0259 =	0.00378 U	4860 =
	12/7/04	4	0.216 U	0.216 U	0.216 U	0.433 U	0.216 U	8.19 J	15.5 J	24.5 J	0.339 U	0.772 J	0.0336 U	0.0336 U	0.0336 U	0.0336 U	0.0336 U	0.0336 U	0.0336 U	0.0846 U	0.0336 U	0.649 J	0.0336 U	0.0336 U	0.455 J	59600 JB
B-99	3/22/99	N/A	<0.11	<0.11	<0.11	<0.33	<0.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	570
	9/13/00	N/A	0.001	<0.001	0.0018	0.0017	<0.002	<0.02	<0.04	0.073	0.14	<0.04	0.004	0.0076	0.016	0.025	0.0057	0.024	0.02	0.013	0.019	<0.004	0.052	<0.04	0.028	<8.1
	10/18/01	4	<0.0012	<0.0012	<0.0012	<0.0035	<0.0012	<0.593	<0.059	<0.059	<0.059	<0.059	<0.059	0.027J	0.032J	0.040J	0.017J	0.029J	0.040J	0.024J	<0.059	<0.059	0.046J	0.024J	0.015J	36
	10/10/02	4	0.00157 J	0.00156 J	0.00516 =	0.0154 =	0.00482 U	0.0235 J	0.0171 U	0.0171 U	0.009 J	0.0342 U	0.0171 U	0.165 J	0.0713 J	0.0805 J	0.0357 J	0.0418 J	0.117 J	0.0351 J	0.00342 U	0.0171 U	0.223 J	0.0396 J	0.147 J	33.7 J
	11/5/03	4	0.00517 U	0.00188 J	0.0013 B	0.00894 J	0.00517 U	0.135 =	0.0382 U	0.0382 U	0.0382 U	0.0382 U	0.00378 U	0.00378 U	0.00378 U	0.00378 U	0.00378 U	0.00378 U	0.00378 U	0.00952 U	0.00378 U	0.0191 U	0.00378 U	0.0259 =	0.00378 U	4860 =
	12/7/04	4	0.235 U	0.235 U	0.235 U	0.47 U	0.235 U	0.00887 U	0.0356 U	0.0356 U	0.0356 U	0.0356 U	0.00353 U	0.00353 U	0.00353 U	0.00353 U	0.00353 U	0.071	0.00353 U	0.00887 U	0.0325	0.0179 U	0.00353 U	0.00353 U	0.00353 U	20 JB
B-101	3/22/99	N/A	<0.12	<0.12	<0.12	<0.36	<0.72	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	320
	9/13/00	N/A	<0.0011	<0.0011	<0.0011	<0.0031	<0.002	<0.021	<0.042	<0.042	<0.021	<0.042	<0.0021	<0.0021	0.006	0.0066	0.0029	0.018	0.0046	0.009	0.0084	<0.004	<0.0042	<0.042	<0.0021	<8.4
	10/18/01	4	0.00088	<0.001	0.0012	<0.003	<0.001	<0.572	0.206	1.09	0.17	1.25	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	1.14	<0.057	<0.057	0.321	1.84	0.912	0.201	7510
	10/10/02	4	0.268 U	0.268 U	0.268 U	0.537 U	0.268 U	0.805 U	1.61 U	1.61 U	0.322 U	3.22 U	1.61 U	0.322 U	0.322 U	0.322 U	0.322 U	0.322 U	0.322 U	0.322 U	0.322 U	1.61 U	2.49 =	1.03 =	6.77 =	13100 =
	11/5/03	4	0.00586 U	0.00586 U	0.00586 U	0.0117 U	0.00586 U	0.0509 U	0.204 U	0.204 U	0.204 U	0.204 U	0.0202 U	0.0304 =	0.0202 U	0.0202 U	0.0202 U	0.0202 U	0.0202 U	0.0509 U	0.0202 U	0.102 U	0.0202 U	0.0241 =	0.0202 U	965 J
	12/7/04	4	0.00477 U	0.00477 U	0.00477 U	0.0012 J	0.00477 U	0.00916 U	0.0367 U	0.0367 U	0.0367 U	0.0367 U	0.00364 U	0.00364 U	0.00364 U	0.00364 U	0.00364 U	0.00364 U	0.00364 U	0.00916 U	0.00364 U	0.0184 U	0.00364 U	0.00364 U	0.00364 U	67.7 JB
B-104	3/22/99	N/A	<0.11	<0.11	<0.11	<0.33	<0.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	28
	9/13/00	N/A	<0.001	<0.001	0.0018	0.0084	<0.002	<0.021	<0.041	<0.041	<0.021	<0.041	<0.0021	<0.0021	<0.002	<0.0041	<0.0021	<0.004	<0.0021	<0.0021	<0.0041	<0.004	<0.0041	<0.041	<0.0021	<8.3
	10/18/01	4	<0.0012	<0.0012	<0.0012	<0.0035	<0.0012	<0.569	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	0.011J	<0.057	0.0041J	<0.057	<0.057	<0.057	<0.057	0.0049J	<0.057	0.014J	80
	10/10/02	4	0.00169 J	0.00268 J	0.0107 =	0.029 =	0.00584 U	0.00864 U	0.0173 U	0.0173 U	0.00346 U	0.0346 U	0.0173 U	0.00346 U	0.00346 U	0.00346 U	0.00346 U	0.00346 U	0.00346 U	0.00346 U	0.00346 U	0.0173 U	0.00346 U	0.00346 U	0.00346 U	10.3 =
	11/5/03	4	0.00548 U	0.00548 U	0.00548 U	0.00165 J	0.00548 U	0.00939 U	0.0377 U	0.0377 U	0.0377 U	0.0377 U	0.00373 U	0.00373 U	0.00373 U	0.00373 U	0.00373 U	0.00373 U	0.00373 U	0.00939 U	0.00373 U	0.0189 U	0.00373 U	0.00373 U	0.00373 U	37.7 =
	12/7/04	4	0.00495 U	0.00495 U	0.00495 U	0.00989 U	0.00495 U	0.00872 U	0.035 U	0.035 U	0.035 U	0.035 U	0.00347 U	0.0351	0.00347 U	0.00347 U	0.00347 U	0.00347 U	0.00347 U	0.00872 U	0.00347 U	0.0175 U	0.00347 U	0.00347 U	0.00347 U	12.6 JB

TABLE A-1
South Fuel Farm Historical Soil Analytical Results

Soil Boring Number	Sample Date	Sample Depth (feet bls)	Benzene	Ethyl Benzene	Toluene	Xylene	Methyl tert-butyl ether	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (g,h,i) perylene	Chrysene	Indeno (1, 2, 3-cd) pyrene	Dibenzo (a,h) anthracene	Fluorene	Fluoranthene	Phenanthrene	Pyrene	TRPH (mg/kg)
Direct Exposure Residential [1]			1.1	1100	380	5900	3200	40	68	80	1900	1100	18000	1.4	0.1	1.4	15	2300	140	1.5	0.1	2200	2900	2000	2200	340
Leachability from GW Criteria [1]			0.007	0.6	0.5	0.2	0.2	1.7	2.2	6.1	2.1	27	2500	3.2	8	10	25	32000	77	28	30	160	1200	250	880	340
B-106	3/22/99	N/A	<0.12	<0.12	<0.12	<0.37	<0.75	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3200
	9/13/00	N/A	<0.001	0.001	0.002	0.0145	<0.002	<0.19	2.4	<0.38	0.47	<0.38	<0.019	0.62	0.68	0.97	0.62	0.5	0.89	0.31	0.34	<0.038	0.93	<0.38	2.8	1000
	10/18/01	4	<0.0011	<0.0011	<0.0011	<0.0033	<0.0011	<0.550	<0.055	<0.055	<0.055	<0.055	<0.055	0.023J	0.040J	0.037J	<0.055	0.040J	0.034J	0.038J	<0.055	<0.055	<0.055	0.023J	0.019J	37
	10/10/02	4	0.00479 U	0.00132 J	0.00494 =	0.0122 =	0.00479 U	0.125 =	0.0167 U	0.0167 U	0.00334 U	0.0334 U	0.0167 U	0.00334 U	0.0197 =	0.0309 =	0.00334 U	0.0395 =	0.0303 =	0.00334 U	0.00334 U	0.0167 U	0.0781 =	0.00334 U	0.0409 =	483 =
	11/5/03	4	0.00522 U	0.00522 U	0.00349 B	0.00151 J	0.00522 U	0.00917 U	0.0368 U	0.0368 U	0.0368 U	0.0368 U	0.00365 U	0.00365 U	0.00497 =	0.0134 =	0.0107 =	0.00365 U	0.0282 =	0.00917 U	0.00365 U	0.0185 U	0.00565 =	0.00365 U	0.00365 U	401 =
	12/7/04	4	0.00447 U	0.00447 U	0.00447 U	0.00895 U	0.00447 U	0.00854 U	0.0343 U	0.0343 U	0.0343 U	0.0343 U	0.0034 U	0.0034 U	0.0034 U	0.0034 U	0.0034 U	0.0034 U	0.0034 U	0.00854 U	0.0034 U	0.0172 U	0.0034 U	0.0034 U	0.0034 U	6.91 JB
B-110	3/22/99	N/A	<0.13	<0.13	<0.13	<0.39	<0.78	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1000
	9/13/00	N/A	<0.097	<0.097	<0.097	<0.286	<0.2	<0.97	<1.9	<1.9	3.7	4.3	<0.097	<0.097	<0.098	<0.19	<0.097	<0.19	1.6	<0.097	<0.19	0.23	<0.19	<1.9	<0.097	530
	10/18/01	4	<0.001	<0.001	<0.001	<0.003	<0.001	<0.575	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<17
	10/10/02	4	0.248 U	0.248 U	0.248 U	0.495 U	0.248 U	0.00857 U	0.0171 U	0.0171 U	0.00343 U	0.0343 U	0.0171 U	0.00343 U	0.00343 U	0.00343 U	0.00343 U	0.00343 U	0.00343 U	0.00343 U	0.00343 U	0.0171 U	0.00343 U	0.00343 U	0.00343 U	9.14 U
	11/5/03	2	0.00523 U	0.00523 U	0.00523 U	0.0105 U	0.00523 U	0.00888 U	0.0356 U	0.0356 U	0.0356 U	0.0356 U	0.00353 U	0.00353 U	0.00353 U	0.00353 U	0.00353 U	0.00353 U	0.00353 U	0.00888 U	0.00353 U	0.0179 U	0.00353 U	0.00353 U	0.00353 U	95.1 =
	12/7/04	2	0.00466 U	0.00466 U	0.00466 U	0.00932 U	0.00466 U	0.00867 U	0.0348 U	0.0348 U	0.0348 U	0.0348 U	0.00345 U	0.00345 U	0.00345 U	0.00345 U	0.00345 U	0.00345 U	0.00345 U	0.00867 U	0.00345 U	0.0174 U	0.00345 U	0.00345 U	0.00345 U	7.85 JB
B-137	3/22/99	N/A	<0.1	<0.1	<0.1	0.52	<0.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1200
	9/13/00	N/A	<0.0013	<0.0013	<0.0013	0.008	<0.002	<0.02	<0.04	<0.04	<0.02	<0.04	<0.002	<0.002	<0.002	<0.004	<0.002	<0.004	<0.002	<0.002	<0.0039	<0.004	<0.004	<0.04	<0.002	8
	10/18/01	2	<0.0012	<0.0012	<0.0012	<0.0037	<0.0012	<0.563	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<17
	10/10/02	4	0.00161 J	0.00108 J	0.00414 J	0.0111 =	0.00497 U	0.00811 U	0.0162 U	0.0162 U	0.00325 U	0.0325 U	0.0162 U	0.00325 U	0.00325 U	0.00325 U	0.00325 U	0.00325 U	0.00325 U	0.00325 U	0.00325 U	0.0162 U	0.00325 U	0.00325 U	0.00325 U	127 =
	11/5/03	4	0.0012 J	0.00533 U	0.00226 B	0.00337 J	0.00533 U	0.00917 U	0.0368 U	0.0368 U	0.0368 U	0.0368 U	0.00364 U	0.00364 U	0.00364 U	0.00364 U	0.00364 U	0.00364 U	0.00364 U	0.00917 U	0.00364 U	0.0184 U	0.00364 U	0.0155 =	0.00364 U	22.9 =
	12/7/04	4	0.255 U	0.255 U	0.255 U	0.51 U	0.255 U	0.00891 U	0.0358 U	0.0358 U	0.0358 U	0.0358 U	0.00354 U	0.00354 U	0.00354 U	0.00354 U	0.00354 U	0.00354 U	0.00354 U	0.00891 U	0.00354 U	0.0179 U	0.00354 U	0.00354 U	0.103	14.9 JB
B-146	3/22/99	N/A	<0.1	<0.1	<0.1	<0.31	<0.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1000
	9/13/00	N/A	<0.0013	<0.0013	0.002	0.006	<0.002	0.028	<0.041	<0.041	<0.021	<0.041	<0.002	<0.002	0.008	<0.0041	<0.002	<0.004	<0.002	<0.002	<0.004	0.005	<0.0041	<0.041	<0.002	13
	10/18/01	4	<0.0012	<0.0012	<0.0012	<0.0037	<0.0012	<0.541	<0.054	<0.054	<0.054	<0.054	<0.054	<0.054	0.0059	0.0099	0.017	<0.054	0.184	0.0092	<0.054	0.012	0.185	<0.054	0.029	1640
	10/10/02	4	0.239 U	0.616 =	0.239 U	3.22 =	0.239 U	0.392 U	0.783 U	0.783 U	0.157 U	1.57 U	0.783 U	0.157 U	0.157 U	0.157 U	0.157 U	0.157 U	0.157 U	0.157 U	0.157 U	0.783 U	1.04 =	0.157 U	3.18 =	4180 =
	11/5/03	4	0.00514 U	0.00514 U	0.00514 U	0.0103 U	0.00514 U	0.00886 U	0.0356 U	0.0356 U	0.0356 U	0.0356 U	0.00352 U	0.00352 U	0.00352 U	0.00352 U	0.00352 U	0.00352 U	0.00352 U	0.00886 U	0.00352 U	0.0178 U	0.00352 U	0.00352 U	0.00352 U	365 =
	12/8/04	4	0.0047 U	0.0047 U	0.0047 U	0.00362 J	0.0047 U	0.00871 U	0.0349 U	0.0349 U	0.0349 U	0.0349 U	0.00346 U	0.0178	0.00346 U	0.00346 U	0.00567	0.0074	0.00346 U	0.00991	0.026	0.0175 U	0.00346 U	0.00346 U	0.00346 U	43.5 JB
B-158	3/22/99	N/A	<0.12	<0.12	<0.12	<0.36	<0.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	9.5
	9/13/00	N/A	0.0016	0.003	0.002	0.0342	<0.002	0.13	<0.041	<0.041	<0.021	<0.041	<0.002	<0.002	0.004	<0.0041	0.0028	0.01	<0.002	<0.002	0.005	0.01	<0.0041	<0.041	<0.002	<8.2
	10/18/01	4	<0.0012	<0.0012	<0.0012	<0.0037	<0.0012	<0.596	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<0.060	<18
	10/10/02	2	0.00341 J	0.00268 J	0.00622 =	0.0252 =	0.00189 J	0.00825 U	0.0165 U	0.0165 U	0.0033 U	0.033 U	0.0165 U	0.0033 U	0.00678 =	0.00766 =	0.00396 =	0.0202 =	0.0033 U	0.0033 U	0.0033 U	0.0165 U	0.0129 =	0.0033 U	0.0033 U	5.9 J
	11/5/03	2	0.00537 U	0.00108 J	0.00537 U	0.00233 J	0.00537 U	0.00908 U	0.0364 U	0.0364 U	0.0364 U	0.0364 U	0.00361 U	0.0552 =	0.084 =	0.00361 U	0.0558 =	0.0802 =	0.0976 =	0.062 =	0.0669 =	0.0183 U	0.00361 U	0.00361 U	0.108 =	19.6 =
	12/8/04	2	0.00469 U	0.00111 J	0.00469 U	0.00333 J	0.00469 U	0.00862 U	0.0346 U	0.0346 U	0.0325 J	0.0346 U	0.00354	0.204	0.113	0.0867	0.145	0.0493	0.057	0.0518	0.048	0.0173 U	0.0344	0.0101	0.0701	63.5 JB
B-167	3/22/99	N/A	<0.12	0.45	0.29	2.8	<0.72	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4200
	9/13/00	N/A	<0.0011	<0.0011	<0.0011	<0.0031	<0.002	<0.02	<0.04	<0.04	<0.02	<0.040	<0.002	<0.002	<0.002	<0.004	<0.002	<0.004	<0.002	<0.002	<0.004	<0.004	<0.004	<0.04	<0.002	<8.1
	10/18/01	4	0.029	3.84	0.019	5.334	0.0034	10.3	22.3	26.3	0.188	<0.573	<0.573	<0.573	<0.573	<0.573	<0.573	<0.573	0.351	<0.573	<0.573	1.71	2.07	2.37	<0.573	11400
	10/10/02	4	0.219 U	0.219 U	0.219 U	0.439 U	0.219 U	9.05 =	21 =	34.9 =	0.334 U	3.34 U	1.67 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	0.334 U	1.67 U	0.334 U	0.334 U	0.334 U	13800 =
	11/5/03	2	0.00501 U	0.00501 U	0.00501 U	0.01 U	0.00501 U	0.00869 U	0.0349 U	0.0349 U	0.0349 U	0.0349 U	0.00346 U	0.00346 U	0.0015 J	0.00194 J	0.00232 J	0.00346 U	0.00346 U	0.00869 U	0.00346 U	0.0175 U	0.00346 U	0.00346 U	0.00346 U	8.38 U
	12/8/04	2	0.235 U	0.235 U	0.235 U	0.469 U	0.235 U	0.533 J	5.91 J	1.98 J	0.0362 U	0.0362 U	0.00359 U	0.00359 U	0.00359 U	0.00359 U	0.00359 U	0.00359 U	0.00359 U	0.00903 U	0.00359 U	0.0182 U	0.00359 U	0.233 J	0.00359 U	1840 JB
B-189	3/22/99	N/A	<0.11	<0.11	<0.11	<0.33	<0.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<7.4
	9/13/00	N/A	0.0018	<0.0011	0.0038	0.0061	<0.002	<0.02	<0.041	<0.041	<0.021	<0.041	<0.002	<0.002	0.004	<0.0041	0.0021	0.005	<0.002	0.002	<0.004	0.006	<0.0041	<0.041	0.004	<8.2
	10/18/01	4	<0.0012	0.00062J	<0.0012	0.0042	<0.0012	<0.570	<0.057	0.013J	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	18
	10/10/02	2	0.285 U	0.285 U	0.285 U	0.57 U	0.285 U	0.00953 U	0.0191 U	0.0191 U	0.00381 U	0.0381 U	0.0191 U	0.00381 U	0.00686 =	0.00593 =	0.00606 =	0.00381 U	0.00381 U	0.00381 U	0.00381 U	0.0191 U	0.014 =	0.00381 U	0.00932 =	10.2 U
	11/5/03	4	0.00583 U	0.00583 U	0.00583 U	0.0117 U	0.00583 U	0.00967 U	0.0388 U	0.0388 U	0.0388 U	0.0388 U	0.00385 U	0.00385 U	0.00385 U	0.00387 =	0.00385 U	0.00385 U	0.00385 U	0.00967 U	0.00385 U	0.0195 U	0.00385 U	0.00385 U	0.00385 U	11 =
	12/8/04	4	0.00174 J	0.00106 J	0.00333 J	0.0118	0.00497 U	0.00874 U	0.0351 U	0.0351 U	0.0351 U	0.0351 U	0.00348 U	0.00348 U	0.00348 U	0.00348 U	0.00348 U	0.00348 U	0.00348 U	0.00874 U	0.00348 U	0.0176 U	0.00348 U	0.00348 U	0.00348 U	57.9 JB

