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NAS CECIL FIELD, FL
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THIRD QUARTER GROUNDWATER MONITORING REPORT FOR DECEMBER 2009 FOR
BUILDING 271 NAS CECIL FIELD FL
05/11/2010
SOLUTIONS-IES INC

**THIRD QUARTER
GROUNDWATER MONITORING REPORT
DECEMBER 2009**

**BUILDING 271
FORMER NAS CECIL FIELD
JACKSONVILLE, FL**

**CONTRACT NO. N62467-05-G-0193
CONTRACT TASK ORDER NO. 0003**

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SOLUTIONS-IES PROJECT NO. 8030.08A2.NAVF

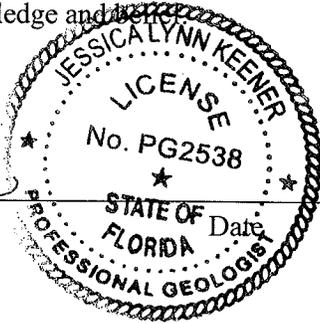
MAY 11, 2010



SIGNATURE PAGE

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 at Building 271 (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 0003. Under this contract, Solutions-IES, with support from Terraine, Inc., performs quarterly groundwater monitoring. Solutions-IES submitted a first quarter report for the June 2009 monitoring event and presented the second quarter September 2009 results at the November 2009 Base Closure Team (BCT) meeting. Based on discussions at the November 2009 BCT meeting, it was decided that groundwater monitoring results for the first, second and third quarter events would be presented at the BCT meetings in lieu of formal reports unless changes to the monitoring program were recommended. However, during the February 2010 BCT meeting, the decision was made to reduce the sampling well network and monitoring parameters at the site prior to the fourth quarter 2009 monitoring event scheduled for March 2010 and document those changes in a quarterly report. Therefore, this Third Quarter Groundwater Monitoring Report describes the third quarter monitoring activities performed at the site on December 1, 2009, and also identifies the agreed upon changes to the monitoring program that will be implemented for the fourth quarter 2009 monitoring event in March 2010.

1.1 SITE LOCATION AND DESCRIPTION

The site is located at the corner of Cecil Pines Street (formerly 9th Street) and Pool Side Avenue (formerly "B" Avenue) at NAS Cecil Field. Building 271 was a former retail gasoline facility that had four underground storage tanks (USTs), identified as 271-D, 271-R, 271-UL and 271-SUL, along with two oil-water separators (OWS). The USTs were located in a tank pit on the west side of Building 271, and the OWS were located on the east side of the building. Three of the USTs had an approximate capacity of 10,000 gallons each and one had approximately 6,000 gallons of capacity (TtNUS, 2002).

A site location map is included as **Figure 1**.

1.2 SITE HISTORY

UST closure records indicate that UST 271-D and the associated piping were removed from the site on March 5, 1996. No soil or groundwater contamination was detected at that time. However, a Confirmatory Sampling Report, prepared in July 1999 for the remaining USTs and two OWS, indicated

that residual petroleum-impacted soil was present at two locations likely due to operation of the USTs. A site assessment was recommended and a site assessment plan was prepared.

Subsequent to completion of assessment activities, the three remaining USTs and associated piping were removed from the site. Soil contamination issues were addressed at that time by excavation. However, groundwater samples collected after removal activities indicated the presence of volatile organic compounds (VOCs). A second investigation was recommended and planned to further define the extent of groundwater contamination.

Both OWS were removed from the site, and Limited Closure Assessment Reports were prepared and submitted to the Florida Department of Environmental Protection (FDEP) in April 2001 (CH2MHill, 2001). These reports indicated that no petroleum contamination existed in the soil or groundwater surrounding the OWS. A May 2002 Site Assessment Report concluded that petroleum constituents remained in groundwater in the vicinity of the former USTs though soil impacts had previously been removed. Preparation of a Remedial Action Plan (RAP) to address groundwater impacts at the site was recommended.

A RAP was prepared and submitted to the FDEP by Tetra Tech NUS, Inc. in September 2002, with an Addendum submitted in January 2003. Air sparge (AS) was the selected remedial technology. FDEP approval for these documents was received in February 2003.

The AS system was installed at the site between September and November 2003 and began operation on November 17, 2003. The system is comprised of seven air sparge wells that are screened from approximately 28 to 30 feet below ground surface (ft bgs). Minor troubleshooting and repairs were conducted on the system in February and March 2008. The system has not operated since late 2008.

2.0 GROUNDWATER MONITORING SUMMARY

During the December 2009 monitoring event, water levels were recorded and groundwater samples were collected for laboratory analysis of benzene, toluene, ethylbenzene and xylenes (BTEX); methyl-*tert*-butyl-ether (MTBE); polycyclic aromatic hydrocarbons (PAHs) and total recoverable petroleum hydrocarbons (TRPH) from wells CEF-271-07S, CEF-271-09S, CEF-271-10S and CEF-271-12S. Locations of the wells are illustrated on **Figure 2**.

2.1 MONITORING WELL OBSERVATIONS

The integrity of the monitoring wells included in the long-term monitoring plan was evaluated during the December 2009 sampling event. The field team noted no extensive damage that would warrant the need for well replacement or repair.

2.2 WATER LEVEL MEASUREMENTS

Water level measurements were recorded in four wells on December 1, 2009. **Table 1** shows current and historical groundwater measurements at the site from April 2007 through the December 2009 sampling event. Based on this information, the general direction of groundwater flow in the source area of the site is towards the southeast, which is consistent with previous reports. A groundwater contour map was prepared for the site based on the groundwater elevations measured during the December 2009 event and has been included as **Figure 3**.

2.3 GROUNDWATER SAMPLING

2.3.1 Methodology

Groundwater sampling was conducted at the site on December 1 and 2, 2009. Four monitoring wells were purged and sampled using low-flow methodology in general accordance with the FDEP, FS 2200 Groundwater Sampling Procedures (December 2008) and the Solutions-IES Work Plan (September 2008). The wells were purged immediately before sampling using a low-flow peristaltic pump, at a rate equal to or less than the groundwater recharge rate, until field parameters (temperature, pH, conductivity, turbidity and dissolved oxygen [DO]) stabilized. Oxidation-reduction potential (ORP) was also recorded. Water levels in the wells were continuously monitored during purging to maintain minimal drawdown. Samples were also collected for field analysis of DO using CHEMetrics[®] field test kits. The final field parameter measurements are provided in **Table 2**.

Samples were stored on ice and delivered via courier under chain-of-custody procedures to Accutest Laboratories Southeast, Inc. (Accutest), a Florida-certified and National Environmental Laboratory Accreditation Program (NELAP) certified laboratory located in Orlando, Florida.

2.3.2 Laboratory Analyses

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

- BTEX and MTBE by EPA Method 8021B;
- PAHs by EPA Method 8270C; and
- TRPH by Method FL-PRO.

A Level II data report provided by the laboratory is included in **Appendix A**.

2.4 INVESTIGATION-DERIVED WASTE (IDW)

Purge, wash and rinse water from the December 2009 event was collected in 5-gallon containers and transferred to a 55-gallon drum labeled 12012009-SIES-1. The drum was staged in the IDW Storage Building (Building 536). The NAS Jacksonville Public Works Department (PWD-JAX) was notified on December 8, 2009, that the drum was being stored in the building. The Hazardous Waste IDW Characterization Summary Report for disposal was forwarded to PWD-JAX on December 22, 2009.

3.0 SAMPLING AND ANALYTICAL RESULTS

3.1 DATA REVIEW

Accutest data analysts reviewed their data according to laboratory Standard Operating Procedures (SOPs) for Level II quality control/quality assurance reporting. As indicated in the laboratory case narrative (**Appendix A**), several quality control results were outside recovery limits for several methods run by the lab due to possible matrix interference. The review also resulted in several data qualifiers. These are shown with the analyte concentrations in **Table 3**.

3.2 FIELD PARAMETERS

Temperature, pH, conductivity, turbidity, DO and ORP were measured with direct read meters in all four wells during purging. DO was also measured at the completion of purging in select wells using CHEMetrics® field test kits. Result of the field measurements from April 2007 through the December 2009 monitoring event are shown on **Table 2**. Copies of the groundwater sampling logs for the

December 2009 sampling event are provided in **Appendix B**. A summary of the field parameter measurements is shown below:

- pH ranged from 6.43 to 6.89 standard units;
- Conductivity ranged from 310 to 927 microsiemens per centimeter ($\mu\text{S}/\text{cm}$);
- Turbidity ranged from 2.22 to 46.4 nephelometric turbidity units (NTU);
- ORP ranged from 8.3 to 133 millivolts (mV); and
- DO measured with the CHEMetrics[®] field test kits ranged from 1.0 to 5.0 milligrams per liter (mg/L).

3.3 LABORATORY ANALYTICAL RESULTS

Well locations and constituent concentrations in excess of the regulatory limits are shown on **Figure 4**. Naphthalene was reported at 112 $\mu\text{g}/\text{L}$ in well CEF-271-07S during the December 2009 event which exceeds the GCTL of 14 $\mu\text{g}/\text{L}$. No other constituents of concern were detected above the GCTLs. The laboratory results are summarized in **Table 3** and the laboratory analytical report for the December 2009 sampling event is included in **Appendix A**. A graph displaying the historical results for naphthalene in well CEF-271-07S is shown on **Figure 5**.

