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FIRST QUARTER 2009 LONG TERM MONITORING AND OPERATION AND MAINTENANCE STATUS REPORT FOR BUILDING 46 NAS CECIL FIELD FL

7/31/2009

SOLUTIONS-IES INC

FIRST QUARTER 2009
LONG-TERM MONITORING AND OPERATION & MAINTENANCE STATUS REPORT

BUILDING 46
FORMER NAS CECIL FIELD
JACKSONVILLE, FL

CONTRACT NO. N62467-05-G-0193
CONTRACT TASK ORDER NO. 0001

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JULY 31, 2009

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We, the undersigned, do hereby affirm that the information contained in this report is accurate and correct to the best of our knowledge and belief.

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1.0 INTRODUCTION

Solutions-IES, Inc. (Solutions-IES) has been contracted by the Navy (NAVFAC Southeast), to provide long-term groundwater monitoring and operation and maintenance (O&M) services at Building 46 (site), Former Naval Air Station (NAS) Cecil Field, Jacksonville, Florida, under Basic Ordering Agreement (BOA) Contract Number N62467-05-G-0193, Contract Task Order Number 0001. Under this contract, Solutions-IES performs quarterly groundwater monitoring in March, June, September and December, and weekly O&M of the air sparge (AS) system. This First Quarter Monitoring Report summarizes the O&M activities performed at the site from December 2008 through March 2009, and the groundwater sampling activities conducted on March 2, 2009.

1.1 SITE LOCATION AND DESCRIPTION

The Building 46 site formerly served as a gasoline station at the former NAS Cecil Field. Underground storage tanks (USTs) were housed at the site, some of which were in operation prior to 1970. Past release(s) from the USTs resulted in fuel-related impacts to soil and groundwater. A site location map is included as **Figure 1**.

1.2 SITE HISTORY

In an attempt to reduce concentrations of petroleum related contaminants in the groundwater at the site to below the Florida Department of Environmental Protection (FDEP) groundwater clean-up target levels (GCTLs), two Phoster® Nutrient Injection Systems (east and west) were installed and operated on the site from 2001 to 2004. During this time, nitrogen and phosphorus were injected into the subsurface to promote biodegradation of contaminants of concern. Nutrient injection was discontinued in April 2004 when the aquifers anaerobic state was no longer conducive to biodegradation. However, the compressors were still used to inject oxygen into the aquifer and enhance the biodegradation of benzene, toluene, ethylbenzene and xylenes (BTEX); naphthalene; methyl-*tert*-butyl-ether (MTBE); and total recoverable petroleum hydrocarbons (TRPH).

In January 2008, the FDEP approved discontinuing use of the west system. Both systems were removed from the site on January 31, 2008. An AS trailer with a Sullivan-Palatek 30D7 compressor was installed on the east side of the site on September 17, 2008. The system was connected to the six sparge wells

illustrated in **Figure 2** (CEF-046-BD-1, -2, -3, -4, -6 and -7), surrounding the two hot spots (monitoring wells CEF-046-01S and CEF-046-07I), as instructed by the Navy's RAC contractor (CH2M Hill).

Solutions-IES was unable to inject air into wells BD-3 and BD-7. Several attempts utilizing different methods performed to clear debris from the wells were unsuccessful due to corrosion of the iron well casings.

2.0 GROUNDWATER MONITORING SUMMARY

At this time, there are 14 monitoring wells in the long-term monitoring program for the site (**Figure 2**). They are screened at depths ranging between approximately 13 and 90 feet below ground surface (ft bgs). The monitoring wells sampled are shown below and were sampled on March 2, 2009.

Monitoring Well	Screened Interval
CEF-046-01S	Shallow
CEF-046-02S	Shallow
CEF-046-05I	Intermediate
CEF-046-06D	Deep
CEF-046-07I	Intermediate
CEF-046-09I	Intermediate
CEF-046-12I	Intermediate
CEF-046-13I	Intermediate
CEF-046-14D	Deep
CEF-046-15I	Intermediate
CEF-046-21I	Intermediate
CEF-046-24D	Deep
CEF-046-25I	Intermediate
CEF-046-26I	Intermediate

Water levels were recorded and samples were collected from the wells listed above for laboratory analysis of BTEX, MTBE, polycyclic aromatic hydrocarbons (PAHs), TRPH, sulfate, natural attenuation (NA) parameters and field parameters.

2.1 MONITORING WELL OBSERVATIONS

The integrity of the monitoring wells included in the long-term monitoring program was evaluated during this sampling event. The field team noted no extensive damage (i.e., the need for well replacement or repair) to the wells during the March 2009 event. Several of the wells have minor issues including missing bolts from the well covers and missing locks.

2.2 WATER LEVEL MEASUREMENTS

Water level measurements are recorded quarterly at the Building 46 site. The top-of-casing elevations, depth-to-groundwater and calculated groundwater elevations are provided in **Table 1**. A groundwater contour map, generated using the groundwater elevations in the intermediate wells, as measured during the March 2009 event is included as **Figure 3**. According to water level measurements obtained on March 2, 2009, groundwater flows south-southwest in the intermediate zone. This groundwater flow direction is consistent with previous sampling events. There are insufficient data points to contour the shallow and deep aquifers.

2.3 GROUNDWATER SAMPLING

2.3.1 Methodology

Groundwater sampling was conducted at the Building 46 site on March 2, 2009. Fourteen monitoring wells were purged and sampled using low-flow methodology. The wells were purged immediately before sampling using a low-flow peristaltic pump, at an approximate rate equal to or less than the groundwater recharge rate until field parameters (temperature, pH, conductivity, turbidity, and dissolved oxygen [DO]) stabilized. Samples were collected for field analysis of carbon dioxide, alkalinity, ferrous iron, hydrogen sulfide and DO using CHEMetrics® field test kits. Additional, low-level DO readings were obtained with the field meter. Oxidation-reduction potential (ORP) readings were also recorded during purging. Groundwater sampling was conducted in general accordance with applicable state and local guidelines, and the Solutions-IES Work Plan (February 2008; Revision 01 dated September 24, 2008). All samples collected were stored on ice and delivered to Accutest Laboratory, a Florida-certified and National Environmental Laboratory Accreditation Program (NELAP) certified laboratory, located in Orlando, Florida, via courier, under chain-of-custody procedures.

Results of the field measurements are summarized in **Table 2**. Copies of the groundwater sampling logs including all field parameter measurements are provided in **Appendix A**.

2.3.2 Laboratory Analyses

Groundwater samples collected at the site were analyzed for the following:

- BTEX and MTBE by EPA Method 8260B
- PAHs by EPA Method 8270C
- TRPH by FL PRO
- Sulfate by EPA Method 300.0

A Level II data report was provided by the laboratory and can be found in **Appendix B**.

2.4 INVESTIGATION DERIVED WASTE (IDW)

Purge, wash and rinse water was collected in 5-gallon containers and transferred to a labeled 55-gallon drum (Drum ID SIES-001-030209). The drum was staged in the IDW Storage Building (Building 536). The NAS Jacksonville Public Works Department (PWD-JAX) was notified on March 9, 2009 that the drum was being kept in the building. The non-hazardous data package for disposal of the March 2009 IDW was forwarded to PWD-JAX on April 16, 2009.

3.0 AIR SPARGE SYSTEM O&M SUMMARY

The AS system became operational on September 17, 2008. Since that time, weekly O&M system checks have been performed by Solutions-IES' subcontractor Enviro-Resources Corporation. Weekly O&M forms can be found in **Appendix C**.

Routine maintenance has been performed during weekly visits. No major operational problems were encountered with the system since the system was started in September 2008. The system ran continuously from December 18, 2008 through February 24, 2009 when it was turned off for the pending groundwater sampling event. Routine maintenance was also performed during the March 2009 site visit which included changing the oil, replacing the air/oil separation filter, replacing the compressor air filter, replacing three oil removal filters, disassembling and cleaning of the autodrain and changing the oil filter. The AS system was restarted on March 2, 2009 after the quarterly groundwater sampling event was completed.

4.0 SAMPLING AND ANALYTICAL RESULTS

4.1 DATA VALIDATION

Accutest data analysts validated all data according to laboratory standard operating procedures (SOPs). The laboratory case narrative indicated a number of QC notes for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and sulfate during March 2009. Most QC irregularities were recognized as matrix interference and sample nonhomogeneity (sulfate). The validation process also resulted in several data qualifiers. These are shown with the analyte concentrations in **Table 3**.

A limited data validation was also performed by Solutions-IES. This limited data validation evaluated data completeness, holding time compliance, laboratory blank contamination and detection limits. No issues were identified.

4.2 FIELD AND NATURAL ATTENUATION PARAMETERS

As part of the March 2009 quarterly sampling event, groundwater samples were analyzed in the field for the natural attenuation parameters: DO, alkalinity, carbon dioxide, hydrogen sulfide and ferrous iron. In addition, field parameters including temperature, pH, conductivity, turbidity and ORP were measured and recorded during well purging. The results of the field measurements are summarized in **Table 2.**

Field measurements indicate that DO concentrations at the Building 46 site are relatively low with a range from 0.1 to 0.8 mg/L, with the exception of well CEF-046-05I which had a DO of 4 mg/L. DO measurements were collected with a DO meter and a flow through cell while purging and confirmed with a CHEMetrics® field kit at the time of sample collection. The higher DO reading identified in well CEF-046-05I may be due to the operation of the AS system.

ORP is a measure of electron activity of the groundwater. Positive ORP values indicate that an oxidative environment exists in the aquifer and negative ORP values indicate a reducing environment. The ORP measurements collected at the site range from -187 to 501. In general, ORP values increased from December 2008 to March 2009. This may be a result of an increasingly oxidative environment being created by the AS system. However, significant historical fluctuations in ORP values are evident at this site.

The pH at the site generally ranges from 2.39 to 6.48 which is consistent with previous pH measurements at this site. Minor fluctuations in pH values were noted but no substantial change was identified since the restart of the AS system. Conductivity, temperature and turbidity measurements were recorded to ensure that representative samples were collected.

Carbon dioxide readings that are elevated above background values are an indication that biodegradation of BTEX contaminants may be occurring. This in turn may increase the alkalinity as carbon dioxide can dissolve carbonate minerals that may be present in the aquifer material. Alkalinity and carbon dioxide values measured in March 2009 are generally consistent with historical values.

Under anaerobic conditions, ferric iron may be used as an electron acceptor during the process of biological degradation of petroleum compounds. The ferric iron, which is not directly measurable in groundwater due to its low solubility, is reduced to ferrous iron during this process which is much more soluble. Elevated levels of ferrous iron indicate that iron reduction may be occurring. This coupled with decreased levels of BTEX can be used as an indicator that anaerobic biodegradation of the BTEX compounds may also be occurring. Similarly, sulfate can be reduced to sulfide under anaerobic conditions. Elevated concentrations of hydrogen sulfide are an indirect measure of the total sulfide concentrations in groundwater. If hydrogen sulfide concentrations increase along with a decrease in sulfate and BTEX compounds, anaerobic biodegradation of the contaminants may be occurring under sulfate reducing conditions.

In general, concentrations of ferrous iron and hydrogen sulfide recorded in March 2009 are consistent with December 2008 values for the site. No substantial change was identified since the restart of the system in September 2008. Sulfate concentrations remain elevated with 4 of the 14 wells sampled exhibiting concentrations in excess of the GCTL (250 mg/L).

4.3 LABORATORY ANALYTICAL RESULTS

Six of the 14 wells sampled contained concentrations of constituents above the GCTLs this reporting period: CEF-046-01S, CEF-046-05I, CEF-046-06D, CEF-046-07I, CEF-046-24D and CEF-046-26I. The constituents included benzene, ethylbenzene, MTBE, naphthalene, sulfate and TRPH. Two wells (CEF-046-06D and CEF-046-07I) had constituents at concentrations above the Natural Attenuation Default Source Concentrations (NADSCs). Monitoring well locations and constituent concentrations in excess of

the regulatory limits are shown on **Figure 4.** A summary of historical sampling results can be found in **Table 3** and the laboratory analytical report is included in **Appendix B**.

The following parameters were detected in the wells identified below during the March 2009 sampling event.

- Benzene was detected above the GCTL (1 μg/L) in wells CEF-046-01S and CEF-046-07I.
- Ethylbenzene was detected above the GTCL (30 μg/L) in well CEF-046-01S.
- MTBE was detected above the GCTL (20 μg/L) in well CEF-046-01S; and above the NADSC (200 μg/L) in well CEF-046-07I.
- Naphthalene was detected above the GCTL (14 μg/L) in well CEF-046-01S.
- Sulfate was detected above the GCTL (250 mg/L) in wells CEF-046-05I, CEF-046-24D and CEF-046-26I; and above the NADSC (2,500 mg/L) in CEF-046-06D.
- TRPH was detected above the GCTL (5,000 μg/L) in well CEF-046-01S.

Historical trends in sulfate concentrations over time in select wells are show in **Figure 5** and historic BTEX and PAH concentrations for monitoring well CEF-046-01S are shown in **Figure 6** and **Figure 7**, respectively.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The March 2009 quarterly groundwater sampling event was conducted in general accordance with the Solutions-IES Work Plan (February 2008). Water level data suggest that groundwater in the intermediate zone at this site flows to the south-southwest.

Monitoring well CEF-046-01S remains the well with the most impacts and is one of the hot spots that is targeted by the AS system. Monitoring well CEF-046-07I has also historically shown high concentrations of the contaminants of concern and is the other area targeted with the AS system. MTBE in well CEF-046-07I is the only constituent that is elevated above the NADSC in these two areas.

Solutions-IES reinstalled a modified AS system which began operation on September 24, 2008. In general, constituents of concern have decreased since air sparging has restarted at the site, but it is too early to determine any trends. The AS system will continue to be monitored weekly and the next sampling event will be conducted in June 2009.

Solutions-IES recommends removing upgradient monitoring wells CEF-046-9I, CEF-046-12I, CEF-046-13I, CEF-046-14D and CEF-046-15I, and downgradient well CEF-046-25I from the monitoring program.

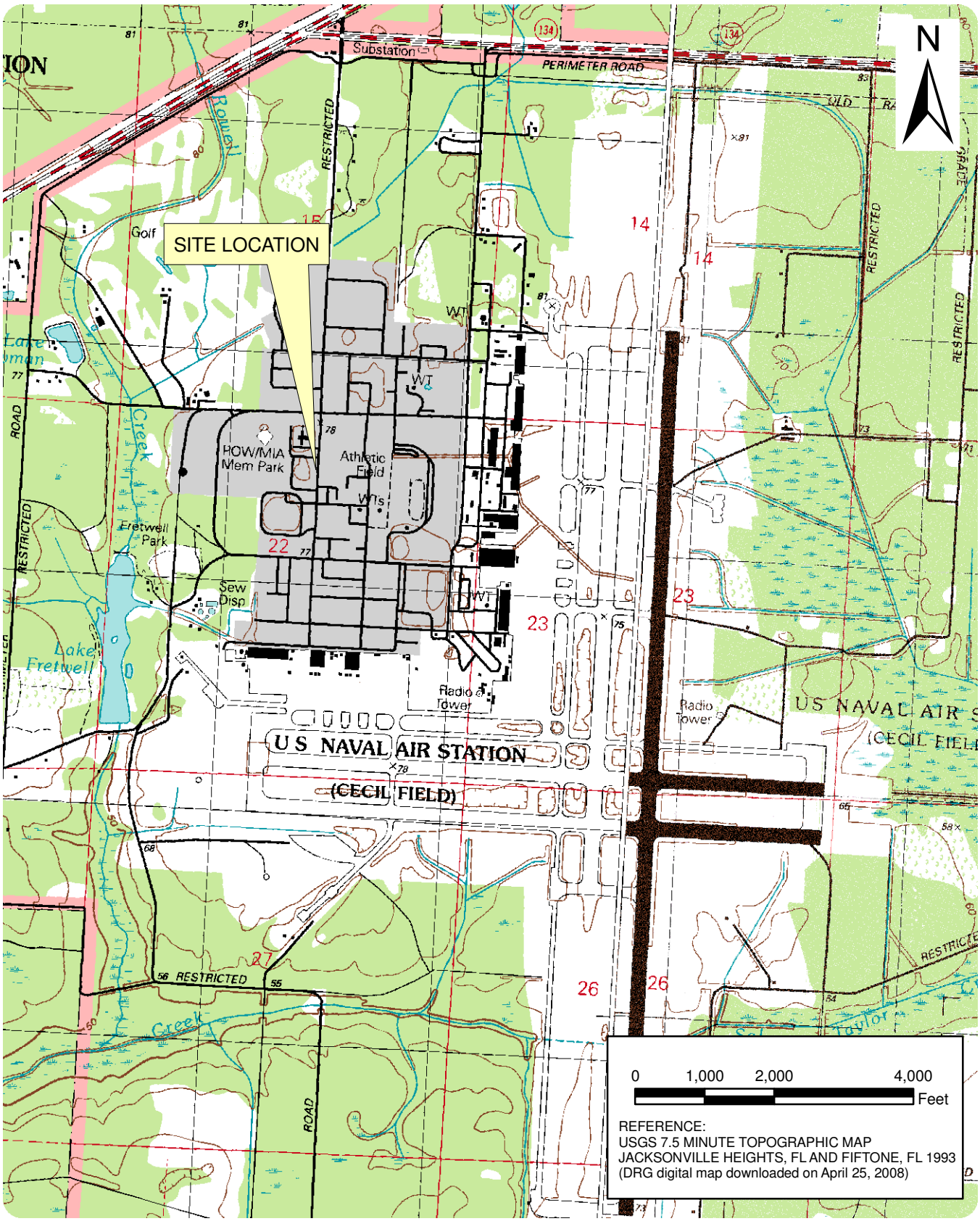
These wells have not had any detection of constituents of concern over the GCTLs since at least 2006 and are either located upgradient or cross-gradient from the source area. Also, monitoring well CEF-046-6D should only be analyzed for sulfate since no constituents of concern have been detected above the GCTLs since 2000.

6.0 REFERENCES

HLA, 1998. *Site Assessment Report, Building 46, Tanks 46R, 46D, 46SUL, and 46UL, Base Realignment and Closure Miscellaneous Tank Sites, Naval Air Station Cecil Field, Jacksonville, Florida.* Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina.

Solutions-IES, Inc., 2008. *Work Plan-Long Term Monitoring and Operation & Maintenance,* Former Naval Air Station Cecil Field, Jacksonville, Florida. February 2008..

FIGURES



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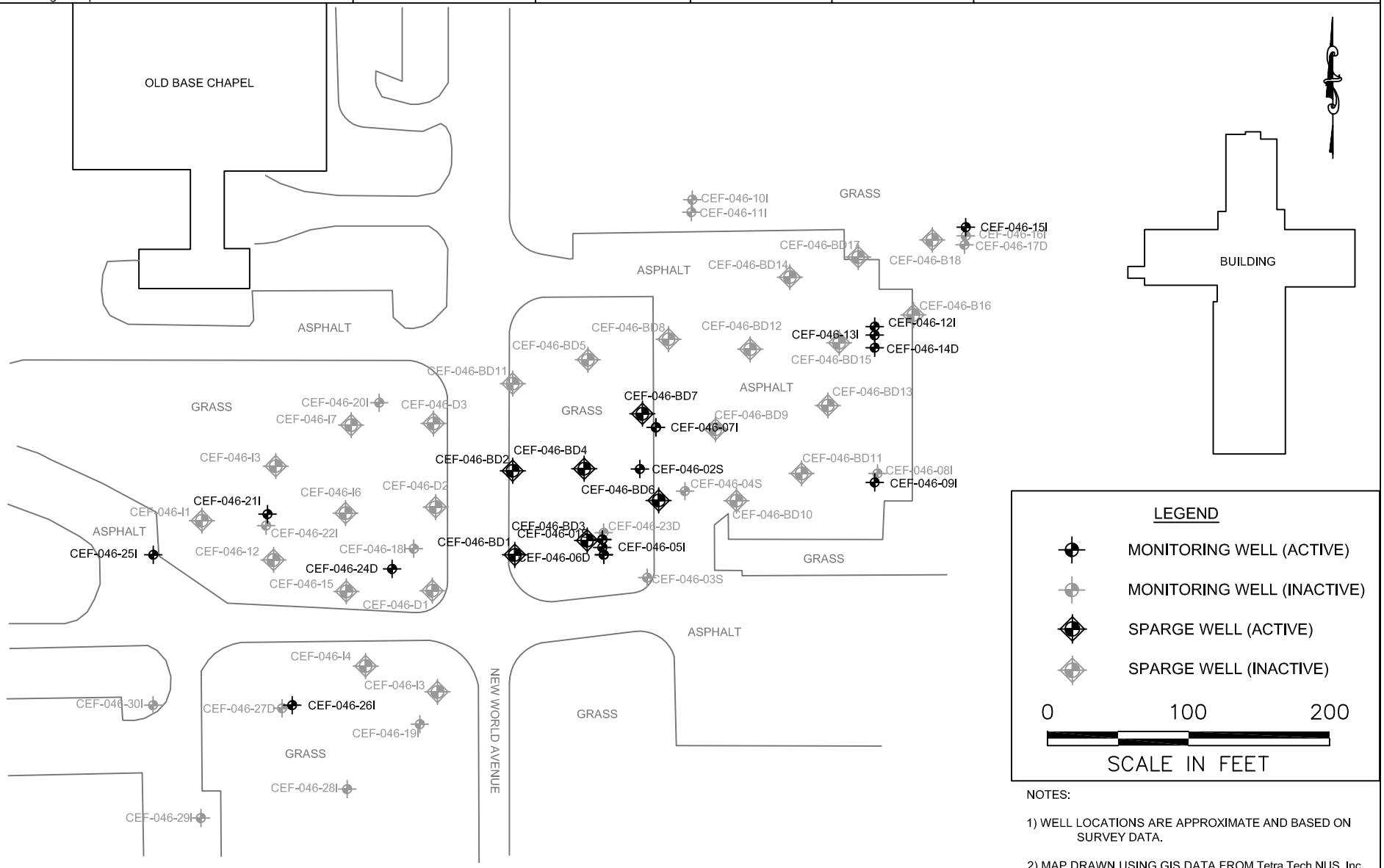
SITE LOCATION MAP
BUILDING 46 - NAS CECIL FIELD
JACKSONVILLE, FL

FIGURE:
1

FILE	DATE	PROJECT MANAGER	CHECKED BY	DRAFTER	PROJECT NUMBER
Figure 2.pdf	04/21/2009	BMR	JLD	DMM	4080.08A2.CECI



NOTES:

1) WELL LOCATIONS ARE APPROXIMATE AND BASED ON SURVEY DATA.

2) MAP DRAWN USING GIS DATA FROM Tetra Tech NUS, Inc.

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WELL LOCATION MAP
BUILDING 46 - NAS CECIL FIELD
JACKSONVILLE, FLORIDA
MARCH 2009

FIGURE:

2

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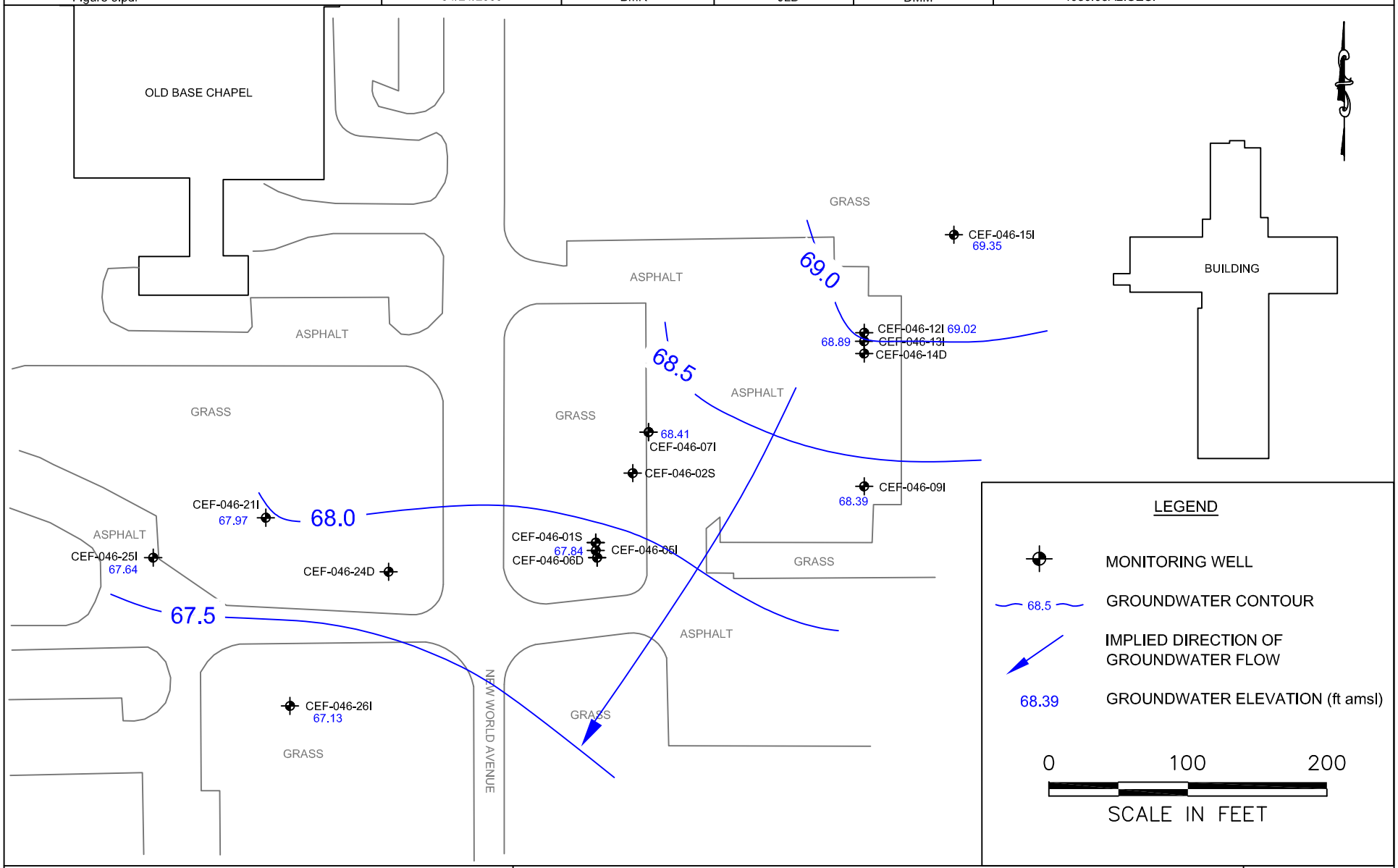

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GROUNDWATER CONTOUR MAP - INTERMEDIATE AQUIFER
BUILDING 46 - NAS CECIL FIELD
JACKSONVILLE, FLORIDA
MARCH 2009

FIGURE:
3

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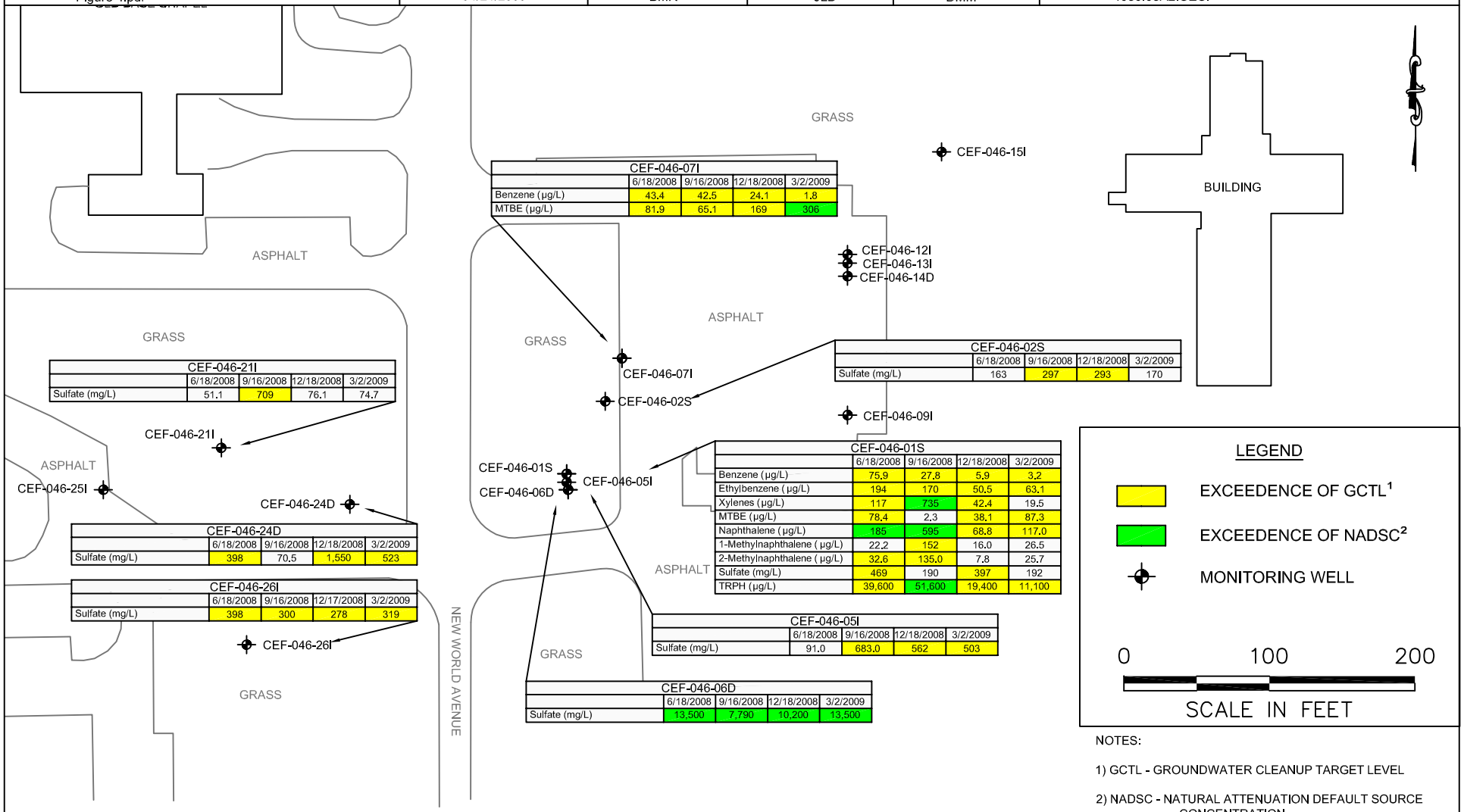

CEF-046-07I	6/18/2008	9/16/2008	12/18/2008	3/2/2009
Benzene (µg/L)	43.4	42.5	24.1	1.8
MTBE (µg/L)	81.9	65.1	169	306

CEF-046-02S	6/18/2008	9/16/2008	12/18/2008	3/2/2009
Sulfate (mg/L)	163	297	293	170

CEF-046-21I	6/18/2008	9/16/2008	12/18/2008	3/2/2009
Sulfate (mg/L)	51.1	709	76.1	74.7

CEF-046-01S	6/18/2008	9/16/2008	12/18/2008	3/2/2009
Benzene (µg/L)	75.9	27.8	5.9	3.2
Ethylbenzene (µg/L)	194	170	50.5	63.1
Xylenes (µg/L)	117	735	42.4	19.5
MTBE (µg/L)	78.4	2.3	38.1	87.3
Naphthalene (µg/L)	185	595	68.8	117.0
1-Methylnaphthalene (µg/L)	22.2	152	16.0	26.5
2-Methylnaphthalene (µg/L)	32.6	135.0	7.8	25.7
Sulfate (mg/L)	469	190	397	192
TRPH (µg/L)	39,600	51,600	19,400	11,100

CEF-046-24D	6/18/2008	9/16/2008	12/18/2008	3/2/2009
Sulfate (mg/L)	398	70.5	1,550	523

CEF-046-05I	6/18/2008	9/16/2008	12/18/2008	3/2/2009
Sulfate (mg/L)	91.0	683.0	562	503

CEF-046-26I	6/18/2008	9/16/2008	12/17/2008	3/2/2009
Sulfate (mg/L)	398	300	278	319

CEF-046-06D	6/18/2008	9/16/2008	12/18/2008	3/2/2009
Sulfate (mg/L)	13,500	7,790	10,200	13,500

NOTES:

1) GCTL - GROUNDWATER CLEANUP TARGET LEVEL

2) NADSC - NATURAL ATTENUATION DEFAULT SOURCE CONCENTRATION

3) WELL LOCATIONS ARE APPROXIMATE AND BASED ON SURVEY DATA.

4) MAP DRAWN USING GIS DATA FROM Tetra Tech NUS, Inc.