All values reported in milligram per kilogram (mg/kg)
1 - Ch 62-777 F.A.C Soil cleanup Target Level (SCTLs) reported in mg/kg
bgs - below ground surface
U - result was not detected
N/A - not available
< - less than
NS - not sampled for compound
J - concentration is less than the reporting limit but greater than the method detection limit
JB- Estimate value. The analyte was detected in the associated method and/or calibration blank.
Shaded values indicate the compounds that exceed the SCTLs
Sampling events dated prior to 10/18/01 were performed by previous CONTRACTOR.

Attachment B
Laboratory Analytical Report
(provided on CD)

NAS Cecil Field

PREPARED FOR: Former NAS Cecil Field / South Fuel Farm Annual Soil Sampling

FINAL REVEIWER: Camden Robinson/ Associate Project Chemist/CCI

COPIES: Sam Naik /Project Manager/CCI

DATE: January 10, 2006

SUBJECT: Quality Assessment for Samples Collected December 1st 2005

This quality assurance memorandum is based upon a review of analytical data generated for soil samples and associated field quality control samples collected December 1st 2005 at the Former Naval Air Station Cecil Field in Jacksonville, Florida. The samples were collected as a part of the South Fuel Farm Annual Soil sampling event conducted at the site. Table 1-1 presents a summary of the CCI sample identification numbers, laboratory sample identification numbers, dates of collection, and the analyses performed.

Gulf Coast Laboratory of Baton Rouge, Louisiana served as the laboratory for this South Fuel Farm Annual soil sampling event for the following analyses:

- Selective Volatile Organic Compounds (VOC) by SW-846 method 8260B,
- Polyaromatic nuclear hydrocarbons (PAH) by HPLC method 8310,
- Total petroleum hydrocarbons (TPH) by method FL-PRO

Table 1-1 Summary Sample Data Reviewed
Former NAS Cecil Field

Sample Number	Lab Sample ID	Date Sampled	Analysis Required
86-B7-S-1201-05	20512031501	12/01/2005	[1], [2], [3]
86-B31-S-1201-05	20512031502	12/01/2005	[1], [2], [3]
86-B41-S-1201-05	20512031503	12/01/2005	[1], [2], [3]
86-B70-S-1201-05	20512031504	12/01/2005	[1], [2], [3]
86-B96-S-1201-05	20512031505	12/01/2005	[1], [2], [3]
86-99-S-1201-05	20512031506	12/01/2005	[1], [2], [3]
86-B101-S-1201-05	20512031507	12/01/2005	[1], [2], [3]
86-B104-S-1201-05	20512031508	12/01/2005	[1], [2], [3]

Sample Number	Lab Sample ID	Date Sampled	Analysis Required
86-B106-S-1201-05	20512031509	12/01/2005	[1], [2], [3]
86-B110-S-1201-05	20512031510	12/01/2005	[1], [2], [3]
86-B137-S-1201-05	20512031511	12/01/2005	[1], [2], [3]
86-B146-S-1201-05	20512031512	12/01/2005	[1], [2], [3]
86-B158-S-1201-05	20512031513	12/01/2005	[1], [2], [3]
86-B167-S-1201-05	20512031514	12/01/2005	[1], [2], [3]
86-B189-S-1201-05	20512031515	12/01/2005	[1], [2], [3]
*086-DUP1-S-1201-05	20512031518	12/01/2005	[1], [2], [3]
**086-DUP2-S-1201-05	20512031519	12/01/2005	[1], [2], [3]
86-EB1-W-1201-05	20512031520	12/01/2005	[1], [2], [3]
86-EB2-W-1201-05	20512031521	12/01/2005	[1], [2], [3]
86-TB1-W-1201-05	20512031522	12/01/2005	[1]
86-TB2-W-1201-05	20512031523	12/01/2005	[1]

ANALYSES PERFORMED CODES:
[1] –Selective Volatile Organic Compounds (VOC) by method SW846 8260B,
[2] –Polyaromatic nuclear hydrocarbons (PAH) by HPLC method 8310,
[3] – Total Petroleum Hydrocarbons (TPH) by method FL-PRO,
** 086-DUP1-S-1207-04 blind field duplicate of 86-B41-S-1201-05,*
*** 086-DUP2-S-1207-04 blind field duplicate of 86-B167-S-1201-05*

Data for the analyses were reviewed for adherence to the specified analytical protocols in accordance with CCI Sampling Analysis Plan. All analysis results have been validated or qualified according to general guidance provided in the Department of Defense (DOD) Quality Systems Manual-Version 2 June 2002.

The findings of this quality assurance report are based upon the comprehensive review of the following results summaries reported according to the CCI Level C (CLP-like data deliverables format): chain of custody documentation, holding times, laboratory method and field blank analyses, surrogate compound recoveries, matrix spike compound recoveries and reproducibility, bromofluorobenzene (BFB) mass tuning results, initial and continuing calibration, second source recovery and internal standard area performance summaries, target compound identification, laboratory control sample results, laboratory and blind field duplicate sample results, detection limits/sensitivity, and electronic data deliverables.

The analyses were performed acceptably, but require several qualifying statements; it is recommended that the analytical data be used only with the qualifying statements provided

below. Any aspects of the data, which are not discussed in this report, should be considered qualitatively and quantitatively valid as reported, based on the deliverables reviewed. A result summary report presenting the validated and qualified results is presented in Attachment I.

SOIL CLEANUP TARGET ACTION LEVEL REGULARTORY LIMITS

All samples collected and analyzed for the month of December 2005 for the volatile organic, polyaromatic hydrocarbon, and total petroluem analyses were less than the action level soil cleanup target level regulartory limits with the exception of the analytes listed below:

Analyte (Volatile List)	Affected Sample	Sample Results (mg/kg)	Groundwater Cleanup Target Levels (mg/kg)
Benzo(a)pyrene	86-B70-A-1201-05	0.705	0.1
Dibenz(a,h)anthracene	86-B70-A-1201-05	0.545	0.1
TPH	86-B104-S-1201-05	1380JB	460
TPH	86-B41-S-1201-05	1970JB	460

General Data Qualifiers

As required by U.S. EPA protocols, all compounds which were qualitatively identified at concentrations below their respective reporting limits (RL) but above the method detection limit (MDL) have been qualified with "J" qualifiers on the data summary reports to indicate that they are quantitative estimates.

Organic Data Qualifiers

The quantitation limits or positive results reported for total petroleum hydrocarbon (TPH) in the samples listed below should be considered quantitative estimates. High percent relative standard deviations during the continuing calibrations were reported during the total petroleum analysis. Lack of precision during the continuing calibration indicates instrument instability; therefore a "J" qualifier was appended to the samples listed below to indicate that the reported values are quantitative estimates.

Compound	Affected Samples
TPH	86-B7-S-1201-05, 86-B31-S-1201-05, 86-B41-S-1201-05, 86-B70-S-1201-05, 86-B96-S-1201-05, 86-B99-S-1201-05, 86-B101-S-1201-05, 86-B104-S-1201-05, 86-B106-S-1201-05, 86-B110-S-1201-S-05, 86-B137-S-1204-05, 86-B146-S-1201-05, 86-B158-S-1201-05, 86-B167-S-1201-05, 86-B189-S-1201-05, 086-DP1-S-1201-05, and 086-DP2-S-1201-05

The positive results for the PAH compounds 1-methylnaphthalene in the samples listed below should be considered quantitative estimates. The relative percent difference (RPD) between the results from the primary and confirmatory column analyses was greater than the acceptance criterion of 40 percent for these compounds. The positive results for this compound in the

specified samples have been "J" qualified on the data summary tables to indicate that they are quantitative estimates.

Compound	Affected Samples
1-Methylnaphthalene	86-B41-S-1201-05, 086-DP2-S-1201-05
Fluoranthene	86-B41-S-1201-05, 86-B70-S-1201-05, 86-B167-S-1201-05, 086-DP1-S-1201-05, 086-DP2-S-1201-05
Naphthalene	86-B31-S-1201-05, 86-B99-S-1201-05
Phenanthrene	86-B41-S-1201-05, 86-B70-S-1201-05
Pyrene	86-B41-S-1201-05, 86-B70-S-1201-05, 86-B104-S-1201-05, 086-DP1-S-1201-05, 086-DP2-S-1201-05
Benzo(a)anthracene	86-B70-S-1201-05, 86-B146-S-1201-05,
Benzo(b)fluoranthene	86-B31-S-1201-05, 86-B167-S-1201-05
Benzo(g,h,I)perylene	86-B70-S-1201-05, 86-B99-S-1201-05, 86-B146-S-1201-05, 86-B167-S-1201-05
Benzo(k)fluoranthene	86-B70-S-1201-05, 86-B146-S-1201-05, 86-B167-S-1201-05
Chrysene	86-B70-S-1201-05, 86-B167-S-1201-05, 086-DP1-S-1201-05
Dibenz(a,h)anthracene	86-B146-S-1201-05, 86-B167-S-1201-05, 086-DP1-S-1201-05
Anthracene	086-DP2-S-1201-05
Fluorene	086-DP2-S-1201-05
Indeno(1,2,3-cd)pyrene	86-B70-S-1201-05, 86-B99-S-1201-05, 86-B104-S-1201-05, 86-B146-S-1201-05

The positive results for total petroleum hydrocarbons (TPH) reported in the samples listed below are considered quantitative estimates due to the level at which these compounds were present in the associated equipment blanks. This has been indicated in the data summary tables by placing a "JB" qualifier next to the reported values for samples associated with equipment blank contamination.

