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NAS JACKSONVILLE  
5090.3a

FINAL B101S GROUNDWATER MONITORING RESULTS REPORT FOR JUNE 2013 NAS  
JACKSONVILLE FL  
7/16/2013  
SOLUTIONS-IES

July 16, 2013

Ms. Jane Beason  
Hazardous & Solid Waste Program Manager  
Public Works Department  
Naval Air Station Jacksonville  
Box 50, Building 1  
Jacksonville, Florida 32212

**Re: B101S Groundwater Monitoring Results, June 2013**  
**FDEP Permit Number 72437-HO-010**  
**Contract Number N69450-11-D-0100/0009**  
**NAS Jacksonville**  
**Solutions-IES Project No. 2013.0029.NAVY**

Dear Ms. Beason:

Solutions-IES, Inc. (Solutions-IES) is pleased to submit this Letter Report of the June 2013 groundwater sampling results from B101S at Naval Air Station (NAS) Jacksonville, Florida. The groundwater sampling at B101S was performed for the United States Navy, Naval Facilities Engineering Command Southeast (NAVFAC SE), under Contract Number N69450-11-D-0100/0009.

B101S is a Resource Conservation and Recovery Act (RCRA) regulated Subpart X unit located within the boundaries of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) designated Operable Unit (OU)-3 site. B101S is located in the Fleet Readiness Center Southeast (FRC-SE) in the north-eastern portion of the NAS Jacksonville installation near the St. Johns River. A site location map is provided as **Figure 1**.

In August 2007, NAS Jacksonville discovered and reported to the Florida Department of Environmental Protection (FDEP) an abandoned underground ventilation piping system at B101S. The system consists of concrete trenches and pits, and a series of 12-inch and 30 to 36-inch vitrified clay pipes that were used in a push-pull ventilation system to convey solvent-laden air from the aircraft stripping area to outside air scrubbers. The ventilation piping is also connected to piping used to convey the aircraft stripping wastewater to the FRC-SE Industrial Waste Water Treatment Plant (IWWTP) (Tetra Tech, Inc. [Tt], 2012).

The ventilation piping was never adequately secured when the system was taken out of service and, over time, wastewater entered the ventilation system. It is also documented that IWWTP effluent would back up into the ventilation piping due to operational requirements associated with the IWWTP lift station. In addition to the ventilation piping/trenches, an abandoned Blast Media Recovery system consisting of four sumps and a piping system varying from 27 to 30 inches in diameter is also part of this unit subject to closure requirements.

The primary objective of sampling activities at B101S is to monitor groundwater associated with the shallow surficial aquifer immediately downgradient of the site. A baseline groundwater sampling event was conducted in May 2009 at the direction of the FDEP. FDEP directed that sampling continue on a semi-annual basis for the site until the Record of Decision (ROD) for OU-3 is approved and the selected remedy is implemented. The first semi-annual sampling event occurred in December 2009.

## FIELD OPERATIONS

Field operations were performed in accordance with the Solutions-IES Sampling and Analysis Plan (SAP) dated May 2012. Groundwater samples were collected on June 13, 2013, using low-flow purging and sampling methods from two shallow monitoring wells (MW-780-1 and MW-780-2) located on the west side of Building 780, and one shallow monitoring well to the north of Building B101S (MW-101S-01). Groundwater sampling logs from the sampling event are provided in **Attachment A**.

The groundwater samples were placed on ice and delivered via courier under chain-of-custody to Accutest Laboratories Southeast in Orlando, Florida for analysis. One equipment rinsate blank, one field blank and two trip blanks were also submitted. The groundwater samples and rinsate blank were submitted for analysis of volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method 8260B, semi-volatile organic compounds (SVOCs) by EPA Method 8270D, RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver plus beryllium, molybdenum, nickel and zinc) by EPA Method 6010C, mercury by EPA Method 7470A and total recoverable petroleum hydrocarbons (TRPH) by the Florida Petroleum Residual Organics Method (FL-PRO). The field blank and trip blank were submitted for analysis of VOCs by EPA Method 8260B only.

## RESULTS

The laboratory analytical results for the June 2013 event are summarized in **Table 1**, and the laboratory analytical report is provided in **Attachment B**. **Figure 2** presents the groundwater constituents by well of origin that exceeded FDEP Groundwater Cleanup Target Levels (GCTLs) during the June 2013 event.

Vinyl chloride (1.6 microgram per liter [ $\mu\text{g/L}$ ]) was the only constituent that exceeded the respective GCTL of 1  $\mu\text{g/L}$  in MW-780-1. Vinyl chloride (1.3  $\mu\text{g/L}$ ) and arsenic (11.0  $\mu\text{g/L}$ ) were the constituents that exceeded the respective GCTLs of 1  $\mu\text{g/L}$  and 10  $\mu\text{g/L}$ , respectively, in well MW-780-2. Constituents were not reported above the GCTLs in monitoring well MW-101S-01. Constituents were not reported above the laboratory detection limits in the trip blanks or rinsate blank submitted during the June 2013 event. However, toluene was reported in the field blank at an estimated concentration of 0.25  $\mu\text{g/L}$  which is above the method detection limit but below the reporting limit .

## CONCLUSIONS

Results from the June 2013 sampling event at B101S indicated the presence of several low-level VOCs, metals and TRPH in the surficial aquifer at the site. Two constituents were reported above the GCTLs: vinyl chloride in well MW-780-1 and vinyl chloride and arsenic in well MW-780-2. The presence of vinyl chloride is often associated with reductive dechlorination of chlorinated solvents. Arsenic has historically been detected in B101S monitoring wells and has been reported above the GCTL in MW-780-2 during the past two events. Constituents were not reported above the GCTLs in well MW-101S-01 and SVOCs were not reported above the laboratory detection limits in any of the wells sampled.

The source of the toluene detected in the field blank from the June 2013 event is unknown. However, toluene was not detected above the laboratory detection limits in any of the samples. Therefore, the detection of toluene in the field blank sample does not adversely affect the conclusions drawn from this event.

## RECOMMENDATIONS

Since June 2011, arsenic has been the only metal reported above the FDEP GCTL, and concentrations of other metals reported above the laboratory detection limits do not suggest an increasing trend. TRPH has

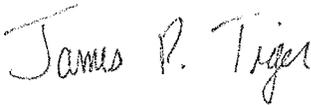
also remained well below the GCTL since June 2011 (Tt, 2011/2012). Additionally, vinyl chloride is the only volatile COC that has been consistently reported above the GCTL. Low concentrations of SVOCs have been intermittently detected and only occasionally reported above their respective GCTLs. Therefore, Solutions-IES recommends the following:

- Removing all metals from the monitoring program with the exception of arsenic;
- Removing TRPH from the monitoring program; and
- Reducing the monitoring frequency at B101S from semi-annual to annual in December of each year.

If you have any questions or need any additional information, please feel free to contact me at 919-873-1060 (ext. 163) or by email at [jovermyer@solutions-ies.com](mailto:jovermyer@solutions-ies.com).

Yours truly,

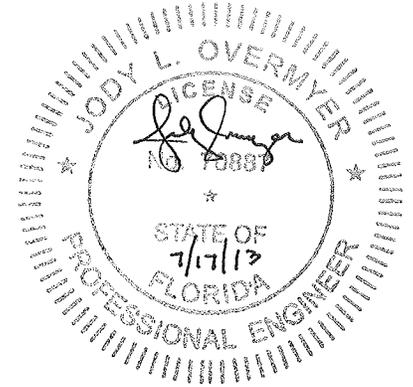
**Solutions-IES**



James Tiger  
Project Manager



Jody Overmyer, P.E.  
Senior Project Manager



**Enclosures:** Figure 1 - Site Location Map  
Figure 2 - Contaminant Concentration Map  
Table 1 - Summary of Groundwater Laboratory Analytical Results  
Attachment A - Groundwater Sampling Logs  
Attachment B - Laboratory Analytical Report and Chain-of-Custody Form