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CONTAMINANT CONCENTRATION MAP
BUILDING 46 - NAS CECIL FIELD
JACKSONVILLE, FLORIDA
MARCH 2009

FIGURE:

4

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Figure 5
Historical Sulfate Concentrations in Select Wells

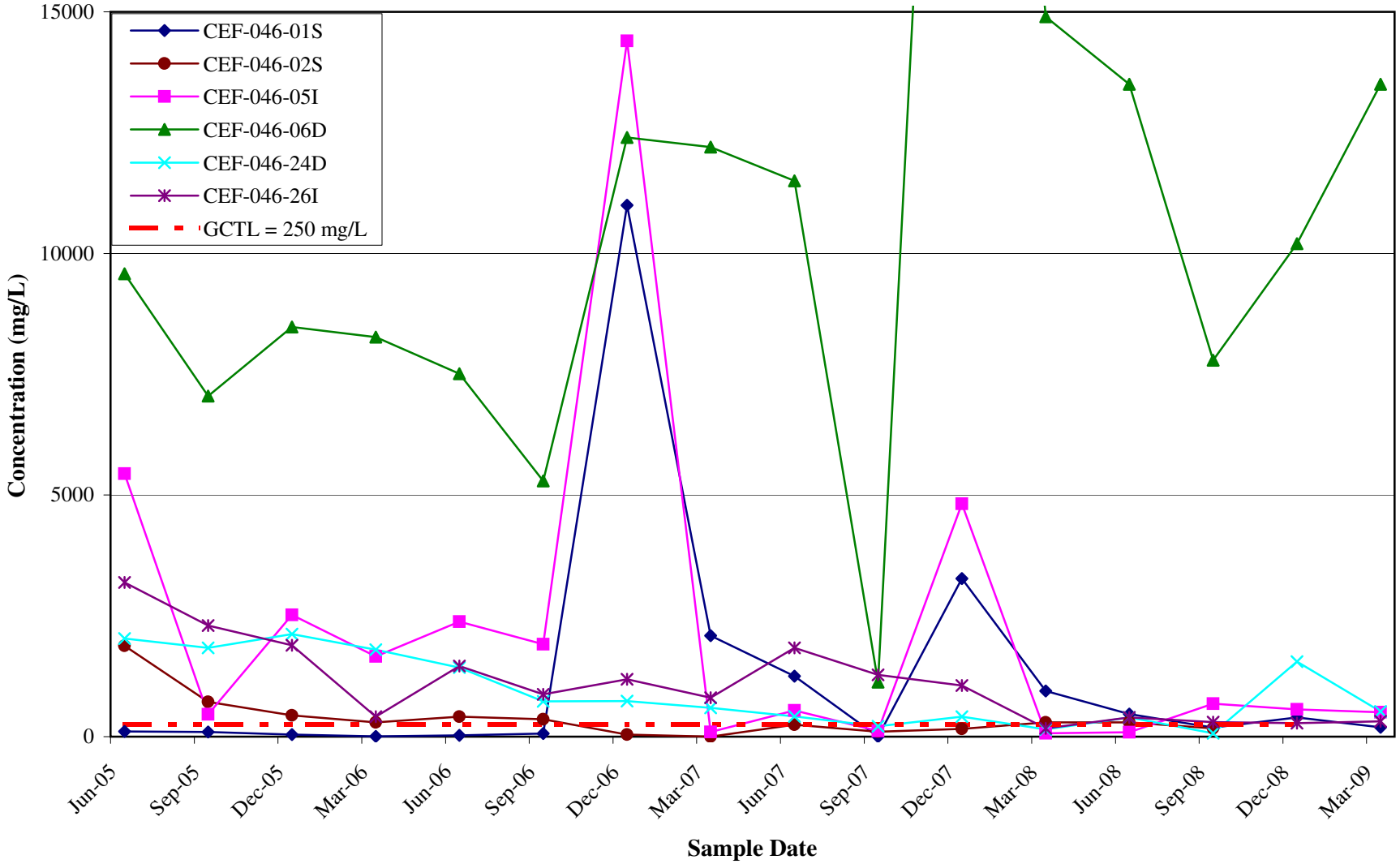


Figure 6
Historical BTEX Concentrations in CEF-046-01S

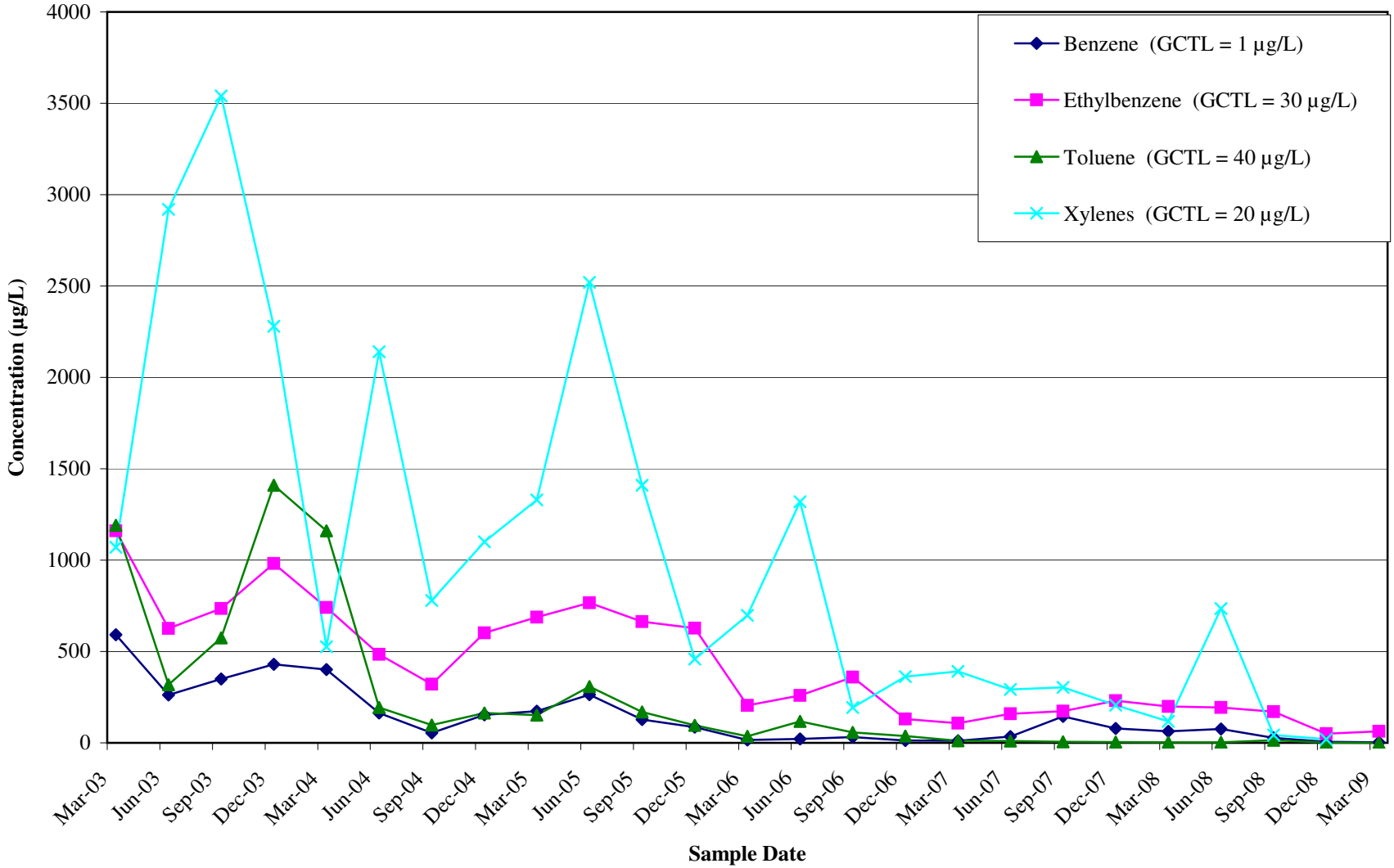
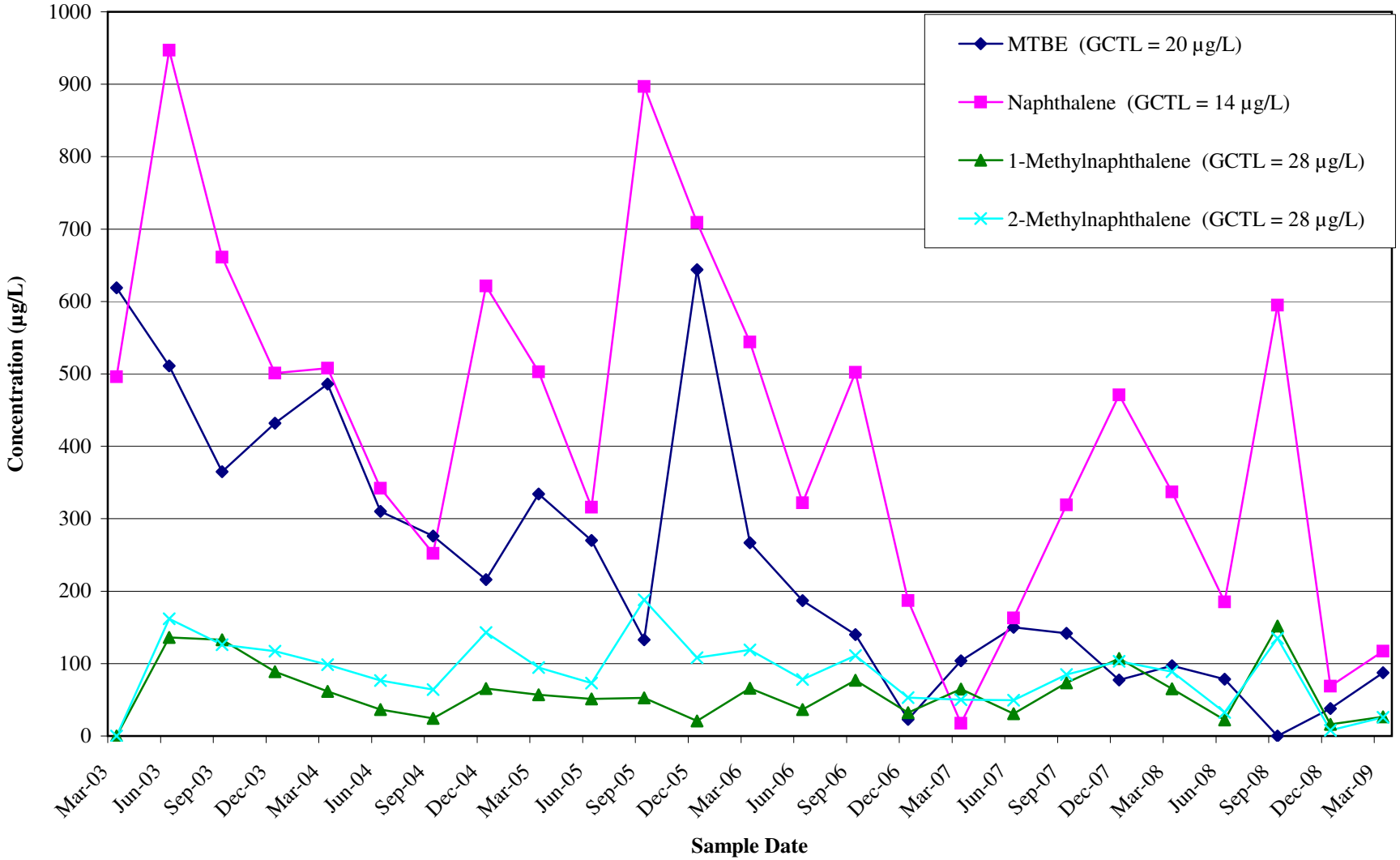


Figure 7
Historical PAH Constituents in CEF-046-01S



TABLES

TABLE 1
GROUNDWATER ELEVATIONS

BUILDING 46
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Well ID	Total Depth (ft bgs)	Date Measured	Top of Casing Elevation (ft amsl)	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)
CEF-046-01S	14.24	12/21/00	79.08	4.94	74.14
		03/14/03		2.55	76.53
		06/09/03		2.40	76.68
		09/03/03		3.42	75.66
		12/11/03		5.20	73.88
		03/18/04		5.92	73.16
		06/08/04		7.80	71.28
		09/21/04		3.42	75.66
		12/01/04		7.06	72.02
		03/13/05		9.00	70.08
		06/09/05		9.04	70.04
		09/06/05		6.95	72.13
		12/06/05		8.79	70.29
		03/29/06		9.31	69.77
		06/09/06		10.95	68.13
		09/24/06		12.60	66.48
		12/08/06		12.52	66.56
		03/01/07		12.10	66.98
		06/15/07		12.02	67.06
		09/12/07		11.32	67.76
		12/05/07		10.16	68.92
		03/05/08		9.80	69.28
		06/17/08		10.47	68.61
		09/16/08		5.42	73.66
		12/17/08		9.96	69.12
		03/02/09		10.45	68.63
CEF-046-02S	13.88	12/21/00	79.08	5.02	74.06
		03/14/03		2.55	76.53
		06/05/03		3.75	75.33
		09/03/03		2.70	76.38
		12/11/03		5.04	74.04
		03/18/04		6.02	73.06
		06/08/04		7.80	71.28
		09/21/04		3.75	75.33
		12/01/04		7.02	72.06
		03/13/05		8.86	70.22
		06/09/05		8.95	70.13
		09/06/05		6.70	72.38
		09/21/05		6.60	72.48
		12/06/05		8.23	70.85
		03/30/06		9.22	69.86
		06/09/06		10.83	68.25
		09/24/06		11.54	67.54
		12/08/06		12.32	66.76
		03/01/07		11.98	67.10
		06/15/07		12.00	67.08
		09/12/07		11.28	67.80
		12/05/07		10.07	69.01
		03/05/08		9.68	69.40
		06/17/08		10.37	68.71
		09/16/08		5.60	73.48
		12/17/08		9.85	69.23
		03/02/09		10.32	68.76
CEF-046-03S	15.00	12/06/05	79.14	9.19	69.95
CEF-046-04S	15.00	12/06/05	79.29	8.85	70.44
CEF-046-05I	49.65	12/21/00	79.18	5.81	73.37
		03/14/03		3.40	75.78
		06/05/03		4.90	74.28
		09/03/03		6.25	72.93
		12/11/03		6.64	72.54
		03/18/04		7.89	71.29
		06/08/04		9.40	69.78
		09/21/04		5.71	73.47
		12/01/04		9.23	69.95
		03/13/05		10.11	69.07
		06/09/05		10.45	68.73
		09/06/05		8.63	70.55
		12/06/05		10.01	69.17
		03/29/06		10.68	68.50
		06/09/06		11.95	67.23
		09/24/06		12.62	66.56
		12/08/06		14.82	64.36
		03/01/07		12.85	66.33
		06/15/07		12.93	66.25
		09/12/07		12.27	66.91
		12/05/07		11.10	68.08
		03/05/08		10.98	68.20
		06/17/08		11.49	67.69
		09/16/08		7.41	71.77
		12/17/08		10.85	68.33
		03/02/09		11.34	67.84

TABLE 1
GROUNDWATER ELEVATIONS

BUILDING 46
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Well ID	Total Depth (ft bgs)	Date Measured	Top of Casing Elevation (ft amsl)	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)
CEF-046-06D	79.82	12/21/00	79.17	7.40	71.77
		03/14/03		6.50	72.67
		06/09/03		8.00	71.17
		09/03/03		5.82	73.35
		12/10/03		7.30	71.87
		03/16/04		10.60	68.57
		06/08/04		11.69	67.48
		09/21/04		7.46	71.71
		12/01/04		9.72	69.45
		03/13/05		10.58	68.59
		06/09/05		10.20	68.97
		09/06/05		9.66	69.51
		12/06/05		10.95	68.22
		03/29/06		10.78	68.39
		06/09/06		12.24	66.93
		09/24/06		9.21	69.96
		12/08/06		16.90	62.27
		03/01/07		13.21	65.96
		06/15/07		13.40	65.77
		09/12/07		12.99	66.18
		12/05/07		11.49	67.68
		03/05/08		11.23	67.94
		06/17/08		11.95	67.22
		09/16/08		9.71	69.46
		12/17/08		13.19	65.98
		03/02/09		13.34	65.83
CEF-046-07I	29.68	12/21/00	79.02	5.45	73.57
		03/14/03		3.30	75.72
		06/09/03		3.20	75.82
		09/03/03		2.80	76.22
		12/11/03		5.84	73.18
		03/18/04		7.40	71.62
		06/08/04		8.80	70.22
		09/21/04		4.95	74.07
		12/01/04		8.60	70.42
		03/13/05		9.71	69.31
		06/09/05		9.40	69.62
		09/06/05		7.19	71.83
		12/06/05		9.00	70.02
		03/30/06		9.91	69.11
		06/09/06		11.30	67.72
		09/24/06		11.82	67.20
		12/08/06		10.35	68.67
		03/01/07		12.82	66.20
		06/15/07		12.95	66.07
		09/12/07		11.74	67.28
		12/05/07		10.22	68.80
		03/05/08		9.97	69.05
		06/17/08		10.68	68.34
		09/16/08		6.47	72.55
		12/17/08		10.19	68.83
		03/02/09		10.61	68.41
CEF-046-08I	30.50	12/06/05	78.91	9.10	69.81
CEF-046-09I	48.81	12/21/00	79.05	5.67	73.38
		03/14/03		2.55	76.50
		06/04/03		4.10	74.95
		09/03/03		3.32	75.73
		12/11/03		5.79	73.26
		03/16/04		7.20	71.85
		06/08/04		8.92	70.13
		09/21/04		5.29	73.76
		12/01/04		8.44	70.61
		03/13/05		9.58	69.47
		06/09/05		9.78	69.27
		09/06/05		7.86	71.19
		12/06/05		9.40	69.65
		03/30/06		9.95	69.10
		06/09/06		11.32	67.73
		09/24/06		11.89	67.16
		12/08/06		12.90	66.15
		03/01/07		12.26	66.79
		06/15/07		12.26	66.79
		09/12/07		11.61	67.44
		12/05/07		10.51	68.54
		03/05/08		10.20	68.85
		06/17/08		10.88	68.17
		09/16/08		6.97	72.08
		12/17/08		10.30	68.75
		03/02/09		10.66	68.39

TABLE 1
GROUNDWATER ELEVATIONS

BUILDING 46
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Well ID	Total Depth (ft bgs)	Date Measured	Top of Casing Elevation (ft amsl)	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)
CEF-046-10I	30.50	12/06/05	80.18	9.08	71.10
CEF-046-11I	50.50	12/06/05	80.23	9.73	70.50
CEF-046-12I	29.61	12/21/00	78.73	5.23	73.50
		03/14/03		2.10	76.63
		06/05/03		3.30	75.43
		09/03/03		2.90	75.83
		12/11/03		5.45	73.28
		03/18/04		6.45	72.28
		06/08/04		8.10	70.63
		09/21/04		4.30	74.43
		12/01/04		7.25	71.48
		03/13/05		8.70	70.03
		06/09/05		8.80	69.93
		09/06/05		6.80	71.93
		12/06/05		8.35	70.38
		03/29/06		8.93	69.80
		06/09/06		10.54	68.19
		09/25/06		11.13	67.60
		12/08/06		12.00	66.73
		03/01/07		11.51	67.22
		06/15/07		11.48	67.25
		09/12/07		10.80	67.93
		12/05/07		9.61	69.12
		03/05/08		9.22	69.51
		06/17/08		9.57	69.16
		09/16/08		5.98	72.75
		12/17/08		9.41	69.32
		03/02/09		9.71	69.02
CEF-046-13I	39.56	12/21/00	78.87	5.43	73.44
		03/14/03		2.31	76.56
		06/05/03		3.50	75.37
		09/03/03		3.10	75.77
		12/11/03		5.90	72.97
		03/18/04		6.85	72.02
		06/08/04		8.61	70.26
		09/21/04		4.65	74.22
		12/01/04		7.60	71.27
		03/13/05		8.91	69.96
		06/09/05		9.10	69.77
		09/06/05		7.15	71.72
		12/06/05		8.64	70.23
		03/29/06		9.17	69.70
		06/09/06		10.95	67.92
		09/25/06		11.36	67.51
		12/08/06		12.32	66.55
		03/01/07		11.73	67.14
		06/15/07		11.72	67.15
		09/12/07		11.08	67.79
		12/05/07		9.90	68.97
		03/05/08		9.52	69.35
		06/17/08		10.24	68.63
		09/16/08		6.34	72.53
		12/17/08		9.67	69.20
		03/02/09		9.98	68.89
CEF-046-14D	78.79	12/21/00	78.88	6.86	72.02
		03/14/03		4.20	74.68
		06/04/03		6.15	72.73
		09/03/03		5.15	73.73
		12/10/03		7.20	71.68
		03/16/04		8.72	70.16
		06/08/04		9.75	69.13
		09/21/04		5.34	73.54
		12/01/04		7.66	71.22
		03/13/05		8.54	70.34
		06/09/05		9.74	69.14
		09/06/05		8.09	70.79
		12/06/05		8.42	70.46
		03/26/06		9.50	69.38
		06/09/06		10.70	68.18
		09/24/06		11.14	67.74
		12/08/06		13.74	65.14
		03/01/07		11.56	67.32
		06/15/07		11.52	67.36
		09/12/07		11.08	67.80
		12/05/07		9.76	69.12
		03/05/08		9.39	69.49
		06/17/08		10.21	68.67
		09/16/08		7.04	71.84
		12/17/08		9.88	69.00
		03/02/09		10.00	68.88

TABLE 1
GROUNDWATER ELEVATIONS

BUILDING 46
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Well ID	Total Depth (ft bgs)	Date Measured	Top of Casing Elevation (ft amsl)	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)
CEF-046-15I	29.77	12/21/00	79.75	6.33	73.42
		03/13/03		3.47	76.28
		06/04/03		4.54	75.21
		09/03/03		4.22	75.53
		12/10/03		6.53	73.22
		03/16/04		7.40	72.35
		06/08/04		9.22	70.53
		09/21/04		5.20	74.55
		12/01/04		8.07	71.68
		03/13/05		9.31	70.44
		06/09/05		9.54	70.21
		09/06/05		7.69	72.06
		12/06/05		9.10	70.65
		03/30/06		9.95	69.80
		06/09/06		11.46	68.29
		09/24/06		11.95	67.80
		12/08/06		12.85	66.90
		03/01/07		12.30	67.45
		06/15/07		12.17	67.58
		09/12/07		11.59	68.16
		12/05/07		10.46	69.29
		03/05/07		9.91	69.84
		06/17/08		10.74	69.01
		09/16/08		6.91	72.84
		12/17/08		10.28	69.47
		03/02/09		10.40	69.35
CEF-046-16I	50.00	12/06/05	79.42	8.96	70.46
CEF-046-17D	80.50	12/06/05	79.15	8.78	70.37
CEF-046-18I	30.50	12/07/05	78.54	9.44	69.10
CEF-046-19I	50.50	12/07/05	78.88	10.55	68.33
CEF-046-20I	30.50	12/07/05	79.34	9.60	69.74
CEF-046-21I	29.70	12/21/00	79.33	6.02	73.31
		03/13/03		2.79	76.54
		06/05/03		4.18	75.15
		09/03/03		3.70	75.63
		12/11/03		7.50	71.83
		03/18/04		8.35	70.98
		06/08/04		10.10	69.23
		09/21/04		5.80	73.53
		12/01/04		9.15	70.18
		03/13/05		10.60	68.73
		06/10/05		10.90	68.43
		09/06/05		NR	NR
		12/07/05		10.11	69.22
		03/29/06		10.60	68.73
		06/09/06		12.18	67.15
		09/24/06		12.97	66.36
		12/08/06		13.81	65.52
		03/01/07		13.36	65.97
		06/15/07		13.43	65.90
		09/12/07		12.67	66.66
		12/05/07		11.43	67.90
		03/05/08		11.34	67.99
		06/17/08		11.87	67.46
		09/16/08		7.42	71.91
		12/17/08		10.96	68.37
		03/02/09		11.36	67.97
CEF-046-22I	50.50	12/07/05	79.22	9.91	69.31
CEF-046-23D	92.50	12/07/05	NA	11.18	NA
CEF-046-24D	90.45	12/21/00	78.74	7.30	71.44
		03/14/03		13.78	64.96
		06/05/03		6.40	72.34
		09/03/03		4.97	73.77
		12/10/03		7.40	71.34
		03/16/04		8.95	69.79
		06/08/04		10.68	68.06
		09/21/04		6.31	72.43
		12/01/04		9.11	69.63
		03/13/05		9.92	68.82
		06/09/05		10.28	68.46
		09/06/05		8.93	69.81
		12/07/05		9.92	68.82
		03/29/06		10.15	68.59
		06/09/06		11.69	67.05
		09/24/06		12.12	66.62
		12/08/06		13.69	65.05
		03/01/07		12.43	66.31
		06/15/07		12.66	66.08
		09/12/07		11.87	66.87
		12/05/07		10.75	67.99
		03/05/08		10.46	68.28
		06/17/08		11.25	67.49
		09/16/08		7.99	70.75
		12/17/08		11.01	67.73
		03/02/09		11.19	67.55

TABLE 1
GROUNDWATER ELEVATIONS

BUILDING 46
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Well ID	Total Depth (ft bgs)	Date Measured	Top of Casing Elevation (ft amsl)	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)
CEF-046-25I	50.45	12/21/00	79.17	6.25	72.92
		03/13/03		2.49	76.68
		06/04/03		3.98	75.19
		09/03/03		3.50	75.67
		12/10/03		5.98	73.19
		03/16/04		8.30	70.87
		06/08/04		10.03	69.14
		09/21/04		5.61	73.56
		12/01/04		9.11	70.06
		03/13/05		10.46	68.71
		06/09/05		10.56	68.61
		09/06/05		8.93	70.24
		12/07/05		10.10	69.07
		03/29/06		10.50	68.67
		06/09/06		12.19	66.98
		09/24/06		12.98	66.19
		12/08/06		13.89	65.28
		03/01/07		13.42	65.75
		06/15/07		13.60	65.57
		09/12/07		12.85	66.32
		12/05/07		11.58	67.59
		03/05/08		11.51	67.66
		06/17/08		12.14	67.03
		09/16/08		7.69	71.48
		12/17/08		11.06	68.11
		03/02/09		11.53	67.64
CEF-046-26I	47.76	12/21/00	79.43	7.09	72.34
		03/14/03		3.82	75.61
		06/05/03		4.30	75.13
		09/03/03		3.73	75.70
		12/11/03		6.65	72.78
		03/18/04		8.05	71.38
		06/08/04		10.40	69.03
		09/21/04		6.56	72.87
		12/01/04		10.20	69.23
		03/13/05		11.50	67.93
		06/09/05		11.50	67.93
		09/06/05		9.90	69.53
		12/07/05		11.01	68.42
		03/29/06		11.00	68.43
		06/09/06		12.90	66.53
		09/24/06		13.60	65.83
		12/08/06		14.54	64.89
		03/01/07		14.08	65.35
		06/15/07		14.23	65.20
		09/12/07		13.43	66.00
		12/05/07		12.22	67.21
		03/05/08		12.25	67.18
		06/17/08		12.76	66.67
		09/16/08		8.53	70.90
		12/17/08		11.80	67.63
		03/02/09		12.30	67.13
CEF-046-27D	90.00	12/07/05	78.94	10.65	68.29
CEF-046-28I	50.00	12/07/05	79.38	11.21	68.17
CEF-046-29I	50.00	12/07/05	79.88	11.75	68.13
CEF-046-30I	50.00	12/07/05	79.66	11.10	68.56
CEF-046-31I	50.00	12/07/05	90.02	12.20	77.82

Notes:
ft bgs - feet below ground surface
ft amsl - feet above mean sea level
ft btoc - feet below top of casing
NM - not measured

TABLE 2
FIELD AND NATURAL ATTENUATION PARAMETERS

Building 46
NAS Cecil Field
Jacksonville, Florida

Well ID	Sample Date	Field Parameters						Natural Attenuation Parameters			
		pH (SU)	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)*		Oxidation - Reduction Potential (mV)	Temperature (°C)	Carbon Dioxide (mg/L)	Alkalinity as $CaCO_3$ (mg/L)	Ferrous Iron (mg/L)	Hydrogen Sulfide (mg/L)
				Meter	CHEMetrics						
CEF-046-01S	12/21/00	6.20	512	1.05	NM	NM	22.70	NM	200	1.4	1.0
	03/14/03	7.54	2520	0.89	NM	-204.0	20.77	ND	100	2.2	5.0
	06/09/03	6.39	1730	ND	NM	-238.0	25.28	Interference	140	3.2	5.0
	09/03/03	6.27	201	2.03	NM	-364.0	27.53	Interference	205	1.0	5.0
	12/11/03	5.98	234	ND	ND	-332.0	23.15	400	250	1.4	5.0
	03/18/04	6.48	220	NM	ND	-278.0	22.33	Interference	175	2.0	5.0
	06/08/04	6.00	1920	0.04	ND	-296.0	26.24	Interference	130	1.0	5.0
	09/21/04	7.42	122	0.00	ND	-234.0	27.97	Interference	100	5.4	5.0
	12/01/04	6.39	2404	0.15	ND	-356.90	26.07	362	205	ND	5.0
	03/13/05	6.23	1467	0.18	ND	-347.60	24.63	170	275	2.8	5.0
	06/09/05	6.24	1223	0.71	ND	-347.10	26.88	140	195	1.8	5.0
	09/06/05	6.52	927	0.20	ND	-367.70	27.64	140	120	1.6	5.0
	12/06/05	6.92	507	0.22	ND	-269.80	23.49	123	85	1.6	5.0
	03/29/06	5.73	355	0.24	ND	-129.80	24.21	280	ND	2.6	5.0
	06/09/06	4.30	405	0.50	ND	-130.00	25.49	83	375	1.5	1.0
	9/24/2006***	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/08/06	3.29	10302	0.59	ND	5.10	22.01	426	ND	4.4	5.0
	03/01/07	4.04	5013	0.78	ND	48.8	21.88	205	ND	4.8	2.0
	06/15/07	4.33	4081	0.22	ND	-11.9	30.62	Interference	ND	5.5	2.0
	09/12/07	4.56	2279	0.83	ND	-10.3	29.77	Interference	ND	6.5	1.0
	12/05/07	5.07	2671	3.04	ND	-140.7	25.99	Interference	ND	3.0	5.0
	03/06/08	4.81	2146	0.23	ND	-98.2	24.44	Interference	10	3.6	5.0
	06/17/08	4.87	1135	1.08	ND	-36.5	27.87	Interference	Interference	6.0	5.0+
	09/16/08	5.90	373	0.19	ND	-120.7	27.28	Interference	60	11.0	3.0
	12/18/08	4.80	921	0.44	0.1	43.2	23.55	110	1000+	10+	5.0
	03/02/09	5.52	867	0.03	0.1	-187.4	19.10	70	18	4.0	1.06
CEF-046-02S	12/21/00	6.20	962	1.06	NM	NM	23.20	352	720	1.0	ND
	03/14/03	7.08	1620	1.60	NM	-112.0	20.88	310	165	2.2	0.1
	06/05/03	6.44	1860	ND	NM	NM	24.66	228	195	2.2	0.3
	09/03/03	6.25	1480	0.03	NM	-132.0	27.94	245	160	2.0	0.3
	12/11/03	6.47	1070	0.40	0.6	-258.0	23.85	218	190	1.0	1.0
	03/18/04	6.80	123	NM	ND	-111.0	20.09	231	190	1.4	0.7
	06/08/04	5.73	855	0.16	3.0	-145.0	25.17	154	95	4.8	ND
	09/21/04	7.06	142	0.03	ND	-153.0	26.76	157	130	3.8	2.0
	12/01/04	6.45	2454	0.06	ND	-215.20	25.63	88	100	0.6	5.0
	03/13/05	5.92	2547	0.07	ND	-181.60	22.86	207	60	2.2	1.0
	06/09/05	6.14	2530	0.59	ND	-199.90	24.39	127	55	5.0	0.5
	09/06/05	6.68	3436	0.04	ND	-295.10	27.26	184	90	3.8	1.0
	09/21/05	6.61	2954	0.49	NM	-125.00	26.67	NM	NM	NM	NM
	12/06/05	6.41	1839	0.33	ND	-25.00	24.31	175	65	3.0	0.1
	03/30/06	5.84	3300	0.24	ND	-10.00	24.29	167	60	5.2	ND
	06/09/06	4.75	994	0.66	ND	-47.90	25.94	67	60	4.4	0.1
	09/25/06	5.81	1175	0.39	ND	-85.10	26.25	237	75	4.0	0.7
	12/08/06	6.02	1232	0.73	ND	-9.50	23.77	162	50	2.4	2.0
	03/01/07	5.17	841	0.41	ND	-7.70	22.96	229	40	4.2	0.7
	06/15/07	5.90	244	0.23	ND	28.10	25.33	332	5	2.0	0.5
	09/12/07	6.21	551	0.41	ND	-56.40	27.80	148	105	3.4	ND
	12/05/07	6.18	1147	0.38	ND	4.70	25.23	189	ND	ND	0.1
	03/06/08	5.92	358	0.34	ND	28.00	22.40	260	60	1.2	0.1
	06/17/08	5.87	478	0.69	ND	-37.70	25.13	297	125	0.8	0.2
	09/16/08	6.46	567	0.12	ND	-77.30	27.06	Interference	400	0.0	0.3
	12/18/08	6.39	655	0.60	0.30	0.40	23.75	70	50	0.4	0.2
	03/02/09	6.48	456	0.52	0.6	177.2	18.61	35	35	0.1	0.0
CEF-046-03S	12/06/05	7.38	2078	0.16	ND	-106.90	25.11	108	325	ND	5.0
CEF-046-04S	12/06/05	6.11	728	0.36	ND	-57.10	25.04	167	20	3.8	5.0
CEF-046-05I	12/21/00	5.60	140	1.10	NM	NM	23.20	183	100	1.8	1.0
	03/14/03	3.54	5810	2.05	NM	393.0	25.23	ND	ND	4.2	ND
	06/05/03	2.00	4840	0.23	NM	407.0	26.92	Interference	ND	9.9	ND
	09/03/03	2.74	4450	0.04	NM	320.0	27.29	Interference	ND	10.0	ND
	12/11/03	2.84	4480	4.01	ND	331.0	22.90	568	ND	6.0	ND
	03/18/04	2.48	4074	NM	ND	NM	25.00	172	ND	4.2	ND
	06/08/04	2.28	5216	0.10	15.0	503.60	27.25	93	ND	15.0	ND
	09/21/04	6.04	103	0.05	ND	-61.80	26.85	171	5	4.8	0.1
	12/01/04	4.48	638	0.23	ND	267.70	26.86	Interference	ND	7.2	0.1
	03/13/05	4.21	2300	0.00	ND	283.00	27.41	579	ND	9.2	ND
	06/09/05	2.71	5151	0.06	ND	319.90	29.89	390	ND	10.0	ND
	09/06/05	2.91	946	0.18	ND	513.50	26.98	145	ND	3.8	ND
	12/06/05	2.62	4721	2.15	ND	554.10	24.95	94	ND	ND	ND
	03/29/06	2.36	3174	0.21	ND	418.90	25.71	478	ND	4.8	ND
	06/09/06	2.69	4061	0.67	ND	406.40	29.66	535	ND	6.0	0.1
	09/24/06	2.91	3865	0.24	ND	361.70	28.12	Interference	5	9.8	ND
	12/08/06	2.66	12471	1.50	ND	353.30	21.20	Interference	ND	5.0	1.0
	03/01/07	3.21	463	1.10	ND	536.50	23.61	102	5	0.6	ND
	06/15/07	1.31	660	0.83	ND	566.00	27.51	460	ND	3.0	0.1
	09/12/07	2.92	2156	1.24	ND	339.50	27.99	Interference	ND	6.0	0.3
	12/05/07	3.03	3368	2.35	1.5	328.10	26.00	Interference	ND	5.0	ND
	03/06/08	2.86	327	0.84	ND	57.60	24.82	99	ND	1.2	ND
	06/17/08	3.85	298	0.32	ND	68.80	27.32	116	5	3.6	0.1
	09/16/08	3.54	499	0.38	ND	218.70	25.91	Interference	0	9.2	0.1
	12/18/08	2.90	850	2.13	2.00	238.00	25.80	400	0	0.0	0.0
	03/02/09	3.07	925	3.09	4.0	501.5	22.88	350	0	1.0	0.0