Compound	Affected Samples
TPH	86-B31-S-1201-05, 86-B41-S-1201-05, 86-B70-S-1201-05, 86-B99-S-1201-05, 86-B104-S-1201-05, 86-B106-S-1201-05, 86-B137-S-1204-05, 86-B146-S-1201-05, 86-B158-S-1201-05, 86-B167-S-1201-05, 86-B189-S-1201-05, 086-DP1-S-1201-05, and 086-DP2-S-1201-05

The samples presented below were analyzed at dilutions for the volatile organic, polyaromatic hydrocarbon, and total petroleum analyses. These dilutions may have resulted in surrogate compounds diluted below the instrument detection limits; therefore surrogate recoveries may not be reported for all diluted analyses. These dilutions were required to prevent saturation of the instrument and to allow quantitation of the compounds within the linear range of the calibration curve and/or to reduce the effects of the matrix on the target compounds. Positive results for these compounds in the samples below have been reported from the diluted analyses. All other results and quantitation limits have been reported on the sample report summary from the initial analysis. However, higher quantitation limits may have resulted for specific volatile organic, polyaromatic hydrocarbon, and total petroluem compounds, which were not detected, in these samples. This should be noted when assessing these samples for the qualitative absence of specific volatile organic, polyaromatic hydrocarbon, and total petroleum compounds.

Sample ID	Analysis	Dilution Factor
86-B41-S-1201-05	VOC	50x
86-B96-S-1201-05	VOC	50X
086-DP1-S-1201-05	VOC	50X
86-B41-S-1201-05	PAH	5x
86-B70-S-1201-05	PAH	10x
86-B96-S-1201-05	PAH	2x
86-B104-S-1201-05	PAH	5x
86-B106-S-1201-05	PAH	5X
086-DP1-S-1201-05	PAH	10X
086-DP2-S-1201-05	PAH	5X
86-B41-S-1201-05	FLA-PRO	10x
86-B104-S-1201-05	FLA-PRO	10X
086-DP1-S-1201-05	FLA-PRO	10X

Samples 86-B41-S-1201-05 and 86-B167-S-1201-05and their blind field duplicate samples 086-DUP1-S-1201-05 and 086-DUP2-S-1201-05 were submitted to the laboratory to evaluate sampling and analytical precision for those compounds determined to be confidently detected. All compounds met CCI's blind duplicate precision criteria of 30% for soil samples relative percent difference (RPD) for volatile organic and polyaromatic analyses with the exception of 1-methylnaphthalene, 2-methylnaphthalene, fluoroanthene, naphthalene, phenanthrene, pyrene, benzo(a)anthracene, benzo(a)pyrene, benzo (b)fluoranthene, benzo(g,h,I)perylene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, anthracene, fluorene, indeno(1,2,3-cd)pyrene, and total petroleum hydrocarbons by fl-pro. A "J" qualifier was appended to these

compounds for the native samples listed below to indicate that the reported value should be considered quantitative estimates due to the field duplicate RPD exceedances. The RPD was not calculated for the compounds that were not detected in both samples.

Compound	Affected Samples
1-Methylnaphthalene	86-B41-S-1201-05, 086-DP2-S-1201-05
2-Methynaphthalene	86-B41-S-1201-05, 086-DP2-S-1201-05
Fluoranthene	86-B41-S-1201-05, 86-B167-S-1201-05, 086-DP1-S-1201-05, 086-DP2-S-1201-05
Naphthalene	86-B41-S-1201-05, 086-DP2-S-1201-05
Phenanthrene	86-B41-S-1201-05
Pyrene	86-B41-S-1201-05, 86-B167-S-1201-05, 086-DP1-S-1201-05, 086-DP2-S-1201-05
Benzo(a)anthracene	86-B167-S-1201-05, 086-DP1-S-1201-05
Benzo(a)pyrene	86-B167-S-1201-05, 086-DP1-S-1201-05
Benzo(b)fluoranthene	86-B167-S-1201-05, 086-DP1-S-1201-05
Benzo(g,h,I)perylene	86-B167-S-1201-05, 086-DP1-S-1201-05
Benzo(k)fluoranthene	86-B167-S-1201-05, 086-DP1-S-1201-05
Chrysene	86-B167-S-1201-05, 086-DP1-S-1201-05
Dibenz(a,h)anthracene	86-B167-S-1201-05, 086-DP1-S-1201-05
Anthracene	086-DP2-S-1201-05
Fluorene	086-DP2-S-1201-05
Indeno(1,2,3-cd)pyrene	86-B167-S-1201-05
TPH	86-B41-S-1201-05, 086-DP1-S-1201-05

Summary

The organic analyses were performed acceptably, but required qualifying statements. This analytical quality assurance report has identified the aspects of the data, which required qualification. These qualifiers are noted on the attached analytical sample summary reports. A support documentation package has been prepared for this quality assurance review and is filed with the Former NAS Cecil Field CTO 86/South Fuel Farm Annual soil sampling 2005 project file.

Attachment I

VALID QUALIFIERS

QUALIFIER	
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit
J	The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R/UR	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet the quality control criteria. The presence or absence of the analyte cannot be verified.
B	The analyte was detected in the associated method and/or calibration blank.
JB	The analyte detected in the associated field, equipment, and/or trip blank.

QUALIFICATION CODE REFERENCE

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect.
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
K	Second source %D was noncompliant.	Second source %D was noncompliant.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
MB	Presumed contamination from preparation (method) blank.	Presumed contamination from preparation (method) blank or calibration blank.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or high RPD.	MS/MSD recovery was poor or high RPD.
G	Result is over the calibration range. No other acceptable result was provided.	Result is over the calibration range. Not other acceptable result was provided.
E	Not applicable.	Lab duplicate RPD showed poor agreement.
Z	Field duplicate RPD showed poor agreement.	Field duplicate RPD showed poor agreement
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D was not within control limits.
TN	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination from trip blank.	Not applicable.
+	False positive—reported compound was not present.	Not applicable.
-	False negative—compound was present but not reported.	Not applicable.
F	Presumed contamination from FB or ER.	Presumed contamination from FB or ER.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.
D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Confirmation analysis RPD exceeded 40%.	Post Digestion Spike recovery was not within control limits.
T/D	Not applicable.	Total metals results were less than the dissolved metals result.
SD	Not applicable.	Seed correction factor was below the acceptable limit.
M	Results should be considered estimated due to matrix effects caused by saturation of non-target analytes.	Not applicable

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-B7-S-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Soil

Sample wt/vol: 5.72 (g/ml) g

Lab Sample ID: 20512031501

Level: (low/med) LOW

Lab File ID: 2051205/U8603

% Moisture: not dec. 11.4

Date Collected: 12/01/05 Time: 1430

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 12/03/05

Instrument ID: MSV0

Date Analyzed: 12/05/05 Time: 1749

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: JCK

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 308217

CONCENTRATION UNITS: ug/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	4.93	U	0.103	4.93
100-41-4	Ethylbenzene	4.93	U	0.204	4.93
108-88-3	Toluene	4.93	U	0.542	4.93
1330-20-7	Xylene (total)	9.86	U	0.564	9.86
1634-04-4	tert-Butyl methyl ether (MTBE)	4.93	U	0.073	4.93

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-B31-S-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Soil

Sample wt/vol: 5.22 (g/ml) g

Lab Sample ID: 20512031502

Level: (low/med) LOW

Lab File ID: 2051206/U9045

% Moisture: not dec. 7.3

Date Collected: 12/01/05 Time: 1510

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 12/03/05

Instrument ID: MSV4

Date Analyzed: 12/06/05 Time: 1105

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: VWM

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 308275

CONCENTRATION UNITS: ug/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	5.17	U	0.108	5.17
100-41-4	Ethylbenzene	5.17	U	0.214	5.17
108-88-3	Toluene	5.17	U	0.569	5.17
1330-20-7	Xylene (total)	10.3	U	0.591	10.3
1634-04-4	tert-Butyl methyl ether (MTBE)	5.17	U	0.077	5.17

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-B41-S-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Soil

Sample wt/vol: 6.26 (g/ml) g

Lab Sample ID: 20512031503

Level: (low/med) LOW

Lab File ID: 2051206/A1516

% Moisture: not dec. 13.0

Date Collected: 12/01/05 Time: 1600

GC Column: DB-VRX-20M ID: .18 (mm)

Date Received: 12/03/05

Instrument ID: MSV7

Date Analyzed: 12/06/05 Time: 1618

Soil Extract Volume: (µL)

Dilution Factor: 50 Analyst: JCK

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 308321

CONCENTRATION UNITS: ug/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	230	U	4.77	230
100-41-4	Ethylbenzene	230	U	9.50	230
108-88-3	Toluene	230	U	25.2	230
1330-20-7	Xylene (total)	459	U	26.3	459
1634-04-4	tert-Butyl methyl ether (MTBE)	230	U	3.40	230

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-B70-S-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Soil

Sample wt/vol: 5.05 (g/ml) g

Lab Sample ID: 20512031504

Level: (low/med) LOW

Lab File ID: 2051206/U9047

% Moisture: not dec. 6.5

Date Collected: 12/01/05 Time: 1350

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 12/03/05

Instrument ID: MSV4

Date Analyzed: 12/06/05 Time: 1151

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: VWM

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 308275

CONCENTRATION UNITS: ug/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	2.63	J	0.110	5.29
100-41-4	Ethylbenzene	1.23	J	0.219	5.29
108-88-3	Toluene	4.51	J	0.582	5.29
1330-20-7	Xylene (total)	5.69	J	0.606	10.6
1634-04-4	tert-Butyl methyl ether (MTBE)	5.29	U	0.078	5.29

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-B96-S-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Soil

Sample wt/vol: 5.21 (g/ml) g

Lab Sample ID: 20512031505

Level: (low/med) LOW

Lab File ID: 2051206/A1513

% Moisture: not dec. 3.6

Date Collected: 12/01/05 Time: 1325

GC Column: DB-VRX-20M ID: .18 (mm)

Date Received: 12/03/05

Instrument ID: MSV7

Date Analyzed: 12/06/05 Time: 1508

Soil Extract Volume: (µL)

Dilution Factor: 50 Analyst: JCK

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 308321

CONCENTRATION UNITS: ug/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	249	U	5.18	249
100-41-4	Ethylbenzene	249	U	10.3	249
108-88-3	Toluene	249	U	27.4	249
1330-20-7	Xylene (total)	498	U	28.5	498
1634-04-4	tert-Butyl methyl ether (MTBE)	249	U	3.68	249

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-B99-S-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Soil

Sample wt/vol: 6.62 (g/ml) g Lab Sample ID: 20512031506

Level: (low/med) LOW Lab File ID: 2051206/U9049

% Moisture: not dec. 14.0 Date Collected: 12/01/05 Time: 1340

GC Column: DB-624-30M ID: .53 (mm) Date Received: 12/03/05

Instrument ID: MSV4 Date Analyzed: 12/06/05 Time: 1237

Soil Extract Volume: (µL) Dilution Factor: 1 Analyst: VWM

Soil Aliquot Volume: (µL) Prep Batch: Analytical Batch: 308275

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/kg

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	4.39	U	0.091	4.39
100-41-4	Ethylbenzene	4.39	U	0.182	4.39
108-88-3	Toluene	4.39	U	0.483	4.39
1330-20-7	Xylene (total)	8.79	U	0.503	8.79
1634-04-4	tert-Butyl methyl ether (MTBE)	4.39	U	0.065	4.39

CL

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-B101-S-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Soil

Sample wt/vol: 5.27 (g/ml) g

Lab Sample ID: 20512031507

Level: (low/med) LOW

Lab File ID: 2051206/U9051

% Moisture: not dec. 6.6

Date Collected: 12/01/05 Time: 1305

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 12/03/05

Instrument ID: MSV4

Date Analyzed: 12/06/05 Time: 1324

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: VWM

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 308275

CONCENTRATION UNITS: ug/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	5.08	U	0.106	5.08
100-41-4	Ethylbenzene	5.08	U	0.210	5.08
108-88-3	Toluene	5.08	U	0.559	5.08
1330-20-7	Xylene (total)	10.2	U	0.581	10.2
1634-04-4	tert-Butyl methyl ether (MTBE)	5.08	U	0.075	5.08

C.L

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-B104-S-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Soil

Sample wt/vol: 5.38 (g/ml) g

Lab Sample ID: 20512031508

Level: (low/med) LOW

Lab File ID: 2051205/U9029

% Moisture: not dec. 9.6

Date Collected: 12/01/05 Time: 1135

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 12/03/05

Instrument ID: MSV4

Date Analyzed: 12/05/05 Time: 1655

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: KCB

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 308195

CONCENTRATION UNITS: ug/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	5.14	U	0.107	5.14
100-41-4	Ethylbenzene	5.14	U	0.213	5.14
108-88-3	Toluene	7.79		0.566	5.14
1330-20-7	Xylene (total)	5.02	J	0.588	10.3
1634-04-4	tert-Butyl methyl ether (MTBE)	5.14	U	0.076	5.14

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-B106-S-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Soil

Sample wt/vol: 5.47 (g/ml) g

Lab Sample ID: 20512031509

Level: (low/med) LOW

Lab File ID: 2051206/U9052

% Moisture: not dec. 9.2

Date Collected: 12/01/05 Time: 1245

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 12/03/05

Instrument ID: MSV4

Date Analyzed: 12/06/05 Time: 1347

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: VWM

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 308275

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/kg

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	5.03	U	0.105	5.03
100-41-4	Ethylbenzene	5.03	U	0.208	5.03
108-88-3	Toluene	5.03	U	0.554	5.03
1330-20-7	Xylene (total)	10.1	U	0.576	10.1
1634-04-4	tert-Butyl methyl ether (MTBE)	5.03	U	0.075	5.03

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-B110-S-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Soil

Sample wt/vol: 5.91 (g/ml) g

Lab Sample ID: 20512031510

Level: (low/med) LOW

Lab File ID: 2051205/U9031

% Moisture: not dec. 16.7

Date Collected: 12/01/05 Time: 1115

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 12/03/05

Instrument ID: MSV4

Date Analyzed: 12/05/05 Time: 1742

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: KCB

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 308195

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/kg

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	5.08	U	0.106	5.08
100-41-4	Ethylbenzene	5.08	U	0.210	5.08
108-88-3	Toluene	5.08	U	0.558	5.08
1330-20-7	Xylene (total)	10.2	U	0.581	10.2
1634-04-4	tert-Butyl methyl ether (MTBE)	5.08	U	0.075	5.08