4.0 CONCLUSIONS

Naphthalene remained elevated above the GCTL in well CEF-271-07S during the December 2009 event and has been the only constituent detected above the regulatory limits since July 2007. The December 2009 sampling event was conducted in general accordance with the Solutions-IES Work Plan and previous sampling events.

5.0 MONITORING PROGRAM CHANGES

During the November 2009 BCT meeting, it was decided to present the results from the first, second and third quarter groundwater monitoring events at the BCT meetings in lieu of formal reports unless changes to the monitoring program were recommended. The fourth quarter monitoring results would continue to be submitted in a formal report. CEF-271-07S is the only well in which exceedances of the GCTLs have been detected since 2001, Solutions-IES recommends reducing the monitoring well network to include only CEF-271-07S and downgradient well CEF-271-10S. Additionally, Solutions-IES recommends sampling these wells only for PAHs. The next quarterly groundwater monitoring event will be conducted in March 2010 (fourth quarter 2009).

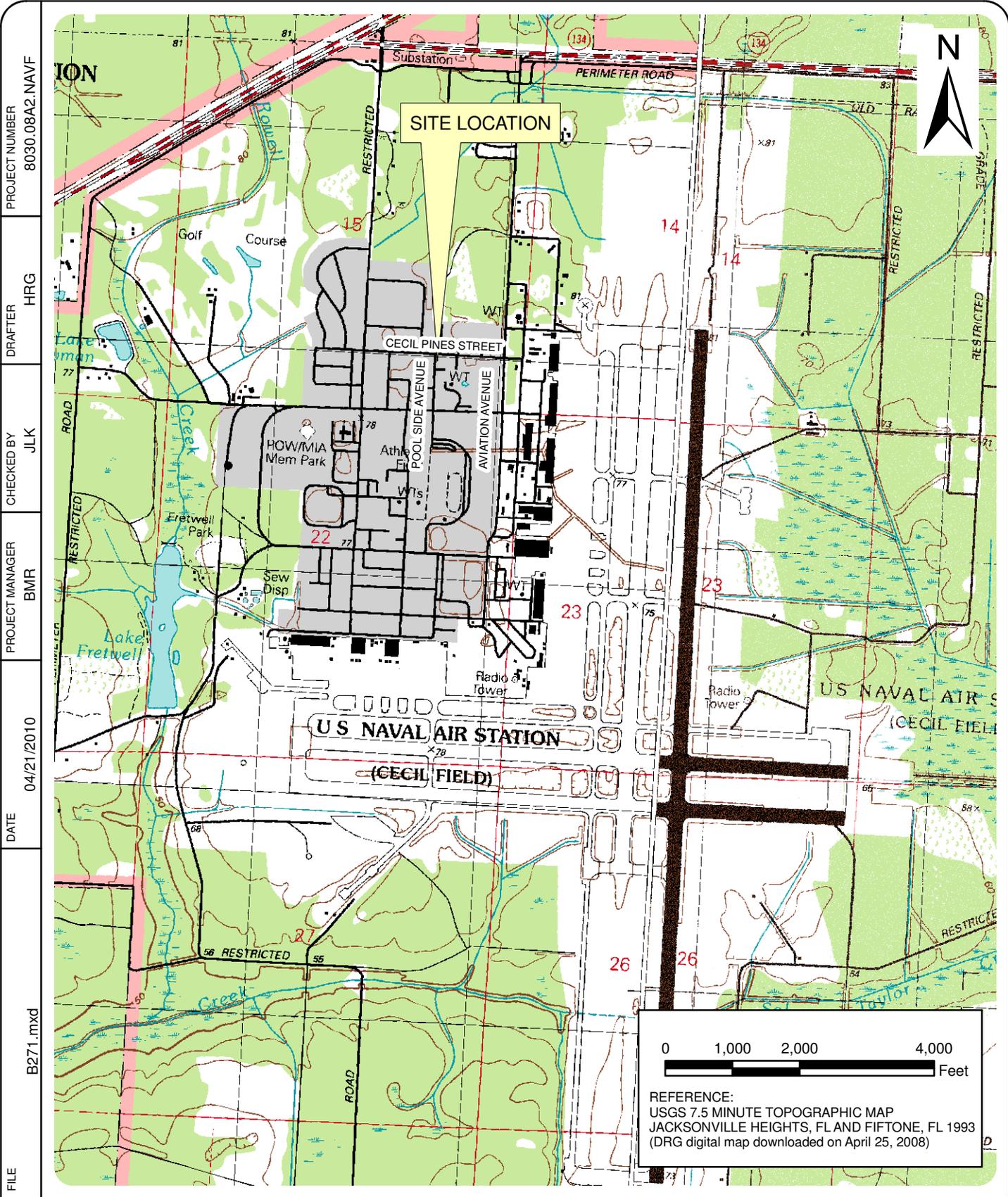
6.0 REFERENCES

TetraTech NUS, Inc. September 2002. Remedial Action Plan for Building 271 Tanks UL/R/SUL/D at Naval Air Station Cecil Field, Jacksonville, Florida.

CH2MHill Constructors, Inc. April 2001. Limited Closure Assessment Report, Oil/Water Separator Removal. NAS Cecil Field, Jacksonville, Florida.

Florida Department of Environmental Protection (FDEP), 2008. DEP-SOP-001/01, FS 2200 Groundwater Sampling, December 2008.

FIGURES

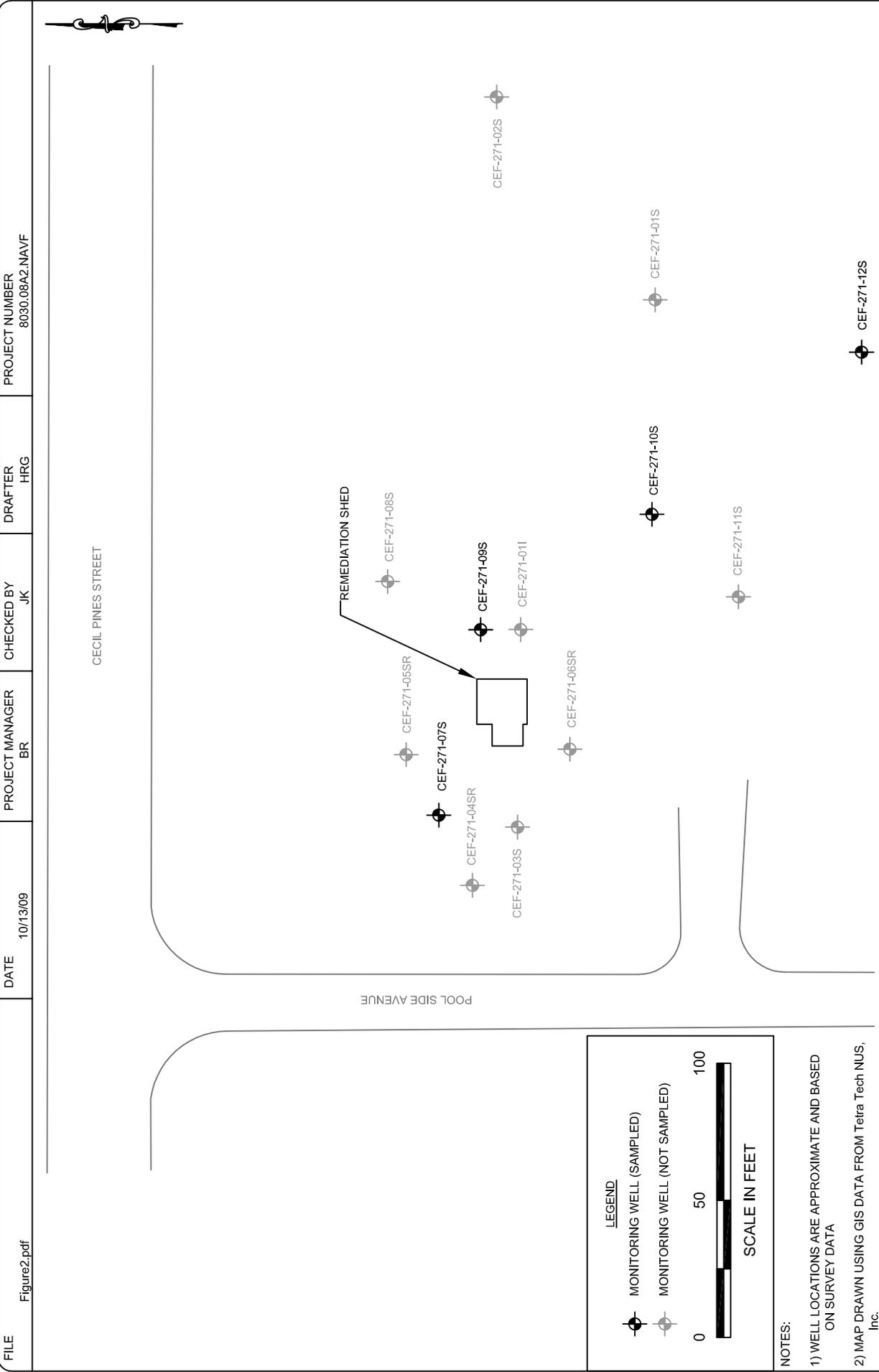


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FIGURE:
 SITE LOCATION MAP
 BUILDING 271 - NAS CECIL FIELD
 JACKSONVILLE, FL