TABLE 2
FIELD AND NATURAL ATTENUATION PARAMETERS

Building 46
NAS Cecil Field
Jacksonville, Florida

Well ID	Sample Date	Field Parameters						Natural Attenuation Parameters			
		pH (SU)	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)*		Oxidation - Reduction Potential (mV)	Temperature (°C)	Carbon Dioxide (mg/L)	Alkalinity as $CaCO_3$ (mg/L)	Ferrous Iron (mg/L)	Hydrogen Sulfide (mg/L)
				Meter	CHEMetrics						
CEF-046-06D	12/21/00	9.71	180	6.51	NM	NM	23.50	8	120	0.4	0.3
	03/14/03	3.23	8600	2.64	NM	404.00	25.71	ND	ND	4.2	ND
	06/09/03	2.69	9740	0.09	NM	77.00	27.97	Interference	ND	7.0	ND
	09/03/03	2.70	8759	0.37	NM	335.00	27.71	Interference	ND	10.0	ND
	12/10/03	2.62	790	ND	0.8	376.00	23.95	Interference	ND	5.4	ND
	03/16/04	2.53	746	6.00	ND	NM	24.60	263	ND	ND	3.0
	06/08/04	2.42	8973	0.09	15.0	431.60	26.46	Interference	ND	9.8	ND
	09/21/04	2.37	10411	0.23	ND	434.30	26.45	109	ND	9.8	0.1
	12/01/04	2.59	18791	0.15	ND	437.10	27.16	118	ND	7.6	0.1
	03/13/05	2.44	9000	0.14	ND	414.00	26.45	176	ND	10.0	ND
	06/09/05	2.49	8012	0.15	ND	431.90	26.79	Interference	ND	10.0	ND
	09/06/05	2.48	7592	0.99	ND	608.90	28.41	154	ND	4.2	0.1
	12/06/05	2.52	10154	5.44	ND	515.70	25.87	99	ND	10.0	ND
	03/29/06	2.21	9429	1.82	1.8	598.90	26.23	241	200	4.6	ND
	06/09/06	2.49	8276	0.71	ND	564.50	28.89	128	ND	2.5	0.1
	09/24/06	2.56	8092	0.33	ND	508.10	28.70	Interference	60	10.0	ND
	12/08/06	2.42	9589	4.80	3.2	344.60	19.58	Interference	ND	4.4	ND
	03/01/07	2.50	10085	0.51	ND	633.90	24.74	Interference	100	0.6	ND
	06/15/07	1.88	8965	0.45	ND	532.80	27.37	Interference	ND	1.0	0.1
	09/12/07	2.43	10362	0.71	ND	408.80	28.74	239	ND	9.5	ND
	12/05/07	2.48	16340	2.07	1.75	408.50	25.88	Interference	ND	5.5	ND
	03/06/08	2.38	10573	0.59	ND	439.70	21.74	Interference	ND	4.2	ND
	06/17/08	2.51	11134	0.98	ND	409.20	22.24	Interference	ND	10.0+	ND
	09/16/08	3.08	4656	0.37	ND	419.70	23.55	Interference	50	28.0	0.3
	12/18/08	2.30	8289	3.68	2.00	432.00	28.31	Interference	0	10+	0.0
	03/02/09	2.61	8190	0.26	0.2	480.1	24.24	Interference	0	10+	0.0
CEF-046-07I	12/21/00	4.90	510	1.11	NM	NM	25.40	317	60	0.6	0.3
	03/14/03	3.23	250	5.24	NM	360.00	23.41	121	ND	1.8	ND
	06/09/03	3.80	191	1.05	NM	278.00	26.12	233	ND	2.2	ND
	09/03/03	4.51	226	0.12	NM	81.00	27.32	143	ND	4.0	2.0
	12/11/03	5.19	180	0.67	ND	-170.00	23.07	70	25	3.7	2.0
	03/18/04	4.89	230	NM	ND	120.00	24.42	75	15	4.0	ND
	06/08/04	3.67	89	0.24	ND	256.00	25.91	99	ND	4.4	ND
	09/21/04	3.55	85	0.00	ND	163.00	26.80	68	5	10.0	ND
	12/01/04	5.62	175	0.06	ND	-50.60	26.45	217	10	5.8	1.0
	03/13/05	4.90	130	0.12	ND	-79.20	25.78	122	35	4.0	2.0
	06/09/05	4.04	439	0.67	ND	-39.50	26.99	148	ND	3.8	2.0
	09/06/05	3.65	461	0.15	ND	253.60	26.26	140	ND	4.6	0.1
	12/06/05	3.90	188	0.40	ND	258.30	23.64	113	ND	3.0	0.1
	03/30/06	4.40	244	0.38	ND	120.70	23.92	128	20	5.0	0.1
	06/09/06	2.04	126	0.68	ND	37.20	25.43	176	70	5.8	0.7
	09/25/06	4.84	108	0.25	ND	3.40	25.61	105	15	4.8	2.0
	12/08/06	3.39	485	2.30	4.2	468.20	23.41	181	ND	0.1	ND
	03/01/07	4.63	134	0.35	ND	-3.20	24.18	108	65	3.2	0.7
	06/15/07	4.83	98	0.20	ND	-69.60	26.19	176	ND	2.4	1.0
	09/12/07	4.92	83	0.57	ND	-41.90	28.28	98	5	3.5	2.0
	12/05/07	4.95	112	0.50	ND	-11.70	25.66	148	ND	2.0	2.0
	03/06/08	4.50	75	0.45	ND	-70.10	23.89	113	4	3.4	1.0
	06/17/08	4.02	63	0.60	ND	-64.20	24.81	145	15	2.6	1.0
	09/16/08	4.61	31	0.13	ND	-70.20	26.41	150	20	2.6	2.0
	12/18/08	4.37	58	0.40	0.30	68.00	23.98	1000+	1000+	0.2	2.0
	03/02/09	3.55	291	1.02	0.7	426.20	22.46	110	0	7.0	0.0
CEF-046-08I	12/06/05	4.89	76	0.59	ND	80.80	25.87	Interference	15	3.0	ND
CEF-046-09I	12/20/00	5.29	79	1.47	NM	NM	24.60	84.6	20	0.8	0.3
	03/14/03	5.47	914	1.35	NM	64.00	25.40	ND	ND	2.2	1.0
	06/04/03	4.75	1090	0.60	NM	-8.00	25.73	Interference	ND	6.0	1.0
	09/03/03	3.74	1040	0.84	NM	18.00	26.85	Interference	ND	3.8	1.0
	12/10/03	3.64	1010	6.21	ND	-100.00	26.29	Interference	ND	5.2	0.5
	03/16/04	3.67	165	NM	ND	199.00	25.08	Interference	ND	2.8	2.0
	06/08/04	3.58	1770	0.14	3.0	68.00	25.99	Interference	ND	8.0	5.0
	09/21/04	3.50	1401	0.17	ND	-18.20	25.99	Interference	ND	8.4	3.0
	12/01/04	3.68	NM	0.11	ND	-74.80	26.09	370	ND	4.5	3.0
	03/13/05	5.92	540	0.00	ND	72.00	25.01	296	ND	5.4	1.0
	06/09/05	3.76	830	0.14	ND	-29.30	26.31	201	ND	3.6	2.0
	09/06/05	3.74	641	0.18	ND	-39.70	28.43	352	ND	3.5	5.0
	12/06/05	3.76	1055	0.24	ND	225.80	25.47	Interference	ND	3.0	5.0
	03/30/06	3.96	20384	0.37	ND	-34.40	24.92	Interference	ND	5.0	2.0
	06/09/06	2.86	756	0.33	ND	177.80	29.25	Interference	ND	7.0	2.0
	09/24/06	3.70	661	0.17	ND	218.80	29.13	413	5	7.2	0.1
	12/08/06	3.81	493	0.38	ND	-43.60	24.24	Interference	ND	ND	2.0
	03/01/07	3.80	390	0.33	ND	44.90	24.03	257	ND	3.6	2.0
	06/15/07	3.07	528	0.20	ND	62.20	26.36	Interference	ND	3.1	1.0
	09/12/07	3.93	236	1.48	ND	58.60	27.37	212	ND	3.4	1.0
	12/05/07	4.42	279	0.45	ND	14.60	25.43	323	ND	2.8	1.0
	03/06/08	3.45	296	0.23	ND	-41.80	25.75	487	ND	2.0	ND
	06/17/08	4.02	146	0.96	ND	-39.10	25.87	400	15	3.2	5.0
	09/16/08	4.06	64	0.50	ND	63.10	27.80	380	5	4.0	5.0
	12/18/08	4.45	109	0.99	0.10	-14.00	25.91	95	0	3.0	0.6
	03/02/09	3.59	123	0.69	0.1	-36.4	22.00	140	0	4.0	1.06

TABLE 2
FIELD AND NATURAL ATTENUATION PARAMETERS

Building 46
NAS Cecil Field
Jacksonville, Florida

Well ID	Sample Date	Field Parameters						Natural Attenuation Parameters			
		pH (SU)	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)*		Oxidation - Reduction Potential (mV)	Temperature (°C)	Carbon Dioxide (mg/L)	Alkalinity as $CaCO_3$ (mg/L)	Ferrous Iron (mg/L)	Hydrogen Sulfide (mg/L)
				Meter	CHEMetrics						
CEF-046-10I	12/06/05	5.68	119	0.50	ND	33.20	23.89	99	15	2.0	1.0
CEF-046-11I	12/06/05	6.44	406	0.63	ND	-46.20	23.45	134	85	2.0	5.0
CEF-046-12I	12/20/00	5.57	160	1.91	NM	NM	26.50	193.6	80	0.8	2.0
	03/14/03	3.38	178	3.92	NM	333.00	26.07	96	ND	2.2	ND
	06/05/03	4.22	155	1.65	NM	117.00	26.33	168	ND	1.0	ND
	09/03/03	4.71	308	0.00	NM	164.00	27.88	136	5	0.0	ND
	12/11/03	4.97	310	0.61	0.8	129.00	23.96	84	1	2.2	0.1
	03/18/04	5.33	129	0.60	0.6	NM	24.90	86	5	3.5	0.1
	06/08/04	4.69	142	0.47	13.0	162.00	26.48	122	5	3.0	ND
	09/21/04	4.65	245	0.01	ND	124.00	24.84	115	5	3.0	ND
	12/01/04	5.30	661	0.12	ND	133.40	26.37	45	5	1.4	ND
	03/13/05	5.12	384	0.12	ND	120.10	24.02	220	25	1.0	ND
	06/09/05	5.13	412	0.97	ND	121.10	25.29	217	25	1.8	ND
	09/06/05	5.06	417	0.22	ND	4.20	26.82	306	20	2.8	0.1
	12/06/05	4.79	185	0.50	ND	170.40	22.70	273	ND	4.8	ND
	03/29/06	4.54	234	0.42	ND	66.50	24.92	253	25	2.8	0.3
	06/09/06	3.73	203	0.59	ND	216.8	26.76	246	15	5.2	0.1
	09/25/06	3.93	222	0.60	ND	-49.8	25.73	443	15	3.2	0.1
	12/08/06	4.39	236	1.04	ND	266.5	23.65	296	ND	4.5	0.1
	03/01/07	4.33	227	0.30	ND	106.5	23.43	247	ND	3.2	0.1
	06/15/07	3.53	188	0.43	ND	126.6	24.87	379	ND	2.4	0.1
	09/12/07	4.55	183	0.55	ND	182.0	28.00	227	5	2.8	ND
	12/05/07	4.74	298	0.46	ND	28.4	25.33	367	ND	3.0	0.1
	03/06/08	3.96	243	0.23	ND	6.1	22.97	425	ND	1.8	0.1
	06/17/08	4.71	176	0.07	ND	65.9	26.58	398	10	3.4	0.1
	09/16/08	4.45	108	0.21	ND	-57.3	26.55	392	20	2.8	0.1
	12/18/08	4.24	159	2.96	0.20	142.00	23.60	50	0	2.0	0.2
	03/02/09	4.58	132	0.28	0.8	252.1	21.87	60	0	2.0	0.0
CEF-046-13I	12/20/00	5.40	120	1.23	NM	NM	25.00	188	20	1.4	5.0
	03/14/03	6.29	110	0.99	NM	-31.00	25.90	280	ND	2.5	5.0
	06/05/03	3.71	643	0.00	NM	1.00	26.44	Interference	ND	3.6	5.0
	09/03/03	3.81	999	0.36	NM	57.00	28.50	Interference	ND	2.4	2.0
	12/11/03	3.93	990	1.11	ND	160.00	24.10	Interference	ND	3.2	5.0
	03/18/04	3.76	1282	0.50	ND	NM	25.60	Interference	ND	3.0	0.3
	06/08/04	3.08	1170	0.34	1.0	286.00	26.73	Interference	ND	3.6	ND
	09/21/04	4.96	588	0.17	ND	-32.00	26.20	Interference	ND	7.8	5.0
	12/01/04	3.93	931	0.06	ND	37.70	26.53	Interference	ND	0.7	5.0
	03/13/05	2.92	947	0.75	ND	494.30	24.67	Interference	ND	2.8	1.0
	06/09/05	2.98	1584	0.71	ND	361.30	25.97	Interference	ND	4.0	0.7
	09/06/05	3.84	1698	0.84	ND	-90.00	26.30	Interference	ND	4.1	1.0
	12/06/05	3.55	568	0.47	ND	257.70	22.63	167	ND	3.0	2.0
	03/29/06	2.48	538	0.63	ND	571.60	24.98	246	ND	3.4	0.1
	06/09/06	3.04	205	0.26	ND	125.10	27.12	58	ND	10.0	2.0
	09/25/06	3.86	154	0.47	ND	-42.30	26.38	395	ND	5.4	0.1
	12/08/06	4.07	146	1.03	ND	121.60	23.00	242	ND	3.5	2.0
	03/01/07	3.90	174	2.18	1.0	187.50	23.81	158	ND	0.8	0.1
	06/15/07	3.94	149	0.33	ND	290.70	25.18	213	ND	1.2	0.1
	09/12/07	4.32	124	0.33	ND	-25.10	28.40	209	5	3.5	0.7
	12/05/07	4.52	203	0.46	ND	15.00	25.75	349	ND	3.4	0.1
	03/06/08	3.42	194	2.78	1.8	62.70	24.01	230	ND	2.4	ND
	06/17/08	4.35	124	0.74	ND	-62.80	27.98	352	15	2.5	5.0
	09/16/08	4.46	77	0.17	ND	-125.20	26.34	267	20	1.6	1.0
	12/18/08	3.64	171	0.29	0.10	-210.00	25.08	300	0	2.0	0.4
	03/02/09	4.50	136	0.17	0.2	7.5	22.97	70	0	1.5	1.5
CEF-046-14D	12/20/00	5.87	109	1.52	NM	NM	24.90	84	540	2.4	0.3
	03/14/03	6.26	98	0.85	NM	-33.00	25.32	180	15	2.5	5.0
	06/04/03	5.77	106	0.17	NM	-39.00	26.14	186	20	2.3	2.0
	09/03/03	4.82	215	0.86	NM	-54.00	27.66	155	20	2.2	5.0
	12/10/03	5.36	282	0.07	ND	-62.00	25.92	136	10	2.4	1.0
	03/16/04	5.43	105	0.80	ND	NM	25.60	154	20	24.0	5.0
	06/08/04	5.17	109	0.10	NM	-58.90	26.00	NM	NM	NM	NM
	09/21/04	5.26	125	0.16	ND	-159.20	25.37	120	15	4.8	3.0
	12/01/04	5.51	239	0.42	ND	-174.00	25.41	176	25	2.4	0.1
	03/13/05	7.68	110	0.20	ND	-29.00	22.89	109	25	3.8	2.0
	06/09/05	5.38	156	0.25	ND	-64.40	25.86	94	15	1.5	0.1
	09/06/05	5.33	108	0.25	ND	-169.70	26.70	109	15	3.5	1.0
	12/06/05	5.22	127	ND	ND	-28.60	22.36	185	ND	2.6	2.0
	03/29/06	3.67	106	0.51	ND	192.00	24.43	160	15	4.8	0.3
	06/09/06	4.02	93	0.52	ND	25.10	29.19	93	10	2.6	0.1
	09/24/06	3.34	95	0.49	ND	148.90	28.48	252	40	3.0	0.3
	12/08/06	5.45	103	0.38	ND	-109.40	23.46	Interference	45	1.0	0.7
	03/01/07	5.39	109	0.32	ND	-16.00	23.42	217	ND	1.8	0.3
	06/15/07	5.28	89	0.28	ND	-46.60	26.29	159	1	1.2	0.1
	09/12/07	5.46	90	1.21	1.0	-21.60	26.65	109	25	3.4	0.1
	12/05/07	5.77	135	0.58	ND	15.20	22.79	117	ND	2.0	0.1
	03/06/08	5.08	122	0.30	ND	-54.30	24.57	169	20	1.8	0.1
	06/17/08	5.16	82	0.75	ND	-59.60	28.71	115	30	2.0	0.7
	09/16/08	3.91	42	0.64	ND	21.50	26.82	132	14	4.6	1.0
	12/18/08	5.31	87	2.98	0.10	112.00	23.74	40	0	2.0	0.4
	03/02/09	5.22	76	0.25	0.2	-18.30	23.22	40	0	2.0	0.0

TABLE 2
FIELD AND NATURAL ATTENUATION PARAMETERS

Building 46
NAS Cecil Field
Jacksonville, Florida

Well ID	Sample Date	Field Parameters						Natural Attenuation Parameters			
		pH (SU)	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)*		Oxidation - Reduction Potential (mV)	Temperature (^oC)	Carbon Dioxide (mg/L)	Alkalinity as $CaCO_3$ (mg/L)	Ferrous Iron (mg/L)	Hydrogen Sulfide (mg/L)
				Meter	CHEMetrics						
CEF-046-15I	12/20/00	5.01	108	1.27	NM	NM	22.20	86.6	40	3.2	1.0
	03/13/03	4.64	191	0.90	NM	328.00	22.79	343	ND	3.2	ND
	06/04/03	1.76	172	0.59	NM	92.00	22.89	368	10	3.3	ND
	09/03/03	3.99	369	0.45	NM	195.00	24.16	367	ND	2.8	ND
	12/10/03	4.00	290	6.16	5.0	99.00	23.64	124	1	3.5	0.1
	03/16/04	4.30	501	NM	ND	241.00	22.91	324	ND	3.0	ND
	06/08/04	4.26	168	0.22	3.0	193.30	22.89	317	15	3.8	ND
	09/21/04	4.25	179	0.27	ND	-55.00	23.27	319	ND	3.5	ND
	12/01/04	4.42	347	0.19	ND	-91.40	23.69	143	15	3.4	0.1
	03/13/05	4.47	180	2.07	1.0	256.00	22.05	291	ND	ND	ND
	06/09/05	4.16	244	0.19	ND	-51.00	22.93	312	10	4.8	ND
	09/06/05	4.32	138	0.66	ND	-101.60	23.90	219	ND	2.5	3.0
	12/06/05	4.66	180	0.76	ND	86.00	20.99	155	15	2.0	0.7
	03/30/06	4.54	2820	0.55	ND	23.20	22.20	234	15	4.8	0.1
	06/09/06	3.10	146	0.45	ND	138.80	24.19	241	20	5.4	0.5
	09/24/06	3.07	142	0.29	ND	192.90	24.45	253	5	6.4	ND
	12/08/06	4.54	150	0.54	ND	-2.00	20.88	296	ND	2.2	0.1
	03/01/07	4.47	151	0.38	ND	82.90	21.21	296	ND	2.6	0.3
	06/15/07	3.03	118	0.40	ND	88.10	22.42	431	ND	3.0	0.7
	09/12/07	4.64	111	1.94	1.0	25.30	23.42	236	2	4.2	1.0
	12/05/07	4.62	187	1.12	ND	30.10	19.51	232	ND	3.0	0.3
	03/06/08	3.99	155	0.39	ND	-37.80	20.65	280	ND	2.0	1.0
	06/17/08	4.70	107	0.09	ND	45.70	23.77	291	10	3.2	2.0
	09/16/08	4.05	700	0.58	ND	92.30	24.64	302	10	2.8	2.0
	12/18/08	3.53	125	0.44	0.10	-197.00	22.90	200	0	3.0	0.0
	03/02/09	3.34	100	0.99	0.3	22.10	20.32	50	0	5.0	0.4
CEF-046-16I	12/06/05	4.87	148	0.90	ND	44.90	20.67	241	20	2.5	5.0
CEF-046-17D	12/06/05	4.44	1904	0.61	ND	53.50	20.08	Interference	ND	3.5	3.0
CEF-046-18I	12/07/05	3.80	856	0.99	ND	318.80	23.56	0.186	ND	9.0	0.1
CEF-046-19I	12/07/05	2.58	5885	0.77	ND	476.90	22.01	Interference	ND	3.6	5.0
CEF-046-20I	12/07/05	3.84	1054	0.95	ND	324.00	23.14	241	ND	9.0	0.1
CEF-046-21I	12/20/00	4.86	47	1.35	NM	NM	23.20	9.4	60	0.8	ND
	03/13/03	3.75	713	2.35	NM	397.00	23.94	0.0	ND	3.0	ND
	06/05/03	3.12	798	0.00	NM	251.00	24.22	Interference	ND	3.9	0.7
	09/03/03	3.34	406	2.82	NM	449.00	26.30	115	ND	1.6	ND
	12/11/03	3.58	476	3.43	2.0	407.00	23.07	89	ND	1.6	ND
	03/18/04	3.81	162	2.10	1.0	NM	23.00	91	ND	2.4	ND
	06/08/04	3.39	147	0.86	13.0	406.00	23.91	78	ND	1.4	ND
	09/21/04	2.61	147	0.44	ND	317.00	24.62	69	ND	0.8	ND
	12/01/04	3.89	334	2.30	ND	439.10	24.76	54	ND	0.3	ND
	03/13/05	3.66	175	0.10	0.10	311.20	23.58	112	ND	0.8	ND
	06/09/05	3.61	114	1.21	0.00	319.00	23.57	45	5	1.4	ND
	09/06/05	4.22	103	0.26	ND	79.30	25.31	75	5	1.0	ND
	12/07/05	4.36	218	2.03	3.60	219.80	23.24	35	ND	4.5	3.0
	03/29/06	3.54	72	0.43	ND	83.90	23.97	31	10	1.0	0.3
	06/09/06	3.70	56	0.15	NM	209.70	25.52	NM	NM	NM	NM
	09/24/06	3.83	95	0.47	ND	-45.30	25.78	156	20	2.4	0.1
	12/08/06	3.99	121	0.57	ND	284.10	20.08	140	5	1.8	0.1
	03/01/07	3.15	136	0.49	ND	126.40	22.41	142	ND	0.8	0.5
	06/15/07	3.23	159	0.51	ND	650.00	26.36	Interference	ND	3.6	0.1
	09/12/07	4.42	139	0.58	ND	167.60	25.28	199	5	3.2	ND
	12/05/07	4.35	238	2.42	2.00	221.10	23.16	171	ND	2.8	0.1
	03/06/08	3.98	176	0.66	ND	389.50	20.92	98	ND	1.8	0.1
	06/17/08	4.29	194	0.10	ND	58.10	23.85	253	15	4.2	1.0
	9/16/08`	4.03	103	0.53	ND	140.10	26.42	249	5	3.6	0.0
	12/18/08	3.84	179	0.27	0.30	-210.00	23.51	70	0	7.0	0.0
	03/02/09	2.39	228	0.81	0.20	206.10	21.36	70	0	3.0	0.2
CEF-046-22I	12/07/05	3.70	4124	1.03	ND	153.30	22.84	95	ND	10.00	5.00
CEF-046-23D	12/07/05	2.44	21506	1.23	ND	438.80	24.49	86	ND	8.50	0.10
CEF-046-24D	12/20/00	6.15	129	0.13	NM	NM	21.90	16.4	60	2.3	0.1
	03/14/03	3.70	2530	2.23	NM	402.00	27.46	ND	ND	4.0	ND
	06/05/03	0.36	3160	0.36	NM	250.00	28.22	Interference	ND	5.9	ND
	09/03/03	3.20	2110	0.21	NM	282.00	27.68	Interference	ND	5.4	ND
	12/10/03	3.24	200	0.30	ND	308.00	26.18	Interference	ND	3.8	ND
	03/16/04	3.45	1285	0.60	ND	NM	27.60	Interference	ND	4.2	0.1
	06/08/04	3.09	1564	0.20	ND	386.40	27.04	Interference	ND	7.2	0.1
	09/21/04	3.74	1218	0.44	ND	17.20	26.06	Interference	ND	9.6	0.3
	12/01/04	3.74	2133	0.33	ND	211.60	24.52	Interference	ND	8.5	0.3
	03/13/05	6.16	1200	0.12	ND	58.00	25.70	Interference	5	7.4	1.0
	06/09/05	4.26	4395	0.06	ND	106.40	26.31	Interference	5	10.0	0.5
	09/06/05	4.12	2946	0.17	ND	161.20	26.94	Interference	ND	9.0	1.0
	12/07/05	4.38	8358	0.96	0.96	207.30	23.42	72	ND	5.2	0.3
	03/29/06	4.34	3362	0.46	ND	97.90	24.67	Interference	5	5.2	ND
	06/09/06	3.66	2810	0.41	ND	212.10	26.11	Interference	ND	10.0	0.1
	09/24/06	4.09	2319	0.50	ND	20.40	26.75	Interference	ND	5.0	0.1
	12/08/06	3.48	1664	0.43	ND	265.90	21.23	Interference	ND	3.1	0.1
	03/01/07	3.24	1353	0.42	ND	180.70	23.24	Interference	ND	4.2	0.1
	06/15/07	4.05	1017	0.61	ND	182.70	25.46	Interference	ND	4.0	0.1
	09/12/07	4.69	762	0.94	ND	123.10	26.54	Interference	5	3.6	ND
	12/05/07	4.81	1093	2.45	2.30	21.70	23.96	Interference	40	2.5	ND
	03/06/08	3.44	771	0.54	ND	286.70	23.36	Interference	ND	2.2	0.5
	06/17/08	3.82	730	0.11	ND	77.70	25.01	Interference	10	3.0	0.7
	09/16/08	4.76	484	0.22	ND	42.10	25.20	Interference	10	19.0	0.3
	12/18/08	2.19	1108	1.17	0.00	40.30	24.76	300	0	10+	0.0
	03/02/09	2.97	1022	0.78	0.4	444.70	21.57	250	0	10+	0.0

TABLE 2
FIELD AND NATURAL ATTENUATION PARAMETERS

Building 46
NAS Cecil Field
Jacksonville, Florida

Well ID	Sample Date	Field Parameters						Natural Attenuation Parameters			
		pH (SU)	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)*		Oxidation - Reduction Potential (mV)	Temperature (°C)	Carbon Dioxide (mg/L)	Alkalinity as $CaCO_3$ (mg/L)	Ferrous Iron (mg/L)	Hydrogen Sulfide (mg/L)
				Meter	CHEMetrics						
CEF-046-25I	12/20/00	5.81	167	2.88	NM	NM	24.60	20.6	120	0.6	5.0
	03/13/03	6.16	1420	1.03	NM	-58.00	25.35	ND	ND	4.5	5.0
	06/04/03	5.98	1440	0.00	NM	-87.00	25.76	ND	ND	6.0	5.0
	09/03/03	3.77	910	0.53	NM	-107.00	26.43	Interference	ND	3.8	5.0
	12/10/03	3.95	860	5.82	ND	-198.00	24.15	Interference	ND	3.5	5.0
	03/16/04	3.74	179	NM	ND	-2.00	23.99	Interference	ND	5.4	5.0
	06/08/04	3.53	2054	0.13	ND	-92.90	25.15	Interference	ND	6.2	5.0
	09/21/04	3.66	1736	0.41	ND	-97.40	24.31	Interference	ND	NM	2.0
	12/01/04	3.72	3586	0.08	ND	-153.10	24.20	Interference	ND	7.8	5.0
	03/13/05	6.67	800	0.19	ND	8.00	22.96	Interference	ND	12.0	5.0
	06/09/05	3.74	1429	0.13	ND	-111.30	24.71	Interference	ND	9.8	5.0
	09/06/05	3.44	871	0.14	ND	-96.00	25.26	Interference	ND	9.5	5.0
	12/07/05	3.96	2015	1.03	ND	140.40	21.84	58	ND	7.0	5.0
	03/29/06	4.05	340	0.43	ND	121.40	23.78	Interference	5	5.0	5.0
	06/09/06	3.52	235	0.33	NM	-28.40	24.84	NM	NM	NM	NM
	09/24/06	3.86	201	0.47	ND	-85.30	25.71	316	ND	3.4	5.0
	12/08/06	3.85	299	0.84	ND	75.90	20.23	Interference	ND	3.4	5.0
	03/01/07	3.29	214	0.42	ND	-44.40	22.33	Interference	ND	3.2	2.0
	06/15/07	4.21	199	0.72	ND	-76.30	24.37	Interference	ND	3.2	5.0
	09/12/07	4.39	138	0.96	ND	-27.60	25.80	134	2	2.6	5.0
	12/05/07	4.39	192	1.93	1.6	-142.00	20.51	Interference	ND	2.0	2.0
	03/06/08	4.24	98	0.41	ND	-81.80	21.75	141	ND	2.6	5.0
	06/17/08	4.71	1045	0.07	ND	33.50	24.79	211	15	2.4	5.0
	09/16/08	4.46	34	0.44	ND	4.30	25.94	2.39	10	5.6	5.0
	12/17/08	3.97	66	0.26	0.10	-188.00	22.69	70	Interference	4.0	3.0
	03/02/09	4.36	80	0.62	0.3	-77.00	21.58	70	0	5.0	3.2
CEF-046-26I	12/20/00	8.53	99	0.03	NM	NM	23.10	24.2	NM	1.4	NM
	03/14/03	6.34	63	4.66	NM	3.00	26.88	ND	ND	4.6	5.0
	06/05/03	3.31	2880	0.00	NM	-2.00	24.60	Interference	ND	9.0	5.0
	09/03/03	3.40	1990	0.12	NM	111.00	25.14	Interference	ND	7.8	5.0
	12/11/03	3.52	224	0.00	ND	151.00	22.18	Interference	ND	3.0	5.0
	03/18/04	3.51	268	NM	ND	203.00	22.45	Interference	ND	5.0	5.0
	06/08/04	2.43	3460	0.32	4.0	284.00	24.34	Interference	ND	4.0	1.0
	09/21/04	3.69	280	0.00	ND	91.00	23.88	Interference	ND	10.0	5.0
	12/01/04	2.62	6045	0.11	ND	371.60	23.43	Interference	ND	3.33	5.0
	03/13/05	2.90	5353	0.12	ND	250.30	24.33	Interference	ND	10.0	2.0
	06/09/05	2.54	6025	0.82	ND	297.10	24.22	Interference	ND	10.0	5.0
	09/06/05	3.40	5927	0.06	ND	74.90	24.57	Interference	ND	6.2	3.0
	12/07/05	3.50	6642	0.43	ND	225.50	22.19	Interference	ND	8.0	5.0
	03/29/06	2.84	3147	0.46	ND	498.40	23.82	Interference	ND	8.0	ND
	06/09/06	2.72	2493	0.23	ND	281.80	24.46	Interference	ND	9.2	5.0
	09/24/06	3.78	1952	0.42	ND	-63.80	26.59	Interference	ND	8.2	2.0
	12/08/06	3.24	1682	0.69	ND	100.60	20.74	Interference	ND	4.5	5.0
	03/01/07	2.32	1746	0.58	ND	280.60	22.32	Interference	ND	4.8	0.1
	06/15/07	3.77	2088	0.56	ND	22.40	24.77	Interference	ND	6.6	2.0
	09/12/07	3.41	1769	0.47	ND	37.40	26.15	Interference	ND	2.8	2.0
	12/05/07	3.40	2466	3.34	ND	2.00	24.43	Interference	ND	4.4	5.0
	03/06/08	3.40	1314	0.38	ND	21.30	21.99	Interference	ND	3.6	5.0
	06/17/08	3.56	811	0.72	ND	-2.50	24.35	Interference	5	6.6	5.0
	09/16/08	3.79	327	0.16	ND	-54.80	24.92	Interference	5	9.0	2.0
	12/17/08	4.12	648	1.54	0.05	-2.00	24.01	350	0	10+	1.0
	03/02/09	3.69	584	0.27	0.20	123.90	22.83	160	0	10+	1.06
CEF-046-27D	12/07/05	7.67	1491	1.08	ND	-79.40	22.38	169	280	5.0	ND
CEF-046-28I	12/07/05	4.00	5614	0.53	ND	84.50	21.24	Interference	ND	4.8	5.0
CEF-046-29I	12/07/05	3.52	7275	0.53	ND	152.90	21.24	Interference	ND	7.0	5.0
CEF-046-30I	12/07/05	3.64	4614	0.29	ND	-3.20	21.97	Interference	ND	10.0	5.0
CEF-046-31I	12/07/05	3.68	6551	0.44	ND	71.60	21.08	Interference	ND	10.0	5.0

NOTES:
SU - Standard units
µS/cm - microsiemens per centimeter
mV - millivolts
mg/L - milligrams per liter
NM - not measured
ND - not detected
***Well went dry after pumping 0.7 gallons, final readings not obtained.