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-B137-S-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Soil

Sample wt/vol: 5.2 (g/ml) g

Lab Sample ID: 20512031511

Level: (low/med) LOW

Lab File ID: 2051205/U9032

% Moisture: not dec. 9.1

Date Collected: 12/01/05 Time: 1050

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 12/03/05

Instrument ID: MSV4

Date Analyzed: 12/05/05 Time: 1805

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: KCB

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 308195

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/kg

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	5.29	U	0.110	5.29
100-41-4	Ethylbenzene	5.29	U	0.219	5.29
108-88-3	Toluene	5.29	U	0.582	5.29
1330-20-7	Xylene (total)	10.6	U	0.605	10.6
1634-04-4	tert-Butyl methyl ether (MTBE)	5.29	U	0.078	5.29

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-B146-S-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Soil

Sample wt/vol: 5.17 (g/ml) g

Lab Sample ID: 20512031512

Level: (low/med) LOW

Lab File ID: 2051205/U9033

% Moisture: not dec. 7.6

Date Collected: 12/01/05 Time: 1025

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 12/03/05

Instrument ID: MSV4

Date Analyzed: 12/05/05 Time: 1828

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: KCB

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 308195

CONCENTRATION UNITS: ug/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	5.23	U	0.109	5.23
100-41-4	Ethylbenzene	5.23	U	0.217	5.23
108-88-3	Toluene	0.974	J	0.576	5.23
1330-20-7	Xylene (total)	2.48	J	0.599	10.5
1634-04-4	tert-Butyl methyl ether (MTBE)	5.23	U	0.077	5.23

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-B158-S-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Soil

Sample wt/vol: 5.3 (g/ml) g

Lab Sample ID: 20512031513

Level: (low/med) LOW

Lab File ID: 2051205/U9034

% Moisture: not dec. 8.4

Date Collected: 12/01/05 Time: 0950

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 12/03/05

Instrument ID: MSV4

Date Analyzed: 12/05/05 Time: 1853

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: KCB

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 308195

CONCENTRATION UNITS: ug/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	5.15	U	0.107	5.15
100-41-4	Ethylbenzene	5.15	U	0.213	5.15
108-88-3	Toluene	5.15	U	0.566	5.15
1330-20-7	Xylene (total)	10.3	U	0.589	10.3
1634-04-4	tert-Butyl methyl ether (MTBE)	5.15	U	0.076	5.15

FORM I VOA

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-B167-S-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Soil

Sample wt/vol: 5.3 (g/ml) g

Lab Sample ID: 20512031514

Level: (low/med) LOW

Lab File ID: 2051205/U9035

% Moisture: not dec. 17.5

Date Collected: 12/01/05 Time: 1005

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 12/03/05

Instrument ID: MSV4

Date Analyzed: 12/05/05 Time: 1915

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: KCB

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 308195

CONCENTRATION UNITS: ug/kg

Analytical Method: SW-846 8260

CAS NO.	***COMPOUND***	***RESULT***	***Q***	***MDL***	***RL***
71-43-2	Benzene	5.71	U	0.119	5.71
100-41-4	Ethylbenzene	5.71	U	0.237	5.71
108-88-3	Toluene	5.71	U	0.629	5.71
1330-20-7	Xylene (total)	11.4	U	0.654	11.4
1634-04-4	tert-Butyl methyl ether (MTBE)	5.71	U	0.085	5.71

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FORM I VOA

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-B189-S-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Soil

Sample wt/vol: 5.05 (g/ml) g

Lab Sample ID: 20512031515

Level: (low/med) LOW

Lab File ID: 2051207/U9066

% Moisture: not dec. 7.2

Date Collected: 12/01/05 Time: 0930

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 12/03/05

Instrument ID: MSV4

Date Analyzed: 12/07/05 Time: 1425

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: AJV

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 308511

CONCENTRATION UNITS: *ug/kg*

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	5.34	U	0.111	5.34
100-41-4	Ethylbenzene	5.34	U	0.221	5.34
108-88-3	Toluene	5.34	U	0.587	5.34
1330-20-7	Xylene (total)	10.7	U	0.610	10.7
1634-04-4	tert-Butyl methyl ether (MTBE)	5.34	U	0.079	5.34

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FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

086-DP1-S-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Soil

Sample wt/vol: 6.6 (g/ml) g

Lab Sample ID: 20512031518

Level: (low/med) LOW

Lab File ID: 2051206/A1517

% Moisture: not dec. 16.0

Date Collected: Time:

GC Column: DB-VRX-20M ID: .18 (mm)

Date Received: 12/03/05

Instrument ID: MSV7

Date Analyzed: 12/06/05 Time: 1641

Soil Extract Volume: (µL)

Dilution Factor: 50 Analyst: JCK

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 308321

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/kg

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	226	U	4.69	226
100-41-4	Ethylbenzene	226	U	9.34	226
108-88-3	Toluene	226	U	24.8	226
1330-20-7	Xylene (total)	451	U	25.8	451
1634-04-4	tert-Butyl methyl ether (MTBE)	226	U	3.34	226

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

086-DP2-S-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Soil

Sample wt/vol: 5.51 (g/ml) g Lab Sample ID: 20512031519

Level: (low/med) LOW Lab File ID: 2051206/U9056

% Moisture: not dec. 11.7 Date Collected: Time:

GC Column: DB-624-30M ID: .53 (mm) Date Received: 12/03/05

Instrument ID: MSV4 Date Analyzed: 12/06/05 Time: 1521

Soil Extract Volume: (µL) Dilution Factor: 1 Analyst: VWM

Soil Aliquot Volume: (µL) Prep Batch: Analytical Batch: 308275

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/kg

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	5.14	U	0.107	5.14
100-41-4	Ethylbenzene	5.14	U	0.213	5.14
108-88-3	Toluene	5.14	U	0.565	5.14
1330-20-7	Xylene (total)	10.3	U	0.588	10.3
1634-04-4	tert-Butyl methyl ether (MTBE)	5.14	U	0.076	5.14

C. R

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-EB1-W-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL Lab Sample ID: 20512031520

Level: (low/med) LOW Lab File ID: 2051207/A1565

% Moisture: not dec. Date Collected: 12/01/05 Time: 0855

GC Column: DB-VRX-20M ID: .18 (mm) Date Received: 12/03/05

Instrument ID: MSV7 Date Analyzed: 12/07/05 Time: 1524

Soil Extract Volume: (µL) Dilution Factor: 1 Analyst: ABD

Soil Aliquot Volume: (µL) Prep Batch: Analytical Batch: 308493

CONCENTRATION UNITS: ug/L Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	5.00	U	0.225	5.00
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

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FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

86-EB2-W-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20512031521

Level: (low/med) LOW

Lab File ID: 2051207/A1566

% Moisture: not dec.

Date Collected: 12/01/05 Time: 1630

GC Column: DB-VRX-20M ID: .18 (mm)

Date Received: 12/03/05

Instrument ID: MSV7

Date Analyzed: 12/07/05 Time: 1546

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: ABD

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 308493

CONCENTRATION UNITS: ug/L

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	5.00	U	0.225	5.00
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

086-TB1-W-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20512031522

Level: (low/med) LOW

Lab File ID: 2051207/A1567

% Moisture: not dec.

Date Collected: Time:

GC Column: DB-VRX-20M ID: .18 (mm)

Date Received: 12/03/05

Instrument ID: MSV7

Date Analyzed: 12/07/05 Time: 1609

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: ABD

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 308493

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	5.00	U	0.225	5.00
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

086-TB2-W-1201-05

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 205120315

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 20512031523

Level: (low/med) LOW

Lab File ID: 2051207/A1568

% Moisture: not dec.

Date Collected: Time:

GC Column: DB-VRX-20M ID: .18 (mm)

Date Received: 12/03/05

Instrument ID: MSV7

Date Analyzed: 12/07/05 Time: 1631

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: ABD

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 308493

Analytical Method: SW-846 8260

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-43-2	Benzene	5.00	U	0.225	5.00
100-41-4	Ethylbenzene	5.00	U	0.227	5.00
108-88-3	Toluene	5.00	U	0.213	5.00
1330-20-7	Xylene (total)	10.0	U	0.509	10.0
1634-04-4	tert-Butyl methyl ether (MTBE)	5.00	U	0.179	5.00

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 25.1 Units: g

Level: (low/med) LOW

% Moisture: 11.4 decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307709 Analytical Batch: 308174

CONCENTRATION UNITS: ug/kg

Sample ID: 86-B7-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031501

Date Collected: 12/01/05 Time: 1430

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/04/05 Time: 0356

Dilution Factor: 1 Analyst: SJT

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS19A

Lab File ID: 2051203P/SV19A005S

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
FLPRO-01	Petroleum Hydrocarbons	8990	U J	5620	8990

C

C.P

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 25 Units: g

Level: (low/med) LOW

% Moisture: 7.3 decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307709 Analytical Batch: 308174

CONCENTRATION UNITS: ug/kg

Sample ID: 86-B31-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031502

Date Collected: 12/01/05 Time: 1510

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/04/05 Time: 0424

Dilution Factor: 1 Analyst: SJT

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS19A

Lab File ID: 2051203P/SV19A006S

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
FLPRO-01	Petroleum Hydrocarbons	10700	JB	5400	8630

F, C

C. L

FORM I ORG-1

1D
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Lab Code: LA024 Case No.:
Matrix: Soil
Sample wt/vol: 25.3 Units: g
Level: (low/med) LOW
% Moisture: 13.0 decanted: (Y/N)
GC Column: ID: (mm)
Concentrated Extract Volume: 2000 (µL)
Soil Aliquot Volume: (µL)
Injection Volume: 1 (µL)
GPC Cleanup: (Y/N) N pH:
Prep Batch: 307709 Analytical Batch: 308174

Sample ID: 86-B41-S-1201-05
Contract:
SAS No.: SDG No.: 205120315
Lab Sample ID: 20512031503
Date Collected: 12/01/05 Time: 1600
Date Received: 12/03/05
Date Extracted: 12/03/05
Date Analyzed: 12/04/05 Time: 1524
Dilution Factor: 10 Analyst: TLS
Prep Method: FLORIDA PRO
Analytical Method: FLORIDA PRO
Sulfur Cleanup: (Y/N) N Instrument ID: GCS19A
Lab File ID: 2051203P/SV19A026S

CONCENTRATION UNITS: ug/kg

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
FLPRO-01	Petroleum Hydrocarbons	1970000	JB	56800	90900

F, C, E

C.L

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 25 Units: g

Level: (low/med) LOW

% Moisture: 6.5 decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307709 Analytical Batch: 308174

CONCENTRATION UNITS: ug/kg

Sample ID: 86-B70-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031504

Date Collected: 12/01/05 Time: 1350

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/04/05 Time: 0521

Dilution Factor: 1 Analyst: SJT

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS19A

Lab File ID: 2051203P/SV19A008S

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
FLPRO-01	Petroleum Hydrocarbons	22800	JB	5350	8550	F, C

C. L

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 25 Units: g

Level: (low/med) LOW

% Moisture: 3.6 decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307709 Analytical Batch: 308174

CONCENTRATION UNITS: ug/kg

Sample ID: 86-B96-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031505

Date Collected: 12/01/05 Time: 1325

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/04/05 Time: 0550

Dilution Factor: 1 Analyst: SJT

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS19A

Lab File ID: 2051203P/SV19A009S

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
FLPRO-01	Petroleum Hydrocarbons	8300	U J	5190	8300

C

c.k

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL	Sample ID:	86-B99-S-1201-05
Lab Code:	LA024 Case No.:	Contract:	
Matrix:	Soil	SAS No.:	SDG No.: 205120315
Sample wt/vol:	25.2 Units: g	Lab Sample ID:	20512031506
Level: (low/med)	LOW	Date Collected:	12/01/05 Time: 1340
% Moisture:	14.0 decanted: (Y/N)	Date Received:	12/03/05
GC Column:	ID: (mm)	Date Extracted:	12/03/05
Concentrated Extract Volume:	2000 (µL)	Date Analyzed:	12/04/05 Time: 0618
Soil Aliquot Volume:	(µL)	Dilution Factor:	1 Analyst: SJT
Injection Volume:	1 (µL)	Prep Method:	FLORIDA PRO
GPC Cleanup: (Y/N)	N pH:	Analytical Method:	FLORIDA PRO
Prep Batch:	307709 Analytical Batch: 308174	Sulfur Cleanup: (Y/N)	N Instrument ID: GCS19A
CONCENTRATION UNITS:	*ug/kg*	Lab File ID:	2051203P/SV19A010S

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
FLPRO-01	Petroleum Hydrocarbons	43900	JB	5770	9230	F, C

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 25.1 Units: g

Level: (low/med) LOW

% Moisture: 6.6 decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307709 Analytical Batch: 308174

CONCENTRATION UNITS: ug/kg

Sample ID: 86-B101-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031507

Date Collected: 12/01/05 Time: 1305

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/04/05 Time: 0647

Dilution Factor: 1 Analyst: SJT

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS19A

Lab File ID: 2051203P/SV19A011S

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
FLPRO-01	Petroleum Hydrocarbons	8530	U J	5330	8530

C

C L

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL	Sample ID:	86-B104-S-1201-05
Lab Code:	LA024 Case No.:	Contract:	
Matrix:	Soil	SAS No.:	SDG No.: 205120315
Sample wt/vol:	25.4 Units: g	Lab Sample ID:	20512031508
Level: (low/med)	LOW	Date Collected:	12/01/05 Time: 1135
% Moisture:	9.6 decanted: (Y/N)	Date Received:	12/03/05
GC Column:	ID: (mm)	Date Extracted:	12/03/05
Concentrated Extract Volume:	2000 (µL)	Date Analyzed:	12/04/05 Time: 1552
Soil Aliquot Volume:	(µL)	Dilution Factor:	10 Analyst: TLS
Injection Volume:	1 (µL)	Prep Method:	FLORIDA PRO
GPC Cleanup: (Y/N)	N pH:	Analytical Method:	FLORIDA PRO
Prep Batch:	307709 Analytical Batch: 308174	Sulfur Cleanup: (Y/N)	N Instrument ID: GCS19A
CONCENTRATION UNITS:	*ug/kg*	Lab File ID:	2051203P/SV19A027S