FIGURE:
 1



LEGEND

- MONITORING WELL (SAMPLED)
- MONITORING WELL (NOT SAMPLED)

0 50 100

SCALE IN FEET

NOTES:

1) WELL LOCATIONS ARE APPROXIMATE AND BASED ON SURVEY DATA

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

 1101 NOWELL ROAD RALEIGH, NORTH CAROLINA 27607 TEL.: (919) 873-1060 FAX.: (919) 873-1074	WELL LOCATION MAP BUILDING 271 - NAS CECIL FIELD JACKSONVILLE, FL DECEMBER 2009	FIGURE: 2
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CECIL PINES STREET

POOL SIDE AVENUE

LEGEND

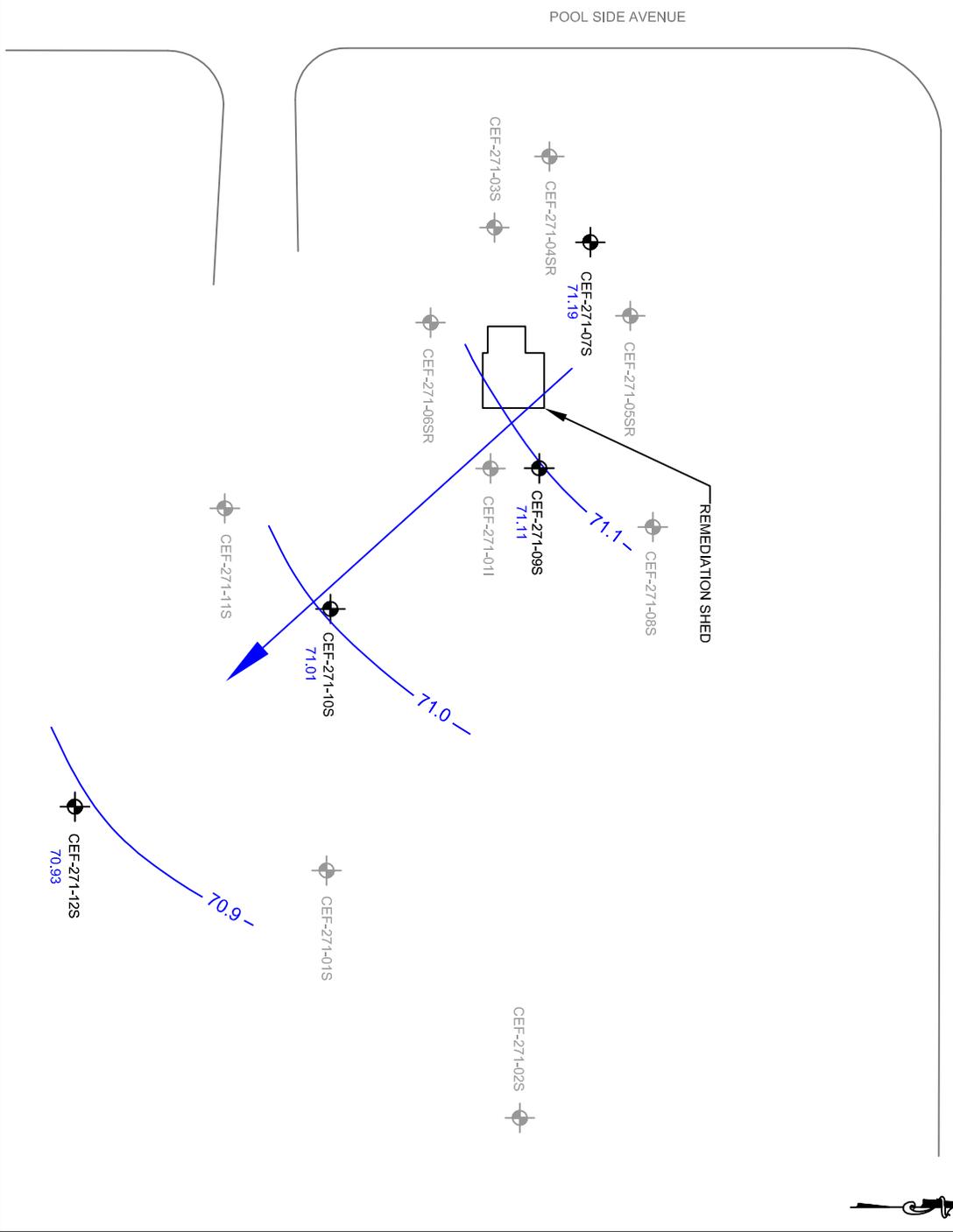
-  MONITORING WELL (SAMPLED)
-  MONITORING WELL (NOT SAMPLED)
-  GROUNDWATER CONTOUR
-  IMPLIED DIRECTION OF GROUNDWATER FLOW

74.97 GROUNDWATER ELEVATION (ft amsl)



0 50 100
SCALE IN FEET

- NOTES:
- 1) WATER LEVELS MEASURED 12/1/09
 - 2) WELL LOCATIONS ARE APPROXIMATE AND BASED ON SURVEY DATA.
 - 3) MAP DRAWN USING GIS DATA FROM Tetra Tech NUS, Inc.




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GROUNDWATER CONTOUR MAP
BUILDING 271 - NAS CECIL FIELD
JACKSONVILLE, FL
DECEMBER 2009

FIGURE:
3

CEF-271-07S	
Naphthalene (µg/L)	102
	23.3
	3.1
	112

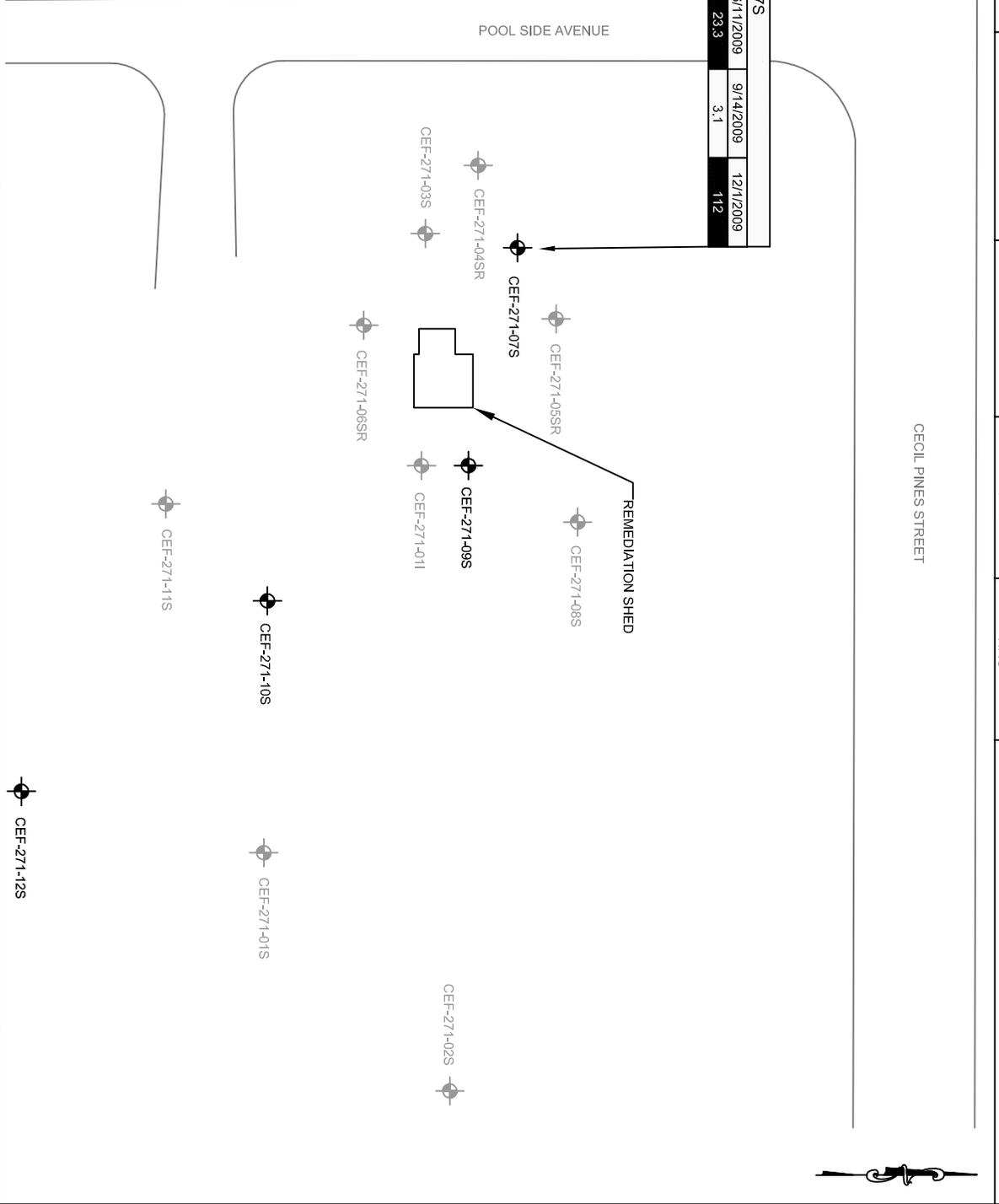
LEGEND

- MONITORING WELL (SAMPLED)
- MONITORING WELL (NOT SAMPLED)
- 23.3** EXCEEDENCE OF GCTL¹

0 50 100

SCALE IN FEET

- NOTES:**
- 1) GCTL - GROUNDWATER CLEANUP TARGET LEVEL.
 - 2) WELL LOCATIONS ARE APPROXIMATE AND BASED ON SURVEY DATA.
 - 3) MAP DRAWN USING GIS DATA FROM Tetra Tech NUS, Inc.