TABLE 3
LABORATORY ANALYTICAL RESULTS

BUILDING 46
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Well ID	Sample Date	Benzene	Ethylbenzene	Toluene	Xylenes (Total)	Methyl-*tert*-butyl-ether	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Sulfate (mg/L)	TRPH
GCTL (µg/L)		1	30	40	20	20	14	28	28	250 *	5000
NADSC (µg/L)		100	300	400	200	200	140	280	280	2500	50000
CEF-046-01S	12/21/00	13000	2900	40000	19000	NM	550	NM	NM	NM	23000
	01/25/01	0.28	0.44	1.4	3.2	<1.0	<1.0	NM	NM	NM	290
	03/14/03	592.0	1160.0	1190.0	4580.0	619	496	<4.0	<4.0	NM	77000
	06/09/03	262.0	626.0	318.0	1070.0	511	947	136	162	NM	33200
	09/03/03	350.0	735.0	575.0	2920.0	365	661	133	126	NM	38300
	12/11/03	430.0	982.0	1410.0	3540.0	432	501	89	117	NM	39600
	03/18/04	401.0	741.0	1160.0	2280.0	486	508	61.5	98.5	NM	16200
	06/08/04	163.0	484.0	194.0	526.0	310	342	36.6	76.5	NM	15400
	09/21/04	54.8Y	321Y	97.4Y	2140Y	276Y	252 J3Y	24.2 J3Y	64.2 J3Y	NM	33300Y
	12/01/04	153.0	601.5	163.9	779.0	216.1	621.4	65.6	143	NM	25200
	03/13/05	174.0	687.0	152.0	1100.0	334	503	56.9	94.5	NM	23000
	06/09/05	263.0	767.0	308.0	1330.0	270	316	51.3	73.0	109	41100
	09/06/05	127.0	664.0	169.0	2520.0	133	897	52.6	188	97.9	51000
	12/06/05	85.9	627.0	95.8	1410.0	644	709	20.9I	108	42.8	35500
	03/29/06	15.2	205.0	36.2	458.0	267	544	65.8	119	4.37	35300
	06/09/06	21.9	259.0	118.0	698.0	187	322	36.7	78	24.5	17100
	09/24/06	31.6	359.0	57.1	1320.0	140	502	76.9	111	63.0	12300
	12/09/06	12.8	131.0	37.3	194.0	23.1	187	32.2	53	11000	4130
	03/01/07	12.0	107.0	11.4	363.0	104	17.7	64.8	50.1	2090	6770
	06/15/07	34.0	159.0	9.8	391.0	150	163	30.7	49.6	1250	7430
	09/21/07	145.0	173.0	5.1	292.0	142	319	73.4	84.9	1080 MHA	11200V
	12/05/07	78.4	230.0	3.8	304.0	77.3	471	107	103.0	3270	52700
	03/06/08	63.0	199	3.09	207	97.1	337	65.1	89.0	946	36500
	06/18/08	75.9 J4	194 J4	2.61	117 J4	78.4 J4	185	22.2	32.6	469	39600 B1,S10,V
	09/16/08	27.8	170	14.8	735	2.3 I	595	152	135.0	190	51,600
	12/18/08	5.9	50.5 a	<1.8	42.4 a, I	38.1 a	68.8	16.0	7.8	397	19,400
	03/02/09	3.2	63.1	0.39 I	19.5	87.3	117	26.5	25.7	192	11,100
CEF-046-02S	12/21/00	300	72	51	200	NA	230	NM	NM	NM	3100
	01/25/01	7.3	0.96	1.5	3.3	7.1	11	NM	NM	NM	540
	03/14/03	<1.0	<1.0	<1.0	<1.0	156	<2.0	<2.0	<2.0	NM	1370
	06/05/03	<1.00	<1.0	<1.0	<1.0	54.5	<0.10	<0.10	<0.10	NM	339
	09/03/03	<1.00	<1.0	<1.0	<1.0	21.3	0.24	<0.10	<0.10	NM	339
	12/11/03	<1.00	<1.0	<1.0	<3.0	21.7	<0.10	<0.10	<0.10	NM	796
	03/18/04	12.4	<1.0	<1.0	3.7	24.3	1.4	0.16	0.21	NM	436
	06/08/04	3.72	<1.00	<1.00	<1.00	26.1	0.643 I	<2.04	<2.04	NM	530
	09/21/04	<1.00Y	<1.00Y	<1.00Y	<1.00Y	8.32Y	<2.17 J3Y	<2.17 J3Y	<2.17 J3Y	NM	0.26Y
	12/01/04	118	134.6	0.5700 I	136	135.8	81.30	4.56 I	<0.214	NM	2450
	03/13/05	54.6	1.04 I	0.210 I	1.64	47.8	96.50	7.77	0.439 I	NM	1600
	06/09/05	25.9	< 0.201	< 0.142	< 0.220	17.2	<0.101	< 0.133	< 0.210	664	1850
	09/06/05	<0.143	<0.201	<0.142	< 0.220	3.95	26.0	1.12 I	<0.203	843	NM
	09/21/05	NM	NM	NM	NM	NM	NM	NM	NM	NM	341
	12/06/05	<0.143	<0.201	<0.142	<0.220	4.47	<0.100	<0.133	<0.203	1880	654
	03/30/06	0.460 I	0.420 I	<0.176	<0.298	3.41	8.9	0.810 I	<0.203	722	1170
	06/09/06	<0.305	<0.338	<0.257	<0.433	2.00	<0.100	<0.133	<0.203	442	623
	09/25/06	<0.305	<0.338	<0.257	<0.433	1.69	<0.100	<0.133	<0.203	297	794
	12/08/06	3.18	0.600 I	<0.257	1.46	2.44	<0.100	<0.133	<0.203	415	431
	03/01/07	<0.305	<0.338	<0.257	<0.433	1.06	3.44 I	2.73 I	<0.203	360	316
	06/15/07	<0.305	<0.338	<0.338	<0.433	3.28	<0.100	<0.133	<0.203	41.0	231
	09/12/07	<0.305	<0.338	0.380 I	<0.433	<0.336	<0.100	<0.133	<0.203	<40.0	157 I V
	12/05/07	<0.305	<0.338	<0.257	<0.433	1.02	<0.100	<0.133	<0.203	245	32 I
	03/06/08	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	104	<18
	06/18/08	<0.270	0.240 I	<0.280	<0.860	<0.420	<0.909	<0.909	<0.909	163	298 V,CF2,CF6
	09/16/08	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	297	244
	12/18/08	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	293	218 I
	03/02/09	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	170	<170
CEF-046-03S	12/06/05	17.2	1.81 I	0.480 I	1.56 I	19.3	<0.103	<0.137	<0.209	503	40 I
CEF-046-04S	12/06/05	0.570 I	<0.201	<0.142	0.540 I	1.47 I	<0.103	<0.137	<0.209	255	<18

TABLE 3
LABORATORY ANALYTICAL RESULTS

BUILDING 46
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Well ID	Sample Date	Benzene	Ethylbenzene	Toluene	Xylenes (Total)	Methyl-*tert*-butyl-ether	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Sulfate (mg/L)	TRPH
GCTL (µg/L)		1	30	40	20	20	14	28	28	250 *	5000
NADSC (µg/L)		100	300	400	200	200	140	280	280	2500	50000
CEF-046-05I	12/21/00	**850**	**38**	**13**	**150**	NM	**1.6**	NM	NM	NM	<550
	01/25/01	**180**	**7.4**	**3.1**	**31**	<1.0	<1.0	NM	NM	NM	<520
	03/14/03	<1.0	<1.0	<1.0	**9.0**	<1.0	<2.0	<2.0	<2.0	NM	<200
	06/05/03	<1.00	<1.0	<1.0	**5.2**	**4.6**	<0.10	<0.10	<0.10	NM	<106
	09/03/03	<1.00	<1.0	<1.0	**6.6**	**66.2**	<0.10	<0.10	<0.10	NM	**333**
	12/11/03	<1.00	<1.0	<1.0	**4.1**	**70**	<0.10	<0.10	<0.10	NM	**456**
	03/18/04	**1.4**	<1.0	**1.1**	**3.9**	**28.4**	<0.10	<0.10	<0.10	NM	**242**
	06/08/04	<1.00	<1.00	<1.00	<1.00	**2.3**	<2.04	<2.04	<2.04	NM	<200
	09/21/04	<1.00Y	**1.61Y**	<1.00Y	**2.93Y**	<1.00Y	<2.20 J3Y	<2.20 J3Y	<2.20 J3Y	NM	<200Y
	12/01/04	<0.143	**0.4400 I**	<0.1417	<0.220	<0.2359	<0.23	<0.206	<0.216	NM	**120 I V**
	03/13/05	**1.75 I**	<0.201	<0.142	**1.23 I**	**3.56**	<0.112	<0.148	<0.233	NM	<18
	06/09/05	< 0.143	< 0.201	< 0.142	**0.950 I**	**8.65**	<0.101	< 0.133	< 0.210	**5440**	**19 I**
	09/06/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.100	<0.133	<0.203	**462**	<18
	12/06/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.100	<0.133	<0.203	**2520**	<18
	03/29/06	<0.140	<0.126	<0.176	<0.298	<0.236	<0.100	<0.133	<0.203	**1660**	<18
	06/09/06	0.340 I	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**2380**	**129 I**
	09/24/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**1910**	**56 I**
	12/09/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**14400**	**18 I**
	03/01/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	**3.23 I**	**3.05 I**	**99.2**	<18
	06/15/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**545**	**140 I**
	09/12/07	<0.305	<0.338	<0.257	<0.433	<0.336 J4	<0.100	<0.133	<0.203	**116**	**92 I V**
	12/05/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**4820**	**59 I**
	03/06/08	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**72.0**	<18
	06/18/08	<0.270	<0.240	<0.280	<0.860	<0.420	<1.00	<1.00	<1.00	**91.0**	<105
	09/16/08	<0.4	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**683.0**	**333**
	12/18/08	<0.4	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**562**	<160
	03/02/09	<0.4	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**503**	<170
CEF-046-06D	12/21/00	**2.8**	**9.9**	**6**	**18**	NM	**3.5**	NM	NM	NM	<560
	02/08/01	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	NM	NM	NM	<500
	03/14/03	<1.0	<1.0	<1.0	6.0	<1.0	<2.0	<2.0	<2.0	NM	**274**
	06/09/03	<1.00	<1.0	<1.0	8.7	<1.0	<1.0	<1.0	<1.0	NM	<200
	09/03/03	<1.00	<1.0	<1.0	3.3	<1.0	<1.0	<1.0	<1.0	NM	<225
	12/10/03	<1.00	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	NM	<200
	03/16/04	<1.00	<1.0	<1.0	<3.0	<1.0	<0.10	<0.10	<0.10	NM	<100
	06/08/04	<1.00	<1.00	<1.00	<1.00	<1.00	<2.04	<2.04	<2.04	NM	<200
	09/21/04	<1.00Y	<1.00Y	<1.00Y	<1.00Y	<1.00Y	<2.15 J3Y	<2.15 J3Y	<2.15 J3Y	NM	<220Y
	12/01/04	<0.143	**1.180 I**	<0.1417	**1.35 I**	<0.2359	<0.23	<0.208	<0.219	NM	**140 I V**
	03/13/05	<0.143	<0.201	<0.142	**1.78 I**	<0.236	<0.112	<0.148	<0.233	NM	<18
	06/09/05	<0.143	<0.201	<0.142	**1.01 I**	<0.236	<0.101	<0.133	<0.210	**9580**	**24 I**
	09/06/05	<0.143	<0.201	<0.142	**0.340 I**	<0.236	<0.100	<0.133	<0.203	**7050**	<18
	12/06/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.100	<0.133	<0.203	**8480**	<18
	03/29/06	<0.140	<0.126	<0.176	<0.298	<0.236	<0.100	<0.133	<0.203	**8270**	<18
	06/09/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**7510**	**135 I**
	09/24/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.0133	<0.203	**5290**	**36 I**
	12/09/06	<0.305	<0.338	<0.257	**1.22**	<0.336	**0.370 I**	<0.133	<0.203	**12400**	**74 I**
	03/01/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**12200**	<18
	06/15/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	**0.230 I**	**0.220 I**	**11500**	**168 I**
	09/12/07	<0.305	<0.338	**0.290 I**	**1.51**	<0.336	<0.100	**0.230 I**	**0.220 I**	**1130**	**103 I V**
	12/05/07	<0.305	<0.338	<0.257	**1.56**	<0.336	<0.452	**0.210 I**	**0.280 I**	**34600**	**91 I**
	03/06/08	<0.305	<0.338	<0.257	**1.63**	<0.336	<0.100	<0.133	<0.203	**14900**	<18
	06/18/08	<0.270	<0.240	<0.280	**1.55 I**	<0.420	<1.00	<1.00	<1.00	**13500**	**225 V,CF2,CV6**
	09/16/08	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**7790**	**238**
	12/18/08	<0.40	<0.43	<0.35	**2.4 I**	<0.26	<0.24	<0.24	<0.24	**10200**	**238 I**
	03/02/09	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**13500**	**235 I**

TABLE 3
LABORATORY ANALYTICAL RESULTS

BUILDING 46
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Well ID	Sample Date	Benzene	Ethylbenzene	Toluene	Xylenes (Total)	Methyl-*tert*-butyl-ether	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Sulfate (mg/L)	TRPH
GCTL (µg/L)		1	30	40	20	20	14	28	28	250 *	5000
NADSC (µg/L)		100	300	400	200	200	140	280	280	2500	50000
	12/21/00	9100	2800	17000	15000	NM	260	NM	NM	NM	13000
	02/22/01	6500	1400	10000	7900	6100	120	NM	NM	NM	17000
	03/14/03	945	150	86.5	904	4380	<2.0	<2.0	<2.0	NM	5480
	06/09/03	678	123	51.6	752	4190	32.4	0.42	0.24	NM	4080
	09/03/03	832	158	<10.0	697	5140	123	6.12	7.92	NM	2530
	12/11/03	734	111	5	290	5820	96.2	4.76	6.28	NM	5410
	03/18/04	386	66	8.5 ?	414	3460	2.15	<0.10	<0.10	NM	1900
	06/08/04	208	42.7	11.3	330	3080	3.34	<2.04	<2.04	NM	650
	09/21/04	494Y	38.1Y	9.99Y	387Y	2190Y	0.242 J3, IY	<2.20 J3Y	<2.20 J3Y	NM	980Y
	12/01/04	833	144.9	10.30	631	1943	131.2	5.18	8.13	NM	1770
	03/13/05	775	176	3.26	269	1480	128	5.39	7.40	NM	1570
	06/09/05	394	127	2.79	199	628	<0.101	<0.133	<0.210	279	1380
	09/06/05	92.9	41.3	2.52	95.6	1730	<0.100	<0.133	<0.203	167	1280
CEF-046-07I	12/06/05	651	144	11.3 I	357	2140	28.6	<0.148	<0.226	54.6	970
	03/30/06	146	26.0	0.650 I	29	1290	33.7	0.900 I	1.10 I	37.1	<18
	06/09/06	207	33.2	0.310 I	11.4	652	60.7	2.67 I	1.24 I	33.0	832
	09/25/06	162	25.4	0.310 I	5.07	296L	75.1	2.96 I	0.510 I	28.6	544
	12/08/06	<0.305	0.490 I	<0.257	<0.433	372	<0.100	<0.133	<0.203	139.0	<18
	03/01/07	74.0	11.8 I	<5.14	<8.65	450	29.1	3.72 I	<0.203	35.0	224
	06/15/07	115	15.0	0.360 I	2.81	338	20.0	1.04 I	<0.203	25.2	397
	09/12/07	81.9	9.91	0.290 I	0.840 I	198	18.8	1.01 I	<0.203	18.3	314 V
	12/05/07	84.1	12.4	0.380 I	0.970 I	213	30.8	1.45 I	<0.203	147	221
	03/06/08	64.2	11.0	<0.257	0.830	147 J4	13.6	1.20	<0.203	14.7	132
	06/18/08	43.4	8.28	<0.280	<0.860	81.9	13.0	1.81 I	<1.00	14.0	376 V,CF2,CF6
	09/16/08	42.5	6.40	<0.35	<1.2	65.1	7.9	1.30	<0.24	15.5	365
	12/18/08	24.1	2.3	<0.35	<1.2	169 a	<0.24	<0.24	<0.24	21.7	<160
	03/02/09	1.8	<0.43	<0.35	<1.2	306 a	<0.24	<0.24	<0.24	116	<160
CEF-046-08I	12/06/05	<0.143	<0.201	<0.142	<0.220	13.8	<0.103	<0.137	<0.209	13.3	<18
	12/20/00	<1.0	<1.0	<1.0	<1.0	NM	<1.1	NM	NM	NM	<570
	01/25/01	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	NM	NM	NM	<500
	03/14/03	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	NM	<200
	06/04/03	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NM	<211
	09/03/03	<1.00	<1.0	<1.0	<1.0	<1.0	0.22	<1.0	<1.0	NM	<225
	12/10/03	<1.00	<1.0	<1.0	<1.0	<1.0	0.22	<1.0	<1.0	NM	<200
	03/16/04	<1.00	<1.0	<1.0	<3.0	<1.0	<0.11	<0.11	<0.11	NM	<111
	06/08/04	<1.00	<1.00	<1.00	<1.00	<1.00	<2.20	<2.20	<2.20	NM	<210
	09/21/04	<1.00Y	<1.00Y	<1.00Y	<1.00Y	3.92Y	<2.20 J3Y	<2.20 J3Y	<2.20 J3Y	NM	220Y
	12/01/04	<0.143	0.5500 I	<0.1417	0.440 I	28.85	0.32 I	<0.202	<0.212	NM	80 I V
	03/13/05	<0.143	<0.201	<0.142	<0.220	16.0	<0.101	<0.133	<0.210	NM	<18
	06/09/05	<0.143	0.420 I	<0.142	0.550 I	13.5	<0.101	<0.133	<0.210	253	<18
	09/06/05	<0.143	<0.201	<0.142	0.220 I	79.7	<0.100	<0.133	<0.203	288 ?	<18
CEF-046-09I	12/06/05	<0.143	<0.201	<0.142	<0.220	48.1	<0.100	<0.133	<0.203	486	<18
	03/30/06	0.260 I	<0.126	<0.176	<0.298	24.2	<0.100	<0.133	<0.203	556	191
	06/09/06	<0.305	<0.338	<0.257	<0.433	12.7	<0.100	<0.133	<0.203	380	452
	09/24/06	<0.305	<0.338	<0.257	<0.433	14.6	<0.100	<0.133	<0.203	114	54 I
	12/08/06	<0.305	<0.338	<0.257	<0.433	9.52	<0.100	<0.133	<0.203	228	<18
	03/01/07	<0.305	<0.338	<0.257	<0.433	7.19	<0.100	2.71 I	2.35 I	137	<18
	06/15/07	<0.305	<0.338	<0.257	<0.433	9.60	<0.100	<0.133	<0.203	187	119 I
	09/12/07	<0.305	<0.338	0.270 I	<0.433	<0.336	<0.100	<0.133	<0.203	97.0	53 I V
	12/05/07	<0.305	<0.338	<0.257	<0.433	0.800 I	<0.100	<0.133	<0.203	35.7	<18
	03/06/08	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	80.7	<18
	06/18/08	<0.270	<0.240	<0.280	<0.860	<0.420	<1.00	<1.00	<1.00	38.8	339 V,CF2,CF6
	09/16/08	<0.4	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	37.1	343
	12/18/08	<0.4	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	34.0	439
	03/02/09	<0.4	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	27.8	205 I
CEF-046-10I	12/06/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.102	<0.136	<0.207	9.04	<18
CEF-046-11I	12/06/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.105	<0.140	<0.214	17.4	<18

TABLE 3
LABORATORY ANALYTICAL RESULTS

BUILDING 46
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Well ID	Sample Date	Benzene	Ethylbenzene	Toluene	Xylenes (Total)	Methyl-*tert*-butyl-ether	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Sulfate (mg/L)	TRPH
GCTL (µg/L)		1	30	40	20	20	14	28	28	250 *	5000
NADSC (µg/L)		100	300	400	200	200	140	280	280	2500	50000
CEF-046-12I	12/20/00	<1.0	<1.0	<1.0	<1.0	NM	<1.1	NM	NM	NM	<530
	01/24/01	<1.0	<1.0	<1.0	<1.0	**14**	<1.0	NM	NM	NM	<520
	03/14/03	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	NM	<200
	06/05/03	<1.00	<1.0	<1.0	<1.0	<1.0	<0.10	<0.10	<0.10	NM	<100
	09/03/03	<1.00	<1.0	<1.0	<1.0	<1.0	<0.10	<0.10	<0.10	NM	<225
	12/11/03	<1.00	<1.0	<1.0	<3.0	**2.2**	<0.10	<0.10	<0.10	NM	<200
	03/18/04	<1.00	<1.0	<1.0	<3.0	**79.9**	<0.10	<0.10	<0.10	NM	<222
	06/08/04	<1.00	<1.00	<1.00	<1.00	**502**	<2.20	<2.20	<2.20	NM	<200
	09/21/04	<1.00Y	<1.00Y	<1.00Y	<1.00Y	**18.9Y**	<2.00 J3Y	<2.00 J3Y	<2.00 J3Y	NM	<200Y
	12/01/04	<0.143	<0.2010	<0.1417	<0.220	**8.480**	<0.22	<0.200	<0.210	NM	**240 I V**
	03/13/05	<0.143	<0.201	<0.142	<0.220	**0.450 I**	<0.101	<0.133	<0.210	NM	<18
	06/09/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.101	<0.133	<0.210	**47.5**	<18
	09/06/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.100	<0.133	<0.203	**57.1**	<18
	12/06/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.100	<0.133	<0.203	**43.9**	<18
	03/29/06	<0.140	<0.126	<0.176	<0.298	**0.310 I**	<0.100	<0.133	<0.203	**47.8**	<18
	06/09/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**49.9**	**70 I**
	09/25/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**63**	<18
	12/08/06	<0.305	<0.338	<0.257	<0.433	<0.335	<0.100	<0.133	<0.203	**68.3**	<18
	03/01/07	<0.305	<0.338	<0.257	<0.433	<0.336	**3.47 I**	**2.73 I**	<0.203	**49.2**	<18
	06/15/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**45.8**	**83 I**
	09/12/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**45.0**	**38 I V**
	12/05/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**44.8**	<18
	03/06/08	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**49.3**	<18
	06/17/08	<0.270	<0.240	<0.280	<0.860	<0.420	<1.00	<1.00	<1.00	**55.0**	**204 V,I**
	09/16/08	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**58.9**	**331**
	12/18/08	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**50.4**	**171 I**
	03/02/09	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**41.4**	**206 I**
CEF-046-13I	12/20/00	<1.0	<1.0	<1.0	**0.45**	NM	**0.89**	NM	NM	NM	<540
	01/24/01	<1.0	<1.0	1.5	**0.62**	**280**	**0.6**	NM	NM	NM	**320**
	03/14/03	<1.0	<1.0	<1.0	<1.0	**318**	<2.0	<2.0	<2.0	NM	**276**
	06/05/03	**1.10**	<1.0	<1.0	<1.0	**254**	**0.19**	<0.10	<0.10	NM	<100
	09/03/03	<1.00	<1.0	<1.0	<1.0	**240**	**0.12**	<0.10	<0.10	NM	<225
	12/11/03	<1.00	<1.0	<1.0	<0.30	**114**	**0.5**	<0.10	<0.10	NM	**208**
	03/18/04	<1.00	<1.0	<1.0	<3.0	**60.7**	<0.10	<0.10	<0.10	NM	<250
	06/08/04	<1.00	<1.00	<1.00	<1.00	**83.8**	<2.02	<2.02	<2.02	NM	<220
	09/21/04	<1.00Y	<1.00Y	<1.00Y	<1.00Y	**149Y**	<2.22 J3Y	<2.22 J3Y	<2.22 J3Y	NM	<200Y
	12/01/04	<0.143	**0.9000 I**	<0.1417	**1.29 I**	**337.5**	<0.22	<0.202	<0.212	NM	**150 I V**
	03/13/05	<0.143	<0.201	<0.142	<0.220	**133**	<0.101	<0.133	<0.210	NM	<18
	06/09/05	<0.143	<0.201	<0.142	<0.220	**62.7**	<0.101	<0.133	< 0.210	**481**	<18
	09/06/05	<0.143	<0.201	<0.142	<0.220	**1.75 I**	<0.100	<0.133	<0.203	**519**	<18
	12/06/05	<0.143	<0.201	<0.142	<0.220	**0.880 I**	<0.100	<0.133	<0.203	**189**	<18
	03/29/06	<0.140	<0.126	<0.176	<0.298	**0.400 I**	<0.100	<0.133	<0.203	**104**	<18
	06/09/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**54.3**	**96 I**
	09/25/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**33.5**	<18
	12/08/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**42.6**	<18
	03/01/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**29.2**	<18
	06/15/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**26.8**	**66 I**
	09/12/07	<0.305	<0.338	0.300 I	<0.433	<0.336	<0.100	<0.133	<0.203	<20.0	**38 I V**
	12/05/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.100	<0.203	**25.1**	<18
	03/06/08	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.100	<0.203	**51.7**	<18
	06/17/08	<0.270	<0.240	<0.280	<0.860	<0.420	<0.952	<0.952	<0.952	**28.7**	**341 V,CF2,CF6**
	09/16/08	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**27.1**	**274**
	12/18/08	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**32.4**	**203 I**
	03/02/09	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**24.5**	**213 I**

TABLE 3
LABORATORY ANALYTICAL RESULTS

BUILDING 46
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Well ID	Sample Date	Benzene	Ethylbenzene	Toluene	Xylenes (Total)	Methyl-*tert*-butyl-ether	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Sulfate (mg/L)	TRPH
GCTL (µg/L)		1	30	40	20	20	14	28	28	250 *	5000
NADSC (µg/L)		100	300	400	200	200	140	280	280	2500	50000
	12/20/00	<1.0	<1.0	**0.42**	**0.37**	NM	<1.1	NM	NM	NM	<550
	01/24/01	<1.0	<1.0	<1.0	**0.23**	<1.0	<1.0	NM	NM	NM	<530
	03/14/03	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	NM	**248**
	06/04/03	<1.00	<1.0	<1.0	<1.0	**1**	<0.10	<0.10	<0.10	NM	<211
	09/03/03	<1.00	<1.0	<1.0	<1.0	<1.0	<0.10	<0.10	<0.10	NM	<225
	12/10/03	<1.00	<1.0	<1.0	<1.0	<1.0	<0.10	<0.10	<0.10	NM	<200
	03/16/04	<1.00	<1.0	<1.0	<3.0	**4.2**	<0.10	<0.10	<0.10	NM	<100
	06/08/04	<1.00	<1.00	<1.00	<1.00	**2.4**	<2.20	<2.20	<2.20	NM	<220
	09/21/04	<1.00Y	<1.00Y	<1.00Y	<1.00Y	**2.97Y**	<2.20 J3Y	<2.20 J3Y	<2.20 J3Y	NM	<200Y
	12/01/04	<0.143	<0.2010	<0.1417	<0.220	**2.500**	<0.22	<0.204	<0.214	NM	**80 I V**
	03/13/05	<0.143	<0.201	<0.142	<0.220	**3.190**	<0.101	<0.133	<0.210	NM	<20
	06/09/05	<0.143	<0.201	<0.142	<0.220	**1.38 I**	<0.101	<0.133	< 0.210	**5.16**	<20
	09/06/05	<0.143	<0.201	<0.142	<0.220	**5.30**	<0.100	<0.133	<0.203	**29.3 ?**	<18
CEF-046-14D	12/06/05	<0.143	<0.201	<0.142	<0.220	**8.21**	<0.111	<0.148	<0.226	**15.3**	<18
	03/29/06	<0.140	<0.126	<0.176	<0.298	**1.07**	<0.100	<0.133	<0.203	**2.12**	<18
	06/09/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	<2.00	**94 I**
	09/24/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**2.91 J4**	<18
	12/08/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	<2.00	**52 I**
	03/01/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	**2.72 I**	**2.39 I**	<2.00	<18
	06/15/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	<2.00	**83 I**
	09/12/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	<200 J4	**39 I V**
	12/05/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	<2.00	<18
	03/06/08	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	<2.00	<18
	06/17/08	0.27	<0.240	<0.280	<0.860	<0.420	<0.971	<0.971	<0.971	<0.500	<105
	09/16/08	<0.40	<0.43	<0.35	<1.2	**2.70**	<0.24	<0.24	<0.24	**9.5**	<270
	12/18/08	<0.40	<0.43	<0.35	<1.2	**3.5**	<0.24	<0.24	<0.24	**3.4**	<170
	03/02/09	<0.40	<0.43	<0.35	<1.2	**1.0**	<0.24	<0.24	<0.24	**3.7**	<170
	12/20/00	<1.0	<1.0	<1.0	<1.0	NM	<1.1	NM	NM	NM	<550
	01/24/01	**0.17**	<1.0	<1.0	<1.0	<1.0	<1.0	NM	NM	NM	<530
	03/13/03	<1.0	<1.0	<1.0	<1.0	<1.0	<2.4	<2.4	<2.4	NM	<200
	06/04/03	<1.00	<1.0	<1.0	<1.0	<1.0	<0.10	<0.10	<0.10	NM	<222
	09/03/03	<1.00	<1.0	<1.0	<1.0	<1.0	<0.10	<0.10	<0.10	NM	<225
	12/10/03	<1.00	<1.0	<1.0	<3.0	<1.0	<0.10	<0.10	<0.10	NM	<200
	03/16/04	<1.00	<1.0	<1.0	<3.0	<1.0	<0.11	<0.11	<0.11	NM	<100
	06/08/04	<1.00	<1.00	<1.00	<1.00	<1.00	<2.20	<2.20	<2.20	NM	<220
	09/21/04	<1.00Y	<1.00Y	<1.00Y	<1.00Y	<1.00Y	<2.11Y	<2.11 J3Y	<2.11 J3Y	NM	<220Y
	12/01/04	<0.143	<0.2010	<0.1417	<0.220	<0.2359	<0.23	<0.206	<0.216	NM	**110 I V**
	03/13/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.101	<0.133	<0.210	NM	<18.0
	06/09/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.101	<0.133	<0.210	**25.6**	< 20
	09/06/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.100	<0.133	<0.203	**34.8 ?**	<18
CEF-046-15I	12/06/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.111	<0.148	<0.226	**20.3**	<18
	03/30/06	<0.140	<0.126	<0.176	<0.298	<0.236	<0.100	<0.133	<0.203	**29.8**	<18
	06/09/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**26.7**	**28 I**
	09/24/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**23.9**	<18
	12/08/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**33.8**	<18
	03/01/07	<0.305	<0.338	<0.257	<0.433	<0.336	**3.42 I**	<0.133	<0.203	**29.8**	<18
	06/15/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**26.7**	**133 I**
	09/12/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**23.5**	**70 I V**
	12/05/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**25.6**	<18
	03/06/08	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**34.3**	<18
	06/17/08	<0.270	<0.240	<0.280	<0.860	<0.420	<1.00	<1.00	<1.00	**32.7**	**118 V, I**
	09/16/08	<0.40	<0.43	<0.354	<1.2	<0.26	<0.24	<0.24	<0.24	**51.2**	**460**
	12/18/08	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**36.9**	<160
	03/02/09	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**26.5**	<160
CEF-046-16I	12/06/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.102	<0.136	<0.207	**20.5**	<18

TABLE 3
LABORATORY ANALYTICAL RESULTS

BUILDING 46
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Well ID	Sample Date	Benzene	Ethylbenzene	Toluene	Xylenes (Total)	Methyl-*tert*-butyl-ether	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Sulfate (mg/L)	TRPH
GCTL (µg/L)		1	30	40	20	20	14	28	28	250 *	5000
NADSC (µg/L)		100	300	400	200	200	140	280	280	2500	50000
CEF-046-17D	12/06/05	<0.143	<0.201	<0.142	<0.220	**27.4**	<0.105	<0.140	<0.214	**982**	**158 I**
CEF-046-18I	12/07/05	<0.143	<0.201	<0.142	**0.440 I**	**1.17 I**	<0.111	<0.148	<0.226	**84.2**	<20
CEF-046-19I	12/07/05	**21.6**	**0.640 I**	<0.142	**4.86**	**27.7**	<0.103	<0.137	<0.209	**1230**	<20
CEF-046-20I	12/07/05	<0.143	<0.201	<0.142	<0.220	0.940 I	<0.109	<0.145	<0.221	**112**	<18
CEF-046-21I	12/20/00	<1.0	<1.0	<1.0	<1.0	NM	<1.1	NM	NM	NM	<550
	01/25/01	**0.25**	<1.0	**0.7**	<1.0	<1.0	<1.0	NM	NM	NM	**300**
	03/13/03	<1.0	<1.0	<1.0	<1.0	<1.0	<2.2	<2.2	<2.2	NM	<200
	06/05/03	<1.00	<1.0	<1.0	<1.0	<1.0	<0.10	<0.10	<0.10	NM	<100
	09/03/03	<1.00	<1.0	<1.0	<1.0	<1.0	**0.18**	**0.27**	**0.2**	NM	**308**
	12/11/03	<1.00	<1.0	<1.0	<1.0	<1.0	<0.10	<0.10	<0.10	NM	<200
	03/18/04	<1.00	<1.0	<1.0	<3.0	<1.0	<0.10	<0.10	<0.10	NM	<222
	06/08/04	<1.00	<1.00	<1.00	<1.00	<1.00	<2.04	<2.04	<2.04	NM	<200
	09/21/04	<1.00Y	<1.00Y	<1.00Y	<1.00Y	<1.00Y	<2.20Y	<2.20 J3Y	<2.20 J3Y	NM	<220Y
	12/01/04	<0.143	<0.2010	<0.1417	<0.220	<0.2359	<0.23	<0.206	<0.216	NM	**100 I V**
	03/13/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.101	<0.133	<0.210	NM	<18
	06/09/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.101	<0.133	<0.210	**14.1**	< 18
	09/06/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.100	<0.133	<0.203	**29.5**	< 18
	12/07/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.111	<0.148	<0.226	**10.6**	<20
	03/29/06	<0.140	<0.126	<0.176	<0.298	<0.236	<0.100	<0.133	<0.203	**14.9**	<18
	06/09/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**12.6**	**76 I**
	09/24/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**26.2**	**35 I**
	12/08/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**34.2**	<18
	03/01/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**31.9**	<18
	06/15/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**61.4**	**156 I**
	09/12/07	<0.305	<0.338	**0.410 I**	<0.433	<0.336	<0.100	<0.133	<0.203	**27.7**	**238 V**
	12/05/07	<0.305	<0.0338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**28.0**	<18
	03/06/08	<0.305	<0.0338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**34.9**	<18
	06/18/08	<0.270	<0.240	<0.280	<0.860	<0.420	<1.00	<1.00	<1.00	**51.1**	<110 CF2,CF6,U
	09/16/08	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**709**	<160
	12/18/08	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**76.1**	<160
	03/02/09	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**74.7**	<160
CEF-046-22I	12/07/05	<0.143	<0.201	<0.142	**0.570 I**	<0.236	<0.105	<0.140	<0.214	**1060**	<20
CEF-046-23D	12/07/05	**0.900 I**	**2.04**	**1.48 I**	**40.7**	**0.320 I**	<0.111	<0.148	<0.226	**6310**	**102 I**
CEF-046-24D	12/20/00	<1.0	<1.0	**0.47**	**0.41**	NM	<1.1	NM	NM	NM	<500
	01/25/01	**8.3**	**0.81**	**1**	**2**	<1.0	<1.0	NM	NM	NM	<510
	03/14/03	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	NM	<200
	06/05/03	<1.00	<1.0	<1.0	<1.0	<1.0	<0.10	<0.10	<0.10	NM	<100
	09/03/03	<1.00	<1.0	<1.0	<1.0	<1.0	<0.10	<0.10	<0.10	NM	<225
	12/10/03	<1.00	<1.0	<1.0	<1.0	<1.0	<0.10	<0.10	<0.10	NM	<200
	03/16/04	<1.00	<1.0	<1.0	<3.0	<1.0	<0.10	<0.10	<0.10	NM	<100
	06/08/04	<1.00	<1.00	<1.00	<1.00	<1.00	<2.20	<2.20	<2.20	NM	<200
	09/21/04	<1.00Y	<1.00Y	<1.00Y	<1.00Y	<1.00Y	<2.04Y	<2.04 J3Y	<2.04 J3Y	NM	<200Y
	12/01/04	<0.143	<0.2010	<0.1417	<0.220	<0.2359	**0.40 I**	<0.200	<0.210	NM	**130 I V**
	03/13/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.101	<0.133	<0.210	NM	<18
	06/09/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.101	<0.133	<0.210	**2030**	< 20
	09/06/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.100	<0.133	<0.203	**1840**	<18
	12/07/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.100	<0.133	<0.203	**2120**	<22
	03/29/06	<0.140	<0.126	<0.176	<0.298	<0.236	<0.100	<0.133	<0.203	**1800**	<18
	06/09/06	<0.305	<0.388	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**1430**	**125 I**
	09/24/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**732**	**31 I**
	12/08/06	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**737**	**34 I**
	03/01/07	<0.305	<0.338	<0.257	<0.433	<0.336	**3.42 I**	<0.133	<0.203	**596**	<18
	06/15/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**420**	**109 I**
	09/12/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**217**	**40 I V**
	12/05/07	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**414**	**245**
	03/06/08	<0.305	<0.338	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**151**	<18
	06/17/08	<0.270	<0.240	<0.280	<0.860	<0.420	<0.952	<0.952	<0.952	**398**	**184 H2,I**
	09/16/08	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**70.5**	<160
	12/18/08	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**1550 ****	**214 I**
	03/02/09	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**523**	<160