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
FLPRO-01	Petroleum Hydrocarbons	1380000	J3	54500	87100	F, C

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 25 Units: g

Level: (low/med) LOW

% Moisture: 9.2 decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307709 Analytical Batch: 308174

CONCENTRATION UNITS: ug/kg

Sample ID: 86-B106-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031509

Date Collected: 12/01/05 Time: 1245

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/04/05 Time: 0812

Dilution Factor: 1 Analyst: SJT

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS19A

Lab File ID: 2051203P/SV19A014S

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
FLPRO-01	Petroleum Hydrocarbons	19700	JB	5510	8810	F, C

C.L

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 25.2 Units: g

Level: (low/med) LOW

% Moisture: 16.7 decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307709 Analytical Batch: 308174

CONCENTRATION UNITS: ug/kg

Sample ID: 86-B110-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031510

Date Collected: 12/01/05 Time: 1115

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/04/05 Time: 0841

Dilution Factor: 1 Analyst: SJT

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS19A

Lab File ID: 2051203P/SV19A015S

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
FLPRO-01	Petroleum Hydrocarbons	9530	U J	5950	9530

C

C.L

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 25.4 Units: g

Level: (low/med) LOW

% Moisture: 9.1 decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307709 Analytical Batch: 308174

CONCENTRATION UNITS: *ug/kg*

Sample ID: 86-B137-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031511

Date Collected: 12/01/05 Time: 1050

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/04/05 Time: 0909

Dilution Factor: 1 Analyst: SJT

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS19A

Lab File ID: 2051203P/SV19A016S

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
FLPRO-01	Petroleum Hydrocarbons	9500	J13	5410	8660	F, C

0.2

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 25 Units: g

Level: (low/med) LOW

% Moisture: 7.6 decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307709 Analytical Batch: 308174

CONCENTRATION UNITS: ug/kg

Sample ID: 86-B146-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031512

Date Collected: 12/01/05 Time: 1025

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/04/05 Time: 0938

Dilution Factor: 1 Analyst: SJT

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS19A

Lab File ID: 2051203P/SV19A017S

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
FLPRO-01	Petroleum Hydrocarbons	13400	JB	5410	8660	F, C

P.L

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 25.1 Units: g

Level: (low/med) LOW

% Moisture: 8.4 decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307709 Analytical Batch: 308174

CONCENTRATION UNITS: ug/kg

Sample ID: 86-B158-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031513

Date Collected: 12/01/05 Time: 0950

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/05/05 Time: 0104

Dilution Factor: 1 Analyst: TLS

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS19A

Lab File ID: 2051203P/SV19A031S

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
FLPRO-01	Petroleum Hydrocarbons	6360	J B	5430	8690

F, C

C.L

FORM I ORG-1

1D
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Lab Code: LA024 Case No.:
Matrix: Soil
Sample wt/vol: 25 Units: g
Level: (low/med) LOW
% Moisture: 17.5 decanted: (Y/N)
GC Column: ID: (mm)
Concentrated Extract Volume: 2000 (µL)
Soil Aliquot Volume: (µL)
Injection Volume: 1 (µL)
GPC Cleanup: (Y/N) N pH:
Prep Batch: 307709 Analytical Batch: 308174
CONCENTRATION UNITS: ug/kg

Sample ID: 86-B167-S-1201-05
Contract:
SAS No.: SDG No.: 205120315
Lab Sample ID: 20512031514
Date Collected: 12/01/05 Time: 1005
Date Received: 12/03/05
Date Extracted: 12/03/05
Date Analyzed: 12/05/05 Time: 0206
Dilution Factor: 1 Analyst: TLS
Prep Method: FLORIDA PRO
Analytical Method: FLORIDA PRO
Sulfur Cleanup: (Y/N) N Instrument ID: GCS19A
Lab File ID: 2051203P/SV19A032S

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
FLPRO-01	Petroleum Hydrocarbons	14900	JB	6060	9690	F, C

C.2

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 25 Units: g

Level: (low/med) LOW

% Moisture: 7.2 decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307709 Analytical Batch: 308174

CONCENTRATION UNITS: ug/kg

Sample ID: 86-B189-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031515

Date Collected: 12/01/05 Time: 0930

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/04/05 Time: 1230

Dilution Factor: 1 Analyst: SJT

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS19A

Lab File ID: 2051203P/SV19A020S

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
FLPRO-01	Petroleum Hydrocarbons	7380	J B	5390	8620

F, C

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 25.1 Units: g

Level: (low/med) LOW

% Moisture: 16.0 decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307709 Analytical Batch: 308174

CONCENTRATION UNITS: ug/kg

Sample ID: 086-DP2-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031518

Date Collected: Time:

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/04/05 Time: 1424

Dilution Factor: 1 Analyst: SJT

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS19A

Lab File ID: 2051203P/SV19A024S

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
FLPRO-01	Petroleum Hydrocarbons	15000	JB	5930	9490	F, C

Resubmitted 1/6/05

C.L

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 25 Units: g

Level: (low/med) LOW

% Moisture: 11.7 decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 2000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307709 Analytical Batch: 308174

Sample ID: 086-DP1-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031519

Date Collected: Time:

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/04/05 Time: 1621

Dilution Factor: 10 Analyst: TLS

Prep Method: FLORIDA PRO

Analytical Method: FLORIDA PRO

Sulfur Cleanup: (Y/N) N Instrument ID: GCS19A

CONCENTRATION UNITS: ug/kg

Lab File ID: 2051203P/SV19A028S

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
FLPRO-01	Petroleum Hydrocarbons	1390000	J B	56600	90600	F, C, Z

Resubmitted 1/6/05

FORM I ORG-1

1D
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Lab Code: LA024 Case No.:
Matrix: Water
Sample wt/vol: 1000 Units: mL
Level: (low/med) LOW
% Moisture: decanted: (Y/N)
GC Column: ID: (mm)
Concentrated Extract Volume: 2000 (µL)
Soil Aliquot Volume: (µL)
Injection Volume: 1 (µL)
GPC Cleanup: (Y/N) N pH:
Prep Batch: 308293 Analytical Batch: 309705

Sample ID: 86-EB1-W-1201-05
Contract:
SAS No.: SDG No.: 205120315
Lab Sample ID: 20512031520
Date Collected: 12/01/05 Time: 0855
Date Received: 12/03/05
Date Extracted: 12/06/05
Date Analyzed: 12/15/05 Time: 0029
Dilution Factor: 1 Analyst: SJT
Prep Method: FLORIDA PRO
Analytical Method: FLORIDA PRO
Sulfur Cleanup: (Y/N) N Instrument ID: GCS20A

CONCENTRATION UNITS: *ug/L*
Lab File ID: 2051214/SV20A013S

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
FLPRO-01	Petroleum Hydrocarbons	151	~~B~~	40.7	100

FORM I ORG-1

1D
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Lab Code: LA024 Case No.:
Matrix: Water
Sample wt/vol: 1000 Units: mL
Level: (low/med) LOW
% Moisture: decanted: (Y/N)
GC Column: ID: (mm)
Concentrated Extract Volume: 2000 (µL)
Soil Aliquot Volume: (µL)
Injection Volume: 1 (µL)
GPC Cleanup: (Y/N) N pH:
Prep Batch: 308293 Analytical Batch: 309705

Sample ID: 86-EB2-W-1201-05
Contract:
SAS No.: SDG No.: 205120315
Lab Sample ID: 20512031521
Date Collected: 12/01/05 Time: 1630
Date Received: 12/03/05
Date Extracted: 12/06/05
Date Analyzed: 12/15/05 Time: 0102
Dilution Factor: 1 Analyst: SJT
Prep Method: FLORIDA PRO
Analytical Method: FLORIDA PRO
Sulfur Cleanup: (Y/N) N Instrument ID: GCS20A
Lab File ID: 2051214/SV20A014S

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
FLPRO-01	Petroleum Hydrocarbons	170	~~B~~	40.7	100

FORM I ORG-1

1D
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Lab Code: LA024 Case No.:
Matrix: Soil
Sample wt/vol: 30.1 Units: g
Level: (low/med) LOW
% Moisture: 11.4 decanted: (Y/N)
GC Column: 201TP-0.15 ID: 2.1 (mm)
Concentrated Extract Volume: 1000 (µL)
Soil Aliquot Volume: (µL)
Injection Volume: 1 (µL)
GPC Cleanup: (Y/N) N pH:
Prep Batch: 307705 Analytical Batch: 308324

Sample ID: 86-B7-S-1201-05
Contract:
SAS No.: SDG No.: 205120315
Lab Sample ID: 20512031501
Date Collected: 12/01/05 Time: 1430
Date Received: 12/03/05
Date Extracted: 12/03/05
Date Analyzed: 12/06/05 Time: 1500
Dilution Factor: 1 Analyst: RFS
Prep Method: SW-846 8310
Analytical Method: SW-846 8310
Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

CONCENTRATION UNITS: ug/kg
Lab File ID: 051206/H0000829

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
90-12-0	1-Methylnaphthalene	37.4	U	10.2	37.4
91-57-6	2-Methylnaphthalene	37.4	U	11.4	37.4
83-32-9	Acenaphthene	37.4	U	10.9	37.4
208-96-8	Acenaphthylene	37.4	U	4.18	37.4
120-12-7	Anthracene	3.71	U	0.530	3.71
56-55-3	Benzo(a)anthracene	3.71	U	1.34	3.71
50-32-8	Benzo(a)pyrene	3.71	U	1.25	3.71
205-99-2	Benzo(b)fluoranthene	3.71	U	0.810	3.71
191-24-2	Benzo(g,h,i)perylene	3.71	U	0.416	3.71
207-08-9	Benzo(k)fluoranthene	3.71	U	0.950	3.71
218-01-9	Chrysene	3.71	U	1.06	3.71
53-70-3	Dibenz(a,h)anthracene	3.71	U	0.992	3.71
206-44-0	Fluoranthene	3.71	U	1.03	3.71
86-73-7	Fluorene	18.8	U	3.95	18.8
193-39-5	Indeno(1,2,3-cd)pyrene	9.33	U	1.02	9.33
91-20-3	Naphthalene	9.33	U	3.46	9.33
85-01-8	Phenanthrene	3.71	U	1.01	3.71
129-00-0	Pyrene	3.71	U	0.535	3.71

1D
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Lab Code: LA024 Case No.:
Matrix: Soil
Sample wt/vol: 30 Units: g
Level: (low/med) LOW
% Moisture: 7.3 decanted: (Y/N)
GC Column: 201TP-0.15 ID: 2.1 (mm)
Concentrated Extract Volume: 1000 (µL)
Soil Aliquot Volume: (µL)
Injection Volume: 1 (µL)
GPC Cleanup: (Y/N) N pH:
Prep Batch: 307705 Analytical Batch: 308324

Sample ID: 86-B31-S-1201-05
Contract:
SAS No.: SDG No.: 205120315
Lab Sample ID: 20512031502
Date Collected: 12/01/05 Time: 1510
Date Received: 12/03/05
Date Extracted: 12/03/05
Date Analyzed: 12/06/05 Time: 1507
Dilution Factor: 1 Analyst: RFS
Prep Method: SW-846 8310
Analytical Method: SW-846 8310
Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1
Lab File ID: 051206/H0000830

CONCENTRATION UNITS: ug/kg

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
90-12-0	1-Methylnaphthalene	35.9	U	9.78	35.9	
91-57-6	2-Methylnaphthalene	35.9	U	10.9	35.9	
83-32-9	Acenaphthene	23.2	J	10.5	35.9	
208-96-8	Acenaphthylene	35.9	U	4.02	35.9	
120-12-7	Anthracene	3.56	U	0.508	3.56	
56-55-3	Benzo(a)anthracene	3.56	U	1.28	3.56	
50-32-8	Benzo(a)pyrene	3.56	U	1.20	3.56	
205-99-2	Benzo(b)fluoranthene	19.9	J	0.777	3.56	P
191-24-2	Benzo(g,h,i)perylene	3.56	U	0.399	3.56	
207-08-9	Benzo(k)fluoranthene	3.56	U	0.912	3.56	
218-01-9	Chrysene	3.56	U	1.02	3.56	
53-70-3	Dibenz(a,h)anthracene	3.56	U	0.952	3.56	
206-44-0	Fluoranthene	3.56	U	0.989	3.56	
86-73-7	Fluorene	18.0	U	3.79	18.0	
193-39-5	Indeno(1,2,3-cd)pyrene	8.96	U	0.983	8.96	
91-20-3	Naphthalene	21.6	J	3.32	8.96	P
85-01-8	Phenanthrene	3.56	U	0.971	3.56	
129-00-0	Pyrene	3.56	U	0.514	3.56	

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 30.4 Units: g

Level: (low/med) LOW

% Moisture: 13.0 decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307705 Analytical Batch: 308324

CONCENTRATION UNITS: ug/kg

Sample ID: 86-B41-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031503

Date Collected: 12/01/05 Time: 1600

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/06/05 Time: 1740

Dilution Factor: 5 Analyst: RFS

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 051206/H0000846

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
90-12-0	1-Methylnaphthalene	1750	J	51.4	189	F, Z
91-57-6	2-Methylnaphthalene	1380	J	57.3	189	Z
83-32-9	Acenaphthene	189	U	55.1	189	
208-96-8	Acenaphthylene	32.2	J	21.1	189	
120-12-7	Anthracene	18.7	U	2.67	18.7	
56-55-3	Benzo(a)anthracene	18.7	U	6.75	18.7	
50-32-8	Benzo(a)pyrene	18.7	U	6.30	18.7	
205-99-2	Benzo(b)fluoranthene	18.7	U	4.08	18.7	
191-24-2	Benzo(g,h,i)perylene	18.7	U	2.10	18.7	
207-08-9	Benzo(k)fluoranthene	18.7	U	4.79	18.7	
218-01-9	Chrysene	18.7	U	5.35	18.7	
53-70-3	Dibenz(a,h)anthracene	18.7	U	5.00	18.7	
206-44-0	Fluoranthene	41.5	J	5.20	18.7	F, Z
86-73-7	Fluorene	59.2	J	19.9	94.7	
193-39-5	Indeno(1,2,3-cd)pyrene	47.1	U	5.17	47.1	
91-20-3	Naphthalene	112	J	17.5	47.1	Z
85-01-8	Phenanthrene	117	J	5.10	18.7	F, Z
129-00-0	Pyrene	37.2	J	2.70	18.7	F, Z