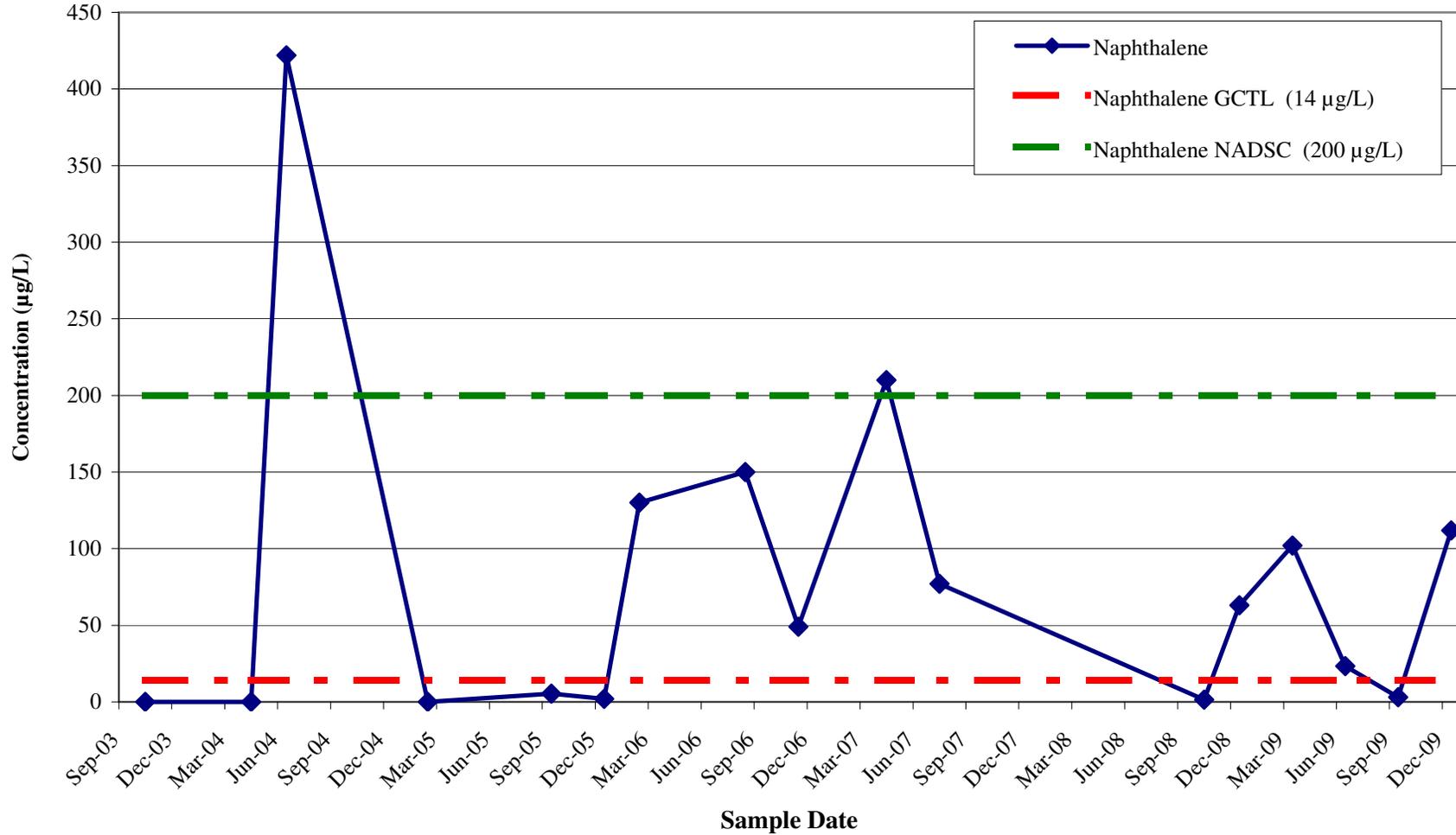


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CONTAMINANT CONCENTRATION MAP
BUILDING 271 - NAS CECIL FIELD
JACKSONVILLE, FL
DECEMBER 2009

FIGURE 5
Historical Naphthalene Concentrations in Well CEF-271-07S



TABLES

**TABLE 1
GROUNDWATER ELEVATIONS**

Building 271
NAS Cecil Field
Jacksonville, Florida

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)
CEF-271-07S	4/2007	79.99	9.98	70.01
	7/2007		8.85	71.14
	10/7/2008		5.02	74.97
	12/17/2008		8.19	71.80
	3/2/2009		7.84	72.15
	6/11/2009		4.29	75.70
	9/14/2009		4.84	75.15
	12/1/2009		8.80	71.19
CEF-271-09S	4/2007	80.51	10.83	69.68
	7/2007		9.44	71.07
	10/7/2008		5.62	74.89
	12/17/2008		8.76	71.75
	3/2/2009		8.74	71.77
	6/11/2009		4.88	75.63
	9/14/2009		5.42	75.09
	12/1/2009		9.40	71.11
CEF-271-10S	4/2007	81.18	11.64	69.54
	7/2007		10.90	70.28
	10/7/2008		6.32	74.86
	12/17/2008		9.50	71.68
	3/2/2009		9.20	71.98
	6/11/2009		5.59	75.59
	9/14/2009		6.17	75.01
	12/1/2009		10.17	71.01
CEF-271-12S	4/2007	80.19	11.31	68.88
	7/2007		9.32	70.87
	10/7/2008		5.44	74.75
	12/17/2008		8.62	71.57
	3/2/2009		8.30	71.89
	6/11/2009		4.70	75.49
	9/14/2009		5.26	74.93
	12/1/2009		9.26	70.93

NOTES:

Data collected prior to 2007 are provided in previous reports

ft amsl - feet above mean sea level

ft btoc - feet below top of casing

**TABLE 2
FIELD PARAMETERS**

Building 271
NAS Cecil Field
Jacksonville, Florida

Well ID	Sample Date	Temperature (°C)	pH (SU)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTU)
CEF-271-07S	4/18/2007	21.31	6.57	958	0.49	-170.4	5
	7/23/2007	25.7	6.51	911	0.33	NM	2.7
	10/7/2008	26.89	7.67	681	0.26	-132	4
	12/17/2008	23.80	6.65	740	0.3	-190	10.8
	3/2/2009	18.25	6.68	736	0.7	-42.5	10.81
	6/11/2009	27.00	6.25	826	1.0	-31.3	11.4
	9/14/2009	29.39	6.50	752	3.35	-24.3	16.4
	12/1/2009	22.45	6.43	927	2.55*	8.3	3.2
CEF-271-09S	4/18/2007	19.55	6.9	235	2.61	-115.5	>1000
	7/23/2007	26.0	6.64	239	1.59	NM	600
	10/7/2008	28.59	8.15	262	3.23	-45.9	69
	12/17/2008	23.95	7.2	204	1.0	NM	398
	3/2/2009	16.61	6.93	140	6.0	145.9	245
	6/11/2009	24.40	6.80	324	3.0	45.1	4.19
	9/14/2009	27.47	6.70	409	3.49	67.8	11.1
	12/1/2009	21.22	6.79	310	5.0	133	46.4
CEF-271-10S	4/18/2007	19.22	6.29	272	0.9	96.4	10
	7/23/2007	25.8	6.25	269	1.27	NM	20
	10/7/2008	27.24	7.06	438	5.25	58	5.54
	12/17/2008	24.39	7.34	409	2.0	-36	8
	3/2/2009	18.55	6.37	411	1.0	75.4	4.01
	6/11/2009	25.06	6.80	590	5.0	-10.2	3.02
	9/14/2009	28.18	6.80	702	4.40	63.8	8.60
	12/2/2009	23.18	6.89	702	1.5	94.3	2.22
CEF-271-12S	4/18/2007	18.35	5.95	189	1.03	-24.8	140
	7/23/2007	23.1	5.94	202	0.3	NM	427
	10/7/2008	23.65	6.44	368	3.56	61.9	30.7
	12/17/2008	21.10	6.61	549	0.6	111.5	20
	3/2/2009	17.09	6.53	335	1.0	68.7	19
	6/11/2009	23.99	6.64	291	3.5	-35.3	16.9
	9/14/2009	24.90	6.65	329	4.99	40.2	16
	12/2/2009	22.05	6.76	370	1.0	31.6	12.65