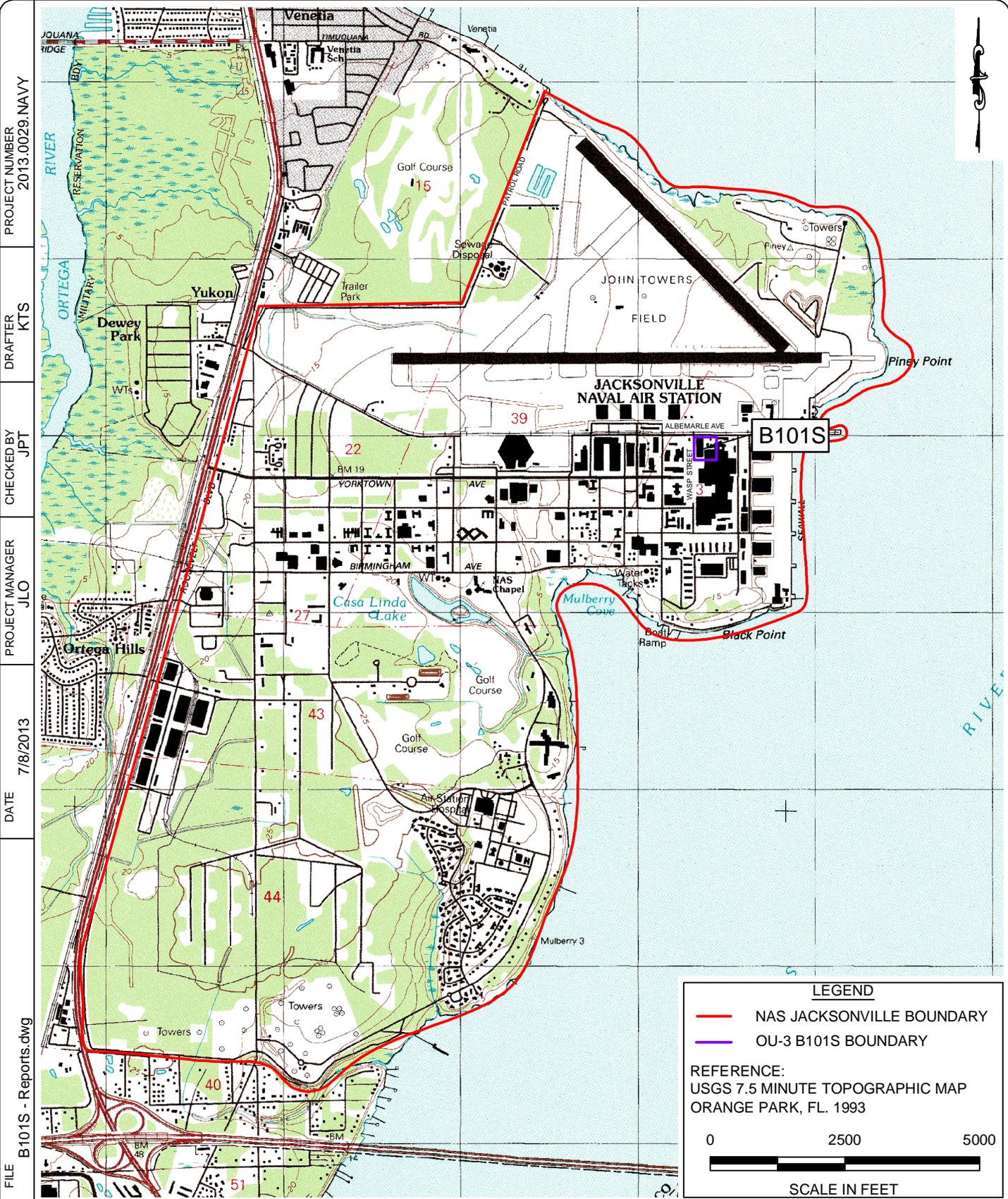
**Electronic cc:** Adrienne Wilson, NAVFAC SE RPM ([adrienne.wilson@navy.mil](mailto:adrienne.wilson@navy.mil))  
Tim Curtin, NAS Jacksonville IRPM ([tim.l.curtin@navy.mil](mailto:tim.l.curtin@navy.mil))

**Reference:**

Tt, 2011. *Hanger 101S June 2011 Sampling Event Letter Report*, Naval Air Station Jacksonville, Jacksonville, Florida, August 24.

Tt, 2012. *Hanger 101S December 2011 Sampling Event Letter Report*, Naval Air Station Jacksonville, Jacksonville, Florida, March 23.

## **FIGURES**



PROJECT NUMBER 2013.0029.NAVY  
 DRAFTER KTS  
 CHECKED BY JPT  
 PROJECT MANAGER JLO  
 DATE 7/8/2013  
 FILE B101S - Reports.dwg

**Solutions-IES**  
 Industrial & Environmental Services  
 1101 NOWELL ROAD  
 RALEIGH, NORTH CAROLINA 27607  
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SITE LOCATION MAP  
 B101S  
 OPERABLE UNIT 3  
 NAVAL AIR STATION JACKSONVILLE  
 JACKSONVILLE, FLORIDA

FIGURE:  
 1

PROJECT NUMBER  
2013.0029.NAVY

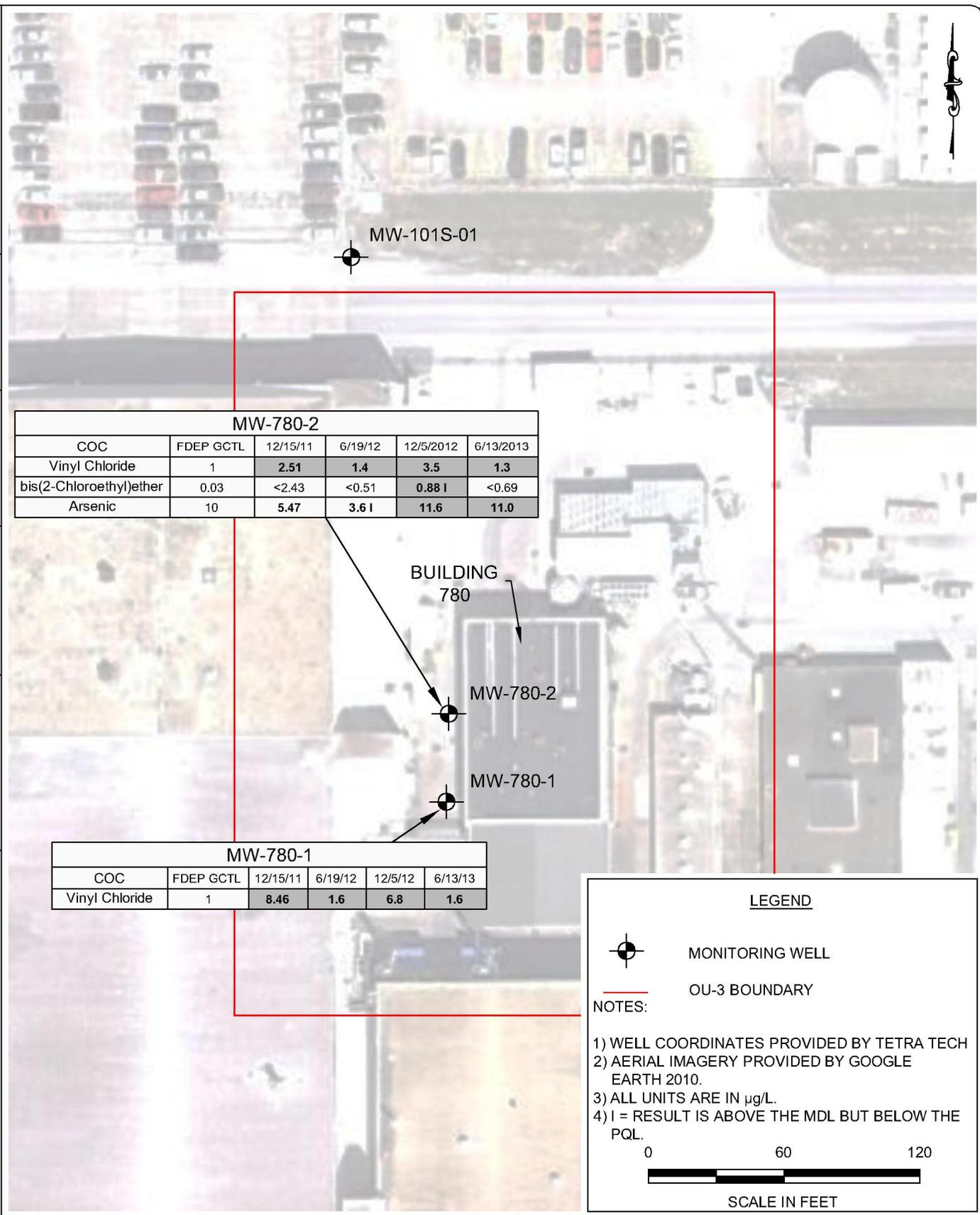
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MW-780-2					
COC	FDEP GCTL	12/15/11	6/19/12	12/5/2012	6/13/2013
Vinyl Chloride	1	2.51	1.4	3.5	1.3
bis(2-Chloroethyl)ether	0.03	<2.43	<0.51	0.88 I	<0.69
Arsenic	10	5.47	3.6 I	11.6	11.0