TABLE 3
LABORATORY ANALYTICAL RESULTS

BUILDING 46
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Well ID	Sample Date	Benzene	Ethylbenzene	Toluene	Xylenes (Total)	Methyl-*tert*-butyl-ether	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Sulfate (mg/L)	TRPH
GCTL (µg/L)		1	30	40	20	20	14	28	28	250 *	5000
NADSC (µg/L)		100	300	400	200	200	140	280	280	2500	50000
	12/20/00	<1.0	<1.0	<1.0	<1.0	NM	<1.1	NM	NM	NM	<560
	01/25/01	**0.25**	<1.0	<1.0	**0.42**	<1.0	<1.0	NM	NM	NM	**320**
	03/13/03	<1.0	<1.0	<1.0	<1.0	<1.0	<2.3	<2.3	<2.3	NM	<200
	06/04/03	<1.00	<1.0	<1.0	<1.0	<1.0	<0.10	<0.10	<0.10	NM	<200
	09/03/03	<1.00	<1.0	<1.0	<1.0	<1.0	<0.10	<0.10	<0.10	NM	<225
	12/10/03	<1.00	<1.0	<1.0	<3.0	<1.0	<0.10	<0.10	<0.10	NM	<200
	03/16/04	<1.00	<1.0	<1.0	<3.0	<1.0	<0.10	<0.10	<0.10	NM	<111
	06/08/04	<1.00	<1.00	<1.00	<1.00	<1.00	<2.02	<2.02	<2.02	NM	<200
	09/21/04	<1.00Y	<1.00Y	<1.00Y	<1.00Y	<1.00Y	<2.11Y	<2.11 J3Y	<2.11 J3Y	NM	<220Y
	12/01/04	<0.143	**0.4800 I**	<0.1417	<0.220	<0.2359	<0.22	<0.204	<0.214	NM	**100 I V**
	03/13/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.101	<0.133	<0.210	NM	<18
	06/09/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.101	<0.133	<0.210	**622**	<20
	09/06/05	<0.143	<0.201	<0.142	**0.590 I**	<0.236	**0.260 I**	<0.133	<0.203	**477**	<20
CEF-046-25I	12/07/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.102	<0.136	<0.207	**271**	<20
	03/29/06	<0.140	**0.126**	<0.176	<0.298	<0.236	<0.100	<0.133	<0.203	**93.2**	<18
	06/09/06	<0.305	<0.388	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**65.1**	**68 I**
	09/24/06	<0.305	<0.388	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**33.0**	**38.0 I**
	12/09/06	<0.305	<0.388	<0.257	<0.433	<0.336	**0.890 I**	<0.133	<0.203	**94.9**	**55 I**
	03/01/07	<0.305	<0.388	<0.257	<0.433	<0.336	<0.100	**2.69 I**	<0.203	**67.4**	<18
	06/15/07	<0.305	<0.388	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**61.7**	**135 I**
	09/12/07	<0.305	<0.388	<0.257	<0.433	<0.336	<0.100	<0.133	<0.203	**42.3**	**111 I V**
	12/05/07	<0.305	<0.338	<0.257	<0.433	<0.336	**1.68**	**0.230 I**	**0.260 I**	**23.9**	**39 I**
	03/06/08	<0.305	<0.338	<0.257	<0.433	<0.336	**0.280**	<0.133	<0.203	**43.4**	<18
	06/18/08	<0.270	<0.240	<0.280	<0.860	<0.420	<0.952	<0.952	<0.952	**23.2**	<110
	09/16/08	<0.40	<0.43	<0.35	<1.2	<0.26	**0.7 I**	<0.24	<0.24	**22.9**	**203**
	12/17/08	<0.40	<0.43	<0.35	<1.2	<0.26	**0.61 I**	<0.24	<0.24	**15.0**	<170
	03/02/09	<0.40	<0.43	<0.35	<1.2	<0.26	**0.58 I**	<0.24	<0.24	**15.2**	<160
	12/20/00	**1300**	**78**	**41**	**310**	NM	<1.1	NM	NM	NM	<530
	01/25/01	**2400**	**270**	**100**	**820**	<5.0	<1.0	NM	NM	NM	**890**
	03/14/03	**866**	**23.3**	**5.4**	**199**	**15.9**	<2.0	<2.0	<2.0	NM	**628**
	06/05/03	**845**	**30**	<10.0	**314**	**21**	<0.10	<0.10	<0.10	NM	**598**
	09/03/03	**902**	**24**	<10.0	**347**	**17.0**	<0.10	<0.10	<0.10	NM	**488**
	12/11/03	**693**	**16.5**	**7.9**	**198**	**19.4**	<0.10	<0.10	<0.10	NM	**954**
	03/18/04	**870**	**8.3**	**6.3 ?**	**162**	**20.3**	<2.20	<2.20	<2.20	NM	**380**
	06/08/04	**832**	**87.9**	**47.7**	**371**	**25.4**	**0.13**	<0.10	<0.10	NM	**524**
	09/21/04	**184Y**	**27.7Y**	**7.84Y**	**233Y**	**141Y**	<2.04Y	<2.04 J3Y	<2.04 J3Y	NM	**280Y**
	12/01/04	**168**	**16.67**	**6.42**	**128**	**12.05**	**0.56 I**	<0.206	<0.216	NM	**1500**
	03/13/05	**5.17**	**2.03**	**0.420 I**	**17.6**	**1.83 I**	**0.216 I**	<0.133	<0.210	NM	**59 I**
	06/09/05	**9.21**	**4.68**	**0.570 I**	**42.4**	**2.33**	<0.101	<0.133	<0.210	**3190**	**1730**
	09/06/05	**1.16 I**	**0.900 I**	<0.142	**13.3**	<0.236	<0.100	<0.133	<0.203	**2300**	**67 I**
CEF-046-26I	12/07/05	**6.72**	**0.740 I**	<0.142	**11.5**	**0.480 I**	<0.100	<0.133	<0.203	**1890**	<18
	03/29/06	**1.00**	**0.490 I**	<0.176	**9.64**	**1.89**	<0.100	<0.133	<0.203	**415**	**390**
	06/09/06	**0.460 I**	<0.338	<0.257	**5.35**	**0.380 I**	<0.100	<0.133	<0.203	**1460**	**107 I**
	09/24/06	**0.490 I**	<0.338	<0.257	**4.10**	<0.336	<0.100	<0.133	<0.203	**876**	**19 I**
	12/08/06	**0.730 I**	<0.338	<0.257	**3.96**	<0.336	<0.100	<0.133	<0.203	**1190**	**20 I**
	03/01/07	**0.850 I**	<0.338	<0.257	**3.57**	<0.336	<0.100	<0.133	<0.203	**804**	<18
	06/15/07	**0.340 I**	<0.338	<0.257	**1.62**	**0.440 I**	<0.100	<0.133	<0.203	**1840**	**167 I**
	09/12/07	**0.350 I**	<0.338	**0.290 I**	**1.13**	<0.336	<0.100	<0.133	<0.203	**1280**	**136 I V**
	12/05/07	<0.305	<0.338	<0.257	**1.78**	<0.336	<0.100	<0.133	<0.203	**1060**	**72 I**
	03/06/08	<0.305	<0.338	<0.257	**1.34**	<0.336	<0.100	<0.133	<0.203	**170**	**172**
	06/17/08	<0.270	<0.240	<0.280	<0.860	<0.420	<0.952	<0.952	<0.952	**398**	<105 CF2,CF6,U
	09/16/08	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**300**	<160
	12/17/08	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**278**	<160
	03/02/09	<0.40	<0.43	<0.35	<1.2	<0.26	<0.24	<0.24	<0.24	**319**	**359**
CEF-046-27D	12/07/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.101	<0.134	<0.205	**2.22**	<18
CEF-046-28I	12/07/05	**13.6**	<0.201	<0.142	**1.34 I**	**10.6**	<0.109	<0.145	<0.221	**1300**	<18
CEF-046-29I	12/07/05	**19.8**	<0.201	<0.142	**2.46**	**0.350 I**	<0.103	<0.137	<0.209	**2220**	<18
CEF-046-30I	12/07/05	<0.143	<0.201	<0.142	<0.220	<0.236	<0.111	<0.148	<0.226	**721**	<18
CEF-046-31I	12/07/05	**0.560 I**	<0.201	<0.142	<0.220	<0.236	<0.111	<0.148	<0.226	**2120**	<20

Table 3 Data Qualifiers, Definitions and Notes

GCTL-Groundwater cleanup target level
NADSC- Natural attenuation default source concentration
All values reported in µg/L unless otherwise noted.
* GCTL and NADSC reported in mg/L
NE - Not established
Concentration exceeds the GCTL value
Concentration exceeds the NADSC value
Bold - analyte was detected above the method detection limit
TRPH - Total Recoverable Petroleum Hydrocarbons
NM - Not measured
N/A - Not applicable
? - Rejected during data validation
V- the analyte was detected in both the sample and the associated method blank
L - Off-scale high, actual value is known to be greater than the value given.
CF2 - Confirmatory analysis was past holding time
CF6 - Results confirmed by reanalysis
H2 - Initial analysis within holding time. Reanalysis for the required dilution of confirmation was past holding time
I - The reported vlaue is between the laboratory MDL and RL
J4 - The sample matrix interfered with the ability to make an accurate determination
B1 - Analyte was detected in the associated method blank. Analyte concentration in the sample is greater than 10x the concentration found in the method blank
S10 - Insufficient sample available for reanalysis
a - Result is from Run #2
** - estimated value above calibration range

APPENDIX A

GROUNDWATER SAMPLING LOGS

SOLUTIONS-IES
GROUNDWATER SAMPLING LOG

Site Name: Building 46 - Cecil Field | **Site Location:** Jacksonville, Florida

Well Number: CEF-46-1S | **Sample ID:** CEF-046-015 | **Date:** 3/2/09

PURGING DATA

Well Diameter (inches):	Tubing Diameter (inches):	Tubing:	Static Depth to water (feet):	Purge Pump Type or Bailer:	Well Screen Interval Depth:
1 (2) 3 4	(1/4) 3/8 1/2	(LDPE) Teflon	10.49	Peristaltic Pump	feet to feet

Initial Pump or Tubing Depth in well:	Purging Initiated:	Purging Ended:	Total Volume Purged (Gallons):	Sample Pump Flow Rate (mL/min):
2 off bottom	1207	1310	1.2	75

Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate: (mL/min)	Depth to Water (feet)	pH (SU)	Temp (°C)	Cond (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU's)	ORP (m/v)	Color (describe)	Odor (describe)
1220	0.2	0.2		11.66	4.32	19.04	1088	0.43	36.6	86.1	Clear	Sulfur
1226	0.1	0.3		11.75	4.43	18.73	1081	0.41	36.3	-42.5		
1233	0.1	0.4		11.82	4.73	18.57	1017	0.26	31.5	-94.1		
1238	0.1	0.5		11.87	4.76	18.73	1019	0.24	27.3	-72.1		
1242	0.1	0.6		11.95	4.91	18.89	1017	0.19	27.1	-93.3		
1247	0.1	0.7		12.06	5.12	19.13	996	0.15	24.6	-110.1		
1252	0.1	0.8		12.15	5.19	19.24	969	0.12	24.2	-147.9		
1257	0.1	0.9		12.22	5.44	19.08	904	0.08	22.7	-174.2		
1302	0.1	1.0		12.23	5.51	19.20	898	0.06	19.9	-184.9		
1307	0.1	1.1		12.24	5.52	19.10	867	0.03	19.7	-187.4		

Well Capacity (Gallons/Foot): **0.75"** = 0.02 **1"** = 0.04 **1.25"** = 0.06 **2"** = 0.16 **3"** = 0.37 **4"** = 0.65 **5"** = 1.02 **6"** = 1.47 **12"** = 5.88

Tubing Inside Diameter Capacity (Gallons/Foot): **1/8"** = 0.0006 **3/16"** = 0.0014 **1/4"** = 0.0026 **5/16"** = 0.004 **3/8"** = 0.006 **1/2"** = 0.010 **5/8"** = 0.016

SAMPLING DATA

Sampled By/Affiliation:	Sampler(s) Signature:	Sampling Initiated:	Sampling Ended:
Burke Cathey / Terraine	Burke Cathey	1310	1400

Field Decontamination:	Field-Filtered:	Filter Size:	Filtration Equipment Type:	Duplicate:
Y (N)	Y (N)	µm		Y (N)

SAMPLE CONTAINER INFORMATION

Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Intended Analysis	Sampling Equipment Code
	2	AG	1 L	None	PAHs 8270C	PP
	2	AG	1 L	H_2SO_4	TRPH FL-PRO	PP
	1	PE	500 mL	None	Sulfate 300.0	PP
	3	CG	40 mL	HCl	BTEX & MTBE 8260B	RFPP

Remarks:

Field Kits: Fe^{++}: 4 H_2S: 1 (sulfide) 1.06 CO_2: 70 DO: 0.1 A_T: 18

Material Codes: **AG** = Amber Glass **CG** = Clear Glass **PE** = Polyethylene **PP** = Polypropylene **S** = Silicone **T** = Teflon **O** = Other (Specify)

Sampling/Purging: **APP** = After Peristaltic Pump **B** = Bailer **BP** = Bladder Pump **ESP** = Electric Submersible Pump **PP** = Peristaltic Pump

Equipment Codes: **RFPP** = Reverse Flow Peristaltic Pump **SM** = Straw Method (Tubing Gravity Drain) **VT** = Vacuum Trap **O** = Other (Specify)

Stabilization criteria for range of variation of last three consecutive readings: **pH:** + 0.2 units **Temperature:** + 0.2°C **Specific Conductance:** + 5%
Dissolved Oxygen: all readings < 20% saturation; optionally, + 0.2 mg/L or + 10% (whichever is greater)
Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

SOLUTIONS-IES
GROUNDWATER SAMPLING LOG

Site Name: Building 46 - Cecil Field | **Site Location:** Jacksonville, Florida

Well Number: CEF-46-2S | **Sample ID:** CEF-046-02S | **Date:** 3/2/09

PURGING DATA

Well Diameter (inches):	Tubing Diameter (inches):	Tubing:	Static Depth to water (feet):	Purge Pump Type or Bailer:	Well Screen Interval Depth:
1 (2) 3 4	(1/4) 3/8 1/2	(LDPE) Teflon	10.32	Peristaltic Pump	feet to feet

Initial Pump or Tubing Depth in well:	Purging Initiated:	Purging Ended:	Total Volume Purged (Gallons):	Sample Pump Flow Rate (mL/min):
2 feet off bottom	1023	1050	0.7	100

Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate: (mL/min)	Depth to Water (feet)	pH (SU)	Temp (°C)	Cond (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU's)	ORP (m/v)	Color (describe)	Odor (describe)
1035	0.2	0.2		10.48	6.49	18.20	441	0.81	8.3	185.2	Clear	None
1038	0.1	0.3		10.49	6.49	18.51	446	0.65	7.5	181.9	—	—
1042	0.1	0.4		10.49	6.48	18.53	448	0.49	7.5	180.7	—	—
1045	0.1	0.5		10.50	6.48	18.61	456	0.52	6.7	177.2	—	—

Well Capacity (Gallons/Foot): **0.75"** = 0.02 **1"** = 0.04 **1.25"** = 0.06 **2"** = 0.16 **3"** = 0.37 **4"** = 0.65 **5"** = 1.02 **6"** = 1.47 **12"** = 5.88

Tubing Inside Diameter Capacity (Gallons/Foot): **1/8"** = 0.0006 **3/16"** = 0.0014 **1/4"** = 0.0026 **5/16"** = 0.004 **3/8"** = 0.006 **1/2"** = 0.010 **5/8"** = 0.016

SAMPLING DATA

Sampled By/Affiliation:	Sampler(s) Signature:	Sampling Initiated:	Sampling Ended:
Burke Cathey / Terraine	[signature]	1050	1127

Field Decontamination:	Field-Filtered:	Filter Size:	Filtration Equipment Type:	Duplicate:
Y (N)	Y (N)	µm		Y (N)

SAMPLE CONTAINER INFORMATION

Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Intended Analysis	Sampling Equipment Code
	2	AG	1 L	None	PAHs 8270C	PP
	2	AG	1 L	H_2SO_4	TRPH FL-PRO	PP
	1	PE	500 mL	None	Sulfate 300.0	PP
	3	CG	40 mL	HCl	BTEX & MTBE 8260B	RFPP

Remarks:

Field Kits: Fe^{++}: 0.1 H_2S: 0.0 CO_2: 35 DO: 0.6 A_T: 35

Material Codes: **AG** = Amber Glass **CG** = Clear Glass **PE** = Polyethylene **PP** = Polypropylene **S** = Silicone **T** = Teflon **O** = Other (Specify)

Sampling/Purging: **APP** = After Peristaltic Pump **B** = Bailer **BP** = Bladder Pump **ESP** = Electric Submersible Pump **PP** = Peristaltic Pump

Equipment Codes: **RFPP** = Reverse Flow Peristaltic Pump **SM** = Straw Method (Tubing Gravity Drain) **VT** = Vacuum Trap **O** = Other (Specify)

Stabilization criteria for range of variation of last three consecutive readings: **pH:** + 0.2 units **Temperature:** + 0.2°C **Specific Conductance:** + 5%
Dissolved Oxygen: all readings < 20% saturation; optionally, + 0.2 mg/L or + 10% (whichever is greater)
Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

SOLUTIONS-IES
GROUNDWATER SAMPLING LOG

Site Name: Building 46 - Cecil Field | **Site Location:** Jacksonville, Florida

Well Number: CEF-46-5I | **Sample ID:** CEF-046-05I | **Date:** 3/2/09

PURGING DATA

Well Diameter (inches):	Tubing Diameter (inches):	Tubing:	Static Depth to water (feet):	Purge Pump Type or Bailer:	Well Screen Interval Depth:
1 (3) 3 4	1/4 3/8 1/2	LDPE Teflon	11.29	Peristaltic Pump	feet to feet

Initial Pump or Tubing Depth in well:	Purging Initiated:	Purging Ended:	Total Volume Purged (Gallons):	Sample Pump Flow Rate (mL/min):
2 feet off bottom	1422	1442	0.55	105

Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate: (mL/min)	Depth to Water (feet)	pH (SU)	Temp (°C)	Cond (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU's)	ORP (m/v)	Color (describe)	Odor (describe)
BC 3/2/09 ~~1422~~												
1434	0.2	0.2		11.61	3.03	23.08	923	3.29	77.7	493.4	Milky	None
1437	0.2	0.4		11.59	3.02	22.89	917	3.09	81.4	495.2		
1440	0.1	0.5		11.60	3.07	22.88	925	3.09	78.8	501.5		

Well Capacity (Gallons/Foot): **0.75"** = 0.02 **1"** = 0.04 **1.25"** = 0.06 **2"** = 0.16 **3"** = 0.37 **4"** = 0.65 **5"** = 1.02 **6"** = 1.47 **12"** = 5.88

Tubing Inside Diameter Capacity (Gallons/Foot): **1/8"** = 0.0006 **3/16"** = 0.0014 **1/4"** = 0.0026 **5/16"** = 0.004 **3/8"** = 0.006 **1/2"** = 0.010 **5/8"** = 0.016

SAMPLING DATA

Sampled By/Affiliation:	Sampler(s) Signature:	Sampling Initiated:	Sampling Ended:
Burke Cathey/Terraine	Burke Cathey	1442	1517

Field Decontamination:	Field-Filtered:	Filter Size:	Filtration Equipment Type:	Duplicate:
Y (N)	Y (N)	µm		Y (N)

SAMPLE CONTAINER INFORMATION

Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Intended Analysis	Sampling Equipment Code
	2	AG	1 L	None	PAHs 8270C	PP
	2	AG	1 L	H_2SO_4	TRPH FL-PRO	PP
	1	PE	500 mL	None	Sulfate 300.0	PP
	3	CG	40 mL	HCl	BTEX & MTBE 8260B	RFPP

Remarks:

Field Kits: Fe^{++}: 1 H_2S: 0.0 CO_2: 350 DO: 4 A_T: 0

Material Codes: **AG** = Amber Glass **CG** = Clear Glass **PE** = Polyethylene **PP** = Polypropylene **S** = Silicone **T** = Teflon **O** = Other (Specify)

Sampling/Purging: **APP** = After Peristaltic Pump **B** = Bailer **BP** = Bladder Pump **ESP** = Electric Submersible Pump **PP** = Peristaltic Pump

Equipment Codes: **RFPP** = Reverse Flow Peristaltic Pump **SM** = Straw Method (Tubing Gravity Drain) **VT** = Vacuum Trap **O** = Other (Specify)

Stabilization criteria for range of variation of last three consecutive readings: **pH:** + 0.2 units **Temperature:** + 0.2°C **Specific Conductance:** + 5%
Dissolved Oxygen: all readings < 20% saturation; optionally, + 0.2 mg/L or + 10% (whichever is greater)
Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

SOLUTIONS-IES
GROUNDWATER SAMPLING LOG

Site Name: Building 46 - Cecil Field		**Site Location:** Jacksonville, Florida
Well Number: CEF-46-6D	**Sample ID:** CEF-046-6D	**Date:** 3/2/09

PURGING DATA

Well Diameter (inches):	Tubing Diameter (inches):	Tubing:	Static Depth to water (feet):	Purge Pump Type or Bailer:	Well Screen Interval Depth:
1 (2) 3 4	1/4 (3/8) 1/2	(LDPE) Teflon	13.3	Peristaltic Pump	feet to feet

Initial Pump or Tubing Depth in well:	Purging Initiated:	Purging Ended:	Total Volume Purged (Gallons):	Sample Pump Flow Rate (mL/min):
	1435	1450	.6	250

Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate: (mL/min)	Depth to Water (feet)	pH (SU)	Temp (°C)	Cond (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU's)	ORP (m/v)	Color (describe)	Odor (describe)
1440	.2	.2	250	14.15	2.59	23.96	8136	0.49	7.35	481.6	light Brown	—
1445	.2	.4	200	14.17	2.61	24.22	8186	0.38	6.58	480.6	" "	—
1450	.2	.6	200	14.15	2.61	24.24	8190	0.26	6.51	480.1	Light Brown	—

Well Capacity (Gallons/Foot): **0.75"** = 0.02 **1"** = 0.04 **1.25"** = 0.06 **2"** = 0.16 **3"** = 0.37 **4"** = 0.65 **5"** = 1.02 **6"** = 1.47 **12"** = 5.88

Tubing Inside Diameter Capacity (Gallons/Foot): **1/8"** = 0.0006 **3/16"** = 0.0014 **1/4"** = 0.0026 **5/16"** = 0.004 **3/8"** = 0.006 **1/2"** = 0.010 **5/8"** = 0.016

SAMPLING DATA

Sampled By/Affiliation:	Sampler(s) Signature:	Sampling Initiated:	Sampling Ended:
SEAN JACVAH	[signature]	1450	1520

Field Decontamination:	Field-Filtered:	Filter Size:	Filtration Equipment Type:	Duplicate:
(Y) N	Y (N)	— µm	—	Y (N)

SAMPLE CONTAINER INFORMATION

Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Intended Analysis	Sampling Equipment Code
	2	AG	1 L	None	PAHs 8270C	PP
	2	AG	1 L	H_2SO_4	TRPH FL-PRO	PP
	1	PE	500 mL	None	Sulfate 300.0	PP
	3	CG	40 mL	HCl	BTEX & MTBE 8260B	RFPP

Remarks: Tot. Purge .75 gal.

Field Kits: Fe^{++}: 710 H_2S: 0 CO_2: DO: 0.2 A_T: 0.0

Sulfid = 0 x Did that 2x Could not get Pink color

Material Codes: **AG** = Amber Glass **CG** = Clear Glass **PE** = Polyethylene **PP** = Polypropylene **S** = Silicone **T** = Teflon **O** = Other (Specify)

Sampling/Purging: **APP** = After Peristaltic Pump **B** = Bailer **BP** = Bladder Pump **ESP** = Electric Submersible Pump **PP** = Peristaltic Pump

Equipment Codes: **RFPP** = Reverse Flow Peristaltic Pump **SM** = Straw Method (Tubing Gravity Drain) **VT** = Vacuum Trap **O** = Other (Specify)

Stabilization criteria for range of variation of last three consecutive readings: **pH:** + 0.2 units **Temperature:** + 0.2°C **Specific Conductance:** + 5%
Dissolved Oxygen: all readings < 20% saturation; optionally, + 0.2 mg/L or + 10% (whichever is greater)
Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

SOLUTIONS-IES
GROUNDWATER SAMPLING LOG

Site Name: Building 46 - Cecil Field | **Site Location:** Jacksonville, Florida

Well Number: CEF-46-7I | **Sample ID:** CEF - 046 - 07I | **Date:** 3/2/09

PURGING DATA

Well Diameter (inches):	Tubing Diameter (inches):	Tubing:	Static Depth to water (feet):	Purge Pump Type or Bailer:	Well Screen Interval Depth:
1 (2) 3 4	1/4 (3/8) 1/2	(LDPE) Teflon	10.46	Peristaltic Pump	feet to feet

Initial Pump or Tubing Depth in well:	Purging Initiated:	Purging Ended:	Total Volume Purged (Gallons):	Sample Pump Flow Rate (mL/min):
2' off bottom	1032	1055	1.1	~~200~~ 300 On

Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate: (mL/min)	Depth to Water (feet)	pH (SU)	Temp (°C)	Cond (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU's)	ORP (m/v)	Color (describe)	Odor (describe)
1040	0.3		200	11.37	3.55	22.25	297	1.36	11.3	421.9	clear	none
1044	0.5	0.5	200	11.35	3.55	22.52	293	1.06	12.5	424.4	clear	none
~~1049~~	~~1.2~~	~~1~~ On										
1049	0.8	0.8	200	11.34	3.55	22.35	292	0.94	10.09	426.3	clear	none
1053	1.0	1.0	200	11.34	3.55	22.46	291	1.02	8.36	426.2	clear	none

Well Capacity (Gallons/Foot): **0.75"** = 0.02 **1"** = 0.04 **1.25"** = 0.06 **2"** = 0.16 **3"** = 0.37 **4"** = 0.65 **5"** = 1.02 **6"** = 1.47 **12"** = 5.88

Tubing Inside Diameter Capacity (Gallons/Foot): **1/8"** = 0.0006 **3/16"** = 0.0014 **1/4"** = 0.0026 **5/16"** = 0.004 **3/8"** = 0.006 **1/2"** = 0.010 **5/8"** = 0.016

SAMPLING DATA

Sampled By/Affiliation:	Sampler(s) Signature:	Sampling Initiated:	Sampling Ended:
Dawn Marshall	Dawn Marshall	1055	1132

Field Decontamination:	Field-Filtered:	Filter Size:	Filtration Equipment Type:	Duplicate:
(Y) N	Y (N)	µm		Y (N)

SAMPLE CONTAINER INFORMATION

Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Intended Analysis	Sampling Equipment Code
	2	AG	1 L	None	PAHs 8270C ✓	PP
	2	AG	1 L	H_2SO_4	TRPH FL-PRO ✓	PP
	1	PE	500 mL	None	Sulfate 300.0 ✓	PP
	3	CG	40 mL	HCl	BTEX & MTBE 8260B ✓	RFPP

Remarks:

Field Kits: Fe^{++}: 7 H_2S: 0.0 (ran twice to verify) CO_2: 110 DO: 0.7 A_T: 0

Material Codes: **AG** = Amber Glass **CG** = Clear Glass **PE** = Polyethylene **PP** = Polypropylene **S** = Silicone **T** = Teflon **O** = Other (Specify)

Sampling/Purging: **APP** = After Peristaltic Pump **B** = Bailer **BP** = Bladder Pump **ESP** = Electric Submersible Pump **PP** = Peristaltic Pump

Equipment Codes: **RFPP** = Reverse Flow Peristaltic Pump **SM** = Straw Method (Tubing Gravity Drain) **VT** = Vacuum Trap **O** = Other (Specify)

Stabilization criteria for range of variation of last three consecutive readings: **pH:** + 0.2 units **Temperature:** + 0.2°C **Specific Conductance:** + 5%
Dissolved Oxygen: all readings < 20% saturation; optionally, + 0.2 mg/L or + 10% (whichever is greater)
Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

SOLUTIONS-IES
GROUNDWATER SAMPLING LOG

Site Name: Building 46 - Cecil Field | **Site Location:** Jacksonville, Florida

Well Number: CEF-46-9I | **Sample ID:** CEF-046-09I | **Date:** 3/2/09

PURGING DATA

Well Diameter (inches):	Tubing Diameter (inches):	Tubing:	Static Depth to water (feet):	Purge Pump Type or Bailer:	Well Screen Interval Depth:
1 (2) 3 4	1/4 (3/8) 1/2	LDPE Teflon	10.64	Peristaltic Pump	feet to feet

Initial Pump or Tubing Depth in well:	Purging Initiated:	Purging Ended:	Total Volume Purged (Gallons):	Sample Pump Flow Rate (mL/min):
	1013	1055	1.7	155

Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate: (mL/min)	Depth to Water (feet)	pH (SU)	Temp (°C)	Cond (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU's)	ORP (m/v)	Color (describe)	Odor (describe)
1026	0.3			10.64	3.91	21.79	118	1.81	4	-44.9	Clear	Slight
1030	0.5			10.64	3.79	21.68	116	1.69	4	-38.5		
1035	0.8			10.64	3.68	21.78	117	1.17	4	-37.0		
1038	0.9			10.64	3.71	22.22	120	1.03	3.90	-38.9		
1048	1.5			10.64	3.66	22.17	122	0.75	3.62	-39.5		
1051	1.6			10.64	3.62	22.13	123	0.71	3.50	-38.0		
1054	1.7			10.64	3.59	22.00	123	0.69	3.34	-36.4		

Well Capacity (Gallons/Foot): **0.75"** = 0.02 **1"** = 0.04 **1.25"** = 0.06 **2"** = 0.16 **3"** = 0.37 **4"** = 0.65 **5"** = 1.02 **6"** = 1.47 **12"** = 5.88

Tubing Inside Diameter Capacity (Gallons/Foot): **1/8"** = 0.0006 **3/16"** = 0.0014 **1/4"** = 0.0026 **5/16"** = 0.004 **3/8"** = 0.006 **1/2"** = 0.010 **5/8"** = 0.016

SAMPLING DATA

Sampled By/Affiliation:	Sampler(s) Signature:	Sampling Initiated:	Sampling Ended:
Leif Hazlewood	[signature]	1055	1135

Field Decontamination:	Field-Filtered:	Filter Size:	Filtration Equipment Type:	Duplicate:
Y (N)	Y (N)	µm		Y (N)

SAMPLE CONTAINER INFORMATION

Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Intended Analysis	Sampling Equipment Code
	2	AG	1 L	None	PAHs 8270C	PP
	2	AG	1 L	H_2SO_4	TRPH FL-PRO	PP
	1	PE	500 mL	None	Sulfate 300.0	PP
	3	CG	40 mL	HCl	BTEX & MTBE 8260B	RFPP

Remarks:

Sulfide: 1

Field Kits: Fe^{++}: 4 H_2S: 1.06 CO_2: 140 DO: 0.1 A_T: 0

Material Codes: **AG** = Amber Glass **CG** = Clear Glass **PE** = Polyethylene **PP** = Polypropylene **S** = Silicone **T** = Teflon **O** = Other (Specify)

Sampling/Purging: **APP** = After Peristaltic Pump **B** = Bailer **BP** = Bladder Pump **ESP** = Electric Submersible Pump **PP** = Peristaltic Pump

Equipment Codes: **RFPP** = Reverse Flow Peristaltic Pump **SM** = Straw Method (Tubing Gravity Drain) **VT** = Vacuum Trap **O** = Other (Specify)

Stabilization criteria for range of variation of last three consecutive readings: **pH:** + 0.2 units **Temperature:** + 0.2°C **Specific Conductance:** + 5%
Dissolved Oxygen: all readings < 20% saturation; optionally, + 0.2 mg/L or + 10% (whichever is greater)
Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

SOLUTIONS-IES
GROUNDWATER SAMPLING LOG

Site Name: Building 46 - Cecil Field	**Site Location:** Jacksonville, Florida
Well Number: CEF046-12I	**Sample ID:** CEF-046-12I **Date:** 3-2-09

PURGING DATA

Well Diameter (inches):	Tubing Diameter (inches):	Tubing:	Static Depth to water (feet):	Purge Pump Type or Bailer:	Well Screen Interval Depth:
1 (2) 3 4	1/4 (3/8) 1/2	(LDPE) Teflon	9.75	Peristaltic Pump	feet to feet

Initial Pump or Tubing Depth in well:	Purging Initiated:	Purging Ended:	Total Volume Purged (Gallons):	Sample Pump Flow Rate (mL/min):
	10:15	10:35	~~2 gal~~ 0.8	250

Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate: (mL/min)	Depth to Water (feet)	pH (SU)	Temp (°C)	Cond (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU's)	ORP (m/v)	Color (describe)	Odor (describe)
10:20	.4	.4	250	9.75	4.58	21.85	134	0.69	3.03	250.8	NA	NA
10:25	.2	.6	250	9.75	4.58	21.86	133	0.48	2.11	246.5	—	—
10:30	.2	.8	250	9.76	4.58	21.87	132	0.28	1.96	252.1	—	—

Well Capacity (Gallons/Foot): **0.75"** = 0.02 **1"** = 0.04 **1.25"** = 0.06 **2"** = 0.16 **3"** = 0.37 **4"** = 0.65 **5"** = 1.02 **6"** = 1.47 **12"** = 5.88

Tubing Inside Diameter Capacity (Gallons/Foot): **1/8"** = 0.0006 **3/16"** = 0.0014 **1/4"** = 0.0026 **5/16"** = 0.004 **3/8"** = 0.006 **1/2"** = 0.010 **5/8"** = 0.016

SAMPLING DATA

Sampled By/Affiliation:	Sampler(s) Signature:	Sampling Initiated:	Sampling Ended:
Sean Sarvan / Solutions-IES	[signature]	~~10:40~~ 10:35 SS	11:08

Field Decontamination:	Field-Filtered:	Filter Size:	Filtration Equipment Type:	Duplicate:
(Y) N	Y (N)	µm		Y (N)

SAMPLE CONTAINER INFORMATION

Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Intended Analysis	Sampling Equipment Code
	2	AG	1 L	None	PAHs 8270C	PP
	2	AG	1 L	H_2SO_4	TRPH FL-PRO	PP
	1	PE	500 mL	None	Sulfate 300.0	PP
	3	CG	40 mL	HCl	BTEX & MTBE 8260B	RFPP

Remarks: 2 gal water generated

Field Kits: Fe^{++}: 2.0 H_2S: 0.0 CO_2: 60 DO: 0.8 A_T: 0.0
Sulfide = 0

Material Codes: **AG** = Amber Glass **CG** = Clear Glass **PE** = Polyethylene **PP** = Polypropylene **S** = Silicone **T** = Teflon **O** = Other (Specify)
Sampling/Purging: **APP** = After Peristaltic Pump **B** = Bailer **BP** = Bladder Pump **ESP** = Electric Submersible Pump **PP** = Peristaltic Pump
Equipment Codes: **RFPP** = Reverse Flow Peristaltic Pump **SM** = Straw Method (Tubing Gravity Drain) **VT** = Vacuum Trap **O** = Other (Specify)

Stabilization criteria for range of variation of last three consecutive readings: **pH:** + 0.2 units **Temperature:** + 0.2°C **Specific Conductance:** + 5%
Dissolved Oxygen: all readings < 20% saturation; optionally, + 0.2 mg/L or + 10% (whichever is greater)
Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

SOLUTIONS-IES
GROUNDWATER SAMPLING LOG

Site Name: Building 46 - Cecil Field		**Site Location:** Jacksonville, Florida
Well Number: CEF-46-13I	**Sample ID:** CEF-46-13I	**Date:** 3-2-09

PURGING DATA

Well Diameter (inches):	**Tubing Diameter (inches):**	**Tubing:**	**Static Depth to water (feet):**	**Purge Pump Type or Bailer:**	**Well Screen Interval Depth:**
1 (2) 3 4	(1/4) 3/8 1/2	LDPE Teflon	9.95	Peristaltic Pump	feet to feet

Initial Pump or Tubing Depth in well:	**Purging Initiated:**	**Purging Ended:**	**Total Volume Purged (Gallons):**	**Sample Pump Flow Rate (mL/min):**
	11:18	11:35	.6	250 mL

Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate: (mL/min)	Depth to Water (feet)	pH (SU)	Temp (°C)	Cond (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU's)	ORP (m/v)	Color (describe)	Odor (describe)
1125	.15	.15	250	9.97	4.51	22.74	136	0.35	1.27	38.6	none	none
1130	.20	.35	250	9.98	4.50	22.99	135	0.29	0.98	8.1	clear	none
1135	.20	.55	250	9.98	4.50	23.97	136	0.17	0.75	7.5	clear	none

Well Capacity (Gallons/Foot): **0.75"** = 0.02 **1"** = 0.04 **1.25"** = 0.06 **2"** = 0.16 **3"** = 0.37 **4"** = 0.65 **5"** = 1.02 **6"** = 1.47 **12"** = 5.88

Tubing Inside Diameter Capacity (Gallons/Foot): **1/8"** = 0.0006 **3/16"** = 0.0014 **1/4"** = 0.0026 **5/16"** = 0.004 **3/8"** = 0.006 **1/2"** = 0.010 **5/8"** = 0.016

SAMPLING DATA

Sampled By/Affiliation:	**Sampler(s) Signature:**	**Sampling Initiated:**	**Sampling Ended:**
SS	[signature]	1135	12:10

Field Decontamination:	**Field-Filtered:**	**Filter Size:**	**Filtration Equipment Type:**	**Duplicate:**
(Y) N	Y (N)	µm		Y (N)

SAMPLE CONTAINER INFORMATION

Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Intended Analysis	Sampling Equipment Code
	2	AG	1 L	None	PAHs 8270C	PP
	2	AG	1 L	H_2SO_4	TRPH FL-PRO	PP
	1	PE	500 mL	None	Sulfate 300.0	PP
	3	CG	40 mL	HCl	BTEX & MTBE 8260B	RFPP