FORM I ORG-1

1D
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Lab Code: LA024 Case No.:
Matrix: Soil
Sample wt/vol: 30.5 Units: g
Level: (low/med) LOW
% Moisture: 6.5 decanted: (Y/N)
GC Column: 201TP-0.15 ID: 2.1 (mm)
Concentrated Extract Volume: 1000 (µL)
Soil Aliquot Volume: (µL)
Injection Volume: 1 (µL)
GPC Cleanup: (Y/N) N pH:
Prep Batch: 307705 Analytical Batch: 308324

Sample ID: 86-B70-S-1201-05
Contract:
SAS No.: SDG No.: 205120315
Lab Sample ID: 20512031504
Date Collected: 12/01/05 Time: 1350
Date Received: 12/03/05
Date Extracted: 12/03/05
Date Analyzed: 12/06/05 Time: 1746
Dilution Factor: 10 Analyst: RFS
Prep Method: SW-846 8310
Analytical Method: SW-846 8310
Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

CONCENTRATION UNITS: ug/kg

Lab File ID: 051206/H0000847

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
90-12-0	1-Methylnaphthalene	350	U	95.3	350	
91-57-6	2-Methylnaphthalene	350	U	106	350	
83-32-9	Acenaphthene	350	U	102	350	
208-96-8	Acenaphthylene	350	U	39.1	350	
120-12-7	Anthracene	19.0	J	4.95	34.7	
56-55-3	Benzo(a)anthracene	257	J	12.5	34.7	P
50-32-8	Benzo(a)pyrene	705		11.7	34.7	
205-99-2	Benzo(b)fluoranthene	797		7.57	34.7	
191-24-2	Benzo(g,h,i)perylene	522	J	3.89	34.7	P
207-08-9	Benzo(k)fluoranthene	244	J	8.89	34.7	P
218-01-9	Chrysene	477	J	9.92	34.7	P
53-70-3	Dibenz(a,h)anthracene	545		9.28	34.7	
206-44-0	Fluoranthene	475	J	9.63	34.7	P
86-73-7	Fluorene	94.8	J	36.9	176	
193-39-5	Indeno(1,2,3-cd)pyrene	726	J	9.58	87.3	P
91-20-3	Naphthalene	87.3	U	32.4	87.3	
85-01-8	Phenanthrene	149	J	9.46	34.7	P
129-00-0	Pyrene	415	J	5.01	34.7	P

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 30.4 Units: g

Level: (low/med) LOW

% Moisture: 3.6 decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307705 Analytical Batch: 308582

CONCENTRATION UNITS: ug/kg

Sample ID: 86-B96-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031505

Date Collected: 12/01/05 Time: 1325

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/08/05 Time: 0128

Dilution Factor: 2 Analyst: RFS

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 051207/H0000917

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
90-12-0	1-Methylnaphthalene	68.2	U	18.5	68.2
91-57-6	2-Methylnaphthalene	68.2	U	20.7	68.2
83-32-9	Acenaphthene	68.2	U	19.9	68.2
208-96-8	Acenaphthylene	68.2	U	7.62	68.2
120-12-7	Anthracene	6.76	U	0.964	6.76
56-55-3	Benzo(a)anthracene	6.76	U	2.44	6.76
50-32-8	Benzo(a)pyrene	6.76	U	2.27	6.76
205-99-2	Benzo(b)fluoranthene	6.76	U	1.47	6.76
191-24-2	Benzo(g,h,i)perylene	6.76	U	0.757	6.76
207-08-9	Benzo(k)fluoranthene	6.76	U	1.73	6.76
218-01-9	Chrysene	6.76	U	1.93	6.76
53-70-3	Dibenz(a,h)anthracene	6.76	U	1.81	6.76
206-44-0	Fluoranthene	6.76	U	1.88	6.76
86-73-7	Fluorene	34.2	U	7.19	34.2
193-39-5	Indeno(1,2,3-cd)pyrene	17.0	U	1.87	17.0
91-20-3	Naphthalene	17.0	U	6.31	17.0
85-01-8	Phenanthrene	6.76	U	1.84	6.76
129-00-0	Pyrene	6.76	U	0.975	6.76

c.L

1D
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Lab Code: LA024 Case No.:
Matrix: Soil
Sample wt/vol: 30.2 Units: g
Level: (low/med) LOW
% Moisture: 14.0 decanted: (Y/N)
GC Column: 201TP-0.15 ID: 2.1 (mm)
Concentrated Extract Volume: 1000 (µL)
Soil Aliquot Volume: (µL)
Injection Volume: 1 (µL)
GPC Cleanup: (Y/N) N pH:
Prep Batch: 307705 Analytical Batch: 308324
CONCENTRATION UNITS: ug/kg

Sample ID: 86-B99-S-1201-05
Contract:
SAS No.: SDG No.: 205120315
Lab Sample ID: 20512031506
Date Collected: 12/01/05 Time: 1340
Date Received: 12/03/05
Date Extracted: 12/03/05
Date Analyzed: 12/06/05 Time: 1535
Dilution Factor: 1 Analyst: RFS
Prep Method: SW-846 8310
Analytical Method: SW-846 8310
Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1
Lab File ID: 051206/H0000834

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
90-12-0	1-Methylnaphthalene	28.7	J	10.5	38.5	
91-57-6	2-Methylnaphthalene	38.5	U	11.7	38.5	
83-32-9	Acenaphthene	38.5	U	11.2	38.5	
208-96-8	Acenaphthylene	38.5	U	4.30	38.5	
120-12-7	Anthracene	3.81	U	0.544	3.81	
56-55-3	Benzo(a)anthracene	3.81	U	1.38	3.81	
50-32-8	Benzo(a)pyrene	7.35		1.28	3.81	
205-99-2	Benzo(b)fluoranthene	3.81	U	0.832	3.81	
191-24-2	Benzo(g,h,i)perylene	179	J	0.428	3.81	P
207-08-9	Benzo(k)fluoranthene	3.81	U	0.977	3.81	
218-01-9	Chrysene	9.35		1.09	3.81	
53-70-3	Dibenz(a,h)anthracene	3.81	U	1.02	3.81	
206-44-0	Fluoranthene	3.81	U	1.06	3.81	
86-73-7	Fluorene	19.3	U	4.06	19.3	
193-39-5	Indeno(1,2,3-cd)pyrene	51.7	J	1.05	9.59	P
91-20-3	Naphthalene	37.6	J	3.56	9.59	P
85-01-8	Phenanthrene	7.68		1.04	3.81	
129-00-0	Pyrene	3.81	U	0.550	3.81	

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 30.1 Units: g

Level: (low/med) LOW

% Moisture: 6.6 decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307705 Analytical Batch: 308324

CONCENTRATION UNITS: ug/kg

Sample ID: 86-B101-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031507

Date Collected: 12/01/05 Time: 1305

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/06/05 Time: 1542

Dilution Factor: 1 Analyst: RFS

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 051206/H0000835

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
90-12-0	1-Methylnaphthalene	35.5	U	9.67	35.5
91-57-6	2-Methylnaphthalene	35.5	U	10.8	35.5
83-32-9	Acenaphthene	35.5	U	10.4	35.5
208-96-8	Acenaphthylene	35.5	U	3.97	35.5
120-12-7	Anthracene	3.52	U	0.502	3.52
56-55-3	Benzo(a)anthracene	3.52	U	1.27	3.52
50-32-8	Benzo(a)pyrene	3.52	U	1.18	3.52
205-99-2	Benzo(b)fluoranthene	8.38		0.768	3.52
191-24-2	Benzo(g,h,i)perylene	3.31	J	0.395	3.52
207-08-9	Benzo(k)fluoranthene	3.52	U	0.901	3.52
218-01-9	Chrysene	3.52	U	1.01	3.52
53-70-3	Dibenz(a,h)anthracene	3.52	U	0.941	3.52
206-44-0	Fluoranthene	3.52	U	0.977	3.52
86-73-7	Fluorene	17.8	U	3.74	17.8
193-39-5	Indeno(1,2,3-cd)pyrene	4.49	J	0.972	8.85
91-20-3	Naphthalene	8.85	U	3.29	8.85
85-01-8	Phenanthrene	3.52	U	0.960	3.52
129-00-0	Pyrene	3.52	U	0.508	3.52

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1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 30.3 Units: g

Level: (low/med) LOW

% Moisture: 9.6 decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307705 Analytical Batch: 308324

CONCENTRATION UNITS: ug/kg

Sample ID: 86-B104-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031508

Date Collected: 12/01/05 Time: 1135

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/06/05 Time: 1800

Dilution Factor: 5 Analyst: RFS

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 051206/H0000849

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
90-12-0	1-Methylnaphthalene	182	U	49.6	182	
91-57-6	2-Methylnaphthalene	182	U	55.3	182	
83-32-9	Acenaphthene	182	U	53.3	182	
208-96-8	Acenaphthylene	182	U	20.4	182	
120-12-7	Anthracene	18.1	U	2.58	18.1	
56-55-3	Benzo(a)anthracene	18.1	U	6.52	18.1	
50-32-8	Benzo(a)pyrene	36.4		6.08	18.1	
205-99-2	Benzo(b)fluoranthene	35.3		3.94	18.1	
191-24-2	Benzo(g,h,i)perylene	18.1	U	2.03	18.1	
207-08-9	Benzo(k)fluoranthene	13.6	J	4.63	18.1	
218-01-9	Chrysene	18.1	U	5.17	18.1	
53-70-3	Dibenz(a,h)anthracene	18.1	U	4.83	18.1	
206-44-0	Fluoranthene	18.1	U	5.02	18.1	
86-73-7	Fluorene	91.5	U	19.2	91.5	
193-39-5	Indeno(1,2,3-cd)pyrene	56.0	J	4.99	45.5	P
91-20-3	Naphthalene	45.5	U	16.9	45.5	
85-01-8	Phenanthrene	18.1	U	4.93	18.1	
129-00-0	Pyrene	92.7	J	2.61	18.1	P

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FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 30.3 Units: g

Level: (low/med) LOW

% Moisture: 9.2 decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307705 Analytical Batch: 308324

CONCENTRATION UNITS: *ug/kg*

Sample ID: 86-B106-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031509

Date Collected: 12/01/05 Time: 1245

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/06/05 Time: 1807

Dilution Factor: 5 Analyst: RFS

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 051206/H0000850

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
90-12-0	1-Methylnaphthalene	182	U	49.4	182
91-57-6	2-Methylnaphthalene	182	U	55.1	182
83-32-9	Acenaphthene	182	U	53.0	182
208-96-8	Acenaphthylene	182	U	20.3	182
120-12-7	Anthracene	18.0	U	2.57	18.0
56-55-3	Benzo(a)anthracene	18.0	U	6.49	18.0
50-32-8	Benzo(a)pyrene	18.0	U	6.05	18.0
205-99-2	Benzo(b)fluoranthene	18.0	U	3.93	18.0
191-24-2	Benzo(g,h,i)perylene	18.0	U	2.02	18.0
207-08-9	Benzo(k)fluoranthene	18.0	U	4.61	18.0
218-01-9	Chrysene	18.0	U	5.14	18.0
53-70-3	Dibenz(a,h)anthracene	18.0	U	4.81	18.0
206-44-0	Fluoranthene	18.0	U	5.00	18.0
86-73-7	Fluorene	91.1	U	19.1	91.1
193-39-5	Indeno(1,2,3-cd)pyrene	16.7	J	4.97	45.3
91-20-3	Naphthalene	45.3	U	16.8	45.3
85-01-8	Phenanthrene	18.0	U	4.91	18.0
129-00-0	Pyrene	18.0	U	2.60	18.0

C-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 30 Units: g

Level: (low/med) LOW

% Moisture: 16.7 decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307705 Analytical Batch: 308324

CONCENTRATION UNITS: ug/kg

Sample ID: 86-B110-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031510

Date Collected: 12/01/05 Time: 1115

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/06/05 Time: 1602

Dilution Factor: 1 Analyst: RFS

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 051206/H0000838

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
90-12-0	1-Methylnaphthalene	40.0	U	10.9	40.0
91-57-6	2-Methylnaphthalene	40.0	U	12.1	40.0
83-32-9	Acenaphthene	40.0	U	11.7	40.0
208-96-8	Acenaphthylene	40.0	U	4.46	40.0
120-12-7	Anthracene	3.96	U	0.565	3.96
56-55-3	Benzo(a)anthracene	3.96	U	1.43	3.96
50-32-8	Benzo(a)pyrene	3.96	U	1.33	3.96
205-99-2	Benzo(b)fluoranthene	3.96	U	0.864	3.96
191-24-2	Benzo(g,h,i)perylene	3.96	U	0.444	3.96
207-08-9	Benzo(k)fluoranthene	3.96	U	1.01	3.96
218-01-9	Chrysene	3.96	U	1.13	3.96
53-70-3	Dibenz(a,h)anthracene	3.96	U	1.06	3.96
206-44-0	Fluoranthene	3.96	U	1.10	3.96
86-73-7	Fluorene	20.0	U	4.21	20.0
193-39-5	Indeno(1,2,3-cd)pyrene	9.96	U	1.09	9.96
91-20-3	Naphthalene	9.96	U	3.70	9.96
85-01-8	Phenanthrene	3.96	U	1.08	3.96
129-00-0	Pyrene	3.96	U	0.571	3.96

C.2

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 30.1 Units: g

Level: (low/med) LOW

% Moisture: 9.1 decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307705 Analytical Batch: 308324

CONCENTRATION UNITS: ug/kg

Sample ID: 86-B137-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031511

Date Collected: 12/01/05 Time: 1050

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/06/05 Time: 1814

Dilution Factor: 1 Analyst: RFS

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 051206/H0000851

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
90-12-0	1-Methylnaphthalene	36.5	U	9.93	36.5
91-57-6	2-Methylnaphthalene	36.5	U	11.1	36.5
83-32-9	Acenaphthene	36.5	U	10.7	36.5
208-96-8	Acenaphthylene	36.5	U	4.08	36.5
120-12-7	Anthracene	3.62	U	0.516	3.62
56-55-3	Benzo(a)anthracene	3.62	U	1.30	3.62
50-32-8	Benzo(a)pyrene	3.62	U	1.22	3.62
205-99-2	Benzo(b)fluoranthene	3.62	U	0.789	3.62
191-24-2	Benzo(g,h,i)perylene	3.62	U	0.406	3.62
207-08-9	Benzo(k)fluoranthene	3.62	U	0.926	3.62
218-01-9	Chrysene	3.62	U	1.03	3.62
53-70-3	Dibenz(a,h)anthracene	3.62	U	0.967	3.62
206-44-0	Fluoranthene	3.62	U	1.00	3.62
86-73-7	Fluorene	18.3	U	3.85	18.3
193-39-5	Indeno(1,2,3-cd)pyrene	9.10	U	0.999	9.10
91-20-3	Naphthalene	9.10	U	3.38	9.10
85-01-8	Phenanthrene	3.62	U	0.986	3.62
129-00-0	Pyrene	3.62	U	0.522	3.62