MW-780-1					
COC	FDEP GCTL	12/15/11	6/19/12	12/5/12	6/13/13
Vinyl Chloride	1	8.46	1.6	6.8	1.6

**LEGEND**

 MONITORING WELL  
 OU-3 BOUNDARY

NOTES:

- 1) WELL COORDINATES PROVIDED BY TETRA TECH
- 2) AERIAL IMAGERY PROVIDED BY GOOGLE EARTH 2010.
- 3) ALL UNITS ARE IN µg/L.
- 4) I = RESULT IS ABOVE THE MDL BUT BELOW THE PQL.

0                      60                      120  
  
 SCALE IN FEET

## **TABLE**

TABLE 1

SUMMARY OF GROUNDWATER LABORATORY ANALYTICAL RESULTS  
B101S  
NAVAL AIR STATION JACKSONVILLE  
JACKSONVILLE, FLORIDA

Well ID	FDEP GCTL	MW-101S-01			MW-780-1			MW-780-2		
		6/19/2012	12/5/2012	6/13/2013	6/19/2012	12/5/2012	6/13/2013	6/19/2012	12/5/2012	6/13/2013
<b>Volatile Organic Compounds (8260B) µg/L</b>										
Benzene	1	<0.20	<0.21	<0.21	<b>0.24 I</b>	<0.21	<0.21	<0.20	<0.21	<0.21
<i>sec</i> -Butylbenzene	NE	<0.22	<0.21	<0.21	<b>0.28 I</b>	<0.21	<b>0.32 I</b>	<0.22	<0.21	<0.21
<i>tert</i> -Butylbenzene	NE	<0.27	<0.29	<0.29	<b>0.38 I</b>	<0.29	<b>0.39 I</b>	<0.27	<0.29	<0.29
Chlorobenzene	100	<0.20	<0.20	<0.20	<1.0	<0.20	<0.20	<0.20	<b>0.94 I</b>	<b>0.27 I</b>
Chloroethane	12	<0.50	<0.50	<0.50	<b>4.1</b>	<b>5.9</b>	<b>4.1</b>	<b>1.0 I</b>	<b>0.68 I</b>	<b>0.77 I</b>
1,1-Dichloroethane	70	<0.25	<0.21	<0.21	<b>2.3</b>	<b>5.7</b>	<b>3.7</b>	<b>1.7</b>	<b>6.4</b>	<b>3.6</b>
1,1-Dichloroethene	7	<0.23	<0.20	<0.20	<b>1.0</b>	<b>5.7</b>	<b>1.5</b>	<0.23	<b>0.78 I</b>	<b>0.40 I</b>
<i>cis</i> -1,2-Dichloroethene	70	<0.26	<0.24	<0.24	<b>3.9</b>	<b>9.7</b>	<b>4.3</b>	<b>2.5</b>	<b>4.2</b>	<b>2.6</b>
<i>o</i> -Dichlorobenzene	600	<0.25	<0.22	<0.22	<b>1.0</b>	<b>0.72 I</b>	<b>0.97 I</b>	<0.25	<0.22	<0.22
<i>trans</i> -1,2-Dichloroethene	100	<0.35	<0.23	<0.23	<1.0	<b>0.34 I</b>	<b>0.30 I</b>	<0.35	<0.23	<0.23
1,1,1-Trichloroethane	200	<0.20	<0.20	<0.20	<b>0.43 I</b>	<b>0.47 I</b>	<b>0.56 I</b>	<0.20	<0.20	<0.20
Trichloroethene	3	<0.26	<0.31	<0.31	<0.26	<0.31	<b>0.37 I</b>	<b>0.90 I</b>	<b>1.9</b>	<b>0.66 I</b>
Vinyl Chloride	1	<0.22	<0.44	<0.44	<b>1.6</b>	<b>6.8</b>	<b>1.6</b>	<b>1.4</b>	<b>3.5</b>	<b>1.3</b>
<b>Semi-Volatile Organic Compounds (8270D) µg/L</b>										
<i>bis</i> (2-Chloroethyl)ether	0.03	<0.51	<0.69	<0.69	<0.52	<0.70	<0.69	<0.51	<b>0.88 I</b>	<0.69
<i>bis</i> (2-Ethylhexyl)phthalate	6	<1.0	<1.1	<1.1	<b>1.9 I</b>	<1.1	<1.1	<b>1.4 I</b>	<1.2	<1.1
1,2-Dichlorobenzene	600	<0.95	<0.65	<0.65	<0.96	<b>0.74 I</b>	<0.65	<0.95	<0.68	<0.65
1-Methylnaphthalene	28	<0.48	<0.68	<0.68	<b>2.2 I</b>	<0.69	<0.68	<0.48	<0.70	<0.68
2-Methylnaphthalene	28	<0.54	<0.66	<0.66	<b>3.0 I</b>	<0.67	<0.66	<b>0.60 I</b>	<0.69	<0.66
Naphthalene	14	<0.76	<0.61	<0.61	<b>1.6 I</b>	<0.62	<0.61	<0.76	<0.64	<0.61
<b>Total Petroleum Hydrocarbons (FL PRO) µg/L</b>										
TRPH	5,000	<b>204 I</b>	<b>340</b>	<b>280</b>	<b>180 I</b>	<b>257</b>	<b>279</b>	<140	<140	<150
<b>Metals (6010C) µg/L</b>										
Arsenic	10	<b>2.1 I</b>	<2.5	<2.5	<b>3.1 I</b>	<b>6.7 I</b>	<b>3.9 I</b>	<b>3.6 I</b>	<b>11.6</b>	<b>11.0</b>
Barium	2,000	<b>57.0 I</b>	<b>56.6 I</b>	<b>54.9 I</b>	<b>67.5 I</b>	<b>63.5 I</b>	<b>58.4 I</b>	<b>46.8 I</b>	<b>32.1 I</b>	<b>33.1 I</b>
Chromium	100	<b>3.1 I</b>	<2.0	<2.0	<b>1.3 I</b>	<2.0	<2.0	<b>1.7 I</b>	<2.0	<2.0
Lead	15	<1.0	<b>2.0 I</b>	<1.1	<b>4.0 I</b>	<1.1	<1.1	<1.0	<1.1	<1.1
Molybdenum	35	<2.0	<1.0	<1.0	<2.0	<b>2.0 I</b>	<1.0	<b>15.2 I</b>	<b>5.6 I</b>	<b>5.8 I</b>
Nickel	100	<2.0	<0.50	<b>0.50 I</b>	<2.0	<b>1.4 I</b>	<b>1.1 I</b>	<2.0	<0.50	<0.50
Selenium	50	<2.0	<b>2.8 I</b>	<2.0	<2.0	<2.0	<2.0	<2.0	<b>2.0 I</b>	<2.0
Silver	100	<1.0	<0.50	<0.50	<1.0	<0.50	<b>0.70 I</b>	<1.0	<b>&lt;0.50</b>	<b>0.60 I</b>
Zinc	5,000	<5.0	<b>6.2 I</b>	<b>6.8 I</b>	<b>77.0</b>	<b>6.3 I</b>	<b>14.3 I</b>	<b>9.8 I</b>	<b>9.2 I</b>	<b>11.7 I</b>

## NOTES:

FDEP GCTL = Florida Department of Environmental Protection Groundwater Cleanup Target Level

Bold results indicate a reported concentration above the laboratory detection limit.

I = result is above the laboratory method detection limit but below the practical quantitation limit

NE = not established

NA = not applicable

Shaded cells indicate a reported concentration above the FDEP GCTL.

Compounds not shown were not reported above the laboratory method detection limit.