Remarks:

Field Kits: Fe^{++}: 1.5 H_2S: Sulfide = 1.5 CO_2: 70 DO: 0.2 A_T: 0

Material Codes: **AG** = Amber Glass **CG** = Clear Glass **PE** = Polyethylene **PP** = Polypropylene **S** = Silicone **T** = Teflon **O** = Other (Specify)

Sampling/Purging: **APP** = After Peristaltic Pump **B** = Bailer **BP** = Bladder Pump **ESP** = Electric Submersible Pump **PP** = Peristaltic Pump

Equipment Codes: **RFPP** = Reverse Flow Peristaltic Pump **SM** = Straw Method (Tubing Gravity Drain) **VT** = Vacuum Trap **O** = Other (Specify)

Stabilization criteria for range of variation of last three consecutive readings: **pH:** + 0.2 units **Temperature:** + 0.2°C **Specific Conductance:** + 5%
Dissolved Oxygen: all readings < 20% saturation; optionally, + 0.2 mg/L or + 10% (whichever is greater)
Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

SOLUTIONS-IES
GROUNDWATER SAMPLING LOG

Site Name: Building 46 - Cecil Field		**Site Location:** Jacksonville, Florida
Well Number: CEF-46-14D	**Sample ID:** CEF-046-14D	**Date:** 3-2-09

PURGING DATA

Well Diameter (inches):	Tubing Diameter (inches):	Tubing:	Static Depth to water (feet):	Purge Pump Type or Bailer:	Well Screen Interval Depth:
1 (2) 3 4	1/4 (3/8) 1/2	(LDPE) Teflon	9.95	Peristaltic Pump	feet to feet

Initial Pump or Tubing Depth in well:	Purging Initiated:	Purging Ended:	Total Volume Purged (Gallons):	Sample Pump Flow Rate (mL/min):
	12:18	12:35	0.7	275

Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate: (mL/min)	Depth to Water (feet)	pH (SU)	Temp (°C)	Cond (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU's)	ORP (m/v)	Color (describe)	Odor (describe)
12:23	0.25	0.25	275	10.01	5.41	23.08	77	0.62	0.35	5.1	clear	none
12:28	0.25	0.50	240	10.35	5.39	23.21	76	0.28	0.23	-16.1	clear	none
12:33	0.20	0.70	200	10.18	5.22	23.22	76	0.25	0.21	-18.3	clear	none

Well Capacity (Gallons/Foot): **0.75"** = 0.02 **1"** = 0.04 **1.25"** = 0.06 **2"** = 0.16 **3"** = 0.37 **4"** = 0.65 **5"** = 1.02 **6"** = 1.47 **12"** = 5.88

Tubing Inside Diameter Capacity (Gallons/Foot): **1/8"** = 0.0006 **3/16"** = 0.0014 **1/4"** = 0.0026 **5/16"** = 0.004 **3/8"** = 0.006 **1/2"** = 0.010 **5/8"** = 0.016

SAMPLING DATA

Sampled By/Affiliation:	Sampler(s) Signature:	Sampling Initiated:	Sampling Ended:
SJ Solutions	[signature]	12:35	13:05

Field Decontamination:	Field-Filtered:	Filter Size:	Filtration Equipment Type:	Duplicate:
(Y) N	Y (N)	— µm	—	Y (N)

SAMPLE CONTAINER INFORMATION

Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Intended Analysis	Sampling Equipment Code
	2	AG	1 L	None	PAHs 8270C	PP
	2	AG	1 L	H_2SO_4	TRPH FL-PRO	PP
	1	PE	500 mL	None	Sulfate 300.0	PP
	3	CG	40 mL	HCl	BTEX & MTBE 8260B	RFPP

Remarks:

Field Kits: Fe^{++}: 2.0 H_2S: 0.0 CO_2: 40 DO: 0.2 A_T: 0

Sulfide: 0.0

Material Codes: **AG** = Amber Glass **CG** = Clear Glass **PE** = Polyethylene **PP** = Polypropylene **S** = Silicone **T** = Teflon **O** = Other (Specify)

Sampling/Purging: **APP** = After Peristaltic Pump **B** = Bailer **BP** = Bladder Pump **ESP** = Electric Submersible Pump **PP** = Peristaltic Pump

Equipment Codes: **RFPP** = Reverse Flow Peristaltic Pump **SM** = Straw Method (Tubing Gravity Drain) **VT** = Vacuum Trap **O** = Other (Specify)

Stabilization criteria for range of variation of last three consecutive readings: **pH:** + 0.2 units **Temperature:** + 0.2°C **Specific Conductance:** + 5%
Dissolved Oxygen: all readings < 20% saturation; optionally, + 0.2 mg/L or + 10% (whichever is greater)
Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

SOLUTIONS-IES
GROUNDWATER SAMPLING LOG

Site Name: Building 46 - Cecil Field		**Site Location:** Jacksonville, Florida
Well Number: CEF-46-15I	**Sample ID:** CEF-046-15I	**Date:** 3/2/09

PURGING DATA

Well Diameter (inches):	Tubing Diameter (inches):	Tubing:	Static Depth to water (feet):	Purge Pump Type or Bailer:	Well Screen Interval Depth:
1 (2) 3 4	1/4 3/8 1/2	~~LDPE~~ Teflon	14.43	Peristaltic Pump	feet to feet

Initial Pump or Tubing Depth in well:	Purging Initiated:	Purging Ended:	Total Volume Purged (Gallons):	Sample Pump Flow Rate (mL/min):
~~1153~~ 24	1153	1215	0.9	155

Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate: (mL/min)	Depth to Water (feet)	pH (SU)	Temp (°C)	Cond (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU's)	ORP (m/v)	Color (describe)	Odor (describe)
1206	0.5	0.6		14.66	3.23	20.04	100	1.24	6.39	39.2	Clear	None
1209	0.1	0.7		14.67	3.37	20.23	101	1.07	6.41	26.7		
1212	0.2	0.9		16.67	3.34	20.32	100	0.99	6.32	22.1		

Well Capacity (Gallons/Foot): **0.75"** = 0.02 **1"** = 0.04 **1.25"** = 0.06 **2"** = 0.16 **3"** = 0.37 **4"** = 0.65 **5"** = 1.02 **6"** = 1.47 **12"** = 5.88

Tubing Inside Diameter Capacity (Gallons/Foot): **1/8"** = 0.0006 **3/16"** = 0.0014 **1/4"** = 0.0026 **5/16"** = 0.004 **3/8"** = 0.006 **1/2"** = 0.010 **5/8"** = 0.016

SAMPLING DATA

Sampled By/Affiliation:	Sampler(s) Signature:	Sampling Initiated:	Sampling Ended:
Leif Hazlewood	[signature]	1215	1241

Field Decontamination:	Field-Filtered:	Filter Size:	Filtration Equipment Type:	Duplicate:
(Y) N	Y N	µm		Y (N)

SAMPLE CONTAINER INFORMATION

Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Intended Analysis	Sampling Equipment Code
	2	AG	1 L	None	PAHs 8270C	PP
	2	AG	1 L	H_2SO_4	TRPH FL-PRO	PP
	1	PE	500 mL	None	Sulfate 300.0	PP
	3	CG	40 mL	HCl	BTEX & MTBE 8260B	RFPP

Remarks:

Field Kits: Fe^{++}: 5 H_2S: Sulfide: 0.4 CO_2: 50 DO: 0.3 A_T: 0

Material Codes: **AG** = Amber Glass **CG** = Clear Glass **PE** = Polyethylene **PP** = Polypropylene **S** = Silicone **T** = Teflon **O** = Other (Specify)

Sampling/Purging: **APP** = After Peristaltic Pump **B** = Bailer **BP** = Bladder Pump **ESP** = Electric Submersible Pump **PP** = Peristaltic Pump

Equipment Codes: **RFPP** = Reverse Flow Peristaltic Pump **SM** = Straw Method (Tubing Gravity Drain) **VT** = Vacuum Trap **O** = Other (Specify)

Stabilization criteria for range of variation of last three consecutive readings: **pH:** + 0.2 units **Temperature:** + 0.2°C **Specific Conductance:** + 5%
Dissolved Oxygen: all readings < 20% saturation; optionally, + 0.2 mg/L or + 10% (whichever is greater)
Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

SOLUTIONS-IES
GROUNDWATER SAMPLING LOG

Site Name: Building 46 - Cecil Field		**Site Location:** Jacksonville, Florida
Well Number: CEF-46-21I	**Sample ID:** CEF-046-21I	**Date:** 3/2/09

PURGING DATA

Well Diameter (inches):	Tubing Diameter (inches):	Tubing:	Static Depth to water (feet):	Purge Pump Type or Bailer:	Well Screen Interval Depth:
1 (2) 3 4	1/4 (3/8) 1/2	(LDPE) Teflon	11.38	Peristaltic Pump	feet to feet

Initial Pump or Tubing Depth in well:	Purging Initiated:	Purging Ended:	Total Volume Purged (Gallons):	Sample Pump Flow Rate (mL/min):
	1342	1400	0.8	170

Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate: (mL/min)	Depth to Water (feet)	pH (SU)	Temp (°C)	Cond (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU's)	ORP (m/v)	Color (describe)	Odor (describe)
1350	0.5	0.5		11.59	2.23	21.12	227	1.14	41.0	212.1	Clear	None
1353	0.1	0.6		11.59	2.33	21.13	227	0.95	34.2	209.7		
1356	0.1	0.7		11.59	2.32	21.24	228	0.86	32.9	207.5		
1359	0.1	0.8		11.59	2.39	21.36	228	0.81	29.4	206.1		

Well Capacity (Gallons/Foot): **0.75"** = 0.02 **1"** = 0.04 **1.25"** = 0.06 **2"** = 0.16 **3"** = 0.37 **4"** = 0.65 **5"** = 1.02 **6"** = 1.47 **12"** = 5.88

Tubing Inside Diameter Capacity (Gallons/Foot): **1/8"** = 0.0006 **3/16"** = 0.0014 **1/4"** = 0.0026 **5/16"** = 0.004 **3/8"** = 0.006 **1/2"** = 0.010 **5/8"** = 0.016

SAMPLING DATA

Sampled By/Affiliation:	Sampler(s) Signature:	Sampling Initiated:	Sampling Ended:
Leif Hardwood	[signature]	1400	1423

Field Decontamination:	Field-Filtered:	Filter Size:	Filtration Equipment Type:	Duplicate:
(Y) N	Y N	µm		Y (N)

SAMPLE CONTAINER INFORMATION

Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Intended Analysis	Sampling Equipment Code
	2	AG	1 L	None	PAHs 8270C	PP
	2	AG	1 L	H_2SO_4	TRPH FL-PRO	PP
	1	PE	500 mL	None	Sulfate 300.0	PP
	3	CG	40 mL	HCl	BTEX & MTBE 8260B	RFPP

Remarks: Changed Tubing in Well

Field Kits: Fe^{++}: 3 H_2S: Sulfate: 0.2 CO_2: 70 DO: 0.2 A_T: 0

Material Codes: **AG** = Amber Glass **CG** = Clear Glass **PE** = Polyethylene **PP** = Polypropylene **S** = Silicone **T** = Teflon **O** = Other (Specify)

Sampling/Purging: **APP** = After Peristaltic Pump **B** = Bailer **BP** = Bladder Pump **ESP** = Electric Submersible Pump **PP** = Peristaltic Pump

Equipment Codes: **RFPP** = Reverse Flow Peristaltic Pump **SM** = Straw Method (Tubing Gravity Drain) **VT** = Vacuum Trap **O** = Other (Specify)

Stabilization criteria for range of variation of last three consecutive readings: **pH:** + 0.2 units **Temperature:** + 0.2°C **Specific Conductance:** + 5%
Dissolved Oxygen: all readings < 20% saturation; optionally, + 0.2 mg/L or + 10% (whichever is greater)
Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

SOLUTIONS-IES
GROUNDWATER SAMPLING LOG

Site Name: Building 46 - Cecil Field		**Site Location:** Jacksonville, Florida
Well Number: CEF-46-24D	**Sample ID:** CEF-046-24D	**Date:** 3/2/09

PURGING DATA

Well Diameter (inches):	Tubing Diameter (inches):	Tubing:	Static Depth to water (feet):	Purge Pump Type or Bailer:	Well Screen Interval Depth:
1 (2) 3 4	1/4 (3/8) 1/2	(LDPE) Teflon	11.19	Peristaltic Pump	feet to feet

Initial Pump or Tubing Depth in well:	Purging Initiated:	Purging Ended:	Total Volume Purged (Gallons):	Sample Pump Flow Rate (mL/min):
2 ft off bottom	1200	1225	0.9	300

Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate: (mL/min)	Depth to Water (feet)	pH (SU)	Temp (°C)	Cond (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU's)	ORP (m/v)	Color (describe)	Odor (describe)
1210	0.3	0.3	250	1.27	2.94	22.23	1019	0.91	7.29	446.7	clear	none
1214	0.2	0.5	250	1.27	2.95	22.15	1017	0.79	6.93	445.7	clear	none
1218	0.1	0.6	200	1.26	2.95	21.74	1019	0.75	~~444.8~~	444.8	clear	none
~~12~~									5.81			
1222	0.2	0.8	200	1.26	2.97	21.57	1022	0.78	5.57	444.7	clear	none

Well Capacity (Gallons/Foot): **0.75"** = 0.02 **1"** = 0.04 **1.25"** = 0.06 **2"** = 0.16 **3"** = 0.37 **4"** = 0.65 **5"** = 1.02 **6"** = 1.47 **12"** = 5.88

Tubing Inside Diameter Capacity (Gallons/Foot): **1/8"** = 0.0006 **3/16"** = 0.0014 **1/4"** = 0.0026 **5/16"** = 0.004 **3/8"** = 0.006 **1/2"** = 0.010 **5/8"** = 0.016

SAMPLING DATA

Sampled By/Affiliation:	Sampler(s) Signature:	Sampling Initiated:	Sampling Ended:
Dawn Marshall	Dawn Marshall	1225	1305

Field Decontamination:	Field-Filtered:	Filter Size:	Filtration Equipment Type:	Duplicate:
(Y) N	Y (N)	µm		Y (N)

SAMPLE CONTAINER INFORMATION

Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Intended Analysis	Sampling Equipment Code
	2	AG	1 L	None	PAHs 8270C	PP
	2	AG	1 L	H_2SO_4	TRPH FL-PRO	PP
	1	PE	500 mL	None	Sulfate 300.0	PP
	3	CG	40 mL	HCl	BTEX & MTBE 8260B	RFPP

Remarks: Changed tubing

Field Kits: Fe^{++}: +10 H_2S: 0.0 CO_2: 250 DO: 0.4 A_T: 0.0

Material Codes: **AG** = Amber Glass **CG** = Clear Glass **PE** = Polyethylene **PP** = Polypropylene **S** = Silicone **T** = Teflon **O** = Other (Specify)

Sampling/Purging: **APP** = After Peristaltic Pump **B** = Bailer **BP** = Bladder Pump **ESP** = Electric Submersible Pump **PP** = Peristaltic Pump

Equipment Codes: **RFPP** = Reverse Flow Peristaltic Pump **SM** = Straw Method (Tubing Gravity Drain) **VT** = Vacuum Trap **O** = Other (Specify)

Stabilization criteria for range of variation of last three consecutive readings: **pH:** + 0.2 units **Temperature:** + 0.2°C **Specific Conductance:** + 5%
Dissolved Oxygen: all readings < 20% saturation; optionally, + 0.2 mg/L or + 10% (whichever is greater)
Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

SOLUTIONS-IES
GROUNDWATER SAMPLING LOG

Site Name: Building 46 - Cecil Field		**Site Location:** Jacksonville, Florida
Well Number: CEF-46-25I	**Sample ID:** CEF-046-25I	**Date:** 3/2/09

PURGING DATA

Well Diameter (inches):	Tubing Diameter (inches):	Tubing:	Static Depth to water (feet):	Purge Pump Type or Bailer:	Well Screen Interval Depth:
1 (2) 3 4	1/4 (3/8) 1/2	(LDPE) Teflon	11.48	Peristaltic Pump	feet to feet

Initial Pump or Tubing Depth in well:	Purging Initiated:	Purging Ended:	Total Volume Purged (Gallons):	Sample Pump Flow Rate (mL/min):
2' off bottom	1420	1438	1.1	240

Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate: (mL/min)	Depth to Water (feet)	pH (SU)	Temp (°C)	Cond (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU's)	ORP (m/v)	Color (describe)	Odor (describe)
1430	0.3	0.3	240	11.50	4.37	21.38	81	0.61	7.66	-58.8	clear	none
1433	0.2	0.5	240	11.50	4.36	21.62	79	0.73	7.47	-60.3	clear	none
1436	0.3	0.8	240	11.50	4.36	21.58	80	0.62	7.79	-77.0	clear	none

Well Capacity (Gallons/Foot): **0.75"** = 0.02 **1"** = 0.04 **1.25"** = 0.06 **2"** = 0.16 **3"** = 0.37 **4"** = 0.65 **5"** = 1.02 **6"** = 1.47 **12"** = 5.88

Tubing Inside Diameter Capacity (Gallons/Foot): **1/8"** = 0.0006 **3/16"** = 0.0014 **1/4"** = 0.0026 **5/16"** = 0.004 **3/8"** = 0.006 **1/2"** = 0.010 **5/8"** = 0.016

SAMPLING DATA

Sampled By/Affiliation:	Sampler(s) Signature:	Sampling Initiated:	Sampling Ended:
Dawn Marshall / Solutions-IES	Dawn Marshall	1440	1505

Field Decontamination:	Field-Filtered:	Filter Size:	Filtration Equipment Type:	Duplicate:
(Y) N	Y (N)	µm		Y (N)

SAMPLE CONTAINER INFORMATION

Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Intended Analysis	Sampling Equipment Code
	2	AG	1 L	None	PAHs 8270C	PP
	2	AG	1 L	H_2SO_4	TRPH FL-PRO	PP
	1	PE	500 mL	None	Sulfate 300.0	PP
	3	CG	40 mL	HCl	BTEX & MTBE 8260B	RFPP

Remarks: Purge broken - repurging (1.5 gallons 1st purge) (20 gallon 2nd purge)

Field Kits: Fe^{++}: 5.0 H_2S: 3.20 CO_2: 70 DO: 0.3 A_T: 0.0
sulfide = 2.0

Material Codes: **AG** = Amber Glass **CG** = Clear Glass **PE** = Polyethylene **PP** = Polypropylene **S** = Silicone **T** = Teflon **O** = Other (Specify)

Sampling/Purging: **APP** = After Peristaltic Pump **B** = Bailer **BP** = Bladder Pump **ESP** = Electric Submersible Pump **PP** = Peristaltic Pump

Equipment Codes: **RFPP** = Reverse Flow Peristaltic Pump **SM** = Straw Method (Tubing Gravity Drain) **VT** = Vacuum Trap **O** = Other (Specify)

Stabilization criteria for range of variation of last three consecutive readings: **pH:** + 0.2 units **Temperature:** + 0.2°C **Specific Conductance:** + 5%
Dissolved Oxygen: all readings < 20% saturation; optionally, + 0.2 mg/L or + 10% (whichever is greater)
Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

SOLUTIONS-IES
GROUNDWATER SAMPLING LOG

Site Name: Building 46 - Cecil Field	**Site Location:** Jacksonville, Florida
Well Number: CEF-46-26I	**Sample ID:** CEF-046-26I **Date:** 3-2-09

PURGING DATA

Well Diameter (inches):	Tubing Diameter (inches):	Tubing:	Static Depth to water (feet):	Purge Pump Type or Bailer:	Well Screen Interval Depth:
1 (2) 3 4	1/4 (3/8) 1/2	(LDPE) Teflon	12.25	Peristaltic Pump	feet to feet

Initial Pump or Tubing Depth in well:	Purging Initiated:	Purging Ended:	Total Volume Purged (Gallons):	Sample Pump Flow Rate (mL/min):
	13:25	13:40	0.6	250

Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate: (mL/min)	Depth to Water (feet)	pH (SU)	Temp (°C)	Cond (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU's)	ORP (m/v)	Color (describe)	Odor (describe)
1330	.2	.2	250	12.25	3.64	22.26	595	1.41	4.65	128.6	clear	none
1335	.2	.4	250	12.26	3.69	22.66	586	0.52	3.06	100.5	clear	none
1340	.2	.6	250	12.26	3.69	22.83	584	0.27	2.84	123.9	clear	none

Well Capacity (Gallons/Foot): **0.75"** = 0.02 **1"** = 0.04 **1.25"** = 0.06 **2"** = 0.16 **3"** = 0.37 **4"** = 0.65 **5"** = 1.02 **6"** = 1.47 **12"** = 5.88

Tubing Inside Diameter Capacity (Gallons/Foot): **1/8"** = 0.0006 **3/16"** = 0.0014 **1/4"** = 0.0026 **5/16"** = 0.004 **3/8"** = 0.006 **1/2"** = 0.010 **5/8"** = 0.016

SAMPLING DATA

Sampled By/Affiliation:	Sampler(s) Signature:	Sampling Initiated:	Sampling Ended:
Sean Jarvah	Sean Jarvah	13:40	1410

Field Decontamination:	Field-Filtered:	Filter Size:	Filtration Equipment Type:	Duplicate:
(Y) N	Y (N)	— µm	—	Y (N)

SAMPLE CONTAINER INFORMATION

Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Intended Analysis	Sampling Equipment Code
	2	AG	1 L	None	PAHs 8270C	PP
	2	AG	1 L	H_2SO_4	TRPH FL-PRO	PP
	1	PE	500 mL	None	Sulfate 300.0	PP
	3	CG	40 mL	HCl	BTEX & MTBE 8260B	RFPP

Remarks: 0.75 tot. gal purged

Field Kits: Fe^{++}: >10 H_2S: 1.06 CO_2: 160 DO: 0.2 A_T: 0.0
Surf: d = 1.0

Material Codes: **AG** = Amber Glass **CG** = Clear Glass **PE** = Polyethylene **PP** = Polypropylene **S** = Silicone **T** = Teflon **O** = Other (Specify)

Sampling/Purging: **APP** = After Peristaltic Pump **B** = Bailer **BP** = Bladder Pump **ESP** = Electric Submersible Pump **PP** = Peristaltic Pump

Equipment Codes: **RFPP** = Reverse Flow Peristaltic Pump **SM** = Straw Method (Tubing Gravity Drain) **VT** = Vacuum Trap **O** = Other (Specify)

Stabilization criteria for range of variation of last three consecutive readings: **pH:** + 0.2 units **Temperature:** + 0.2°C **Specific Conductance:** + 5%
Dissolved Oxygen: all readings < 20% saturation; optionally, + 0.2 mg/L or + 10% (whichever is greater)
Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

SOLUTIONS-IES
GROUNDWATER SAMPLING LOG

Site Name: Building 46 - Cecil Field		**Site Location:** Jacksonville, Florida
Well Number: CEF-46-25I	**Sample ID:** CEF-046-25I	**Date:** 3/2/09

PURGING DATA

Well Diameter (inches):	**Tubing Diameter (inches):**	**Tubing:**	**Static Depth to water (feet):**	**Purge Pump Type or Bailer:**	**Well Screen Interval Depth:**
1 (2) 3 4	1/4 (3/8) 1/2	(LDPE) Teflon	11.48	Peristaltic Pump	feet to feet

Initial Pump or Tubing Depth in well:	**Purging Initiated:**	**Purging Ended:**	**Total Volume Purged (Gallons):**	**Sample Pump Flow Rate (mL/min):**
2' off bottom	1340	1400 ~~0.9~~	0.9	240

Time	Volume Purged (gallons)	Cumulative Volume Purged (gallons)	Purge Rate: (mL/min)	Depth to Water (feet)	pH (SU)	Temp (°C)	Cond (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU's)	ORP (m/v)	Color (describe)	Odor (describe)
1350	0.3	0.3	240	11.50	4.22	21.31	79	0.73	11.2	-89.8	clear	none
1356	0.3	0.6	240	11.50	4.27	21.31	81	0.77	10.95	-97.6	clear	none
1400	0.2	0.8	240	11.50	4.30	21.38	81	0.71	9.33	-102.5	clear	none

Well Capacity (Gallons/Foot): **0.75"** = 0.02 **1"** = 0.04 **1.25"** = 0.06 **2"** = 0.16 **3"** = 0.37 **4"** = 0.65 **5"** = 1.02 **6"** = 1.47 **12"** = 5.88

Tubing Inside Diameter Capacity (Gallons/Foot): **1/8"** = 0.0006 **3/16"** = 0.0014 **1/4"** = 0.0026 **5/16"** = 0.004 **3/8"** = 0.006 **1/2"** = 0.010 **5/8"** = 0.016

SAMPLING DATA

Sampled By/Affiliation:	**Sampler(s) Signature:**	**Sampling Initiated:**	**Sampling Ended:**
Dawn Marshall	Dawn Marshall	1405	

Field Decontamination:	**Field-Filtered:**	**Filter Size:**	**Filtration Equipment Type:**	**Duplicate:**
(Y) N	Y (N)	µm		Y (N)

SAMPLE CONTAINER INFORMATION

Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Intended Analysis	Sampling Equipment Code
	2	AG	1 L	None	PAHs 8270C	PP
	2	AG	1 L	H_2SO_4	TRPH FL-PRO	PP
	1	PE	500 mL	None	Sulfate 300.0	PP
	3	CG	40 mL	HCl	BTEX & MTBE 8260B	RFPP

Remarks: Purge broke during sampling 1st (unpreserved) bottle

Field Kits: Fe^{++}: 0 H_2S: CO_2: 0 DO: A_T:

Material Codes: **AG** = Amber Glass **CG** = Clear Glass **PE** = Polyethylene **PP** = Polypropylene **S** = Silicone **T** = Teflon **O** = Other (Specify)

Sampling/Purging: **APP** = After Peristaltic Pump **B** = Bailer **BP** = Bladder Pump **ESP** = Electric Submersible Pump **PP** = Peristaltic Pump

Equipment Codes: **RFPP** = Reverse Flow Peristaltic Pump **SM** = Straw Method (Tubing Gravity Drain) **VT** = Vacuum Trap **O** = Other (Specify)

Stabilization criteria for range of variation of last three consecutive readings: **pH:** + 0.2 units **Temperature:** + 0.2°C **Specific Conductance:** + 5%
Dissolved Oxygen: all readings < 20% saturation; optionally, + 0.2 mg/L or + 10% (whichever is greater)
Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

APPENDIX B

LABORATORY ANALYTICAL REPORT AND CHAIN-OF-CUSTODY FORM

Southeast ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

04/30/09

Technical Report for

Solutions-IES, Inc

Cecil Field -Bldg 46; Jacksonville, FL

4080.08A2

Accutest Job Number: F63668

Sampling Date: 03/02/09

Report to:

Solutions-IES, Inc

jdehart@solutions-ies.com

ATTN: Jessica Dehart

Total number of pages in report: 72

ACCREDITED IN ACCORDANCE WITH nelac

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

Harry Behzadi, Ph.D.
Laboratory Director

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Sample Summary

Solutions-IES, Inc

Job No: F63668

Cecil Field -Bldg 46; Jacksonville, FL
Project No: 4080.08A2

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F63668-1	03/02/09	13:10	JD	03/03/09	AQ	Ground Water	CEF-046-01S
F63668-2	03/02/09	10:50	JD	03/03/09	AQ	Ground Water	CEF-046-02S
F63668-3	03/02/09	14:42	JD	03/03/09	AQ	Ground Water	CEF-046-05I
F63668-4	03/02/09	14:50	JD	03/03/09	AQ	Ground Water	CEF-046-06D
F63668-5	03/02/09	10:55	JD	03/03/09	AQ	Ground Water	CEF-046-07I
F63668-6	03/02/09	10:55	JD	03/03/09	AQ	Ground Water	CEF-046-09I
F63668-7	03/02/09	10:45	JD	03/03/09	AQ	Ground Water	CEF-046-12I
F63668-8	03/02/09	11:35	JD	03/03/09	AQ	Ground Water	CEF-046-13I
F63668-9	03/02/09	12:35	JD	03/03/09	AQ	Ground Water	CEF-046-14D
F63668-10	03/02/09	12:15	JD	03/03/09	AQ	Ground Water	CEF-046-15I
F63668-11	03/02/09	14:00	JD	03/03/09	AQ	Ground Water	CEF-046-21I
F63668-12	03/02/09	12:25	JD	03/03/09	AQ	Ground Water	CEF-046-24D
F63668-13	03/02/09	14:40	JD	03/03/09	AQ	Ground Water	CEF-046-25I

Sample Summary
(continued)

Solutions-IES, Inc

Job No: F63668

Cecil Field -Bldg 46; Jacksonville, FL
Project No: 4080.08A2

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F63668-14	03/02/09	13:40	JD	03/03/09	AQ	Ground Water	CEF-046-26I
F63668-15	03/02/09	15:20	JD	03/03/09	AQ	Field Blank Water	FIELD BLANK
F63668-16	03/02/09	00:00	JD	03/03/09	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Solutions-IES, Inc **Job No:** F63668

Site: Cecil Field -Bldg 46; Jacksonville, FL **Report Date** 3/16/2009 12:36:37

14 Samples, 1 Trip Blank and 1 Field Blank were collected on 03/02/2009 and received at Accutest on 03/03/2009 properly preserved, at 2.4 Deg. C and intact. These Samples received an Accutest job number of F63668. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VF883

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) F63679-2MS, F63679-2MSD were used as the QC samples indicated.

Matrix Spike Duplicate Recovery(s) for Xylene (total) are outside control limits. Probable cause due to matrix interference.

RPD(s) for MSD for Ethylbenzene, Xylene (total) are outside control limits for sample F63679-2MSD. Probable cause due to sample homogeneity.

Matrix: AQ **Batch ID:** VM1368

All samples were analyzed within the recommended method holding time.

Sample(s) F63668-1MS, F63668-1MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

F63668-1: Confirmation run.

Matrix: AQ **Batch ID:** VM1369

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) F63603-1MS, F63603-1MSD were used as the QC samples indicated.

MS/MSD Recovery(s) for Xylene (total) are outside control limits. Outside control limits due to high level in sample relative to spike amount. See Blank Spike for method performance in clean matrix.

F63668-1: Sample was treated with an anti-foaming agent.

Matrix: AQ **Batch ID:** VN1370

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) F63630-2MS, F63630-2MSD were used as the QC samples indicated.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix: AQ **Batch ID:** OP28241

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) F63668-14MS, F63668-14MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Sample(s) F63668-1 have surrogates outside control limits. Probable cause due to matrix interference.

F63668-1: Confirmed by re-extraction and reanalysis beyond holdtime. Sample results indicate possible sample nonhomogeneity.

F63668-1 for Terphenyl-d14: Confirmed by re-extraction and reanalysis beyond holdtime.

Matrix: AQ **Batch ID:** OP28306

The following samples were extracted outside of holding time for method SW846 8270C BY SIM: F63668-1

Sample(s) F63668-1 have surrogates outside control limits. Probable cause due to matrix interference.

F63668-1: Confirmation run.

Extractables by GC By Method FLORIDA-PRO

Matrix: AQ **Batch ID:** OP28239

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) F63667-3MS, F63667-3MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** OP28246

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) F63676-12MS, F63676-12MSD were used as the QC samples indicated.

Matrix Spike Duplicate Recovery(s) for TPH (C8-C40) are outside control limits. Probable cause due to matrix interference.

Wet Chemistry By Method EPA 300/SW846 9056

Matrix: AQ **Batch ID:** GP12591

All samples were prepared within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) F63668-1DUP, F63668-5DUP, F63668-1MS, F63668-5MS were used as the QC samples for Sulfate.

Matrix Spike Recovery(s) for Sulfate are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

_____ Date: March 16, 2009

Svetlana Izosimova, QAO (signature on file)

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	CEF-046-01S		
Lab Sample ID:	F63668-1	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	M0033500.D	1	03/05/09	MM	n/a	n/a	VM1369
Run #2 [b]	M0033486.D	5	03/04/09	MM	n/a	n/a	VM1368

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	3.2	1.0	0.40	ug/l	
108-88-3	Toluene	0.39	1.0	0.35	ug/l	I
100-41-4	Ethylbenzene	63.1	1.0	0.43	ug/l	
1330-20-7	Xylene (total)	19.5	3.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	87.3	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%	104%	87-116%
17060-07-0	1,2-Dichloroethane-D4	94%	94%	76-127%
2037-26-5	Toluene-D8	95%	97%	86-112%
460-00-4	4-Bromofluorobenzene	92%	93%	84-120%

(a) Sample was treated with an anti-foaming agent.
(b) Confirmation run.

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-01S		
Lab Sample ID:	F63668-1	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	W044918.D	10	03/04/09	RB	03/04/09	OP28241	SW2283
Run #2 [b]	W045051.D	10	03/12/09	NAF	03/10/09	OP28306	SW2289

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2	1030 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	4.9 U	9.7	4.9	ug/l	
208-96-8	Acenaphthylene	4.9 U	9.7	4.9	ug/l	
120-12-7	Anthracene	4.9 U	9.7	4.9	ug/l	
56-55-3	Benzo(a)anthracene	0.49 U	1.9	0.49	ug/l	
50-32-8	Benzo(a)pyrene	0.49 U	1.9	0.49	ug/l	
205-99-2	Benzo(b)fluoranthene	0.49 U	1.9	0.49	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.49 U	1.9	0.49	ug/l	
207-08-9	Benzo(k)fluoranthene	0.49 U	1.9	0.49	ug/l	
218-01-9	Chrysene	0.97 U	1.9	0.97	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.49 U	1.9	0.49	ug/l	
206-44-0	Fluoranthene	2.4 U	9.7	2.4	ug/l	
86-73-7	Fluorene	4.9 U	9.7	4.9	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.49 U	1.9	0.49	ug/l	
90-12-0	1-Methylnaphthalene	26.5	9.7	2.4	ug/l	
91-57-6	2-Methylnaphthalene	25.7	9.7	2.4	ug/l	
91-20-3	Naphthalene	117	9.7	2.4	ug/l	
85-01-8	Phenanthrene	2.4 U	9.7	2.4	ug/l	
129-00-0	Pyrene	2.4 U	9.7	2.4	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	60%	66%	42-108%
321-60-8	2-Fluorobiphenyl	51%	58%	40-106%
1718-51-0	Terphenyl-d14	37% [c]	42%	39-121%

(a) Confirmed by re-extraction and reanalysis beyond holdtime. Sample results indicate possible sample nonhomogeneity.
(b) Confirmation run.
(c) Confirmed by re-extraction and reanalysis beyond holdtime.