NOTES: Data collected prior to 2007 are provided in previous reports

°C - Degrees Celsius

SU - Standard Units

µS/cm - Microsiemens per centimeter

mg/L - Milligrams per liter

mV - Millivolts

NTU - Nephelometric Turbidity Unit

NM - Not Measured

* - DO concentration from field meter

TABLE 3
SUMMARY OF HISTORICAL VOC, PAH AND TRPH RESULTS

Building 271
 NAS Cecil Field
 Jacksonville, Florida

Well ID	Sample Date	VOLATILE ORGANIC COMPOUNDS (µg/L)					POLYCYCLIC AROMATIC HYDROCARBONS (µg/L)			TRPH (C8-C40) (µg/L)
		Benzene	Ethylbenzene	Methyl- <i>tert</i> -butyl-ether	Xylenes (total)	Toluene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	
GCTL (µg/L)		1	30	20	20	40	28	28	14	5000
NADSC (µg/L)		100	300	500	200	400	200	200	200	50000
CEF-271-07S	08/24/2001	89	520	11	3300	2900	-	-	-	<4100
	10/28/2003	<188	<398	<50	<1690	<1180	<21.1	<58.9	<184	-
	04/26/2004	324 J	<133	<25	17.2 J	16.7 J	37 J	<74	<476	-
	06/24/2004	-	-	-	-	-	-	-	-	-
	6/24/2004**	165 J	<14	2.1 J	48.2 J	4.42 J	<44.5	<86.3	<422	-
	09/22/2004	-	-	-	-	-	-	-	-	-
	09/24/2004	<32.2	<6.37	1.12 J	<58.2	3.65 J	<24.1	<43.6	<178	-
	02/15/2005	<5	<50	<50	2910 J	<123	93.4 J	83.6 J	<430	-
	09/03/2005	3.8	3.2	<1.1	-	18	2.1	1.8	5.4	-
	12/04/2005	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	0.32 I	2	-
	02/26/2006	0.51 I	13	<0.35	190	15	<0.12	25	130	-
	08/21/2006	<0.21	15	<0.35	182	8.3	<0.12	11	150	-
	11/18/2006	<0.63	5.8	<1.1	22.8	<0.69	9.7	9.2	49	-
	04/18/2007	<0.63	11	<1	48.5	<0.69	38	52	210	-
	07/23/2007	<0.63	2.9	<1	16.8	<0.69	43	18	77	-
	10/7/2008	<0.40	<0.43	<0.26	<1.2	<0.35	0.47 I	<0.24	1.5	414
	12/17/2008	<0.40	0.96 I	<0.26	4.8	<0.35	7.6	9.0	63.1	599
3/2/2009	0.61 I	3.5	<0.50	19.5	1.1	14.5	20.3	102	2800	
6/11/2009	<0.50	1.2	<0.50	<1.0	<0.50	3.5	1.7	23.3	703	
9/14/2009	<0.50	<0.50	<0.50	<1.0	<0.50	0.92	0.6	3.1	222	
12/1/2009	0.65 I	2.2	<0.50	15.5	0.94 I	12.4	17.1	112	1,600	
CEF-271-09S	08/24/2001	9.8	36	<10	1600	270	-	-	-	<1600
	10/23/2003	<1.93	<25.8	<5	<98.5	<20.3	0.536 J	1.13 J	5.89 J	-
	04/26/2004	<0.5	<5	<5	3.06 J	<5	<1	<1	<0.25	-
	4/26/2004**	<0.5	<5	<5	3.12 J	<5	<1	<1	<0.25	-
	06/24/2004	<0.5	<5	<5	<10	<5	<1	<1	<0.25	-
	09/24/2004	<0.5	<5	<5	<10	<5	<1	<1	<0.25	-
	02/15/2005	<0.5	<5	<5	<10	<5	<1	<1	<0.25	-
	09/03/2005	<0.21	<0.17	<0.35	-	<0.23	<0.12	<0.18	<0.15	-
	12/04/2005	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	<0.18	<0.15	-
	02/27/2006	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	<0.18	<0.15	-
	08/21/2006	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	<0.18	0.18 I	-
	11/18/2006	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	<0.18	<0.15	-
	04/18/2007	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	<0.18	<0.15	-
	07/23/2007	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	<0.18	<0.15	-
	10/7/2008	<0.40	<0.43	<0.26	<1.2	<0.35	<0.24	<0.24	<0.24	<160
	12/17/2008	<0.40	<0.43	<0.26	<1.2	<0.35	<0.24	<0.24	<0.24	175 I
	3/2/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<0.25	<0.25	<0.25	<160
6/11/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<0.25	<0.25	<0.25	200 I	
9/14/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<0.24	<0.24	<0.24	<160	
12/1/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<0.24	<0.24	<0.24	<160	

TABLE 3
SUMMARY OF HISTORICAL VOC, PAH AND TRPH RESULTS

Building 271
NAS Cecil Field
Jacksonville, Florida

Well ID	Sample Date	VOLATILE ORGANIC COMPOUNDS (µg/L)					POLYCYCLIC AROMATIC HYDROCARBONS (µg/L)			TRPH (C8-C40) (µg/L)
		Benzene	Ethylbenzene	Methyl-tert-butyl-ether	Xylenes (total)	Toluene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	
GCTL (µg/L)		1	30	20	20	40	28	28	14	5000
NADSC (µg/L)		100	300	500	200	400	200	200	200	50000
CEF-271-10S	08/24/2001	1.8	1.2	<10	8	6.2	-	-	-	<1000
	10/27/2003	<0.5	<5	<5	<10	<5	<1	<1	<0.25	-
	04/27/2004	<0.5	<5	<5	<10	<5	<1	<1	<0.25	-
	6/24/2004**	<0.5	<5	<5	<10	<5	<1	<1	<0.25	-
	09/24/2004	<0.5	<5	<5	<10	<5	<1	<1	<0.25	-
	02/15/2005	<0.5	<5	<5	<10	<5	<1	<1	<0.25	-
	09/03/2005	<0.21	<0.17	<0.35	-	<0.23	<0.12	<0.18	<0.15	-
	12/04/2005	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	<0.18	<0.15	-
	02/26/2006	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	<0.18	<0.15	-
	08/24/2006	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	<0.18	<0.15	-
	11/18/2006	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	<0.18	<0.15	-
	04/18/2007	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	<0.18	<0.15	-
	07/23/2007	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	<0.18	<0.15	-
	10/7/2008	<0.40	<0.43	<0.26	<1.2	<0.35	<0.24	<0.24	<0.24	<160
12/17/2008	<0.40	<0.43	<0.26	<1.2	<0.35	<0.24	<0.24	<0.24	168 I	
3/2/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<0.24	<0.24	<0.24	<160	
6/11/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<0.24	<0.24	<0.24	<160	
9/14/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<0.24	<0.24	<0.24	<160	
12/2/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<0.24	<0.24	<0.24	<160	
CEF-271-12S	08/23/2001	0.44 J	<1	<5	<2	0.35 J	-	-	-	<1000
	10/23/2003	<0.5	<5	<5	<10	<5	<1	<1	<0.25	-
	04/27/2004	<0.5	<5	<5	<10	<5	<1	<1	<0.25	-
	06/24/2004	<2.04	<5	0.281 J	<10	<5	<1	<1	<0.25	-
	09/24/2004	<0.5	<5	<5	<10	<5	<1	<1	<0.25	-
	02/15/2005	<0.5	<5	<5	<10	<5	<1	<1	<0.25	-
	09/03/2005	<0.21	<0.17	<0.35	-	<0.23	<0.12	<0.18	<0.15	-
	12/04/2005	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	<0.18	<0.15	-
	02/26/2006	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	<0.18	<0.15	-
	08/24/2006	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	<0.18	<0.15	-
	11/18/2006	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	<0.18	<0.15	-
	04/18/2007	<0.21	<0.17	<0.35	<0.63	<0.23	<0.12	<0.18	<0.15	-
	07/23/2007	<0.21	<0.17	<0.35	0.63	<0.23	<0.12	<0.18	<0.15	-
	10/7/2008	<0.40	<0.43	<0.26	<1.2	<0.35	<0.24	<0.24	<0.24	164 I
	12/17/2008	<0.40	<0.43	<0.26	<1.2	<0.35	<0.24	<0.24	<0.24	195 I
	3/2/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<0.25	<0.25	<0.25	<170
6/11/2009	<0.50	<0.50	<0.50	<1.0	<0.50	<0.24	<0.24	<0.24	<160	
9/14/2009	<0.50	<.050	<.050	<1.0	<.050	<0.24	<0.24	<0.24	275	
12/2/2009	<0.50	<.050	<.050	<1.0	<.050	<0.24	<0.24	<0.24	<170	

NOTES:

µg/L - Micrograms per liter

GCTL - Groundwater Cleanup Target Level

NADSC - Natural Attenuation Default Source Concentration

TRPH - Total recoverable petroleum hydrocarbons

Bold indicates values above the method detection limit.

Shading indicates: Exceeds the GCTL

 Exceeds both the GCTL and NADSC

J - Estimated concentration

"-" Indicates that results are not available.