**ATTACHMENT A**  
**GROUNDWATER SAMPLING LOGS**

**Solutions-IES, Inc. / Florida Department of Environmental Protection  
GROUNDWATER SAMPLING LOG**

SITE NAME: B101S	SITE LOCATION: NAS Jacksonville	Solutions-IES Project No.: 2013.0029.NAVY
WELL NO: MW-101S-01	SAMPLE ID: JAX-B101S-MW-101S-01- 20130613 <small>(4 digit year 2 digit month 2digit)</small>	DATE: 6/13/13

**PURGING DATA**

WELL DIAMETER (inches): .75	TUBING DIAMETER (inches): 3/8 <small>3/8</small>	WELL SCREEN INTERVAL DEPTH: 1.5 feet to 11.5 feet	STATIC DEPTH TO WATER (feet): 6.80	PURGE PUMP TYPE OR BAILER: P pump
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( 11.5 feet - 6.80 feet ) X 0.02 gallons/foot = .0894 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + ( .0026 gallons/foot X 12 feet ) + .025 gallons = .05 gallons				

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (mL)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) (mg/L or % saturation)	TURBIDITY (NTUs)	ORP (mV)	COLOR (describe)	ODOR (describe)
855	0.70	0.70	160	7.20	5.01	26.35	459	7.40	27.1	43.6	CLEAR	NONE
900	0.20	0.60	160	7.20	5.14	26.44	483	5.01	25.3	34.5	"	"
905	0.20	0.80	160	7.20	5.29	26.39	442	0.98	15.7	27.1	TURBID	"
910	0.15	0.95	110	7.10	5.38	26.54	435	0.61	13.5	19.2	"	"
915	0.15	1.10	110	7.10	5.66	27.00	431	0.49	62.7	5.1	"	"
920	0.15	1.25	110	7.09	5.76	27.16	429	0.45	27.5	9.5	CLEAR	"
925	0.15	1.40	110	7.09	5.74	27.20	429	0.39	14.7	5.8	"	"
930	0.15	1.55	110	7.09	5.73	27.16	428	0.36	11.2	4.5	"	"
935	0.15	1.70	110	7.09	5.72	27.18	428	0.34	10.9	3.3	"	"

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 8      FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8      PURGING INITIATED AT: 800      PURGING ENDED AT: 935      TOTAL VOLUME PURGED (gallons): 1.70

WELL CAPACITY (Gallons Per 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 DIA. CAPACITY (Gal./Ft.): 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  
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Samuel McIntyre/Solutions-IES	SAMPLER(S) SIGNATURE(S): <i>Samuel McIntyre</i>	SAMPLING INITIATED AT: 935	SAMPLING ENDED AT: 1010						
PUMP OR TUBING DEPTH IN WELL (feet): 8	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y <input checked="" type="checkbox"/> N/A	FILTER SIZE: _____ μm						
FIELD DECONTAMINATION: PUMP <input checked="" type="checkbox"/> N	TUBING <input checked="" type="checkbox"/> N (replaced or dedicated)	DUPLICATE: Y <input checked="" type="checkbox"/> N							
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
3	3	CG	40 ML	HCl			8260	RFPP	110
2	2	AG	1 L	None			8270	PP	
2	2	AG	1 L	H2SO4			FL-PRO TRPH	PP	
1	1	PL	500 ML	HNO3			RCRA Metals +	PP	

REMARKS: \*Stowed flow rate from 300 ml/min to 160 ml/min prior to 1st reading.  
\*Tubing intake moved to 6' @ 908

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH: ± 0.2 units    Temperature: ± 0.2 °C    Specific Conductance: ± 5%    Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)    Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

\* 920: collected field blank <sup>SM</sup> JAX-B101S-NAV-RB-20130613 while traffic passed  
\* constant traffic during sample collection <sup>SM</sup>

**Solutions-IES, Inc. / Florida Department of Environmental Protection  
GROUNDWATER SAMPLING LOG**

SITE NAME: B101S	SITE LOCATION: NAS Jacksonville	Solutions-IES Project No.: 2013.0029.NAVY
WELL NO: MW-780-1	SAMPLE ID: JAX-B101S-MW-780-1- <u>20130613</u> <small>(4 digit year 2 digit month 2digit)</small>	DATE: <u>0-13-13</u>

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 4 feet to 14 feet	STATIC DEPTH TO WATER (feet): <u>4.80</u>	PURGE PUMP TYPE OR BAILER: p pump
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( 14 feet - <u>4.8</u> feet ) X 0.16 gallons/foot = <u>1.4</u> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + ( .0026 gallons/foot X 14 feet ) + .025 gallons = .06 gallons				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 9		FINAL PUMP OR TUBING DEPTH IN WELL (feet): 9		PURGING INITIATED AT: <u>845</u>		PURGING ENDED AT: <u>915</u>		TOTAL VOLUME PURGED (gallons): <u>1.4</u>				
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (mL)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR (describe)	ODOR (describe)
415	1.4	1.4	210	5.18	6.72	25.37	541	12.05	5.8	-29.0	clear	none
420	0.25	1.65	210	5.19	6.53	25.38	541	11.37	5.5	-39.0	clear	none
425	0.25	1.90	210	5.20	6.67	25.36	541	10.87	5.6	-53.4	clear	none
430	0.25	2.15	210	5.20	6.77	25.42	543	10.42	5.5	-60.3	clear	none
435	0.25	2.40	210	5.21	6.78	25.43	543	10.34	5.4	-65.3	clear	none
440	0.25	2.65	210	5.21	6.80	25.46	544	10.30	5.1	-66.4	clear	none
								/				
								/				
								/				
								/				

WELL CAPACITY (Gallons Per 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 DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <u>Stewart Farley / SDBS</u>		SAMPLER(S) SIGNATURE(S): <u>[Signature]</u>		SAMPLING INITIATED AT: <u>940</u>		SAMPLING ENDED AT: <u>1018</u>			
PUMP OR TUBING DEPTH IN WELL (feet): 9		TUBING MATERIAL CODE: PE		FIELD-FILTERED: Y <input checked="" type="checkbox"/> FILTER SIZE: _____ μm		FILTRATION EQUIPMENT TYPE: _____			
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING Y <input checked="" type="checkbox"/> (replaced or dedicated)		DUPLICATE: Y <input checked="" type="checkbox"/>							
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	8260	RFPP	<u>210</u>
<u>3</u>	<u>3</u>	<u>CG</u>	<u>40 ML</u>	<u>HCl</u>			8270	PP	<u>210</u>
<u>2</u>	<u>2</u>	<u>AG</u>	<u>1 L</u>	<u>None</u>			FL-PRO TRPH	PP	<u>210</u>
<u>2</u>	<u>2</u>	<u>AG</u>	<u>1 L</u>	<u>H2SO4</u>			RCRA Metals +	PP	<u>210</u>
<u>1</u>	<u>1</u>	<u>PL</u>	<u>500 ML</u>	<u>HNO3</u>					

REMARKS: replaced well cap

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); 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, Inc. / Florida Department of Environmental Protection  
GROUNDWATER SAMPLING LOG**

SITE NAME: B101S	SITE LOCATION: NAS Jacksonville	Solutions-IES Project No.: 2013.0029.NAVY
WELL NO: MW-780-2	SAMPLE ID: JAX-B101S-MW-780-2- <u>20130612</u> <small>(4 digit year 2 digit month 2digit)</small>	DATE: <u>6-12-13</u>

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 1.0 feet to 10 feet	STATIC DEPTH TO WATER (feet): <u>5.30</u>	PURGE PUMP TYPE OR BAILER: p pump
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <u>10</u> feet - <u>5.30</u> feet ) X <u>0.16</u> gallons/foot = <u>0.75</u> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = <u>          </u> gallons + ( <u>.0026</u> gallons/foot X <u>10</u> feet ) + <u>.025</u> gallons = <u>.05</u> gallons				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 7	PURGING INITIATED AT: <u>1511</u>	PURGING ENDED AT: <u>1545</u>	TOTAL VOLUME PURGED (gallons): <u>21.5</u>
--	--	-----------------------------------	-------------------------------	--