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range
I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-01S		
Lab Sample ID:	F63668-1	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	FLORIDA-PRO SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ55671.D	5	03/04/09	SL	03/03/09	OP28239	GIJ1950
Run #2							

	Initial Volume	Final Volume
Run #1	1010 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	11.1	1.2	0.84	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		38-122%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-01S		
Lab Sample ID:	F63668-1	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
		Percent Solids:	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Sulfate	192	10	5.0	mg/l	5	03/04/09 21:32	CC	EPA 300/SW846 9056

RL = Reporting Limit = PQL
MDL = Method Detection Limit

U = Indicates a result < MDL
I = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	CEF-046-02S		
Lab Sample ID:	F63668-2	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0033477.D	1	03/04/09	MM	n/a	n/a	VM1368
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.40 U	1.0	0.40	ug/l	
108-88-3	Toluene	0.35 U	1.0	0.35	ug/l	
100-41-4	Ethylbenzene	0.43 U	1.0	0.43	ug/l	
1330-20-7	Xylene (total)	1.2 U	3.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.26 U	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		87-116%
17060-07-0	1,2-Dichloroethane-D4	107%		76-127%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-02S		
Lab Sample ID:	F63668-2	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W044915.D	1	03/04/09	RB	03/04/09	OP28241	SW2283
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.96	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.96	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.96	0.48	ug/l	
56-55-3	Benzo(a)anthracene	0.048 U	0.19	0.048	ug/l	
50-32-8	Benzo(a)pyrene	0.048 U	0.19	0.048	ug/l	
205-99-2	Benzo(b)fluoranthene	0.048 U	0.19	0.048	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.048 U	0.19	0.048	ug/l	
207-08-9	Benzo(k)fluoranthene	0.048 U	0.19	0.048	ug/l	
218-01-9	Chrysene	0.096 U	0.19	0.096	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.048 U	0.19	0.048	ug/l	
206-44-0	Fluoranthene	0.24 U	0.96	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.96	0.48	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.048 U	0.19	0.048	ug/l	
90-12-0	1-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.96	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.96	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.96	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	60%		42-108%
321-60-8	2-Fluorobiphenyl	58%		40-106%
1718-51-0	Terphenyl-d14	72%		39-121%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-02S		
Lab Sample ID:	F63668-2	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	FLORIDA-PRO SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ55672.D	1	03/04/09	SL	03/03/09	OP28239	GIJ1950
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.17 U	0.24	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		38-122%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-02S		
Lab Sample ID:	F63668-2	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
		Percent Solids:	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Sulfate	170	10	5.0	mg/l	5	03/04/09 22:25	CC	EPA 300/SW846 9056

RL = Reporting Limit = PQL
MDL = Method Detection Limit

U = Indicates a result < MDL
I = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	CEF-046-05I		
Lab Sample ID:	F63668-3	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0033497.D	1	03/05/09	MM	n/a	n/a	VM1369
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.40 U	1.0	0.40	ug/l	
108-88-3	Toluene	0.35 U	1.0	0.35	ug/l	
100-41-4	Ethylbenzene	0.43 U	1.0	0.43	ug/l	
1330-20-7	Xylene (total)	1.2 U	3.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.26 U	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		87-116%
17060-07-0	1,2-Dichloroethane-D4	96%		76-127%
2037-26-5	Toluene-D8	96%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-05I		
Lab Sample ID:	F63668-3	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W044917.D	1	03/04/09	RB	03/04/09	OP28241	SW2283
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.96	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.96	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.96	0.48	ug/l	
56-55-3	Benzo(a)anthracene	0.048 U	0.19	0.048	ug/l	
50-32-8	Benzo(a)pyrene	0.048 U	0.19	0.048	ug/l	
205-99-2	Benzo(b)fluoranthene	0.048 U	0.19	0.048	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.048 U	0.19	0.048	ug/l	
207-08-9	Benzo(k)fluoranthene	0.048 U	0.19	0.048	ug/l	
218-01-9	Chrysene	0.096 U	0.19	0.096	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.048 U	0.19	0.048	ug/l	
206-44-0	Fluoranthene	0.24 U	0.96	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.96	0.48	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.048 U	0.19	0.048	ug/l	
90-12-0	1-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.96	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.96	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.96	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	67%		42-108%
321-60-8	2-Fluorobiphenyl	61%		40-106%
1718-51-0	Terphenyl-d14	46%		39-121%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-05I		
Lab Sample ID:	F63668-3	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	FLORIDA-PRO SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ55675.D	1	03/04/09	SL	03/03/09	OP28239	GIJ1950
Run #2							

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.17 U	0.25	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		38-122%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-05I		
Lab Sample ID:	F63668-3	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
		Percent Solids:	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Sulfate	503	20	10	mg/l	10	03/04/09 22:42	CC	EPA 300/SW846 9056

RL = Reporting Limit = PQL
MDL = Method Detection Limit

U = Indicates a result < MDL
I = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	CEF-046-06D		
Lab Sample ID:	F63668-4	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0033478.D	1	03/04/09	MM	n/a	n/a	VM1368
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.40 U	1.0	0.40	ug/l	
108-88-3	Toluene	0.35 U	1.0	0.35	ug/l	
100-41-4	Ethylbenzene	0.43 U	1.0	0.43	ug/l	
1330-20-7	Xylene (total)	1.2 U	3.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.26 U	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		87-116%
17060-07-0	1,2-Dichloroethane-D4	104%		76-127%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	104%		84-120%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-06D		
Lab Sample ID:	F63668-4	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W044919.D	1	03/04/09	RB	03/04/09	OP28241	SW2283
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.96	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.96	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.96	0.48	ug/l	
56-55-3	Benzo(a)anthracene	0.048 U	0.19	0.048	ug/l	
50-32-8	Benzo(a)pyrene	0.048 U	0.19	0.048	ug/l	
205-99-2	Benzo(b)fluoranthene	0.048 U	0.19	0.048	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.048 U	0.19	0.048	ug/l	
207-08-9	Benzo(k)fluoranthene	0.048 U	0.19	0.048	ug/l	
218-01-9	Chrysene	0.096 U	0.19	0.096	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.048 U	0.19	0.048	ug/l	
206-44-0	Fluoranthene	0.24 U	0.96	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.96	0.48	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.048 U	0.19	0.048	ug/l	
90-12-0	1-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.96	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.96	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.96	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	65%		42-108%
321-60-8	2-Fluorobiphenyl	62%		40-106%
1718-51-0	Terphenyl-d14	70%		39-121%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-06D		
Lab Sample ID:	F63668-4	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	FLORIDA-PRO SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ55676.D	1	03/04/09	SL	03/03/09	OP28239	GIJ1950
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.235	0.25	0.17	mg/l	I

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	76%		38-122%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-06D		
Lab Sample ID:	F63668-4	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
		Percent Solids:	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Sulfate	13500	400	200	mg/l	200	03/06/09 04:23	CC	EPA 300/SW846 9056

RL = Reporting Limit = PQL
MDL = Method Detection Limit

U = Indicates a result < MDL
I = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	CEF-046-07I		
Lab Sample ID:	F63668-5	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0033479.D	1	03/04/09	MM	n/a	n/a	VM1368
Run #2	M0033501.D	5	03/05/09	MM	n/a	n/a	VM1369

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.8	1.0	0.40	ug/l	
108-88-3	Toluene	0.35 U	1.0	0.35	ug/l	
100-41-4	Ethylbenzene	0.43 U	1.0	0.43	ug/l	
1330-20-7	Xylene (total)	1.2 U	3.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	306 [a]	5.0	1.3	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	112%	87-116%
17060-07-0	1,2-Dichloroethane-D4	99%	105%	76-127%
2037-26-5	Toluene-D8	98%	96%	86-112%
460-00-4	4-Bromofluorobenzene	100%	100%	84-120%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-07I		
Lab Sample ID:	F63668-5	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W044920.D	1	03/04/09	RB	03/04/09	OP28241	SW2283
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.49 U	0.97	0.49	ug/l	
208-96-8	Acenaphthylene	0.49 U	0.97	0.49	ug/l	
120-12-7	Anthracene	0.49 U	0.97	0.49	ug/l	
56-55-3	Benzo(a)anthracene	0.049 U	0.19	0.049	ug/l	
50-32-8	Benzo(a)pyrene	0.049 U	0.19	0.049	ug/l	
205-99-2	Benzo(b)fluoranthene	0.049 U	0.19	0.049	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.049 U	0.19	0.049	ug/l	
207-08-9	Benzo(k)fluoranthene	0.049 U	0.19	0.049	ug/l	
218-01-9	Chrysene	0.097 U	0.19	0.097	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.049 U	0.19	0.049	ug/l	
206-44-0	Fluoranthene	0.24 U	0.97	0.24	ug/l	
86-73-7	Fluorene	0.49 U	0.97	0.49	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.049 U	0.19	0.049	ug/l	
90-12-0	1-Methylnaphthalene	0.24 U	0.97	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.97	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.97	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.97	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.97	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	72%		42-108%
321-60-8	2-Fluorobiphenyl	68%		40-106%
1718-51-0	Terphenyl-d14	67%		39-121%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-07I		
Lab Sample ID:	F63668-5	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	FLORIDA-PRO SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ55677.D	1	03/04/09	SL	03/03/09	OP28239	GIJ1950
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.16 U	0.24	0.16	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		38-122%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-07I		
Lab Sample ID:	F63668-5	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
		Percent Solids:	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Sulfate	116	4.0	2.0	mg/l	2	03/04/09 23:17	CC	EPA 300/SW846 9056

RL = Reporting Limit = PQL
MDL = Method Detection Limit

U = Indicates a result < MDL
I = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	CEF-046-09I		
Lab Sample ID:	F63668-6	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0033480.D	1	03/04/09	MM	n/a	n/a	VM1368
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.40 U	1.0	0.40	ug/l	
108-88-3	Toluene	0.35 U	1.0	0.35	ug/l	
100-41-4	Ethylbenzene	0.43 U	1.0	0.43	ug/l	
1330-20-7	Xylene (total)	1.2 U	3.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.26 U	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		87-116%
17060-07-0	1,2-Dichloroethane-D4	96%		76-127%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	101%		84-120%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-09I		
Lab Sample ID:	F63668-6	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W044921.D	1	03/04/09	RB	03/04/09	OP28241	SW2283
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.96	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.96	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.96	0.48	ug/l	
56-55-3	Benzo(a)anthracene	0.048 U	0.19	0.048	ug/l	
50-32-8	Benzo(a)pyrene	0.048 U	0.19	0.048	ug/l	
205-99-2	Benzo(b)fluoranthene	0.048 U	0.19	0.048	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.048 U	0.19	0.048	ug/l	
207-08-9	Benzo(k)fluoranthene	0.048 U	0.19	0.048	ug/l	
218-01-9	Chrysene	0.096 U	0.19	0.096	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.048 U	0.19	0.048	ug/l	
206-44-0	Fluoranthene	0.24 U	0.96	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.96	0.48	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.048 U	0.19	0.048	ug/l	
90-12-0	1-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.96	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.96	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.96	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	66%		42-108%
321-60-8	2-Fluorobiphenyl	69%		40-106%
1718-51-0	Terphenyl-d14	76%		39-121%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-09I		
Lab Sample ID:	F63668-6	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	FLORIDA-PRO SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ55678.D	1	03/04/09	SL	03/03/09	OP28239	GIJ1950
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.205	0.24	0.16	mg/l	I

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		38-122%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-09I		
Lab Sample ID:	F63668-6	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
		Percent Solids:	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Sulfate	27.8	2.0	1.0	mg/l	1	03/03/09 16:33	CC	EPA 300/SW846 9056

RL = Reporting Limit = PQL
MDL = Method Detection Limit

U = Indicates a result < MDL
I = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	CEF-046-12I		
Lab Sample ID:	F63668-7	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0033481.D	1	03/04/09	MM	n/a	n/a	VM1368
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.40 U	1.0	0.40	ug/l	
108-88-3	Toluene	0.35 U	1.0	0.35	ug/l	
100-41-4	Ethylbenzene	0.43 U	1.0	0.43	ug/l	
1330-20-7	Xylene (total)	1.2 U	3.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.26 U	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		87-116%
17060-07-0	1,2-Dichloroethane-D4	95%		76-127%
2037-26-5	Toluene-D8	99%		86-112%
460-00-4	4-Bromofluorobenzene	97%		84-120%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-12I		
Lab Sample ID:	F63668-7	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W044922.D	1	03/04/09	RB	03/04/09	OP28241	SW2283
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.96	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.96	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.96	0.48	ug/l	
56-55-3	Benzo(a)anthracene	0.048 U	0.19	0.048	ug/l	
50-32-8	Benzo(a)pyrene	0.048 U	0.19	0.048	ug/l	
205-99-2	Benzo(b)fluoranthene	0.048 U	0.19	0.048	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.048 U	0.19	0.048	ug/l	
207-08-9	Benzo(k)fluoranthene	0.048 U	0.19	0.048	ug/l	
218-01-9	Chrysene	0.096 U	0.19	0.096	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.048 U	0.19	0.048	ug/l	
206-44-0	Fluoranthene	0.24 U	0.96	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.96	0.48	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.048 U	0.19	0.048	ug/l	
90-12-0	1-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.96	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.96	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.96	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	69%		42-108%
321-60-8	2-Fluorobiphenyl	67%		40-106%
1718-51-0	Terphenyl-d14	80%		39-121%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-12I		
Lab Sample ID:	F63668-7	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	FLORIDA-PRO SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ55679.D	1	03/04/09	SL	03/03/09	OP28239	GIJ1950
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.206	0.25	0.17	mg/l	I

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	97%		38-122%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-12I		
Lab Sample ID:	F63668-7	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
		Percent Solids:	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Sulfate	41.4	2.0	1.0	mg/l	1	03/03/09 17:26	CC	EPA 300/SW846 9056

RL = Reporting Limit = PQL
MDL = Method Detection Limit

U = Indicates a result < MDL
I = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	CEF-046-13I		
Lab Sample ID:	F63668-8	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0033482.D	1	03/04/09	MM	n/a	n/a	VM1368
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.40 U	1.0	0.40	ug/l	
108-88-3	Toluene	0.35 U	1.0	0.35	ug/l	
100-41-4	Ethylbenzene	0.43 U	1.0	0.43	ug/l	
1330-20-7	Xylene (total)	1.2 U	3.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.26 U	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		87-116%
17060-07-0	1,2-Dichloroethane-D4	95%		76-127%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	101%		84-120%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-13I		
Lab Sample ID:	F63668-8	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W044923.D	1	03/04/09	RB	03/04/09	OP28241	SW2283
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.96	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.96	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.96	0.48	ug/l	
56-55-3	Benzo(a)anthracene	0.048 U	0.19	0.048	ug/l	
50-32-8	Benzo(a)pyrene	0.048 U	0.19	0.048	ug/l	
205-99-2	Benzo(b)fluoranthene	0.048 U	0.19	0.048	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.048 U	0.19	0.048	ug/l	
207-08-9	Benzo(k)fluoranthene	0.048 U	0.19	0.048	ug/l	
218-01-9	Chrysene	0.096 U	0.19	0.096	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.048 U	0.19	0.048	ug/l	
206-44-0	Fluoranthene	0.24 U	0.96	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.96	0.48	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.048 U	0.19	0.048	ug/l	
90-12-0	1-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.96	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.96	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.96	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		42-108%
321-60-8	2-Fluorobiphenyl	67%		40-106%
1718-51-0	Terphenyl-d14	77%		39-121%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-13I		
Lab Sample ID:	F63668-8	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	FLORIDA-PRO SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ55680.D	1	03/04/09	SL	03/03/09	OP28239	GIJ1950
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.213	0.24	0.16	mg/l	I

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		38-122%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-13I		
Lab Sample ID:	F63668-8	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
		Percent Solids:	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Sulfate	24.5	2.0	1.0	mg/l	1	03/03/09 17:43	CC	EPA 300/SW846 9056

RL = Reporting Limit = PQL
MDL = Method Detection Limit

U = Indicates a result < MDL
I = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	CEF-046-14D		
Lab Sample ID:	F63668-9	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0033485.D	1	03/04/09	MM	n/a	n/a	VM1368
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.40 U	1.0	0.40	ug/l	
108-88-3	Toluene	0.35 U	1.0	0.35	ug/l	
100-41-4	Ethylbenzene	0.43 U	1.0	0.43	ug/l	
1330-20-7	Xylene (total)	1.2 U	3.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.0	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		87-116%
17060-07-0	1,2-Dichloroethane-D4	97%		76-127%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	100%		84-120%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-14D		
Lab Sample ID:	F63668-9	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W044924.D	1	03/04/09	RB	03/04/09	OP28241	SW2283
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.96	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.96	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.96	0.48	ug/l	
56-55-3	Benzo(a)anthracene	0.048 U	0.19	0.048	ug/l	
50-32-8	Benzo(a)pyrene	0.048 U	0.19	0.048	ug/l	
205-99-2	Benzo(b)fluoranthene	0.048 U	0.19	0.048	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.048 U	0.19	0.048	ug/l	
207-08-9	Benzo(k)fluoranthene	0.048 U	0.19	0.048	ug/l	
218-01-9	Chrysene	0.096 U	0.19	0.096	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.048 U	0.19	0.048	ug/l	
206-44-0	Fluoranthene	0.24 U	0.96	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.96	0.48	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.048 U	0.19	0.048	ug/l	
90-12-0	1-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.96	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.96	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.96	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	63%		42-108%
321-60-8	2-Fluorobiphenyl	54%		40-106%
1718-51-0	Terphenyl-d14	75%		39-121%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-14D		
Lab Sample ID:	F63668-9	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	FLORIDA-PRO SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ55681.D	1	03/04/09	SL	03/03/09	OP28239	GIJ1950
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.17 U	0.25	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	84%		38-122%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-14D		
Lab Sample ID:	F63668-9	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
		Percent Solids:	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Sulfate	3.7	2.0	1.0	mg/l	1	03/03/09 18:01	CC	EPA 300/SW846 9056

RL = Reporting Limit = PQL
MDL = Method Detection Limit

U = Indicates a result < MDL
I = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	CEF-046-15I		
Lab Sample ID:	F63668-10	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0341221.D	1	03/04/09	LD	n/a	n/a	VF883
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.40 U	1.0	0.40	ug/l	
108-88-3	Toluene	0.35 U	1.0	0.35	ug/l	
100-41-4	Ethylbenzene	0.43 U	1.0	0.43	ug/l	
1330-20-7	Xylene (total)	1.2 U	3.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.26 U	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		87-116%
17060-07-0	1,2-Dichloroethane-D4	97%		76-127%
2037-26-5	Toluene-D8	103%		86-112%
460-00-4	4-Bromofluorobenzene	101%		84-120%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-15I		
Lab Sample ID:	F63668-10	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W044925.D	1	03/04/09	RB	03/04/09	OP28241	SW2283
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.96	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.96	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.96	0.48	ug/l	
56-55-3	Benzo(a)anthracene	0.048 U	0.19	0.048	ug/l	
50-32-8	Benzo(a)pyrene	0.048 U	0.19	0.048	ug/l	
205-99-2	Benzo(b)fluoranthene	0.048 U	0.19	0.048	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.048 U	0.19	0.048	ug/l	
207-08-9	Benzo(k)fluoranthene	0.048 U	0.19	0.048	ug/l	
218-01-9	Chrysene	0.096 U	0.19	0.096	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.048 U	0.19	0.048	ug/l	
206-44-0	Fluoranthene	0.24 U	0.96	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.96	0.48	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.048 U	0.19	0.048	ug/l	
90-12-0	1-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.96	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.96	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.96	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	67%		42-108%
321-60-8	2-Fluorobiphenyl	63%		40-106%
1718-51-0	Terphenyl-d14	81%		39-121%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-15I		
Lab Sample ID:	F63668-10	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	FLORIDA-PRO SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ55682.D	1	03/04/09	SL	03/03/09	OP28239	GIJ1950
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.16 U	0.24	0.16	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		38-122%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-15I		
Lab Sample ID:	F63668-10	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
		Percent Solids:	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Sulfate	26.5	2.0	1.0	mg/l	1	03/03/09 18:18	CC	EPA 300/SW846 9056

RL = Reporting Limit = PQL
MDL = Method Detection Limit

U = Indicates a result < MDL
I = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	CEF-046-21I		
Lab Sample ID:	F63668-11	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0033403.D	1	03/04/09	MM	n/a	n/a	VN1370
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.40 U	1.0	0.40	ug/l	
108-88-3	Toluene	0.35 U	1.0	0.35	ug/l	
100-41-4	Ethylbenzene	0.43 U	1.0	0.43	ug/l	
1330-20-7	Xylene (total)	1.2 U	3.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.26 U	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		87-116%
17060-07-0	1,2-Dichloroethane-D4	83%		76-127%
2037-26-5	Toluene-D8	94%		86-112%
460-00-4	4-Bromofluorobenzene	104%		84-120%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-21I		
Lab Sample ID:	F63668-11	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W044926.D	1	03/04/09	RB	03/04/09	OP28241	SW2283
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.96	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.96	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.96	0.48	ug/l	
56-55-3	Benzo(a)anthracene	0.048 U	0.19	0.048	ug/l	
50-32-8	Benzo(a)pyrene	0.048 U	0.19	0.048	ug/l	
205-99-2	Benzo(b)fluoranthene	0.048 U	0.19	0.048	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.048 U	0.19	0.048	ug/l	
207-08-9	Benzo(k)fluoranthene	0.048 U	0.19	0.048	ug/l	
218-01-9	Chrysene	0.096 U	0.19	0.096	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.048 U	0.19	0.048	ug/l	
206-44-0	Fluoranthene	0.24 U	0.96	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.96	0.48	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.048 U	0.19	0.048	ug/l	
90-12-0	1-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.96	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.96	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.96	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	59%		42-108%
321-60-8	2-Fluorobiphenyl	54%		40-106%
1718-51-0	Terphenyl-d14	76%		39-121%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-21I		
Lab Sample ID:	F63668-11	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	FLORIDA-PRO SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ55683.D	1	03/04/09	SL	03/03/09	OP28239	GIJ1950
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.16 U	0.24	0.16	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	84%		38-122%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-21I		
Lab Sample ID:	F63668-11	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
		Percent Solids:	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Sulfate	74.7	2.0	1.0	mg/l	1	03/03/09 18:36	CC	EPA 300/SW846 9056

RL = Reporting Limit = PQL
MDL = Method Detection Limit

U = Indicates a result < MDL
I = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	CEF-046-24D		
Lab Sample ID:	F63668-12	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0033404.D	1	03/04/09	MM	n/a	n/a	VN1370
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.40 U	1.0	0.40	ug/l	
108-88-3	Toluene	0.35 U	1.0	0.35	ug/l	
100-41-4	Ethylbenzene	0.43 U	1.0	0.43	ug/l	
1330-20-7	Xylene (total)	1.2 U	3.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.26 U	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		87-116%
17060-07-0	1,2-Dichloroethane-D4	84%		76-127%
2037-26-5	Toluene-D8	94%		86-112%
460-00-4	4-Bromofluorobenzene	104%		84-120%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-24D		
Lab Sample ID:	F63668-12	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W044927.D	1	03/04/09	RB	03/04/09	OP28241	SW2283
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.96	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.96	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.96	0.48	ug/l	
56-55-3	Benzo(a)anthracene	0.048 U	0.19	0.048	ug/l	
50-32-8	Benzo(a)pyrene	0.048 U	0.19	0.048	ug/l	
205-99-2	Benzo(b)fluoranthene	0.048 U	0.19	0.048	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.048 U	0.19	0.048	ug/l	
207-08-9	Benzo(k)fluoranthene	0.048 U	0.19	0.048	ug/l	
218-01-9	Chrysene	0.096 U	0.19	0.096	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.048 U	0.19	0.048	ug/l	
206-44-0	Fluoranthene	0.24 U	0.96	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.96	0.48	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.048 U	0.19	0.048	ug/l	
90-12-0	1-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.96	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.96	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.96	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	63%		42-108%
321-60-8	2-Fluorobiphenyl	59%		40-106%
1718-51-0	Terphenyl-d14	81%		39-121%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-24D		
Lab Sample ID:	F63668-12	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	FLORIDA-PRO SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ55684.D	1	03/04/09	SL	03/03/09	OP28239	GIJ1950
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.16 U	0.24	0.16	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	84%		38-122%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-24D		
Lab Sample ID:	F63668-12	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
		Percent Solids:	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Sulfate	523	20	10	mg/l	10	03/05/09 00:45	CC	EPA 300/SW846 9056

RL = Reporting Limit = PQL
MDL = Method Detection Limit

U = Indicates a result < MDL
I = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	CEF-046-25I		
Lab Sample ID:	F63668-13	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0033405.D	1	03/04/09	MM	n/a	n/a	VN1370
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.40 U	1.0	0.40	ug/l	
108-88-3	Toluene	0.35 U	1.0	0.35	ug/l	
100-41-4	Ethylbenzene	0.43 U	1.0	0.43	ug/l	
1330-20-7	Xylene (total)	1.2 U	3.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.26 U	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		87-116%
17060-07-0	1,2-Dichloroethane-D4	85%		76-127%
2037-26-5	Toluene-D8	94%		86-112%
460-00-4	4-Bromofluorobenzene	100%		84-120%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-25I		
Lab Sample ID:	F63668-13	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W044928.D	1	03/04/09	RB	03/04/09	OP28241	SW2283
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.96	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.96	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.96	0.48	ug/l	
56-55-3	Benzo(a)anthracene	0.048 U	0.19	0.048	ug/l	
50-32-8	Benzo(a)pyrene	0.048 U	0.19	0.048	ug/l	
205-99-2	Benzo(b)fluoranthene	0.048 U	0.19	0.048	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.048 U	0.19	0.048	ug/l	
207-08-9	Benzo(k)fluoranthene	0.048 U	0.19	0.048	ug/l	
218-01-9	Chrysene	0.096 U	0.19	0.096	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.048 U	0.19	0.048	ug/l	
206-44-0	Fluoranthene	0.24 U	0.96	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.96	0.48	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.048 U	0.19	0.048	ug/l	
90-12-0	1-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-20-3	Naphthalene	0.58	0.96	0.24	ug/l	I
85-01-8	Phenanthrene	0.24 U	0.96	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.96	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	63%		42-108%
321-60-8	2-Fluorobiphenyl	60%		40-106%
1718-51-0	Terphenyl-d14	83%		39-121%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-25I		
Lab Sample ID:	F63668-13	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	FLORIDA-PRO SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ55757.D	1	03/06/09	SL	03/04/09	OP28246	GIJ1952
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.16 U	0.24	0.16	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		38-122%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-25I		
Lab Sample ID:	F63668-13	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
		Percent Solids:	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Sulfate	15.2	2.0	1.0	mg/l	1	03/03/09 19:11	CC	EPA 300/SW846 9056

RL = Reporting Limit = PQL
MDL = Method Detection Limit

U = Indicates a result < MDL
I = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	CEF-046-26I		
Lab Sample ID:	F63668-14	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0033406.D	1	03/04/09	MM	n/a	n/a	VN1370
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.40 U	1.0	0.40	ug/l	
108-88-3	Toluene	0.35 U	1.0	0.35	ug/l	
100-41-4	Ethylbenzene	0.43 U	1.0	0.43	ug/l	
1330-20-7	Xylene (total)	1.2 U	3.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.26 U	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		87-116%
17060-07-0	1,2-Dichloroethane-D4	83%		76-127%
2037-26-5	Toluene-D8	94%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-26I		
Lab Sample ID:	F63668-14	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W044929.D	1	03/04/09	RB	03/04/09	OP28241	SW2283
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.49 U	0.97	0.49	ug/l	
208-96-8	Acenaphthylene	0.49 U	0.97	0.49	ug/l	
120-12-7	Anthracene	0.49 U	0.97	0.49	ug/l	
56-55-3	Benzo(a)anthracene	0.049 U	0.19	0.049	ug/l	
50-32-8	Benzo(a)pyrene	0.049 U	0.19	0.049	ug/l	
205-99-2	Benzo(b)fluoranthene	0.049 U	0.19	0.049	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.049 U	0.19	0.049	ug/l	
207-08-9	Benzo(k)fluoranthene	0.049 U	0.19	0.049	ug/l	
218-01-9	Chrysene	0.097 U	0.19	0.097	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.049 U	0.19	0.049	ug/l	
206-44-0	Fluoranthene	0.24 U	0.97	0.24	ug/l	
86-73-7	Fluorene	0.49 U	0.97	0.49	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.049 U	0.19	0.049	ug/l	
90-12-0	1-Methylnaphthalene	0.24 U	0.97	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.97	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.97	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.97	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.97	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	58%		42-108%
321-60-8	2-Fluorobiphenyl	55%		40-106%
1718-51-0	Terphenyl-d14	72%		39-121%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-26I		
Lab Sample ID:	F63668-14	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
Method:	FLORIDA-PRO SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ55758.D	1	03/06/09	SL	03/04/09	OP28246	GIJ1952
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.359	0.24	0.16	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		38-122%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CEF-046-26I		
Lab Sample ID:	F63668-14	**Date Sampled:**	03/02/09
Matrix:	AQ - Ground Water	**Date Received:**	03/03/09
		Percent Solids:	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Sulfate	319	10	5.0	mg/l	5	03/05/09 01:02	CC	EPA 300/SW846 9056

RL = Reporting Limit = PQL
MDL = Method Detection Limit

U = Indicates a result < MDL
I = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	F63668-15	**Date Sampled:**	03/02/09
Matrix:	AQ - Field Blank Water	**Date Received:**	03/03/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0033498.D	1	03/05/09	MM	n/a	n/a	VM1369
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.40 U	1.0	0.40	ug/l	
108-88-3	Toluene	0.35 U	1.0	0.35	ug/l	
100-41-4	Ethylbenzene	0.43 U	1.0	0.43	ug/l	
1330-20-7	Xylene (total)	1.2 U	3.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.26 U	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		87-116%
17060-07-0	1,2-Dichloroethane-D4	94%		76-127%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	100%		84-120%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	F63668-15	**Date Sampled:**	03/02/09
Matrix:	AQ - Field Blank Water	**Date Received:**	03/03/09
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W044932.D	1	03/04/09	RB	03/04/09	OP28241	SW2283
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.96	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.96	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.96	0.48	ug/l	
56-55-3	Benzo(a)anthracene	0.048 U	0.19	0.048	ug/l	
50-32-8	Benzo(a)pyrene	0.048 U	0.19	0.048	ug/l	
205-99-2	Benzo(b)fluoranthene	0.048 U	0.19	0.048	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.048 U	0.19	0.048	ug/l	
207-08-9	Benzo(k)fluoranthene	0.048 U	0.19	0.048	ug/l	
218-01-9	Chrysene	0.096 U	0.19	0.096	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.048 U	0.19	0.048	ug/l	
206-44-0	Fluoranthene	0.24 U	0.96	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.96	0.48	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.048 U	0.19	0.048	ug/l	
90-12-0	1-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.96	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.96	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.96	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.96	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	64%		42-108%
321-60-8	2-Fluorobiphenyl	58%		40-106%
1718-51-0	Terphenyl-d14	87%		39-121%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	F63668-15	**Date Sampled:**	03/02/09
Matrix:	AQ - Field Blank Water	**Date Received:**	03/03/09
Method:	FLORIDA-PRO SW846 3510C	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ55761.D	1	03/06/09	SL	03/04/09	OP28246	GIJ1952
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.16 U	0.24	0.16	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	77%		38-122%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	F63668-15	**Date Sampled:**	03/02/09
Matrix:	AQ - Field Blank Water	**Date Received:**	03/03/09
		Percent Solids:	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Sulfate	1.0 U	2.0	1.0	mg/l	1	03/03/09 19:46	CC	EPA 300/SW846 9056

RL = Reporting Limit = PQL
MDL = Method Detection Limit

U = Indicates a result < MDL
I = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F63668-16	**Date Sampled:**	03/02/09
Matrix:	AQ - Trip Blank Water	**Date Received:**	03/03/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Cecil Field -Bldg 46; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0033499.D	1	03/05/09	MM	n/a	n/a	VM1369
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.40 U	1.0	0.40	ug/l	
108-88-3	Toluene	0.35 U	1.0	0.35	ug/l	
100-41-4	Ethylbenzene	0.43 U	1.0	0.43	ug/l	
1330-20-7	Xylene (total)	1.2 U	3.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.26 U	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		87-116%
17060-07-0	1,2-Dichloroethane-D4	92%		76-127%
2037-26-5	Toluene-D8	97%		86-112%
460-00-4	4-Bromofluorobenzene	97%		84-120%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit = PQL
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

CHAIN OF CUSTODY

Fresh Ponds Corporate Village, Building B
2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3480

Accutest Job #: F63668
Accutest Quote #:

Client Information

Solutions-IES
Name: 1101 Nowell Road
Address: Raleigh NC 27607
City / State / Zip
Jessica Dehart
Send Report to:
Phone #: (919) 873-1060

Facility Information

Solutions-IES
Project Name
Location
Project/PO #: Cecil Field - Building 46
FAX #: (919) 873-1074

Analytical Information

Field ID / Point of Collection	Collection Date	Time	Sampled By	Matrix	# of bottles	Preservation HCL	NaOH	HNO3	H2SO4	None	BTEX and MTBE only 8260B	PAHs 8270C	TRPH FL-PRO	Sulfate 300.0
CEF-Ø46-Ø1s	3/2/09	1310	Cathey	gw	8	3			2	3	X	X	X	X
CEF-Ø46-Ø2s		1050	Cathey Jarvah											
CEF-Ø46-Ø5i		1442	Cathey											
CEF-Ø46-Ø6d		1450	Jarvah											
CEF-Ø46-Ø7i		1055	Marshall											
CEF-Ø46-Ø9i		1055	Hazlewood											
CEF-Ø46-12i		1045	Jarvah											
CEF-Ø46-13i		1135	Jarvah											
CEF-Ø46-14d		1235	Jarvah											
CEF-Ø46-15i		1215	Hazlewood											
CEF-Ø46-21i		1400	Hazlewood											

Turnaround Information

- [ ] 21 Day Standard — Approved By:
- [ ] 14 Day
- [ ] 7 Days *EMERGENCY*
- [X] Other _____ (Days)

RUSH TAT is for FAX data unless previously approved.

Data Deliverable Information

- [ ] NJ Reduced
- [ ] NJ Full
- [ ] FULL CLP
- [ ] Disk Deliverable
- [ ] Other (Specify)
- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] ASP Category B
- [ ] State Forms

Comments / Remarks

Please provide labels with site name and tests pre-printed on the them. Please provide a TRIP BLANK in the cooler containing VOCs. Please Provide eight (8) Liters of deionized water. Standard 7 day TAT. COMMBN deliverables.

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date/Time:	Received By:	Relinquished By:	Date/Time:	Received By:
1	3/2/9 1600	2	3/2/09 1600	3/2/09 1900	2 Accutest
3		3	4		4 3-3-09 08:00
5		5	Seal # / Preserved where applical		On Ice: 2.0 2.4 1.6 2.4 2.0 1.4 1.4 2.2

CHAIN OF CUSTODY

Fresh Ponds Corporate Village, Building B
2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3480

Accutest Job #:
Accutest Quote #: F63668

Client Information

Name: Solutions-IES
Address: 1101 Nowell Road
City: Raleigh State: NC Zip: 27607
Send Report to: Jessica Dehart
Phone #: (919) 873-1060

Facility Information

Solutions-IES
Project Name:
Location:
Project/PO #: Cecil Field - Building 46
FAX #: (919) 873-1074

Analytical Information

Field ID / Point of Collection	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Preservation HCL	NaOH	HNO3	H2SO4	None	BTEX and MTBE only 8260B	PAHs 8270C	TRPH FL-PRO	Sulfate 300.0
CEF-046-24d	3/2/09	1225	Marshall	gw	8	3			2	3	X	X	X	X
CEF-046-25i		1440	Marshall											
CEF-046-26i		1340	Jarvar											
Field Blank		1320	Hedwood											
Trip Blank											X			

Turnaround Information

- [ ] 21 Day Standard
- [ ] 14 Day
- [ ] 7 Days *EMERGENCY*
- [X] Other _____ (Days)

Approved By:

RUSH TAT is for FAX data unless previously approved.

Data Deliverable Information

- [ ] NJ Reduced
- [ ] NJ Full
- [ ] FULL CLP
- [ ] Disk Deliverable
- [ ] Other (Specify)
- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] ASP Category B
- [ ] State Forms

Comments / Remarks

Please provide labels with site name and tests pre-printed on the them. Please provide a TRIP BLANK in the cooler containing VOCs. Please Provide eight (8) Liters of deionized water. Standard 7 day TAT. COMMBN deliverables.