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FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 30.4 Units: g

Level: (low/med) LOW

% Moisture: 7.6 decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307705 Analytical Batch: 308324

CONCENTRATION UNITS: ug/kg

Sample ID: 86-B146-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031512

Date Collected: 12/01/05 Time: 1025

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/06/05 Time: 1821

Dilution Factor: 1 Analyst: RFS

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 051206/H0000852

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
90-12-0	1-Methylnaphthalene	35.6	U	9.67	35.6	
91-57-6	2-Methylnaphthalene	13.2	J	10.8	35.6	
83-32-9	Acenaphthene	35.6	U	10.4	35.6	
208-96-8	Acenaphthylene	35.6	U	3.97	35.6	
120-12-7	Anthracene	3.52	U	0.503	3.52	
56-55-3	Benzo(a)anthracene	22.8	J	1.27	3.52	P
50-32-8	Benzo(a)pyrene	3.52	U	1.19	3.52	
205-99-2	Benzo(b)fluoranthene	10.5		0.769	3.52	
191-24-2	Benzo(g,h,i)perylene	25.8	J	0.395	3.52	P
207-08-9	Benzo(k)fluoranthene	3.66	J	0.902	3.52	P
218-01-9	Chrysene	3.52	U	1.01	3.52	
53-70-3	Dibenz(a,h)anthracene	38.0	J	0.942	3.52	P
206-44-0	Fluoranthene	9.20		0.978	3.52	
86-73-7	Fluorene	17.8	U	3.75	17.8	
193-39-5	Indeno(1,2,3-cd)pyrene	16.4	J	0.973	8.86	P
91-20-3	Naphthalene	8.86	U	3.29	8.86	
85-01-8	Phenanthrene	3.52	U	0.961	3.52	
129-00-0	Pyrene	5.16		0.508	3.52	

FORM I ORG-1

1D
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Lab Code: LA024 Case No.:
Matrix: Soil
Sample wt/vol: 30.2 Units: g
Level: (low/med) LOW
% Moisture: 8.4 decanted: (Y/N)
GC Column: 201TP-0.15 ID: 2.1 (mm)
Concentrated Extract Volume: 1000 (µL)
Soil Aliquot Volume: (µL)
Injection Volume: 1 (µL)
GPC Cleanup: (Y/N) N pH:
Prep Batch: 307705 Analytical Batch: 308324

Sample ID: 86-B158-S-1201-05
Contract:
SAS No.: SDG No.: 205120315
Lab Sample ID: 20512031513
Date Collected: 12/01/05 Time: 0950
Date Received: 12/03/05
Date Extracted: 12/03/05
Date Analyzed: 12/06/05 Time: 1828
Dilution Factor: 1 Analyst: RFS
Prep Method: SW-846 8310
Analytical Method: SW-846 8310
Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

CONCENTRATION UNITS: ug/kg

Lab File ID: 051206/H0000853

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
90-12-0	1-Methylnaphthalene	36.1	U	9.82	36.1
91-57-6	2-Methylnaphthalene	36.1	U	10.9	36.1
83-32-9	Acenaphthene	36.1	U	10.5	36.1
208-96-8	Acenaphthylene	36.1	U	4.03	36.1
120-12-7	Anthracene	3.58	U	0.511	3.58
56-55-3	Benzo(a)anthracene	3.58	U	1.29	3.58
50-32-8	Benzo(a)pyrene	3.58	U	1.20	3.58
205-99-2	Benzo(b)fluoranthene	3.58	U	0.780	3.58
191-24-2	Benzo(g,h,i)perylene	3.58	U	0.401	3.58
207-08-9	Benzo(k)fluoranthene	3.58	U	0.916	3.58
218-01-9	Chrysene	3.58	U	1.02	3.58
53-70-3	Dibenz(a,h)anthracene	3.58	U	0.956	3.58
206-44-0	Fluoranthene	3.58	U	0.993	3.58
86-73-7	Fluorene	18.1	U	3.80	18.1
193-39-5	Indeno(1,2,3-cd)pyrene	9.00	U	0.987	9.00
91-20-3	Naphthalene	9.00	U	3.34	9.00
85-01-8	Phenanthrene	3.58	U	0.976	3.58
129-00-0	Pyrene	3.58	U	0.516	3.58

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1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 30.3 Units: g

Level: (low/med) LOW

% Moisture: 17.5 decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307705 Analytical Batch: 308324

CONCENTRATION UNITS: *ug/kg*

Sample ID: 86-B167-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031514

Date Collected: 12/01/05 Time: 1005

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/06/05 Time: 1835

Dilution Factor: 1 Analyst: RFS

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 051206/H0000854

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
90-12-0	1-Methylnaphthalene	39.9	U	10.9	39.9	
91-57-6	2-Methylnaphthalene	39.9	U	12.1	39.9	
83-32-9	Acenaphthene	39.9	U	11.7	39.9	
208-96-8	Acenaphthylene	39.9	U	4.46	39.9	
120-12-7	Anthracene	3.96	U	0.565	3.96	
56-55-3	Benzo(a)anthracene	9.70	J	1.43	3.96	Z
50-32-8	Benzo(a)pyrene	10.2	J	1.33	3.96	P, Z
205-99-2	Benzo(b)fluoranthene	20.2	J	0.864	3.96	P, Z
191-24-2	Benzo(g,h,i)perylene	29.0	J	0.444	3.96	P, Z
207-08-9	Benzo(k)fluoranthene	6.52	J	1.01	3.96	P, Z
218-01-9	Chrysene	6.38	J	1.13	3.96	P, Z
53-70-3	Dibenz(a,h)anthracene	74.9	J	1.06	3.96	P, Z
206-44-0	Fluoranthene	6.93	J	1.10	3.96	P, Z
86-73-7	Fluorene	20.0	U	4.21	20.0	
193-39-5	Indeno(1,2,3-cd)pyrene	16.4	J	1.09	9.96	Z
91-20-3	Naphthalene	9.96	U	3.69	9.96	
85-01-8	Phenanthrene	3.96	U	1.08	3.96	
129-00-0	Pyrene	14.5	J	0.571	3.96	Z

C.L

FORM I ORG-1

1D
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Lab Code: LA024 Case No.:
Matrix: Soil
Sample wt/vol: 30.1 Units: g
Level: (low/med) LOW
% Moisture: 7.2 decanted: (Y/N)
GC Column: 201TP-0.15 ID: 2.1 (mm)
Concentrated Extract Volume: 1000 (µL)
Soil Aliquot Volume: (µL)
Injection Volume: 1 (µL)
GPC Cleanup: (Y/N) N pH:
Prep Batch: 307705 Analytical Batch: 308582

Sample ID: 86-B189-S-1201-05
Contract:
SAS No.: SDG No.: 205120315
Lab Sample ID: 20512031515
Date Collected: 12/01/05 Time: 0930
Date Received: 12/03/05
Date Extracted: 12/03/05
Date Analyzed: 12/08/05 Time: 0046
Dilution Factor: 1 Analyst: RFS
Prep Method: SW-846 8310
Analytical Method: SW-846 8310
Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

CONCENTRATION UNITS: *ug/kg*

Lab File ID: 051207/H0000911

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
90-12-0	1-Methylnaphthalene	35.8	U	9.73	35.8
91-57-6	2-Methylnaphthalene	35.8	U	10.9	35.8
83-32-9	Acenaphthene	35.8	U	10.4	35.8
208-96-8	Acenaphthylene	35.8	U	4.00	35.8
120-12-7	Anthracene	3.55	U	0.506	3.55
56-55-3	Benzo(a)anthracene	3.55	U	1.28	3.55
50-32-8	Benzo(a)pyrene	3.55	U	1.19	3.55
205-99-2	Benzo(b)fluoranthene	3.55	U	0.773	3.55
191-24-2	Benzo(g,h,i)perylene	3.55	U	0.397	3.55
207-08-9	Benzo(k)fluoranthene	3.55	U	0.908	3.55
218-01-9	Chrysene	3.55	U	1.01	3.55
53-70-3	Dibenz(a,h)anthracene	3.55	U	0.948	3.55
206-44-0	Fluoranthene	3.55	U	0.984	3.55
86-73-7	Fluorene	17.9	U	3.77	17.9
193-39-5	Indeno(1,2,3-cd)pyrene	8.92	U	0.979	8.92
91-20-3	Naphthalene	8.92	U	3.31	8.92
85-01-8	Phenanthrene	3.55	U	0.967	3.55
129-00-0	Pyrene	3.55	U	0.511	3.55

c. Y

1D
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Sample ID: 086-DP1-S-1201-05
Lab Code: LA024 Case No.:
Contract:
Matrix: Soil
SAS No.: SDG No.: 205120315
Sample wt/vol: 30.1 Units: g
Lab Sample ID: 20512031518
Level: (low/med) LOW
Date Collected: Time:
% Moisture: 16.0 decanted: (Y/N)
Date Received: 12/03/05
GC Column: 201TP-0.15 ID: 2.1 (mm)
Date Extracted: 12/03/05
Concentrated Extract Volume: 1000 (µL)
Date Analyzed: 12/06/05 Time: 1923
Soil Aliquot Volume: (µL)
Dilution Factor: 10 Analyst: RFS
Injection Volume: 1 (µL)
Prep Method: SW-846 8310
GPC Cleanup: (Y/N) N pH:
Analytical Method: SW-846 8310
Prep Batch: 307705 Analytical Batch: 308324
Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1
CONCENTRATION UNITS: ug/kg
Lab File ID: 051206/H0000861

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
90-12-0	1-Methylnaphthalene	395	U	108	395	
91-57-6	2-Methylnaphthalene	395	U	120	395	
83-32-9	Acenaphthene	395	U	115	395	
208-96-8	Acenaphthylene	395	U	44.2	395	
120-12-7	Anthracene	39.2	U	5.59	39.2	
56-55-3	Benzo(a)anthracene	129	J	14.1	39.2	N
50-32-8	Benzo(a)pyrene	112	J	13.2	39.2	N
205-99-2	Benzo(b)fluoranthene	146	J	8.55	39.2	N
191-24-2	Benzo(g,h,i)perylene	78.2	J	4.39	39.2	N
207-08-9	Benzo(k)fluoranthene	42.2	J	10.0	39.2	N
218-01-9	Chrysene	94.1	J	11.2	39.2	N,P
53-70-3	Dibenz(a,h)anthracene	57.5	J	10.5	39.2	N,P
206-44-0	Fluoranthene	179	J	10.9	39.2	N,P
86-73-7	Fluorene	198	U	41.7	198	
193-39-5	Indeno(1,2,3-cd)pyrene	95.8	J	10.8	98.5	
91-20-3	Naphthalene	98.5	U	36.6	98.5	
85-01-8	Phenanthrene	39.2	U	10.7	39.2	
129-00-0	Pyrene	175	J	5.65	39.2	N,P

0.2

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Soil

Sample wt/vol: 30.2 Units: g

Level: (low/med) LOW

% Moisture: 11.7 decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 307705 Analytical Batch: 308582

CONCENTRATION UNITS: *ug/kg*

Sample ID: 086-DP2-S-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031519

Date Collected: Time:

Date Received: 12/03/05

Date Extracted: 12/03/05

Date Analyzed: 12/08/05 Time: 0135

Dilution Factor: 5 Analyst: RFS

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 051207/H0000918

CAS NO.	COMPOUND	RESULT	Q	MDL	RL	
90-12-0	1-Methylnaphthalene	1820	J	50.9	187	Z, P
91-57-6	2-Methylnaphthalene	1560	J	56.8	187	Z
83-32-9	Acenaphthene	187	U	54.7	187	
208-96-8	Acenaphthylene	187	U	20.9	187	
120-12-7	Anthracene	79.8	J	2.65	18.6	Z, P
56-55-3	Benzo(a)anthracene	18.6	U	6.69	18.6	
50-32-8	Benzo(a)pyrene	18.6	U	6.24	18.6	
205-99-2	Benzo(b)fluoranthene	18.6	U	4.05	18.6	
191-24-2	Benzo(g,h,i)perylene	18.6	U	2.08	18.6	
207-08-9	Benzo(k)fluoranthene	18.6	U	4.75	18.6	
218-01-9	Chrysene	18.6	U	5.30	18.6	
53-70-3	Dibenz(a,h)anthracene	18.6	U	4.96	18.6	
206-44-0	Fluoranthene	103	J	5.15	18.6	Z, P
86-73-7	Fluorene	140	J	19.7	93.9	Z, P
193-39-5	Indeno(1,2,3-cd)pyrene	46.7	U	5.12	46.7	
91-20-3	Naphthalene	89.9	J	17.3	46.7	Z
85-01-8	Phenanthrene	18.6	U	5.06	18.6	
129-00-0	Pyrene	50.6	J	2.68	18.6	Z, P

C.Y

FORM I ORG-1

1D
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL
Lab Code: LA024 Case No.:
Matrix: Water
Sample wt/vol: 1000 Units: mL
Level: (low/med) LOW
% Moisture: decanted: (Y/N)
GC Column: 201TP-0.15 ID: 2.1 (mm)
Concentrated Extract Volume: 1000 (µL)
Soil Aliquot Volume: (µL)
Injection Volume: 1 (µL)
GPC Cleanup: (Y/N) N pH:
Prep Batch: 308233 Analytical Batch: 308324
CONCENTRATION UNITS: *ug/L*

Sample ID: 86-EB1-W-1201-05
Contract:
SAS No.: SDG No.: 205120315
Lab Sample ID: 20512031520
Date Collected: 12/01/05 Time: 0855
Date Received: 12/03/05
Date Extracted: 12/05/05
Date Analyzed: 12/06/05 Time: 1937
Dilution Factor: 1 Analyst: RFS
Prep Method: SW-846 8310
Analytical Method: SW-846 8310
Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1
Lab File ID: 051206/H0000863

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

C.L

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: 201TP-0.15 ID: 2.1 (mm)

Concentrated Extract Volume: 1000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 308233 Analytical Batch: 308324

CONCENTRATION UNITS: ug/L

Sample ID: 86-EB2-W-1201-05

Contract:

SAS No.: SDG No.: 205120315

Lab Sample ID: 20512031521

Date Collected: 12/01/05 Time: 1630

Date Received: 12/03/05

Date Extracted: 12/05/05

Date Analyzed: 12/06/05 Time: 1944

Dilution Factor: 1 Analyst: RFS

Prep Method: SW-846 8310

Analytical Method: SW-846 8310

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 1

Lab File ID: 051206/H0000864

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
83-32-9	Acenaphthene	1.00	U	0.331	1.00
208-96-8	Acenaphthylene	1.00	U	0.153	1.00
120-12-7	Anthracene	0.100	U	0.024	0.100
56-55-3	Benzo(a)anthracene	0.100	U	0.032	0.100
50-32-8	Benzo(a)pyrene	0.100	U	0.033	0.100
205-99-2	Benzo(b)fluoranthene	0.100	U	0.016	0.100
191-24-2	Benzo(g,h,i)perylene	0.100	U	0.016	0.100
207-08-9	Benzo(k)fluoranthene	0.100	U	0.033	0.100
218-01-9	Chrysene	0.100	U	0.030	0.100
53-70-3	Dibenz(a,h)anthracene	0.100	U	0.029	0.100
206-44-0	Fluoranthene	0.100	U	0.044	0.100
86-73-7	Fluorene	0.500	U	0.099	0.500
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	U	0.041	0.250
91-20-3	Naphthalene	0.250	U	0.124	0.250
85-01-8	Phenanthrene	0.100	U	0.025	0.100
129-00-0	Pyrene	0.100	U	0.034	0.100

FORM I ORG-1

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20512031501	86-B7-S-1201-05	Solid	12/01/2005 14:30	12/03/2005 10:00

2540 G Total Solids - Solid

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/04/2005 13:00	JEM	308128

CAS#	Parameter	Result	RDL	MDL	Units
C-008	Total Solids	88.6	0.010	0.010	%

RESULTS REPORTED ON A DRY WEIGHT BASIS

C.L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20512031502	86-B31-S-1201-05	Solid	12/01/2005 15:10	12/03/2005 10:00

2540 G Total Solids - Solid

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/04/2005 13:00	JEM	308128

CAS#	Parameter	Result	RDL	MDL	Units
C-008	Total Solids	92.7	0.010	0.010	%

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20512031503	86-B41-S-1201-05	Solid	12/01/2005 16:00	12/03/2005 10:00

2540 G Total Solids - Solid

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/04/2005 13:00	JEM	308128

CAS#	Parameter	Result	RDL	MDL	Units
C-008	Total Solids	87.00	0.010	0.010	%

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20512031504	86-B70-S-1201-05	Solid	12/01/2005 13:50	12/03/2005 10:00

2540 G Total Solids - Solid

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/04/2005 13:00	JEM	308128

CAS#	Parameter	Result	RDL	MDL	Units
C-008	Total Solids	93.5	0.010	0.010	%

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20512031505	86-B96-S-1201-05	Solid	12/01/2005 13:25	12/03/2005 10:00

2540 G Total Solids - Solid

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/04/2005 13:00	JEM	308128

CAS#	Parameter	Result	RDL	MDL	Units
C-008	Total Solids	96.4	0.010	0.010	%

RESULTS REPORTED ON A DRY WEIGHT BASIS

C.A

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20512031506	86-B99-S-1201-05	Solid	12/01/2005 13:40	12/03/2005 10:00

2540 G Total Solids - Solid

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/04/2005 13:00	JEM	308128

CAS#	Parameter	Result	RDL	MDL	Units
C-008	Total Solids	86.00	0.010	0.010	%

RESULTS REPORTED ON A DRY WEIGHT BASIS

C.2

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20512031507	86-B101-S-1201-05	Solid	12/01/2005 13:05	12/03/2005 10:00

2540 G Total Solids - Solid

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/04/2005 13:00	JEM	308128

CAS#	Parameter	Result	RDL	MDL	Units
C-008	Total Solids	93.4	0.010	0.010	%

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20512031508	86-B104-S-1201-05	Solid	12/01/2005 11:35	12/03/2005 10:00

2540 G Total Solids - Solid

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/04/2005 13:00	JEM	308128

CAS#	Parameter	Result	RDL	MDL	Units
C-008	Total Solids	90.4	0.010	0.010	%

RESULTS REPORTED ON A DRY WEIGHT BASIS

CL

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20512031509	86-B106-S-1201-05	Solid	12/01/2005 12:45	12/03/2005 10:00

2540 G Total Solids - Solid

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/04/2005 13:00	JEM	308128

CAS#	Parameter	Result	RDL	MDL	Units
C-008	Total Solids	90.8	0.010	0.010	%

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20512031510	86-B110-S-1201-05	Solid	12/01/2005 11:15	12/03/2005 10:00

2540 G Total Solids - Solid

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/04/2005 13:00	JEM	308128

CAS#	Parameter	Result	RDL	MDL	Units
C-008	Total Solids	83.3	0.010	0.010	%

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20512031511	86-B137-S-1201-05	Solid	12/01/2005 10:50	12/03/2005 10:00

2540 G Total Solids - Solid

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/04/2005 13:00	JEM	308128

CAS#	Parameter	Result	RDL	MDL	Units
C-008	Total Solids	90.9	0.010	0.010	%

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20512031512	86-B146-S-1201-05	Solid	12/01/2005 10:25	12/03/2005 10:00

2540 G Total Solids - Solid

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/04/2005 13:00	JEM	308128

CAS#	Parameter	Result	RDL	MDL	Units
C-008	Total Solids	92.4	0.010	0.010	%

RESULTS REPORTED ON A DRY WEIGHT BASIS

C.L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20512031513	86-B158-S-1201-05	Solid	12/01/2005 09:50	12/03/2005 10:00

2540 G Total Solids - Solid

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/04/2005 13:00	JEM	308128

CAS#	Parameter	Result	RDL	MDL	Units
C-008	Total Solids	91.6	0.010	0.010	%

RESULTS REPORTED ON A DRY WEIGHT BASIS

C.L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20512031514	86-B167-S-1201-05	Solid	12/01/2005 10:05	12/03/2005 10:00

2540 G Total Solids - Solid

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/04/2005 13:00	JEM	308128

CAS#	Parameter	Result	RDL	MDL	Units
C-008	Total Solids	82.6	0.010	0.010	%

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20512031515	86-B189-S-1201-05	Solid	12/01/2005 09:30	12/03/2005 10:00

2540 G Total Solids - Solid

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/04/2005 13:00	JEM	308128

CAS#	Parameter	Result	RDL	MDL	Units
C-008	Total Solids	92.8	0.010	0.010	%

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20512031518	086-DP1-S-1201-05	Solid		12/03/2005 10:00

2540 G Total Solids - Solid

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/04/2005 13:00	JEM	308128

CAS#	Parameter	Result	RDL	MDL	Units
C-008	Total Solids	84.00	0.010	0.010	%

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20512031519	086-DP2-S-1201-05	Solid		12/03/2005 10:00

2540 G Total Solids - Solid

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/04/2005 13:00	JEM	308128

CAS#	Parameter	Result	RDL	MDL	Units
C-008	Total Solids	88.3	0.010	0.010	%

RESULTS REPORTED ON A DRY WEIGHT BASIS

C.L

1E
ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

86-B41-S-1201

Lab Name: GCAL

Matrix: (soil/water) SOIL

Lab Sample ID:20512031503

Sample wt/vol: 25.3 (g/mL) g

Lab File ID: sv19a026

Concentrated Extract Volume: 2(mL)

Date Analyzed: 12/04/05

Injection Volume: 1.0(uL)

Dilution Factor: 10.0

COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
C8-C10	43644	SB F,C,Z
C10-C12	504927	SB F,C,Z
C12-C16	1130903	SB F,C,Z
C16-C22	26691	SB F,C,Z
C22-C36	11221	SB F,C,Z

FORM I

C.L.R

000606A
ADDITION

1E
ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

86-B104-S-1201

Lab Name: GCAL

Matrix: (soil/water) SOIL

Lab Sample ID:20512031508

Sample wt/vol: 25.4 (g/mL) g

Lab File ID: sv19a027

Concentrated Extract Volume: 2(mL)

Date Analyzed: 12/04/05

Injection Volume: 1.0(uL)

Dilution Factor: 10.0

COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
C8-C10	1170	5B F,C
C10-C12	858	5B F,C
C12-C16	331275	5B F,C
C16-C22	743940	5B F,C
C22-C36	139018	5B F,C

FORM I

C.L.R

000631A

ADDITION

CH2MHILL Constructors, Inc.
115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278
Tel No: (770) 604-9182
Fax No: (770) 604-9282

CHAIN-OF-CUSTODY RECORD

COC NUMBER
271591-041 page 1 of 2

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No. , and Fax No.):
Former NAS Cecil Field	271591	Gulf Coast Labs. Dano Merril	Bethany Garvey CH2M Hill Constructors, Inc.	115 Perimeter Center Place, N.E. Suite 700 Atlanta, GA 30346 (770)604-9182 FAX:604-9282
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No. , and Fax No.):
South Fuel Farm - Annual Soil Sampling	CTO 086	6442		
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:	LAB TEL NO AND FAX NO:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No. , and Fax No.):
Sam Naik CH2M Hill Constuctors, Inc.	Ph: (770)604-9182 FAX: (770)604-9282	Ph:(225) 769-4900		

ANALYSES REQUIRED (Include Method Numbers)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on back)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on back)	TAT (calendar days)	BETX + MTBE by 8021B	PAHs + 1- and 2-Methylnapthalene by 8310. TRPH by FLO-PRO.								SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID
1	86-B7-S-1201-05	boring B-7 @ 2 ft	S	12/01/05	1430	III/C	14	4	1								Grab		1
2	86-B31-S-1201-05	boring B-31 @ 2 ft	S	12/01/05	1510	III/C	14	4	1								Grab		2
3	86-B41-S-1201-05	boring B-41 @ 4 ft	S	12/01/05	1600	III/C	14	4	1								Grab		3
4	86-B70-S-1201-05	boring B-70 @ 2 ft	S	12/01/05	1350	III/C	14	4	1								Grab		4
5	86-B96-S-1201-05	boring B-96 @ 4 ft	S	12/01/05	1325	III/C	14	4	1								Grab		5
6	86-B99-S-1201-05	boring B-99 @ 4 ft	S	12/01/05	1340	III/C	14	4	1								Grab		6
7	86-B101-S-1201-05	boring B-101 @ 4 ft	S	12/01/05	1305	III/C	14	4	1								Grab		7
8	86-B104-S-1201-05	boring B-104 @ 4 ft	S	12/01/05	1135	III/C	14	4	1								Grab		8
9	86-B106-S-1201-05	boring B-106 @ 2 ft	S	12/01/05	1245	III/C	14	4	1								Grab		9
10	86-B110-S-1201-05	boring B-110 @ 4 ft	S	12/01/05	1115	III/C	14	4	1								Grab		10
11	86-B137-S-1201-05	boring B-137 @ 4 ft	S	12/01/05	1050	III/C	14	4	1								Grab		11

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT:
Randy Dumaop / J. Calixte / W. Perry AGVIQ Environmental Services	Federal Express Tracking Numbers: 791797519681, 791797519692, 791797519729, 791797519730.	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature:			Printed Name and Signature:		
R. Dumaop	12/2/2005	15:00	Federal Express Tracking Numbers: 791797519681, 791797519692, 791797519729, 791797519730.	12/2/2005	15:00
Printed Name and Signature:			Printed Name and Signature:		
Fedex	12-3-05	1000	Michelle Rabon	12-3-05	1000

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CH2MHILL Constructors, Inc.

115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278
Tel No: (770) 604-9182
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CHAIN-OF-CUSTODY RECORD

COC NUMBER: 271591-041 page 2 of 2

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PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No. , and Fax No.):
South Fuel Farm - Annual Soil Sampling	CTO 086	6442		
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:	LAB TEL NO AND FAX NO:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No. , and Fax No.):
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ANALYSES REQUIRED (Include Method Numbers)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on back)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on back)	TAT (calendar days)	BETX + MTBE by 8021B	PAHs + 1- and 2-Methylnapthalene by 8310, TRPH by FLO-PRO.	PAHs + 1- and 2-Methylnapthalene by 8310	TRPH by FLO-PRO.						SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID
12	86-B146-S-1201-05	boring B-146 @ 2 ft	S	12/01/05	1025	III/C	14	4	1								Grab		12
13	86-B158-S-1201-05	boring B-158 @ 4 ft	S	12/01/05	950	III/C	14	4	1								Grab		13
14	86-B167-S-1201-05	boring B-167 @ 4 ft	S	12/01/05	1005	III/C	14	4	1								Grab		14
15	86-B189-S-1201-05	boring B-189 @ 4 ft	S	12/01/05	930	III/C	14	4	1								Grab	MS/MSD	15
16	86-MS-S-1201-05	Matrix Spike	S	12/01/05	930	III/C	14	4	1								Grab	boring B-189 @ 4 ft	16
17	86-MSD-S-1201-05	Matrix Spike Dup	S	12/01/05	930	III/C	14	4	1								Grab	boring B-189 @ 4 ft	17
18	086-DP1-S-1201-05	Duplicate #1	S	--	--	III/C	14	4	1								Grab		18
19	086-DP2-S-1201-05	Duplicate #2	S	--	--	III/C	14	4	1								Grab		19
20	86-EB1-W-1201-05	Pre-Equipment Blank	W	12/01/05	855	III/C	14	3		2	2						Grab		20
21	86-EB2-W-1201-05	Post Equipment Blank	W	12/01/05	1630	III/C	14	3		2	2						Grab		21
22	086-TB1-W-1201-05	Trip Blank #1	W	NA	NA	III/C	14	3									Grab	Prepared by Lab	22
23	086-TB2-W-1201-05	Trip Blank #2	W	NA	NA	III/C	14	3									Grab	Prepared by Lab	23

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT:
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Printed Name and Signature:			Printed Name and Signature:		
R. Dumaop	12/2/2005	15:00	Federal Express Tracking Numbers: 791797519681, 791797519692, 791797519729, 791797519730.	12/2/2005	15:00
Printed Name and Signature:					
Fedex	12-3-05	1000	M. Della Rabona	12-3-05	1000

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CH2MHill/4580/205120315/12-9-05

CH2MHILL Constructors, Inc.
115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278
Tel No: (770) 604-9182
Fax No: (770) 604-9282

CHAIN-OF-CUSTODY RECORD

COC NUMBER
271591-041 page 2 of 2

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23	086-TB2-W-1201-05	Trip Blank #2	W	NA	NA	III/C	14	3									Grab	Prepared by Lab	23

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* per Camden Robinson 1/4/06