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (mL)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) $\mu\text{mhos/cm}$ or $\mu\text{S/cm}$	DISSOLVED OXYGEN (circle units) (mg/L or % saturation)	TURBIDITY (NTUs)	ORP (mV)	COLOR (describe)	ODOR (describe)
1520	20	20	150	5.75	2.02	27.00	467	0.871	4.3	268.3	clear	none
1525	20	40	150	5.81	6.72	26.99	464	0.771	4.2	-41.0	"	"
1530	20	60	150	5.87	6.69	27.08	464	0.571	2.8	-40.0	"	"
1535	20	80	150	5.88	6.58	26.91	458	0.481	2.8	-41.4	"	"
1540	20	1.0	150	5.91	6.68	26.82	456	0.441	3.9	-42.5	"	"
1545	20	1.2	150	5.92	6.67	26.66	450	0.371	4.4	-44.0	"	"
								/				
								/				
								/				
								/				
								/				

WELL CAPACITY (Gallons Per 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 DIA. CAPACITY (Gal./Ft.): 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

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <u>Nick Shore Solutions-IES</u>	SAMPLER(S) SIGNATURE(S): <u>[Signature]</u>	SAMPLING INITIATED AT: <u>1600</u>	SAMPLING ENDED AT: <u>1620</u>
---	---	------------------------------------	--------------------------------

PUMP OR TUBING DEPTH IN WELL (feet): 7	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y <input checked="" type="radio"/> N <input type="radio"/>	FILTER SIZE: <u>          </u> $\mu\text{m}$
FIELD DECONTAMINATION: PUMP <input checked="" type="radio"/> N <input type="radio"/> TUBING <input checked="" type="radio"/> N (replaced or dedicated)		DUPLICATE: Y <input checked="" type="radio"/> N <input type="radio"/>	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<u>3</u>	3	CG	40 ML	HCl			8260	RFPP	
<u>2</u>	2	AG	1 L	None			8270	PP	
<u>2</u>	2	AG	1 L	H2SO4			FL-PRO TRPH	PP	
<u>1</u>	1	PL	500 ML	HNO3			RCRA Metals +	PP	

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA - FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

**ATTACHMENT B**

**LABORATORY ANALYTICAL REPORT AND CHAIN-OF-CUSTODY FORM**

**Technical Report for**

**Solutions-IES, Inc**

**OU-3 B101S NAS JAX; Jacksonville, FL**

**2013.0029**

**Accutest Job Number: FA5547**

**Sampling Dates: 06/12/13 - 06/13/13**

**Report to:**

**Solutions-IES, Inc**  
**1101 Nowell Rd**  
**Raleigh, NC 27606**  
**jovermyer@solutions-ies.com; MarshallD@solutions-ies.com**  
**ATTN: Jody Overmyer**

**Total number of pages in report: 101**



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 (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)  
DoD ELAP (L-A-B L2229), CA (04226CA), TX (T104704404), AK, AR, GA, KY, MA, NV, OK, UT, VA, WA, WI

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Test results relate only to samples analyzed.

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## Sample Summary

Solutions-IES, Inc

**Job No:** FA5547

OU-3 B101S NAS JAX; Jacksonville, FL

Project No: 2013.0029

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
FA5547-1	06/13/13	09:35 MPS	06/14/13	AQ	Ground Water	JAX-B101S-MW-101S-01-20130613
FA5547-2	06/13/13	09:40 MPS	06/14/13	AQ	Ground Water	JAX-B101S-MW-780-1-20130613
FA5547-3	06/12/13	16:00 MPS	06/14/13	AQ	Ground Water	JAX-B101S-MW-780-2-20130612
FA5547-4	06/13/13	09:20 MPS	06/14/13	AQ	Field Blank Water	JAX-B101S-FB-20130613
FA5547-5	06/13/13	10:30 MPS	06/14/13	AQ	Equipment Blank	JAX-B101S-RB-20130613
FA5547-6	06/13/13	00:00 MPS	06/14/13	AQ	Trip Blank Water	JAX-B101S-TB-20130613
FA5547-7	06/13/13	00:00 MPS	06/14/13	AQ	Trip Blank Water	JAX-B101S-TB-20130613-2

## SAMPLE DELIVERY GROUP CASE NARRATIVE

**Client:** Solutions-IES, Inc

**Job No:** FA5547

**Site:** OU-3 B101S NAS JAX; Jacksonville, FL

**Report Date** 6/25/2013 12:48:17

4 Samples, 2 Trip Blanks and 1 Field Blank were collected between 06/12/2013 and 06/13/2013 and were received at Accutest SE on 06/14/2013 properly preserved, at 2.6 Deg. C and intact. These Samples received an Accutest job number of FA5547. 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:** VB3737

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA5547-1MS, FA5547-1MSD were used as the QC samples indicated.

Matrix Spike / Matrix Spike Duplicate Recovery(s) for 2-Chloroethyl vinyl ether, Acrolein are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for 2-Chloroethyl vinyl ether are outside control limits for sample FA5547-1MSD. Probable cause is due to sample non-homogeneity.

FA5547-1 for Methyl chloride: Associated BS recovery outside DOD QSM control limits.

FA5547-2 for Methyl chloride: Associated BS recovery outside DOD QSM control limits.

FA5547-3 for Methyl chloride: Associated BS recovery outside DOD QSM control limits.

FA5547-4 for Methyl chloride: Associated BS recovery outside DOD QSM control limits.

FA5547-5 for Methyl chloride: Associated BS recovery outside DOD QSM control limits.

FA5547-6 for Methyl chloride: Associated BS recovery outside DOD QSM control limits.

FA5547-7 for Methyl chloride: Associated BS recovery outside DOD QSM control limits.

### Extractables by GCMS By Method SW846 8270D

**Matrix:** AQ

**Batch ID:** OP47383

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) FA5545-1MS, FA5545-1MSD were used as the QC samples indicated.

Matrix Spike Duplicate Recovery(s) for 4-Nitrophenol, Benzidine are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for 2,4,6-Trichlorophenol, 2,4-Dinitrophenol, 4,6-Dinitro-o-cresol, 4-Nitrophenol, Benzoic Acid, Pentachlorophenol are outside control limits for sample OP47383-MSD. Probable cause is due to sample non-homogeneity.

**Matrix:** AQ

**Batch ID:** OP47411

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) FA5581-2MS, FA5581-2MSD were used as the QC samples indicated.

Matrix Spike / Matrix Spike Duplicate Recovery(s) for Benzidine are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for Benzidine are outside control limits for sample OP47411-MSD. Probable cause is due to sample non-homogeneity.



## Summary of Hits

**Job Number:** FA5547  
**Account:** Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL  
**Collected:** 06/12/13 thru 06/13/13



Lab Sample ID	Client Sample ID	Result/ Qual	PQL	MDL	Units	Method
---------------	------------------	-----------------	-----	-----	-------	--------

**FA5547-1 JAX-B101S-MW-101S-01-20130613**

TPH (C8-C40)	0.280	0.24	0.14	mg/l	FLORIDA-PRO
Barium	54.9 I	200	1.0	ug/l	SW846 6010C
Nickel	0.50 I	40	0.50	ug/l	SW846 6010C
Zinc	6.8 I	20	5.0	ug/l	SW846 6010C

**FA5547-2 JAX-B101S-MW-780-1-20130613**

sec-Butylbenzene	0.32 I	1.0	0.21	ug/l	SW846 8260B
tert-Butylbenzene	0.39 I	1.0	0.29	ug/l	SW846 8260B
Chloroethane	4.1	2.0	0.50	ug/l	SW846 8260B
1,1-Dichloroethane	3.7	1.0	0.21	ug/l	SW846 8260B
1,1-Dichloroethylene	1.5	1.0	0.20	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	4.3	1.0	0.24	ug/l	SW846 8260B
o-Dichlorobenzene	0.97 I	1.0	0.22	ug/l	SW846 8260B
trans-1,2-Dichloroethylene	0.30 I	1.0	0.23	ug/l	SW846 8260B
1,1,1-Trichloroethane	0.56 I	1.0	0.20	ug/l	SW846 8260B
Trichloroethylene	0.37 I	1.0	0.31	ug/l	SW846 8260B
Vinyl chloride	1.6	1.0	0.44	ug/l	SW846 8260B
TPH (C8-C40)	0.279	0.24	0.14	mg/l	FLORIDA-PRO
Arsenic	3.9 I	10	2.5	ug/l	SW846 6010C
Barium	58.4 I	200	1.0	ug/l	SW846 6010C
Nickel	1.1 I	40	0.50	ug/l	SW846 6010C
Silver	0.70 I	10	0.50	ug/l	SW846 6010C
Zinc	14.3 I	20	5.0	ug/l	SW846 6010C