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	3/2/9 1600	1	2	3/2/09 1900	2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by Sampler:	Date Time:	Received By:	Seal #	Preserved where applicable	On Ice:
5		5			2.0 2.4 1.6 2.4 2.0 1.4 1.4 2.2

4.1
4

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F63668 CLIENT: Solutions-IES PROJECT: Cecil field

DATE/TIME RECEIVED: 3-3-09 0800 # OF COOLERS RECEIVED: 8 COOLER TEMPS: 2.0 2.4 1.6 2.4 2.0 1.4 1.4 2.2

METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS:

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [x] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET
- [ ] WET ICE RECEIVED IN COOLER

TRIP BLANK INFORMATION

- [x] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [x] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [x] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- [ ] SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
- [ ] CORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] TIMES ON COC DOES NOT MATCH LABEL(S)
- [ ] ID'S ON COC DOES NOT MATCH LABEL(S)
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING INSTRUCTIONS
- [ ] UNCLEAR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] 5035 FIELD KIT NOT FROZEN WITHIN 48 HOUR'S
- [ ] RESIDUAL CHLORINE PRESENT

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

MISC. INFORMATION

NUMBER OF ENCORES ? Ø

NUMBER OF 5035 FIELD KITS ? Ø

NUMBER OF LAB FILTERED METALS ? Ø

SUMMARY OF COMMENTS: Sample 4 recieved 1 unpreserved Amber missing time COC says 1235

TECHNICIAN SIGNATURE/DATE E.T. 3-3-09 TECHNICIAN SIGNATURE/DATE CLD 3/3/09

ASBD 12/17/07

4.1

4

F63668: Chain of Custody
Page 3 of 3

APPENDIX C

FIRST QUARTER AIR SPARGE SYSTEM O&M LOGS

AIR SPARGE SYSTEM OPERATION AND MAINTENANCE FORM
CECIL FIELD - BUILDING 46
JACKSONVILLE, FL
4080.08A2.CECI

Technician: MILLARD H. SHARP Time In: 12:30pm RETURN OFFICE
Date: DECEMBER 22, 2000 Time Out: 9:30 am DEPART OFFICE

Sensaphone Panel

	Circle One	
System On Light	(On)	Off
Phone in Use Light	(On)	Off
Alarm Light	On	(Off)
Battery OK Light	(On)	Off
Temperature Switch	record number: 122°F	°F
Breaker Switch	(up)	down

Main Control Panel

	Circle One	
Air Compressor Light	(On)	Off
Process Air High Temperature Light	On	(Off)
High Pressure Light	On	(Off)
120 Volt Power Light	(On)	Off
Building High Temperature Light	On	(Off)
Motor Fault Light	On	(Off)

Main Switch — Circle One: II O (A)

Other

Exhaust Fan Setting TS-1 HTS-4	record number: 79°F	°F
Building High Temperature Setting	record number: 132°F	°F

Compressor

Start/Stop Light	(On) Off	Should be red while in operation
Sump Pressure Gauge	record number: 92 PSIG	PSI
Line Pressure Gauge	record number: 90 PSIG	PSI
Temperature Gauge	record number: 163°F	°F
Separator Differential Gauge	record number: 3 PSIG	PSI
Oil Filter Differential Gauge	record number: 0 PSID	PSI
Oil in Sight Glass? OIL TO TOP OF SIGHT GLASS	(Yes) No	INTERIOR CLEAN AND DRY. AIR FILTER MEDIUM GRAY.

OIL FILTER RECENTLY REPLACED

Manifolds

	Circle One		Flow		Pressure	
Valve 1	(Opened)	Closed	2.5	SCFM	65 PSIG	PSI
Valve 2	(Opened)	Closed	2.75	SCFM	65 PSIG	PSI
Valve 3	Opened	(Closed)	0	SCFM	0	PSI
Valve 4	(Opened)	Closed	0	SCFM	65 PSIG	PSI — FLOAT IN #4 CONTINUES TO NOT MOVE DURING SYSTEM CYCLE.
Valve 5	Opened	Closed		SCFM		PSI
Valve 6	(Opened)	Closed	0	SCFM	0	PSI

Air Tank

Tank Pressure Gauge	90 PSIG		PSI
Auto Drain Functioning?	(Yes)	No	
Compressed Air Filter 1 Indicator	(clean)	change	dirty
Compressed Air Filter 2 Indicator	(clean)	change	dirty
Compressed Air Filter 3 Indicator	(clean)	change	dirty

ALL GAGES MAX GREEN.

Comments: SYSTEM OPERATING ON ARRIVAL. EXTERIOR HOSES NO AIR LEAKS. SPARE PARTS BOXES MOVED AND OPENED. GAGES 1, 4 AND 5 READING 75 PSIG ON ARRIVAL. ADJUSTED 1, 4 AND 5 TO SPEC PRESSURE. FLUID IN #5 CONTINUES TO BE OPAQUE ORANGE COLORATION. OBSERVED GAGES 15 MINUTES PRIOR TO DEPARTURE TO VERIFY SYSTEM BALANCE. REMOVED AND DISCARDED 2 USED OIL FILTERS.

To: Ms. Carrie Rullman
Solutions - IES, Inc.
919 873-1060
FAX: 919 873-1074

AIR SPARGE SYSTEM OPERATION AND MAINTENANCE FORM
CECIL FIELD - BUILDING 46
JACKSONVILLE, FL
4080.08A2.CECI

Technician: MILLARD H. SHARP — Time In: 11:00 am — RETURN OFFICE
Date: DECEMBER 30, 2008 — Time Out: 8:00 am — DEPART OFFICE

Sensaphone Panel

	Circle One	
System On Light	(On)	Off
Phone in Use Light	(On)	Off
Alarm Light	On	(Off)
Battery OK Light	(On)	Off
Temperature Switch	record number: 122°F	°F
Breaker Switch	(up)	down

Main Control Panel

	Circle One	
Air Compressor Light	(On)	Off
Process Air High Temperature Light	On	(Off)
High Pressure Light	On	(Off)
120 Volt Power Light	(On)	Off
Building High Temperature Light	On	(Off)
Motor Fault Light	On	(Off)

Main Switch — Circle One: H O (A)

Other

Exhaust Fan Setting TS-1 HTS-4	record number: 79°F	°F
Building High Temperature Setting	record number: 132°F	°F

Compressor

Start/Stop Light	(On)	Off	Should be red while in operation
Sump Pressure Gauge	record number: 92 PSIG		PSI
Line Pressure Gauge	record number: 90 PSIG		PSI
Temperature Gauge	record number: 164°F		°F
Separator Differential Gauge	record number: 3 PSIG		PSI
Oil Filter Differential Gauge	record number: 0 PSID		PSI
Oil in Sight Glass? OIL TO TOP OF SIGHT GLASS	(Yes)	No	INTERIOR CLEAN AND DRY. AIR FILTER MEDIUM GRAY.

Manifolds

	Circle One		Flow		Pressure		
Valve 1	(Opened)	Closed	2.0	SCFM	64 PSIG	PSI	
Valve 2	(Opened)	Closed	2.75	SCFM	66 PSIG	PSI	
Valve 3	Opened	(Closed)	0	SCFM	0	PSI	
Valve 4	(Opened)	Closed	0	SCFM	65 PSIG	PSI	FLOAT IN #4 CONTINUES NOT TO MOVE DURING SYSTEM CYCLE
Valve 5	(Opened)	Closed	1.5	SCFM	65 PSIG	PSI	
Valve 6	Opened	(Closed)	0	SCFM	0	PSI	

Air Tank

Tank Pressure Gauge	90 PSIG		PSI
Auto Drain Functioning?	(Yes)	No	
Compressed Air Filter 1 Indicator	(clean)	change	dirty
Compressed Air Filter 2 Indicator	(clean)	change	dirty
Compressed Air Filter 3 Indicator	(clean)	change	dirty

ALL GAGES MAY GREEN.

Comments: SYSTEM OPERATING ON ARRIVAL. EXTERIOR HOSES NO AIR LEAKS. INTERIOR CLEAN AND DRY. ADJUSTED VALVE 4 AND VALVE 5 TO OBTAIN SPEC PRESSURE. FLUID IN #5 SIGHT GLASS CONTINUES TO BE AN ORANGE OPAQUE COLOR. FLUID IN SIGHT GLASS #5 ABOVE FLOAT HAS A CONSIDERABLE QUANTITY OF AIR BUBBLES (ACTIVE) WHICH APPEARS TO PREVENT FLOAT FROM RISING. OBSERVED GAGES FOR 15 MINUTES PRIOR TO DEPARTURE TO VERIFY PRESSURE BALANCE.

TO: MS. CARRIE RUHLMAN
SOLUTIONS - IES INC.
919 873-1060
FAX: 919 873-1074

AIR SPARGE SYSTEM OPERATION AND MAINTENANCE FORM
CECIL FIELD - BUILDING 46
JACKSONVILLE, FL
4080.08A2.CECI

Technician: MILLARD H. SHARP
Date: JANUARY 6, 2009
Time In: 11:55 RETURN OFFICE
Time Out: 9:00AM DEPART OFFICE

Sensaphone Panel

	Circle One	
System On Light	(On)	Off
Phone in Use Light	(On)	Off
Alarm Light	On	(Off)
Battery OK Light	(On)	Off
Temperature Switch	record number: 122°F	°F
Breaker Switch	(up)	down

Main Control Panel

	Circle One	
Air Compressor Light	(On)	Off
Process Air High Temperature Light	On	(Off)
High Pressure Light	On	(Off)
120 Volt Power Light	(On)	Off
Building High Temperature Light	On	(Off)
Motor Fault Light	On	(Off)

Main Switch — Circle One: H O (A)

Other

Exhaust Fan Setting TS-1	record number:	79°F	°F
Building High Temperature Setting HTS-4	record number:	132°F	°F

Compressor

Start/Stop Light	(On)	Off	Should be red while in operation
Sump Pressure Gauge	record number:	90 PSIG	PSI
Line Pressure Gauge	record number:	89 PSIG	PSI
Temperature Gauge	record number:	167°F	°F
Separator Differential Gauge	record number:	3 PSIG	PSI
Oil Filter Differential Gauge	record number:	.5 PSID	PSI
Oil in Sight Glass? OIL TO TOP OF SIGHT GLASS	(Yes)	No	AIR FILTER MEDIUM GRAY, INTERIOR CLEAN AND DRY.

Manifolds

	Circle One		Flow		Pressure	
Valve 1	(Opened)	Closed	2.25	SCFM	66 PSIG	PSI
Valve 2	(Opened)	Closed	2.75	SCFM	64 PSIG	PSI
Valve 3	Opened	(Closed)	0	SCFM	0	PSI
Valve 4	(Opened)	Closed	0-.1	SCFM	65 PSIG	PSI — #4 FLOAT ALMOST NO MOVEMENT WHEN SYSTEM CYCLE
Valve 5	(Opened)	Closed	1.5	SCFM	65 PSIG	PSI
Valve 6	Opened	(Closed)	0	SCFM	0	PSI

Air Tank

Tank Pressure Gauge	90 PSIG			PSI
Auto Drain Functioning?	(Yes)	No		
Compressed Air Filter 1 Indicator	(clean)	change	dirty	ALL GAGES
Compressed Air Filter 2 Indicator	(clean)	change	dirty	MAX GREEN
Compressed Air Filter 3 Indicator	(clean)	change	dirty	

Comments: SYSTEM OPERATING ON ARRIVAL. INTERIOR CLEAN AND DRY. EXTERIOR HOSES NO AIR LEAKS OR DETERIORATION. ADJUSTED VALVES TO SPEC PRESSURE. SIGHT GLASS #1 & #2 HAVE DEVELOPED CONSIDERABLE AIR BUBBLING INSIDE, #5 SIGHT GLASS HAS LESS OF THE ORANGE COLOR HOWEVER #5 SIGHT GLASS INTERIOR HAS AN EXTREME QTY OF AIR BUBBLING INSIDE; FAR GREATER THAN PREVIOUSLY OBSERVED. OBSERVED GAGES 15 MINUTES PRIOR TO DEPART TO VERIFY PRESSURE BALANCE.

TO: MS. CARRIE RUHLMAN
SOLUTIONS - IES, INC.
919 873-1060
FAX: 919 873-1074

AIR SPARGE SYSTEM OPERATION AND MAINTENANCE FORM
CECIL FIELD - BUILDING 46
JACKSONVILLE, FL
4080.08A2.CECI

Technician: MILLARD H. SHARP
Date: JANUARY 12, 2009
Time In: 1211 SPA — RETURNED OFFICE
Time Out: 713 AM — DEPART OFFICE

Sensaphone Panel

Circle One

System On Light	(On)	Off
Phone in Use Light	(On)	Off
Alarm Light	On	(Off)
Battery OK Light	(On)	Off
Temperature Switch	record number: 122°F	°F
Breaker Switch	(up)	down

Main Control Panel

Circle One

Air Compressor Light	(On)	Off
Process Air High Temperature Light	On	(Off)
High Pressure Light	On	(Off)
120 Volt Power Light	(On)	Off
Building High Temperature Light	On	(Off)
Motor Fault Light	On	(Off)

Main Switch — Circle One: H O (A)

Other

Exhaust Fan Setting TS-1 HTS-4	record number: 79°F	°F
Building High Temperature Setting	record number: 132°F	°F

Compressor

Start/Stop Light	(On) Off	Should be red while in operation
Sump Pressure Gauge	record number: 92 PSIG	PSI
Line Pressure Gauge	record number: 90 PSIG	PSI
Temperature Gauge	record number: 164°F	°F
Separator Differential Gauge	record number: 3 PSIG	PSI
Oil Filter Differential Gauge	record number: .5 PSID	PSI
Oil in Sight Glass? OIL TO TOP OF SIGHT GLASS	(Yes) No	INTERIOR CLEAN AND DRY AIR FILTER MEDIUM GRAY.

Manifolds

	Circle One		Flow		Pressure	
Valve 1	(Opened)	Closed	2.0	SCFM	67 PSIG	PSI
Valve 2	(Opened)	Closed	2.5	SCFM	67 PSIG	PSI
Valve 3	Opened	(Closed)	0	SCFM	0	PSI
Valve 4	(Opened)	Closed	0-.1	SCFM	65 PSIG	PSI - FLOAT IN #4 DOES NOT MOVE DURING SYSTEM CYCLE
Valve 5	(Opened)	Closed	1.0	SCFM	64 PSIG	PSI
Valve 6	Opened	(Closed)	0	SCFM	0	PSI

Air Tank

Tank Pressure Gauge	90 PSIG		PSI
Auto Drain Functioning?	(Yes)	No	
Compressed Air Filter 1 Indicator	(clean)	change	dirty
Compressed Air Filter 2 Indicator	(clean)	change	dirty
Compressed Air Filter 3 Indicator	(clean)	change	dirty

ALL GAGES MAX GREEN

Comments: SYSTEM OPERATING ON ARRIVAL EXTERIOR HOSES NO DETERIORATION OR LEAKS. INTERIOR CLEAN AND DRY. AIR BUBBLING IN SIGHT GLASS 1 & 2 HAVE DISAPPEARED. FLOAT IN SIGHT GLASS 4 CONTINUES TO NOT MOVE DURING SYSTEM CYCLE. FLUID IN SIGHT GLASS 5 CONTINUES TO BE OPAQUE ORANGE COLOR.

TO: MS. CARRIE RUHLMAN
SOLUTIONS - IES INC.
919 873-1060
FAX: 919 873-1074

AIR SPARGE SYSTEM OPERATION AND MAINTENANCE FORM
CECIL FIELD - BUILDING 46
JACKSONVILLE, FL
4080.08A2.CECI

Technician: MILLARD H. SHARP
Date: JANUARY 20, 2009
Time In: 12:00 PM
Time Out: 9:00 AM
RETURN OFFICE DEPART OFFICE

Sensaphone Panel

	Circle One	
System On Light	(On)	Off
Phone in Use Light	(On)	Off
Alarm Light	On	(Off)
Battery OK Light	(On)	Off
Temperature Switch	record number: 122°F	°F
Breaker Switch	(up)	down

Main Control Panel

	Circle One	
Air Compressor Light	(On)	Off
Process Air High Temperature Light	On	(Off)
High Pressure Light	On	(Off)
120 Volt Power Light	(On)	Off
Building High Temperature Light	On	(Off)
Motor Fault Light	On	(Off)

Main Switch — Circle One: H O (A)

Other

Exhaust Fan Setting TS-1 #TS-4	record number: 78°F	°F
Building High Temperature Setting	record number: 132°F	°F

Compressor

Start/Stop Light	(On)	Off	Should be red while in operation
Sump Pressure Gauge	record number: 91 PSIG		PSI
Line Pressure Gauge	record number: 90 PSIG		PSI
Temperature Gauge	record number: 163°F		°F
Separator Differential Gauge	record number: 3 PSID		PSI
Oil Filter Differential Gauge	record number: .5 PSIG		PSI
Oil in Sight Glass? OIL TO TOP OF SIGHT GLASS	(Yes)	No	INTERIOR CLEAN AND DRY. AIR FILTER MEDIUM GRAY.

Manifolds

	Circle One		Flow		Pressure	
Valve 1	(Opened)	Closed	2.0	SCFM	66 PSIG	PSI
Valve 2	(Opened)	Closed	2.5	SCFM	63 PSIG	PSI
Valve 3	Opened	(Closed)	0	SCFM	0	PSI
Valve 4	(Opened)	Closed	0-.1	SCFM	63 PSIG	PSI
Valve 5	(Opened)	Closed	1.0	SCFM	64 PSIG	PSI
Valve 6	Opened	(Closed)	0	SCFM	0	PSI

Air Tank

Tank Pressure Gauge	90 PSIG		PSI
Auto Drain Functioning?	(Yes)	No	
Compressed Air Filter 1 Indicator	(clean)	change	dirty
Compressed Air Filter 2 Indicator	(clean)	change	dirty
Compressed Air Filter 3 Indicator	(clean)	change	dirty

ALL GAGES MAY GREEN

Comments: SYSTEM OPERATING ON ~~MANUAL~~ ARRIVAL. EXTERNAL HOSES NO LEAKS OR DETERIORATION - INTERIOR CLEAN AND DRY. VALVE 4 FLOAT STILL NOT MOVING DURING SYSTEM CYCLE - VALVE 5 FLOAT DOES NOT MOVE DURING SYSTEM CYCLE. FLUID IN VALVE 5 SIGHT GLASS CONTINUES TO BE OPAQUE ORANGE COLOR.

TO: MS CARRIE RUHLMAN
SOLUTIONS-IES INC.
919 873-1060
FAX: 919-873-1074

AIR SPARGE SYSTEM OPERATION AND MAINTENANCE FORM
CECIL FIELD - BUILDING 46
JACKSONVILLE, FL
4080.08A2.CEC1

Technician: MILLARD H. SHARP
Date: JANUARY 26, 2009
Time In: 12:00 PM — ARTHUR OFFICE
Time Out: 9:00 am — DEPART OFFICE

Sensaphone Panel

	Circle One	
System On Light	(On)	Off
Phone in Use Light	(On)	Off
Alarm Light	On	(Off)
Battery OK Light	(On)	Off
Temperature Switch	record number: 122°F	°F
Breaker Switch	(up)	down

Main Control Panel

	Circle One	
Air Compressor Light	(On)	Off
Process Air High Temperature Light	On	(Off)
High Pressure Light	On	(Off)
120 Volt Power Light	(On)	Off
Building High Temperature Light	On	(Off)
Motor Fault Light	On	(Off)

Main Switch — Circle One: H O (A)

Other

Exhaust Fan Setting TS-1 HTS-4	record number: 79°F	°F
Building High Temperature Setting	record number: 132°F	°F

Compressor

Start/Stop Light	(On) Off	Should be red while in operation
Sump Pressure Gauge	record number: 91 PSIG	PSI
Line Pressure Gauge	record number: 90 PSIG	PSI
Temperature Gauge	record number: 166°F	°F
Separator Differential Gauge	record number: 2.5 PSID	PSI
Oil Filter Differential Gauge	record number: .5 PSIG	PSI
Oil in Sight Glass? OIL TO TOP OF SIGHT GLASS	(Yes) No	AIR FILTER BECOMMING DARK GRAY. INTERIOR CLEAN AND DRY.

Manifolds

	Circle One		Flow		Pressure	
Valve 1	(Opened)	Closed	2.0	SCFM	66 PSIG	PSI
Valve 2	(Opened)	Closed	2.5	SCFM	65 PSIG	PSI
Valve 3	Opened	(Closed)	0	SCFM	0	PSI
Valve 4	(Opened)	Closed	0	SCFM	65 PSIG	PSI
Valve 5	(Opened)	Closed	1.0	SCFM	64 PSIG	PSI
Valve 6	Opened	(Closed)	0	SCFM	0	PSI

Air Tank

Tank Pressure Gauge	90 PSIG		PSI
Auto Drain Functioning?	(Yes)	No	
Compressed Air Filter 1 Indicator	(clean)	change	dirty
Compressed Air Filter 2 Indicator	(clean)	change	dirty
Compressed Air Filter 3 Indicator	(clean)	change	dirty

ALL GAGES MAX GREEN

Comments: SYSTEM OPERATING ON ARRIVAL. EXTERIOR HOSES UNDAMAGED AND NO AIR LEAKS. INTERIOR DRY AND CLEAN. AN ONHAND REPLACEMENT COMPRESSOR AIR FILTER IS NOT AVAILABLE. IF YOU SEND ONE DOWN I CAN CHANGE IT OUT. ADJUSTED VALVE 4 TO SPEC PRESSURE. FLOAT IN VALVE 4 SIGHT GLASS STILL DOES NOT MOVE DURING SYSTEM CYCLE. ORANGE COLOR OF FLUID IN SIGHT GLASS HAS CLEARED SOMEWHAT. SIGHT GLASS STILL HAS SOME AIR BUBBLING.

TO: MS CARRIE RUHLMAN
SOLUTIONS-IES, INC.
919 873-1060
FAX: 919 873-1077

AIR SPARGE SYSTEM OPERATION AND MAINTENANCE FORM
CECIL FIELD - BUILDING 46
JACKSONVILLE, FL
4080.08A2.CECI

Technician: MILLARD H. SHARP
Date: FEBRUARY 3, 2009
Time In: 8:11:50 RETURN OFFICE
Time Out: 9:30 AM DEPART OFFICE

Sensaphone Panel

	Circle One	
System On Light	(On)	Off
Phone in Use Light	(On)	Off
Alarm Light	On	(Off)
Battery OK Light	(On)	Off
Temperature Switch	record number: 122°F	°F
Breaker Switch	(up)	down

Main Control Panel

	Circle One	
Air Compressor Light	(On)	Off
Process Air High Temperature Light	On	(Off)
High Pressure Light	On	(Off)
120 Volt Power Light	(On)	Off
Building High Temperature Light	On	(Off)
Motor Fault Light	On	(Off)

Main Switch — Circle One: H O (A)

Other

Exhaust Fan Setting TS-1 473-4	record number: 79°F	°F
Building High Temperature Setting	record number: 132°F	°F

Compressor

Start/Stop Light	(On)	Off	Should be red while in operation
Sump Pressure Gauge	record number: 91 PSIG		PSI
Line Pressure Gauge	record number: 90 PSIG		PSI
Temperature Gauge	record number: 163°F		°F
Separator Differential Gauge	record number: 2.5 PSID		PSI
Oil Filter Differential Gauge	record number: .5 PSIG		PSI
Oil in Sight Glass? OIL TO TOP OF SIGHT GLASS	(Yes)	No	INTERIOR CLEAN AND DRY * AIR FILTER *

Manifolds

	Circle One		Flow		Pressure	
Valve 1	(Opened)	Closed	2.25	SCFM	66 PSIG	PSI
Valve 2	(Opened)	Closed	2.5	SCFM	67 PSIG	PSI
Valve 3	Opened	(Closed)	0	SCFM	0	PSI
Valve 4	(Opened)	Closed	.5	SCFM	65 PSIG	PSI - **
Valve 5	(Opened)	Closed	.5	SCFM	67 PSIG	PSI - A
Valve 6	Opened	(Closed)	0	SCFM	0	PSI

Air Tank

Tank Pressure Gauge	85 PSIG			PSI
Auto Drain Functioning?	(Yes)	No		
Compressed Air Filter 1 Indicator	(clean)	change	dirty	ALL GAGES
Compressed Air Filter 2 Indicator	(clean)	change	dirty	MAY GREEN.
Compressed Air Filter 3 Indicator	(clean)	change	dirty	

Comments: SYSTEM OPERATING ON ARRIVAL. EXTERIOR HOSES UNDAMAGED WITH NO LEAKS. INTERIOR CLEAN AND DRY. * COMPRESSOR AIR FILTER BECOMMING DARK GRAY. REPLACEMENT NOT AVAILABLE. CAN CHANGE OUT IF NEW IS SENT DOWN. ** VALVE 4 SIGHT GLASS FLOAT CONTINUES TO NOT MOVE DURING SYSTEM CYCLE. A-VALVE 5 SIGHT GLASS FLOAT IS NOT MOVING DURING SYSTEM CYCLE.

TO: MS CARRIE RUNLMAN
SOLUTIONS-IES, INC
919 873-1060
FAX: 919 873-1074

Feb-03-09 12:37P P.01

AIR SPARGE SYSTEM OPERATION AND MAINTENANCE FORM
CECIL FIELD - BUILDING 46
JACKSONVILLE, FL
4080.08A2.CECI

Technician: MILLARD H. SHARP
Date: FEBRUARY 10, 2009
Time In: 11:45AM
Time Out: 9:00AM
RETURN OFFICE DEPART OFFICE

Sensaphone Panel

	Circle One	
System On Light	(On)	Off
Phone in Use Light	(On)	Off
Alarm Light	On	(Off)
Battery OK Light	(On)	Off
Temperature Switch	record number: 122°F	°F
Breaker Switch	(up)	down

Main Control Panel

	Circle One	
Air Compressor Light	(On)	Off
Process Air High Temperature Light	On	(Off)
High Pressure Light	On	(Off)
120 Volt Power Light	(On)	Off
Building High Temperature Light	On	(Off)
Motor Fault Light	On	(Off)

Main Switch — Circle One: H O (A)

Other

Exhaust Fan Setting TS-1	record number:	79°F	°F
Building High Temperature Setting HTS-4	record number:	32°F	°F

Compressor

Start/Stop Light	(On) Off	Should be red while in operation	
Sump Pressure Gauge	record number:	91 PSIG	PSI
Line Pressure Gauge	record number:	90 PSIG	PSI
Temperature Gauge	record number:	171°F	°F
Separator Differential Gauge	record number:	3 PSIG	PSI
Oil Filter Differential Gauge	record number:	1 PSID	PSI
Oil in Sight Glass? OIL TO TOP OF SIGHT GLASS	(Yes) No	COMPRESSOR AIR FILTER DARK GRAY CAN CHANGE OUT IF REPLACEMENT IS SENT DOWN.	

INTERIOR CLEAN AND DRY, NO LEAKS

Manifolds

	Circle One		Flow		Pressure	
Valve 1	(Opened)	Closed	2.0	SCFM	65 PSIG	PSI
Valve 2	(Opened)	Closed	2.5	SCFM	65 PSIG	PSI
Valve 3	Opened	(Closed)	0	SCFM	0	PSI
Valve 4	(Opened)	Closed	.5	SCFM	65 PSIG	PSI
Valve 5	(Opened)	Closed	9.0/1.75	SCFM	65 PSIG	PSI
Valve 6	Opened	(Closed)	0	SCFM	0	PSI

~~FLOAT IS NOT MOVING DURING SYSTEM CYCLE. THIS IS NEW!~~

Air Tank

Tank Pressure Gauge	90 PSIG		PSI
Auto Drain Functioning?	(Yes)	No	
Compressed Air Filter 1 Indicator	(clean)	change	dirty
Compressed Air Filter 2 Indicator	(clean)	change	dirty
Compressed Air Filter 3 Indicator	(clean)	change	dirty

ALL GAGES MAX GREEN.

STRIKE THAT ON SIGHT GLASS NUMEROUS TIMES AND FLOAT BEGAN TO MOVE. AS FLOAT APPEARS TO HAVE DEBRIS ON EXTERIOR SURFACE.

Comments: SYSTEM OPERATING ON ARRIVAL. EXTERIOR HOSES UNDAMAGED & NO LEAKS. INTERIOR CLEAN AND DRY. ADJUSTED VALVES 1, 2, 4, 5 TO SPEC PRESSURE. ALL GAGES ON ARRIVAL 70-75 PSIG. FLUID IN #4 SIGHT GLASS DEVELOPING A SLIGHT TAN COLOR. FLUID IN #5 SIGHT GLASS HAS MUCH LESS COLORATION. FLOAT IN #4 SIGHT GLASS STILL NOT MOVING DURING SYSTEM CYCLE. REMAINED ON SITE 15 MINUTES AFTER VALVE ADJUSTMENT TO VERIFY PRESSURE BALANCE.

TO: MR BRIAN REBAR
SOLUTIONS-IES INC
919 873-1060
FAX: 919 873-1074

AIR SPARGE SYSTEM OPERATION AND MAINTENANCE FORM
CECIL FIELD - BUILDING 46
JACKSONVILLE, FL
4080.08A2.CECI

Technician: MILLARD H. SHARP
Date: FEBRUARY 17, 2009
Time In: 11:00 AM
Time Out: 7:30 AM
RETURN OFFICE
DEPART OFFICE

Sensaphone Panel

	Circle One	
System On Light	(On)	Off
Phone in Use Light	(On)	Off
Alarm Light	On	(Off)
Battery OK Light	(On)	Off
Temperature Switch	record number: 122°F	°F
Breaker Switch	(up)	down

Main Control Panel

	Circle One	
Air Compressor Light	(On)	Off
Process Air High Temperature Light	On	(Off)
High Pressure Light	On	(Off)
120 Volt Power Light	(On)	Off
Building High Temperature Light	On	(Off)
Motor Fault Light	On	(Off)

Main Switch — Circle One: H O (A)

Other

Exhaust Fan Setting TS-4	record number: 79°F	°F
Building High Temperature Setting HTS-4	record number: 132°F	°F

Compressor

Start/Stop Light	(On)	Off	Should be red while in operation
Sump Pressure Gauge	record number: 91 PSIG		PSI
Line Pressure Gauge	record number: 90 PSIG		PSI
Temperature Gauge	record number: 164°F		°F
Separator Differential Gauge	record number: 3.5G		PSI
Oil Filter Differential Gauge	record number: 0 PSID		PSI
Oil in Sight Glass? OIL TO TOP OF SIGHT GLASS	(Yes)	No	COMPRESSOR AIR FILTER DARK GRAY. CAN CHANGEOUT IN REPLACEMENT

INTERIOR CLEAN AND DRY

Manifolds

IS SENT DOWN.

	Circle One		Flow		Pressure	
Valve 1	(Opened)	Closed	2.5	SCFM	70 PSIG	PSI
Valve 2	(Opened)	Closed	2.75	SCFM	70 PSIG	PSI
Valve 3	Opened	(Closed)	0	SCFM	0	PSI
Valve 4	(Opened)	Closed	1.75	SCFM	70 PSIG	PSI
Valve 5	(Opened)	Closed	1.85	SCFM	70 PSIG	PSI
Valve 6	Opened	(Closed)	0	SCFM	0	PSI

Air Tank

Tank Pressure Gauge	90 PSIG		PSI
Auto Drain Functioning?	(Yes)	No	
Compressed Air Filter 1 Indicator	(clean)	change	dirty
Compressed Air Filter 2 Indicator	(clean)	change	dirty
Compressed Air Filter 3 Indicator	(clean)	change	dirty

ALL GAGES MAX GREEN.

Comments: SYSTEM OPERATING ON MANUAL. EXTERIOR HOSES NO DAMAGE OR LEAKS. INTERIOR CLEAN AND DRY. REPLACED COMPRESSOR OIL FILTER PER DIRECTION. ADJUSTED VALVES 1,2,4,5 FOR 70 PSIG PER DIRECTION. * CONSIDERABLE RAPID AIR BUBBLING IN SIGHT GLASS & FLUID. FLUID IN SIGHT GLASS IS HAS MUCH LESS ORANGE COLORATION. REMAINED ON SITE TO VERIFY OIL FILTER REPLACEMENT DOES NOT LEAK AND VERIFY SYSTEM PRESSURE BALANCE.

TO: MR. BRIAN REBAR
SOLUTIONS-IES, INC.
919 873-1060
FAX: 919 873-1074

AIR SPARGE SYSTEM OPERATION AND MAINTENANCE FORM
CECIL FIELD - BUILDING 46
JACKSONVILLE, FL
4080.08A2.CECI

Technician: MULLARD H. SHARP
Date: FEBRUARY 24, 2009
Time In: 11:15 am RETURNED OFFICE
Time Out: 8:15 am DEPART OFFICE

Sensaphone Panel

	Circle One	
System On Light	(On)	Off
Phone in Use Light	(On)	Off
Alarm Light	On	(Off)
Battery OK Light	(On)	Off
Temperature Switch	record number: 122°F	°F
Breaker Switch	(up)	down

Main Control Panel

	Circle One	
Air Compressor Light	(On)	Off
Process Air High Temperature Light	On	(Off)
High Pressure Light	On	(Off)
120 Volt Power Light	(On)	Off
Building High Temperature Light	On	(Off)
Motor Fault Light	On	(Off)

Main Switch — Circle One: H O (A)

Other

Exhaust Fan Setting TS-4	record number:	79°F	°F
Building High Temperature Setting TS-4	record number:	132°F	°F

Compressor

Start/Stop Light	(On) Off	Should be red while in operation	
Sump Pressure Gauge	record number:	90 PSIG	PSI
Line Pressure Gauge	record number:	90 PSIG	PSI
Temperature Gauge	record number:	163°F	°F
Separator Differential Gauge	record number:	3.5 PSIG	PSI
Oil Filter Differential Gauge	record number:	0 PSID	PSI
Oil in Sight Glass? OIL TO TOP OF SIGHT GLASS	(Yes) No	COMPRESSOR AIR FILTER DARK GRAY BEING REPLACEMENT NEXT WEEK AND CAN CHANGE OUT.	

Manifolds

INTERNAL CLEAN AND DRY

	Circle One		Flow		Pressure	
Valve 1	(Opened)	Closed	2.80	SCFM	71 PSIG	PSI
Valve 2	(Opened)	Closed	2.95	SCFM	70 PSIG	PSI
Valve 3	Opened	(Closed)	0	SCFM	0	PSI
Valve 4	(Opened)	Closed	1.0	SCFM	70 PSIG	PSI
Valve 5	(Opened)	Closed	1.80	SCFM	70 PSIG	PSI
Valve 6	Opened	(Closed)	0	SCFM	0	PSI

Air Tank

Tank Pressure Gauge	90 PSIG			PSI
Auto Drain Functioning?	(Yes)	No		
Compressed Air Filter 1 Indicator	(clean)	change	dirty	ALL GAGES
Compressed Air Filter 2 Indicator	(clean)	change	dirty	MAY GREEN
Compressed Air Filter 3 Indicator	(clean)	change	dirty	

Comments: SYSTEM OPERATING ON ARRIVAL INTERIOR CLEAN AND DRY. EXTERIOR HOSES UNDAMAGED NO LEAKS. FLUID IN VALVE #4 SIGHT GLASS BECOMMING ORANGE COLOR. AIR BUBBLES IN #3 SIGHT GLASS NOT PRESENT AS PREVIOUS WEEKS. SHUT DOWN SYSTEM AFTER INSPECTION PER DIRECTION AND SECURED POWER TO TRAILER ON POLE CIRCUIT BREAKER BOX.

TO: MR BRIAN REDAR
SOLUTIONS-IES INC.
919 873-1060
FAX: 919 873-1074

Feb-24-09 12:50P P.01