I - Indicates values that are greater than the method detection limit but less than the lab reporting limit

APPENDIX A

LABORATORY REPORT AND CHAIN-OF-CUSTODY FORM



Technical Report for

Solutions-IES, Inc

Cecil Field Building 271; Jacksonville, FL

8030.08A2.NAVF

Accutest Job Number: F69863

Sampling Dates: 12/01/09 - 12/02/09

Report to:

Solutions-IES, Inc

jdehart@solutions-ies.com

ATTN: Jessica Dehart

Total number of pages in report: **21**



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

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Test results relate only to samples analyzed.



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Sample Summary

Solutions-IES, Inc

Job No: F69863

Cecil Field Building 271; Jacksonville, FL
 Project No: 8030.08A2.NAVF

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F69863-1	12/01/09	17:06 EG	12/03/09	AQ	Ground Water	CEF-271-09S
F69863-2	12/01/09	17:00 EG	12/03/09	AQ	Ground Water	CEF-271-07S
F69863-3	12/02/09	08:52 EG	12/03/09	AQ	Ground Water	CEF-271-10S
F69863-4	12/02/09	09:27 EG	12/03/09	AQ	Ground Water	CEF-271-12S
F69863-5	12/01/09	00:00 EG	12/03/09	AQ	Trip Blank Water	CEF-271-TB1

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Solutions-IES, Inc

Job No: F69863

Site: Cecil Field Building 271; Jacksonville, FL

Report Date 12/15/2009 12:32:12

4 Samples and 1 Trip Blank were collected on between 12/01/2009 and 12/02/2009 and received at Accutest on 12/03/2009 properly preserved, at 3.2 Deg. C and intact. These Samples received an Accutest job number of F69863. 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.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix: AQ

Batch ID: OP31150

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) F69869-4MS, F69869-4MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Fluoranthene, Fluorene, Naphthalene, Phenanthrene are outside control limits. Probable cause due to matrix interference. For method performance in a clean matrix, refer to SB.

Matrix Spike Duplicate Recovery(s) for 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene are outside control limits. Probable cause due to matrix interference. For method performance in a clean matrix, refer to SB.

RPD(s) for MSD for Benzo(k)fluoranthene are outside control limits for sample OP31150-MSD. Probable cause due to matrix interference.

Volatiles by GC By Method SW846 8021B

Matrix: AQ

Batch ID: GEF5312

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) F69863-1MS, F69863-1MSD were used as the QC samples indicated.

F69863-2: All hits confirmed by dual column analysis.

Extractables by GC By Method FLORIDA-PRO

Matrix: AQ

Batch ID: OP31137

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) F69863-2MS, F69863-2MSD were used as the QC samples indicated.

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:

Lovelie Metzgar, QA Assistant (signature on file)

Date: December 15, 2009

Tuesday, December 15, 2009

Page 1 of 1



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: CEF-271-09S	
Lab Sample ID: F69863-1	Date Sampled: 12/01/09
Matrix: AQ - Ground Water	Date Received: 12/03/09
Method: SW846 8270C BY SIM SW846 3510C	Percent Solids: n/a
Project: Cecil Field Building 271; Jacksonville, FL	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R20595.D	1	12/08/09	RB	12/07/09	OP31150	SR1007
Run #2							

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

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.95	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.95	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.95	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	0.095 U	0.19	0.095	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	0.95	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.95	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	0.95	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.95	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.95	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.95	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.95	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	53%		42-108%
321-60-8	2-Fluorobiphenyl	46%		40-106%
1718-51-0	Terphenyl-d14	54%		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

3.1
3

Client Sample ID: CEF-271-09S		Date Sampled: 12/01/09
Lab Sample ID: F69863-1		Date Received: 12/03/09
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8021B		
Project: Cecil Field Building 271; Jacksonville, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF096896.D	1	12/07/09	CW	n/a	n/a	GEF5312
Run #2							

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

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.0 U	3.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		70-120%
98-08-8	aaa-Trifluorotoluene	97%		73-118%

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

3.1
3

Client Sample ID: CEF-271-09S		Date Sampled: 12/01/09
Lab Sample ID: F69863-1		Date Received: 12/03/09
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: FLORIDA-PRO SW846 3510C		
Project: Cecil Field Building 271; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ61592.D	1	12/07/09	FEA	12/04/09	OP31137	GIJ2106
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	72%		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-271-07S	
Lab Sample ID: F69863-2	Date Sampled: 12/01/09
Matrix: AQ - Ground Water	Date Received: 12/03/09
Method: SW846 8270C BY SIM SW846 3510C	Percent Solids: n/a
Project: Cecil Field Building 271; Jacksonville, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R20596.D	1	12/08/09	RB	12/07/09	OP31150	SR1007
Run #2	R20666.D	4	12/10/09	RB	12/07/09	OP31150	SR1011

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

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.65	0.95	0.48	ug/l	I
208-96-8	Acenaphthylene	0.48 U	0.95	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.95	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	0.095 U	0.19	0.095	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	0.95	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.95	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	12.4	0.95	0.24	ug/l	
91-57-6	2-Methylnaphthalene	17.1	0.95	0.24	ug/l	
91-20-3	Naphthalene	112 ^a	3.8	0.95	ug/l	
85-01-8	Phenanthrene	0.27	0.95	0.24	ug/l	I
129-00-0	Pyrene	0.24 U	0.95	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	52%	56%	42-108%
321-60-8	2-Fluorobiphenyl	44%	55%	40-106%
1718-51-0	Terphenyl-d14	56%	73%	39-121%

(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

32
3

Client Sample ID: CEF-271-07S		Date Sampled: 12/01/09
Lab Sample ID: F69863-2		Date Received: 12/03/09
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8021B		
Project: Cecil Field Building 271; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	EF096897.D	1	12/07/09	CW	n/a	n/a	GEF5312
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	0.65	1.0	0.50	ug/l	I
108-88-3	Toluene	0.94	1.0	0.50	ug/l	I
100-41-4	Ethylbenzene	2.2	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	15.5	3.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	113%		70-120%
98-08-8	aaa-Trifluorotoluene	107%		73-118%

(a) All hits confirmed by dual column analysis.

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

32
3

Client Sample ID: CEF-271-07S		Date Sampled: 12/01/09
Lab Sample ID: F69863-2		Date Received: 12/03/09
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: FLORIDA-PRO SW846 3510C		
Project: Cecil Field Building 271; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ61625.D	1	12/08/09	FEA	12/04/09	OP31137	GIJ2107
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)	1.60	0.24	0.16	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	87%		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-271-10S	
Lab Sample ID: F69863-3	Date Sampled: 12/02/09
Matrix: AQ - Ground Water	Date Received: 12/03/09
Method: SW846 8270C BY SIM SW846 3510C	Percent Solids: n/a
Project: Cecil Field Building 271; Jacksonville, FL	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R20597.D	1	12/08/09	RB	12/07/09	OP31150	SR1007
Run #2							

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

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.95	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.95	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.95	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	0.095 U	0.19	0.095	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	0.95	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.95	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	0.95	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.95	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.95	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.95	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.95	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%		42-108%
321-60-8	2-Fluorobiphenyl	66%		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-271-10S		Date Sampled: 12/02/09
Lab Sample ID: F69863-3		Date Received: 12/03/09
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8021B		
Project: Cecil Field Building 271; Jacksonville, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF096898.D	1	12/07/09	CW	n/a	n/a	GEF5312
Run #2							

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

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.0 U	3.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		70-120%
98-08-8	aaa-Trifluorotoluene	103%		73-118%

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-271-10S		Date Sampled: 12/02/09
Lab Sample ID: F69863-3		Date Received: 12/03/09
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: FLORIDA-PRO SW846 3510C		
Project: Cecil Field Building 271; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ61596.D	1	12/07/09	FEA	12/04/09	OP31137	GIJ2106
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	100%		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-271-12S		
Lab Sample ID:	F69863-4	Date Sampled:	12/02/09
Matrix:	AQ - Ground Water	Date Received:	12/03/09
Method:	SW846 8270C BY SIM SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field Building 271; Jacksonville, FL		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R20598.D	1	12/08/09	RB	12/07/09	OP31150	SR1007
Run #2							

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

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.95	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.95	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.95	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	0.095 U	0.19	0.095	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	0.95	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.95	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	0.95	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.95	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.95	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.95	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.95	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	62%		42-108%
321-60-8	2-Fluorobiphenyl	55%		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

3.4
3

Client Sample ID: CEF-271-12S		Date Sampled: 12/02/09
Lab Sample ID: F69863-4		Date Received: 12/03/09
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8021B		
Project: Cecil Field Building 271; Jacksonville, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF096899.D	1	12/07/09	CW	n/a	n/a	GEF5312
Run #2							

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

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.0 U	3.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		70-120%
98-08-8	aaa-Trifluorotoluene	94%		73-118%