**FA5547-3 JAX-B101S-MW-780-2-20130612**

Chlorobenzene	0.27 I	1.0	0.20	ug/l	SW846 8260B
Chloroethane	0.77 I	2.0	0.50	ug/l	SW846 8260B
1,1-Dichloroethane	3.6	1.0	0.21	ug/l	SW846 8260B
1,1-Dichloroethylene	0.40 I	1.0	0.20	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	2.6	1.0	0.24	ug/l	SW846 8260B
Trichloroethylene	0.66 I	1.0	0.31	ug/l	SW846 8260B
Vinyl chloride	1.3	1.0	0.44	ug/l	SW846 8260B
Arsenic	11.0	10	2.5	ug/l	SW846 6010C
Barium	33.1 I	200	1.0	ug/l	SW846 6010C
Molybdenum	5.8 I	50	1.0	ug/l	SW846 6010C
Silver	0.60 I	10	0.50	ug/l	SW846 6010C
Zinc	11.7 I	20	5.0	ug/l	SW846 6010C

**FA5547-4 JAX-B101S-FB-20130613**

Toluene	0.25 I	1.0	0.20	ug/l	SW846 8260B
---------	--------	-----	------	------	-------------

## Summary of Hits

**Job Number:** FA5547  
**Account:** Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL  
**Collected:** 06/12/13 thru 06/13/13



Lab Sample ID	Client Sample ID	Result/ Analyte	Qual	PQL	MDL	Units	Method
---------------	------------------	--------------------	------	-----	-----	-------	--------

**FA5547-5**      **JAX-B101S-RB-20130613**

No hits reported in this sample.

**FA5547-6**      **JAX-B101S-TB-20130613**

No hits reported in this sample.

**FA5547-7**      **JAX-B101S-TB-20130613-2**

No hits reported in this sample.

Sample Results

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Report of Analysis

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## Report of Analysis

<b>Client Sample ID:</b>	JAX-B101S-MW-101S-01-20130613	<b>Date Sampled:</b>	06/13/13
<b>Lab Sample ID:</b>	FA5547-1	<b>Date Received:</b>	06/14/13
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	OU-3 B101S NAS JAX; Jacksonville, FL		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B091259.D	1	06/20/13	WV	n/a	n/a	VB3737
Run #2							

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

## VOA 8260 List

CAS No.	Compound	Result	PQL	MDL	Units	Q
67-64-1	Acetone	10 U	25	10	ug/l	
107-02-8	Acrolein	6.9 U	20	6.9	ug/l	
107-13-1	Acrylonitrile	2.0 U	10	2.0	ug/l	
71-43-2	Benzene	0.21 U	1.0	0.21	ug/l	
108-86-1	Bromobenzene	0.22 U	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	0.23 U	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.20 U	1.0	0.20	ug/l	
75-25-2	Bromoform	0.34 U	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	0.20 U	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	0.21 U	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	0.29 U	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	0.20 U	1.0	0.20	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.26 U	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	0.21 U	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	0.20 U	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	1.3 U	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	0.49 U	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	0.31 U	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	0.21 U	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	0.20 U	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	0.25 U	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	0.71 U	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	0.30 U	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	0.22 U	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	0.26 U	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	0.27 U	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	0.25 U	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	0.20 U	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	0.50 U	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.24 U	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.22 U	1.0	0.22	ug/l	

U = Not detected MDL - Method Detection Limit

PQL = Practical Quantitation Limit

L = Indicates value exceeds calibration range

I = Result &gt;= MDL but &lt; PQL J = Estimated value

V = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-MW-101S-01-20130613	<b>Date Sampled:</b> 06/13/13
<b>Lab Sample ID:</b> FA5547-1	<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B	
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	

**VOA 8260 List**

CAS No.	Compound	Result	PQL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	0.25 U	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	0.22 U	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	0.20 U	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.23 U	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.21 U	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	0.29 U	1.0	0.29	ug/l	
591-78-6	2-Hexanone	2.0 U	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	0.20 U	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	0.20 U	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	2.3 U	5.0	2.3	ug/l	
74-83-9	Methyl bromide	0.79 U	2.0	0.79	ug/l	
74-87-3	Methyl chloride <sup>a</sup>	0.50 U	2.0	0.50	ug/l	
74-95-3	Methylene bromide	0.34 U	2.0	0.34	ug/l	
75-09-2	Methylene chloride	2.0 U	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	3.1 U	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.21 U	1.0	0.21	ug/l	
91-20-3	Naphthalene	1.0 U	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.23 U	1.0	0.23	ug/l	
100-42-5	Styrene	0.20 U	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.23 U	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	0.20 U	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.24 U	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	0.20 U	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.50 U	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	0.56 U	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.50 U	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.20 U	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.20 U	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	0.32 U	1.0	0.32	ug/l	
108-88-3	Toluene	0.20 U	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	0.31 U	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	0.50 U	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	0.44 U	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	3.1 U	10	3.1	ug/l	
	m,p-Xylene	0.30 U	2.0	0.30	ug/l	
95-47-6	o-Xylene	0.20 U	1.0	0.20	ug/l	

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

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

4.1  
4

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-MW-101S-01-20130613	<b>Date Sampled:</b> 06/13/13
<b>Lab Sample ID:</b> FA5547-1	<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B	
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	

**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	99%		79-125%
2037-26-5	Toluene-D8	104%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

(a) Associated BS recovery outside DOD QSM control limits.

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

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

4.1  
4

## Report of Analysis

<b>Client Sample ID:</b>	JAX-B101S-MW-101S-01-20130613	<b>Date Sampled:</b>	06/13/13
<b>Lab Sample ID:</b>	FA5547-1	<b>Date Received:</b>	06/14/13
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270D SW846 3510C		
<b>Project:</b>	OU-3 B101S NAS JAX; Jacksonville, FL		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T008439.D	1	06/19/13	FS	06/18/13	OP47383	ST410
Run #2							

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

## ABN Full List

CAS No.	Compound	Result	PQL	MDL	Units	Q
65-85-0	Benzoic Acid	9.6 U	48	9.6	ug/l	
95-57-8	2-Chlorophenol	0.68 U	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	0.78 U	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	0.67 U	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	0.74 U	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	5.0 U	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	1.4 U	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	0.69 U	4.8	0.69	ug/l	
	3&4-Methylphenol	1.3 U	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	0.65 U	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	4.8 U	24	4.8	ug/l	
87-86-5	Pentachlorophenol	4.8 U	24	4.8	ug/l	
108-95-2	Phenol	0.53 U	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	0.86 U	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	0.75 U	4.8	0.75	ug/l	
83-32-9	Acenaphthene	0.67 U	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	0.67 U	4.8	0.67	ug/l	
62-53-3	Aniline	0.75 U	4.8	0.75	ug/l	
120-12-7	Anthracene	0.72 U	4.8	0.72	ug/l	
92-87-5	Benzidine	4.8 U	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	0.52 U	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	0.55 U	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	0.73 U	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.64 U	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	0.64 U	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	0.76 U	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	0.68 U	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	0.96 U	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	0.70 U	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	0.66 U	4.8	0.66	ug/l	
86-74-8	Carbazole	0.50 U	4.8	0.50	ug/l	
218-01-9	Chrysene	0.56 U	4.8	0.56	ug/l	

U = Not detected MDL - Method Detection Limit

PQL = Practical Quantitation Limit

L = Indicates value exceeds calibration range

I = Result &gt;= MDL but &lt; PQL J = Estimated value

V = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	JAX-B101S-MW-101S-01-20130613	<b>Date Sampled:</b>	06/13/13
<b>Lab Sample ID:</b>	FA5547-1	<b>Date Received:</b>	06/14/13
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270D SW846 3510C		
<b>Project:</b>	OU-3 B101S NAS JAX; Jacksonville, FL		

## ABN Full List

CAS No.	Compound	Result	PQL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	0.67 U	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	0.69 U	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	0.76 U	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	0.84 U	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	0.65 U	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	0.62 U	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	0.75 U	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	0.67 U	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	0.66 U	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	0.77 U	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	0.71 U	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.56 U	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	0.72 U	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	0.96 U	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	0.96 U	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	0.96 U	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	0.77 U	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	1.1 U	4.8	1.1	ug/l	
206-44-0	Fluoranthene	0.56 U	4.8	0.56	ug/l	
86-73-7	Fluorene	0.73 U	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	0.66 U	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	0.92 U	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	0.76 U	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	0.71 U	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.55 U	4.8	0.55	ug/l	
78-59-1	Isophorone	0.61 U	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	0.68 U	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	0.66 U	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	0.72 U	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	0.62 U	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	0.93 U	4.8	0.93	ug/l	
91-20-3	Naphthalene	0.61 U	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	0.69 U	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	0.60 U	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	0.82 U	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	0.96 U	4.8	0.96	ug/l	
85-01-8	Phenanthrene	0.68 U	4.8	0.68	ug/l	
129-00-0	Pyrene	0.65 U	4.8	0.65	ug/l	
110-86-1	Pyridine	1.9 U	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.58 U	4.8	0.58	ug/l	

U = Not detected MDL - Method Detection Limit

PQL = Practical Quantitation Limit

L = Indicates value exceeds calibration range

I = Result &gt;= MDL but &lt; PQL J = Estimated value

V = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-MW-101S-01-20130613 <b>Lab Sample ID:</b> FA5547-1 <b>Matrix:</b> AQ - Ground Water <b>Method:</b> SW846 8270D SW846 3510C <b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	<b>Date Sampled:</b> 06/13/13 <b>Date Received:</b> 06/14/13 <b>Percent Solids:</b> n/a
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**ABN Full List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	29%		14-67%
4165-62-2	Phenol-d5	19%		10-50%
118-79-6	2,4,6-Tribromophenol	85%		33-118%
4165-60-0	Nitrobenzene-d5	68%		42-108%
321-60-8	2-Fluorobiphenyl	75%		40-106%
1718-51-0	Terphenyl-d14	86%		39-121%

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

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

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## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-MW-101S-01-20130613	<b>Date Sampled:</b> 06/13/13
<b>Lab Sample ID:</b> FA5547-1	<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> FLORIDA-PRO SW846 3510C	
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF060396.D	1	06/22/13	FEA	06/20/13	OP47429	GZF2138
Run #2							

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

CAS No.	Compound	Result	PQL	MDL	Units	Q
	TPH (C8-C40)	0.280	0.24	0.14	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	106%		43-123%		

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

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

4.1  
4

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-MW-101S-01-20130613	<b>Date Sampled:</b> 06/13/13
<b>Lab Sample ID:</b> FA5547-1	<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	

### Total Metals Analysis

Analyte	Result	PQL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	2.5 U	10	2.5	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Barium	54.9 I	200	1.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Beryllium	0.50 U	4.0	0.50	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Cadmium	0.50 U	5.0	0.50	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Chromium	2.0 U	10	2.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Lead	1.1 U	5.0	1.1	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Mercury	0.030 U	0.50	0.030	ug/l	1	06/18/13	06/18/13 JL	SW846 7470A <sup>2</sup>	SW846 7470A <sup>4</sup>
Molybdenum	1.0 U	50	1.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Nickel	0.50 I	40	0.50	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Selenium	2.0 U	10	2.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Silver	0.50 U	10	0.50	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Zinc	6.8 I	20	5.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>

- (1) Instrument QC Batch: MA10829
- (2) Instrument QC Batch: MA10830
- (3) Prep QC Batch: MP25319
- (4) Prep QC Batch: MP25333

PQL = Practical Quantitation Limit  
 MDL = Method Detection Limit

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

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## Report of Analysis

<b>Client Sample ID:</b>	JAX-B101S-MW-780-1-20130613	<b>Date Sampled:</b>	06/13/13
<b>Lab Sample ID:</b>	FA5547-2	<b>Date Received:</b>	06/14/13
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	OU-3 B101S NAS JAX; Jacksonville, FL		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B091260.D	1	06/20/13	WV	n/a	n/a	VB3737
Run #2							

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

## VOA 8260 List

CAS No.	Compound	Result	PQL	MDL	Units	Q
67-64-1	Acetone	10 U	25	10	ug/l	
107-02-8	Acrolein	6.9 U	20	6.9	ug/l	
107-13-1	Acrylonitrile	2.0 U	10	2.0	ug/l	
71-43-2	Benzene	0.21 U	1.0	0.21	ug/l	
108-86-1	Bromobenzene	0.22 U	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	0.23 U	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.20 U	1.0	0.20	ug/l	
75-25-2	Bromoform	0.34 U	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	0.20 U	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	0.32	1.0	0.21	ug/l	I
98-06-6	tert-Butylbenzene	0.39	1.0	0.29	ug/l	I
108-90-7	Chlorobenzene	0.20 U	1.0	0.20	ug/l	
75-00-3	Chloroethane	4.1	2.0	0.50	ug/l	
67-66-3	Chloroform	0.26 U	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	0.21 U	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	0.20 U	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	1.3 U	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	0.49 U	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	0.31 U	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	3.7	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	1.5	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	0.25 U	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	0.71 U	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	0.30 U	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	0.22 U	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	0.26 U	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	0.27 U	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	0.25 U	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	0.20 U	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	0.50 U	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	4.3	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.22 U	1.0	0.22	ug/l	

U = Not detected MDL - Method Detection Limit

PQL = Practical Quantitation Limit

L = Indicates value exceeds calibration range

I = Result &gt;= MDL but &lt; PQL J = Estimated value

V = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-MW-780-1-20130613		<b>Date Sampled:</b> 06/13/13
<b>Lab Sample ID:</b> FA5547-2		<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL		

**VOA 8260 List**

CAS No.	Compound	Result	PQL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	0.25 U	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	0.97	1.0	0.22	ug/l	I
106-46-7	p-Dichlorobenzene	0.20 U	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.30	1.0	0.23	ug/l	I
10061-02-6	trans-1,3-Dichloropropene	0.21 U	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	0.29 U	1.0	0.29	ug/l	
591-78-6	2-Hexanone	2.0 U	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	0.20 U	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	0.20 U	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	2.3 U	5.0	2.3	ug/l	
74-83-9	Methyl bromide	0.79 U	2.0	0.79	ug/l	
74-87-3	Methyl chloride <sup>a</sup>	0.50 U	2.0	0.50	ug/l	
74-95-3	Methylene bromide	0.34 U	2.0	0.34	ug/l	
75-09-2	Methylene chloride	2.0 U	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	3.1 U	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.21 U	1.0	0.21	ug/l	
91-20-3	Naphthalene	1.0 U	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.23 U	1.0	0.23	ug/l	
100-42-5	Styrene	0.20 U	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.23 U	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	0.56	1.0	0.20	ug/l	I
79-34-5	1,1,2,2-Tetrachloroethane	0.24 U	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	0.20 U	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.50 U	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	0.56 U	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.50 U	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.20 U	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.20 U	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	0.32 U	1.0	0.32	ug/l	
108-88-3	Toluene	0.20 U	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	0.37	1.0	0.31	ug/l	I
75-69-4	Trichlorofluoromethane	0.50 U	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	1.6	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	3.1 U	10	3.1	ug/l	
	m,p-Xylene	0.30 U	2.0	0.30	ug/l	
95-47-6	o-Xylene	0.20 U	1.0	0.20	ug/l	

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

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

4.2  
4

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-MW-780-1-20130613	<b>Date Sampled:</b> 06/13/13
<b>Lab Sample ID:</b> FA5547-2	<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B	
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	

**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

(a) Associated BS recovery outside DOD QSM control limits.