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

3.4
3

Client Sample ID: CEF-271-12S		Date Sampled: 12/02/09
Lab Sample ID: F69863-4		Date Received: 12/03/09
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: FLORIDA-PRO SW846 3510C		
Project: Cecil Field Building 271; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ61597.D	1	12/07/09	FEA	12/04/09	OP31137	GIJ2106
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	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-271-TB1	Date Sampled:	12/01/09
Lab Sample ID:	F69863-5	Date Received:	12/03/09
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8021B		
Project:	Cecil Field Building 271; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF096900.D	1	12/07/09	CW	n/a	n/a	GEF5312
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	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.0 U	3.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		70-120%
98-08-8	aaa-Trifluorotoluene	103%		73-118%

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

I = Result \geq 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

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F69863 CLIENT: Solutions PROJECT: Cecil field
 DATE/TIME RECEIVED: 12/03/09 8:00 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 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
- SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- TEMPERATURE CRITERIA NOT MET
- WET ICE PRESENT

TRIP BLANK INFORMATION

- TRIP BLANK PROVIDED
- TRIP BLANK NOT PROVIDED
- TRIP BLANK NOT ON COC
- TRIP BLANK INTACT
- TRIP BLANK NOT INTACT
- RECEIVED WATER TRIP BLANK
- RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 0
 NUMBER OF 5035 FIELD KITS ? 0
 NUMBER OR LAB FILTERED METALS ? 0

TEMPERATURE INFORMATION

- IR THERM ID 122 CORR. FACTOR 1.4
- OBSERVED TEMPS: 28
- CORRECTED TEMPS: 32

SAMPLE INFORMATION

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

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS: Sample 4 only received 2 vials HCL

TECHNICIAN SIGNATURE/DATE [Signature] 12/03/09 REVIEWER SIGNATURE/DATE [Signature] 12/03/09

NF 10/09

RECEIPT CONFIRMATION 100609 (2).xls

4
4

Sample Summary

Solutions-IES, Inc

Job No: F69863

Cecil Field Building 271; Jacksonville, FL
Project No: 8030.08A2.NAVF

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F69863-1	12/01/09	17:06 EG	12/03/09	AQ	Ground Water	CEF-271-09S
F69863-2	12/01/09	17:00 EG	12/03/09	AQ	Ground Water	CEF-271-07S
F69863-3	12/02/09	08:52 EG	12/03/09	AQ	Ground Water	CEF-271-10S
F69863-4	12/02/09	09:27 EG	12/03/09	AQ	Ground Water	CEF-271-12S
F69863-5	12/01/09	00:00 EG	12/03/09	AQ	Trip Blank Water	CEF-271-TB1

Report of Analysis

Client Sample ID:	CEF-271-09S		
Lab Sample ID:	F69863-1	Date Sampled:	12/01/09
Matrix:	AQ - Ground Water	Date Received:	12/03/09
Method:	SW846 8270C BY SIM SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field Building 271; Jacksonville, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R20595.D	1	12/08/09	RB	12/07/09	OP31150	SR1007
Run #2							

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

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.95	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.95	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.95	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	0.095 U	0.19	0.095	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	0.95	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.95	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	0.95	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.95	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.95	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.95	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.95	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	53%		42-108%
321-60-8	2-Fluorobiphenyl	46%		40-106%
1718-51-0	Terphenyl-d14	54%		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-271-09S	
Lab Sample ID:	F69863-1	Date Sampled: 12/01/09
Matrix:	AQ - Ground Water	Date Received: 12/03/09
Method:	SW846 8021B	Percent Solids: n/a
Project:	Cecil Field Building 271; Jacksonville, FL	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF096896.D	1	12/07/09	CW	n/a	n/a	GEF5312
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	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.0 U	3.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		70-120%
98-08-8	aaa-Trifluorotoluene	97%		73-118%

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-271-09S	
Lab Sample ID: F69863-1	Date Sampled: 12/01/09
Matrix: AQ - Ground Water	Date Received: 12/03/09
Method: FLORIDA-PRO SW846 3510C	Percent Solids: n/a
Project: Cecil Field Building 271; Jacksonville, FL	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ61592.D	1	12/07/09	FEA	12/04/09	OP31137	GIJ2106
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	72%		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-271-07S		
Lab Sample ID:	F69863-2	Date Sampled:	12/01/09
Matrix:	AQ - Ground Water	Date Received:	12/03/09
Method:	SW846 8270C BY SIM SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field Building 271; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R20596.D	1	12/08/09	RB	12/07/09	OP31150	SR1007
Run #2	R20666.D	4	12/10/09	RB	12/07/09	OP31150	SR1011

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

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.65	0.95	0.48	ug/l	I
208-96-8	Acenaphthylene	0.48 U	0.95	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.95	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	0.095 U	0.19	0.095	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	0.95	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.95	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	12.4	0.95	0.24	ug/l	
91-57-6	2-Methylnaphthalene	17.1	0.95	0.24	ug/l	
91-20-3	Naphthalene	112 ^a	3.8	0.95	ug/l	
85-01-8	Phenanthrene	0.27	0.95	0.24	ug/l	I
129-00-0	Pyrene	0.24 U	0.95	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	52%	56%	42-108%
321-60-8	2-Fluorobiphenyl	44%	55%	40-106%
1718-51-0	Terphenyl-d14	56%	73%	39-121%

(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-271-07S	
Lab Sample ID:	F69863-2	Date Sampled: 12/01/09
Matrix:	AQ - Ground Water	Date Received: 12/03/09
Method:	SW846 8021B	Percent Solids: n/a
Project:	Cecil Field Building 271; Jacksonville, FL	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	EF096897.D	1	12/07/09	CW	n/a	n/a	GEF5312
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	0.65	1.0	0.50	ug/l	I
108-88-3	Toluene	0.94	1.0	0.50	ug/l	I
100-41-4	Ethylbenzene	2.2	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	15.5	3.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	113%		70-120%
98-08-8	aaa-Trifluorotoluene	107%		73-118%

(a) All hits confirmed by dual column analysis.

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-271-07S	
Lab Sample ID: F69863-2	Date Sampled: 12/01/09
Matrix: AQ - Ground Water	Date Received: 12/03/09
Method: FLORIDA-PRO SW846 3510C	Percent Solids: n/a
Project: Cecil Field Building 271; Jacksonville, FL	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ61625.D	1	12/08/09	FEA	12/04/09	OP31137	GIJ2107
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)	1.60	0.24	0.16	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	87%		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-271-10S		
Lab Sample ID:	F69863-3	Date Sampled:	12/02/09
Matrix:	AQ - Ground Water	Date Received:	12/03/09
Method:	SW846 8270C BY SIM SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field Building 271; Jacksonville, FL		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R20597.D	1	12/08/09	RB	12/07/09	OP31150	SR1007
Run #2							

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

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.95	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.95	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.95	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	0.095 U	0.19	0.095	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	0.95	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.95	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	0.95	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.95	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.95	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.95	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.95	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%		42-108%
321-60-8	2-Fluorobiphenyl	66%		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-271-10S	
Lab Sample ID:	F69863-3	Date Sampled: 12/02/09
Matrix:	AQ - Ground Water	Date Received: 12/03/09
Method:	SW846 8021B	Percent Solids: n/a
Project:	Cecil Field Building 271; Jacksonville, FL	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF096898.D	1	12/07/09	CW	n/a	n/a	GEF5312
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	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.0 U	3.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		70-120%
98-08-8	aaa-Trifluorotoluene	103%		73-118%

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-271-10S	
Lab Sample ID: F69863-3	Date Sampled: 12/02/09
Matrix: AQ - Ground Water	Date Received: 12/03/09
Method: FLORIDA-PRO SW846 3510C	Percent Solids: n/a
Project: Cecil Field Building 271; Jacksonville, FL	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ61596.D	1	12/07/09	FEA	12/04/09	OP31137	GIJ2106
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	100%		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-271-12S		
Lab Sample ID:	F69863-4	Date Sampled:	12/02/09
Matrix:	AQ - Ground Water	Date Received:	12/03/09
Method:	SW846 8270C BY SIM SW846 3510C	Percent Solids:	n/a
Project:	Cecil Field Building 271; Jacksonville, FL		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R20598.D	1	12/08/09	RB	12/07/09	OP31150	SR1007
Run #2							

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

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.48 U	0.95	0.48	ug/l	
208-96-8	Acenaphthylene	0.48 U	0.95	0.48	ug/l	
120-12-7	Anthracene	0.48 U	0.95	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	0.095 U	0.19	0.095	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	0.95	0.24	ug/l	
86-73-7	Fluorene	0.48 U	0.95	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	0.95	0.24	ug/l	
91-57-6	2-Methylnaphthalene	0.24 U	0.95	0.24	ug/l	
91-20-3	Naphthalene	0.24 U	0.95	0.24	ug/l	
85-01-8	Phenanthrene	0.24 U	0.95	0.24	ug/l	
129-00-0	Pyrene	0.24 U	0.95	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	62%		42-108%
321-60-8	2-Fluorobiphenyl	55%		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-271-12S	
Lab Sample ID:	F69863-4	Date Sampled: 12/02/09
Matrix:	AQ - Ground Water	Date Received: 12/03/09
Method:	SW846 8021B	Percent Solids: n/a
Project:	Cecil Field Building 271; Jacksonville, FL	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF096899.D	1	12/07/09	CW	n/a	n/a	GEF5312
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	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.0 U	3.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		70-120%
98-08-8	aaa-Trifluorotoluene	94%		73-118%

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-271-12S	
Lab Sample ID:	F69863-4	Date Sampled: 12/02/09
Matrix:	AQ - Ground Water	Date Received: 12/03/09
Method:	FLORIDA-PRO SW846 3510C	Percent Solids: n/a
Project:	Cecil Field Building 271; Jacksonville, FL	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ61597.D	1	12/07/09	FEA	12/04/09	OP31137	GIJ2106
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	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-271-TB1	Date Sampled:	12/01/09
Lab Sample ID:	F69863-5	Date Received:	12/03/09
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8021B		
Project:	Cecil Field Building 271; Jacksonville, FL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF096900.D	1	12/07/09	CW	n/a	n/a	GEF5312
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	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.0 U	3.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		70-120%
98-08-8	aaa-Trifluorotoluene	103%		73-118%

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

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F69863 CLIENT: Solutions PROJECT: Cecil field
 DATE/TIME RECEIVED: 12/03/09 8:00 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 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
- SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- TEMPERATURE CRITERIA NOT MET
- WET ICE PRESENT

TRIP BLANK INFORMATION

- TRIP BLANK PROVIDED
- TRIP BLANK NOT PROVIDED
- TRIP BLANK NOT ON COC
- TRIP BLANK INTACT
- TRIP BLANK NOT INTACT
- RECEIVED WATER TRIP BLANK
- RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 0
 NUMBER OF 5035 FIELD KITS ? 0
 NUMBER OR LAB FILTERED METALS ? 0

TEMPERATURE INFORMATION

- IR THERM ID 122 CORR. FACTOR 1.4
- OBSERVED TEMPS: 28
- CORRECTED TEMPS: 32

SAMPLE INFORMATION

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

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS: Sample 4 only received 2 vials HCL

TECHNICIAN SIGNATURE/DATE [Signature] 12/03/09 REVIEWER SIGNATURE/DATE [Signature] 12/03/09

NF 10/09

RECEIPT CONFIRMATION 100609 (2).xls

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FC9863 CLIENT: Solutions PROJECT: Cecil field
 DATE/TIME RECEIVED: 12/03/09 8:00 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 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
- SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- TEMPERATURE CRITERIA NOT MET
- WET ICE PRESENT

TRIP BLANK INFORMATION

- TRIP BLANK PROVIDED
- TRIP BLANK NOT PROVIDED
- TRIP BLANK NOT ON COC
- TRIP BLANK INTACT
- TRIP BLANK NOT INTACT
- RECEIVED WATER TRIP BLANK
- RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 0
 NUMBER OF 5035 FIELD KITS ? 0
 NUMBER OR LAB FILTERED METALS ? 0

TEMPERATURE INFORMATION

- IR THERM ID 122 CORR. FACTOR 1.4
- OBSERVED TEMPS: 2.8
- CORRECTED TEMPS: 3.2

SAMPLE INFORMATION

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

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS: Sample 4 only received 2 vials HCL

TECHNICIAN SIGNATURE/DATE CEL 12/03/09 REVIEWER SIGNATURE/DATE ET-12/03/09

Sample Receipt Confirmation

Solutions-IES, Inc

Job No: F69863

Cecil Field Building 271; Jacksonville, FL
 Project No: 8030.08A2.NAVF

Sample Number	Collected		Received	Matrix			Client Sample ID
	Date	Time By		TA	Code	Type	
F69863-1	12/01/09	17:06 EG	12/03/09	7	AQ	Ground Water	CEF-271-09S
F69863-2	12/01/09	17:00 EG	12/03/09	7	AQ	Ground Water	CEF-271-07S
F69863-3	12/02/09	08:52 EG	12/03/09	7	AQ	Ground Water	CEF-271-10S
F69863-4	12/02/09	09:27 EG	12/03/09	7	AQ	Ground Water	CEF-271-12S
Tests: B8270SIMPAAH, FLPRO, V8021BTXM							
F69863-5	12/01/09	00:00 EG	12/03/09	7	AQ	Trip Blank Water	CEF-271-TB1
Tests: V8021BTXM							

Tests are displayed after the samples to which they apply.

APPENDIX B

GROUNDWATER SAMPLING LOGS

**SOLUTIONS-IES
GROUNDWATER SAMPLING LOG**

Site Name: Building 271 - Cecil Field	Site Location: Jacksonville, Florida
Well Number: CEF-271-07S	Sample ID: CEF-271-07S
Date: 12/1/09	

PURGING DATA

Well Diameter (inches): 1 2 3 4	Tubing Diameter (inches): 3/8 1/2	Tubing: LDPE Teflon	Static Depth to water (feet): 8.86	Purge pump type or bailer: Peristaltic Pump	Well Screen Interval Depth: 2.7 to 12.7 feet
Initial Pump or Tubing Depth in well: 2 ft from bottom		Purging Initiated: 16:30	Purging Ended: 17:00	Total Volume Purged (Gallons): 1.2	Sample Pump Flow Rate (mL/min): 190

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)
1635	.05	.05	190	8.99	5.88	20.74	858	3.62	23.0	117.9	light tea	none
1640	.2	.25	190	9.02	6.30	21.99	886	2.91	10.8	57.8	v. light tea	"
1645	.25	.5	190	9.03	6.37	22.11	896	2.78	8.2	39.3	"	"
1650	.2	.7	190	9.05	6.41	22.29	910	2.60	6.3	25.2	"	"
1655	.25	.95	190	9.06	6.42	22.39	920	2.60	4.2	15.1	"	"
1700	.25	1.2	190	9.06	6.43	22.45	927	2.55	3.2	8.3	"	"

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: Traci Fulkerson/Terratec	Sampler(s) Signature: 	Sampling Initiated: 17:00	Sampling Ended:
Field Decontamination: Y <input checked="" type="radio"/> N <input type="radio"/>	Field-Filtered: Y <input checked="" type="radio"/> N <input type="radio"/>	Filter Size: _____ µm	Filtration Equipment Type: _____
			Duplicate: Y <input type="radio"/> N <input checked="" type="radio"/>

SAMPLE CONTAINER INFORMATION

Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Intended Analysis	Sampling Equipment Code
✓	2	AG	1 L	None	PAHs 8270C + 1- and 2-methylnaphthalene	PP
✓	2	AG	1 L	H ₂ SO ₄	TRPH FL-PRO	PP
✓	3	CG	40 mL	HCl	BTEX & MTBE 8021B	RFPP

Remarks:

Field Kits: DO:

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 271 - Cecil Field	Site Location: Jacksonville, Florida
Well Number: CEF-271-12S	Sample ID: CEF-271-12S
Date: 12-2-09	

PURGING DATA

Well Diameter (inches): 1 2 3 4	Tubing Diameter (inches): 1/4 3/8 1/2	Tubing: LDPE Teflon	Static Depth to water (feet): 9.71	Purge pump type or bailer: Peristaltic Pump	Well Screen Interval Depth: 3.1 to 13.1 feet
Initial Pump or Tubing Depth in well: 7.6 ft	Purging Initiated: 0830	Purging Ended: 0926	Total Volume Purged (Gallons):		Sample Pump Flow Rate (mL/min): 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)
0840	0.1	0.1	100	9.45	6.84	21.23	0.392	0.23	389	-24.2	cloudy	none
0845	0.2	0.3	100	9.45	6.82	21.33	0.387	0.43	329	-16.1	cloudy	none
0850	0.2	0.5	100	9.45	6.81	21.47	0.380	0.42	139	-0.4	cloudy	none
0855	0.2	0.7	100	9.45	6.80	21.57	0.380	0.38	99.7	5.9	cloudy	none
0900	0.2	0.9	100	9.45	6.80	21.67	0.381	0.36	88.7	9.5	cloudy	none
0905	0.2	1.1	100	9.45	6.80	21.76	0.380	0.32	67.0	21.6	cloudy	none
0910	0.2	1.3	100	9.45	6.79	21.88	0.378	0.26	33.2	29.3	cloudy	none
0915	0.2	1.5	100	9.45	6.80	21.91	0.374	0.22	18.66	34.6	clear	none
0920	0.2	1.7	100	9.45	6.77	21.99	0.373	0.24	14.91	31.8	clear	none
0925	0.2	1.9	100	9.45	6.76	22.05	0.370	0.23	12.65	31.6	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: Kathryn Doll/Solutions-IES	Sampler(s) Signature: <i>Kathryn Doll</i>	Sampling Initiated: 0927	Sampling Ended: 1000
Field Decontamination: Y N	Field-Filtered: Y <u>N</u>	Filter Size: µm	Filtration Equipment Type:
			Duplicate: Y <u>N</u>

SAMPLE CONTAINER INFORMATION

Sample ID Code	# Containers	Material Code	Volume	Preservative Used	Intended Analysis	Sampling Equipment Code
	2	AG	1 L	None	PAHs 8270C + 1- and 2-methylnaphthalene	PP
	2	AG	1 L	H ₂ SO ₄	TRPH FL-PRO	PP
	3	CG	40 mL	HCl	BTEX & MTBE 8021B	RFPP

Remarks:

Field Kits: DO: 1.0 mg/L

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)