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

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

4.2  
4

## Report of Analysis

<b>Client Sample ID:</b>	JAX-B101S-MW-780-1-20130613	<b>Date Sampled:</b>	06/13/13
<b>Lab Sample ID:</b>	FA5547-2	<b>Date Received:</b>	06/14/13
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270D SW846 3510C		
<b>Project:</b>	OU-3 B101S NAS JAX; Jacksonville, FL		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T008440.D	1	06/19/13	FS	06/18/13	OP47383	ST410
Run #2							

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

## ABN Full List

CAS No.	Compound	Result	PQL	MDL	Units	Q
65-85-0	Benzoic Acid	9.6 U	48	9.6	ug/l	
95-57-8	2-Chlorophenol	0.68 U	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	0.78 U	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	0.67 U	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	0.74 U	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	5.0 U	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	1.4 U	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	0.69 U	4.8	0.69	ug/l	
	3&4-Methylphenol	1.3 U	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	0.65 U	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	4.8 U	24	4.8	ug/l	
87-86-5	Pentachlorophenol	4.8 U	24	4.8	ug/l	
108-95-2	Phenol	0.53 U	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	0.86 U	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	0.75 U	4.8	0.75	ug/l	
83-32-9	Acenaphthene	0.67 U	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	0.67 U	4.8	0.67	ug/l	
62-53-3	Aniline	0.75 U	4.8	0.75	ug/l	
120-12-7	Anthracene	0.72 U	4.8	0.72	ug/l	
92-87-5	Benzidine	4.8 U	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	0.52 U	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	0.55 U	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	0.73 U	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.64 U	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	0.64 U	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	0.76 U	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	0.68 U	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	0.96 U	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	0.70 U	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	0.66 U	4.8	0.66	ug/l	
86-74-8	Carbazole	0.50 U	4.8	0.50	ug/l	
218-01-9	Chrysene	0.56 U	4.8	0.56	ug/l	

U = Not detected MDL - Method Detection Limit

PQL = Practical Quantitation Limit

L = Indicates value exceeds calibration range

I = Result &gt;= MDL but &lt; PQL J = Estimated value

V = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	JAX-B101S-MW-780-1-20130613	<b>Date Sampled:</b>	06/13/13
<b>Lab Sample ID:</b>	FA5547-2	<b>Date Received:</b>	06/14/13
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270D SW846 3510C		
<b>Project:</b>	OU-3 B101S NAS JAX; Jacksonville, FL		

## ABN Full List

CAS No.	Compound	Result	PQL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	0.67 U	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	0.69 U	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	0.76 U	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	0.84 U	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	0.65 U	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	0.62 U	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	0.75 U	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	0.67 U	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	0.66 U	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	0.77 U	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	0.71 U	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.56 U	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	0.72 U	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	0.96 U	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	0.96 U	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	0.96 U	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	0.77 U	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	1.1 U	4.8	1.1	ug/l	
206-44-0	Fluoranthene	0.56 U	4.8	0.56	ug/l	
86-73-7	Fluorene	0.73 U	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	0.66 U	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	0.92 U	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	0.76 U	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	0.71 U	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.55 U	4.8	0.55	ug/l	
78-59-1	Isophorone	0.61 U	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	0.68 U	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	0.66 U	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	0.72 U	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	0.62 U	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	0.93 U	4.8	0.93	ug/l	
91-20-3	Naphthalene	0.61 U	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	0.69 U	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	0.60 U	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	0.82 U	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	0.96 U	4.8	0.96	ug/l	
85-01-8	Phenanthrene	0.68 U	4.8	0.68	ug/l	
129-00-0	Pyrene	0.65 U	4.8	0.65	ug/l	
110-86-1	Pyridine	1.9 U	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.58 U	4.8	0.58	ug/l	

U = Not detected MDL - Method Detection Limit

PQL = Practical Quantitation Limit

L = Indicates value exceeds calibration range

I = Result &gt;= MDL but &lt; PQL J = Estimated value

V = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-MW-780-1-20130613	<b>Date Sampled:</b> 06/13/13
<b>Lab Sample ID:</b> FA5547-2	<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8270D SW846 3510C	
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	

**ABN Full List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	37%		14-67%
4165-62-2	Phenol-d5	24%		10-50%
118-79-6	2,4,6-Tribromophenol	90%		33-118%
4165-60-0	Nitrobenzene-d5	74%		42-108%
321-60-8	2-Fluorobiphenyl	76%		40-106%
1718-51-0	Terphenyl-d14	85%		39-121%

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

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

4.2  
4

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-MW-780-1-20130613	<b>Date Sampled:</b> 06/13/13
<b>Lab Sample ID:</b> FA5547-2	<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> FLORIDA-PRO SW846 3510C	
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF060397.D	1	06/22/13	FEA	06/20/13	OP47429	GZF2138
Run #2							

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

CAS No.	Compound	Result	PQL	MDL	Units	Q
	TPH (C8-C40)	0.279	0.24	0.14	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	107%		43-123%		

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

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

4.2  
4

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-MW-780-1-20130613	<b>Date Sampled:</b> 06/13/13
<b>Lab Sample ID:</b> FA5547-2	<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	

**Total Metals Analysis**

Analyte	Result	PQL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	3.9 I	10	2.5	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Barium	58.4 I	200	1.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Beryllium	0.50 U	4.0	0.50	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Cadmium	0.50 U	5.0	0.50	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Chromium	2.0 U	10	2.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Lead	1.1 U	5.0	1.1	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Mercury	0.030 U	0.50	0.030	ug/l	1	06/18/13	06/18/13 JL	SW846 7470A <sup>2</sup>	SW846 7470A <sup>4</sup>
Molybdenum	1.0 U	50	1.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Nickel	1.1 I	40	0.50	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Selenium	2.0 U	10	2.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Silver	0.70 I	10	0.50	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Zinc	14.3 I	20	5.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>

- (1) Instrument QC Batch: MA10829
- (2) Instrument QC Batch: MA10830
- (3) Prep QC Batch: MP25319
- (4) Prep QC Batch: MP25333

PQL = Practical Quantitation Limit  
 MDL = Method Detection Limit

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

4.2  
4

## Report of Analysis

<b>Client Sample ID:</b>	JAX-B101S-MW-780-2-20130612	<b>Date Sampled:</b>	06/12/13
<b>Lab Sample ID:</b>	FA5547-3	<b>Date Received:</b>	06/14/13
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	OU-3 B101S NAS JAX; Jacksonville, FL		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B091261.D	1	06/20/13	WV	n/a	n/a	VB3737
Run #2							

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

## VOA 8260 List

CAS No.	Compound	Result	PQL	MDL	Units	Q
67-64-1	Acetone	10 U	25	10	ug/l	
107-02-8	Acrolein	6.9 U	20	6.9	ug/l	
107-13-1	Acrylonitrile	2.0 U	10	2.0	ug/l	
71-43-2	Benzene	0.21 U	1.0	0.21	ug/l	
108-86-1	Bromobenzene	0.22 U	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	0.23 U	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.20 U	1.0	0.20	ug/l	
75-25-2	Bromoform	0.34 U	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	0.20 U	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	0.21 U	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	0.29 U	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	0.27	1.0	0.20	ug/l	I
75-00-3	Chloroethane	0.77	2.0	0.50	ug/l	I
67-66-3	Chloroform	0.26 U	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	0.21 U	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	0.20 U	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	1.3 U	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	0.49 U	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	0.31 U	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	3.6	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	0.40	1.0	0.20	ug/l	I
563-58-6	1,1-Dichloropropene	0.25 U	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	0.71 U	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	0.30 U	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	0.22 U	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	0.26 U	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	0.27 U	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	0.25 U	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	0.20 U	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	0.50 U	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	2.6	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.22 U	1.0	0.22	ug/l	

U = Not detected MDL - Method Detection Limit

PQL = Practical Quantitation Limit

L = Indicates value exceeds calibration range

I = Result &gt;= MDL but &lt; PQL J = Estimated value

V = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b>	JAX-B101S-MW-780-2-20130612	<b>Date Sampled:</b>	06/12/13
<b>Lab Sample ID:</b>	FA5547-3	<b>Date Received:</b>	06/14/13
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	OU-3 B101S NAS JAX; Jacksonville, FL		

**VOA 8260 List**

CAS No.	Compound	Result	PQL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	0.25 U	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	0.22 U	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	0.20 U	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.23 U	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.21 U	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	0.29 U	1.0	0.29	ug/l	
591-78-6	2-Hexanone	2.0 U	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	0.20 U	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	0.20 U	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	2.3 U	5.0	2.3	ug/l	
74-83-9	Methyl bromide	0.79 U	2.0	0.79	ug/l	
74-87-3	Methyl chloride <sup>a</sup>	0.50 U	2.0	0.50	ug/l	
74-95-3	Methylene bromide	0.34 U	2.0	0.34	ug/l	
75-09-2	Methylene chloride	2.0 U	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	3.1 U	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.21 U	1.0	0.21	ug/l	
91-20-3	Naphthalene	1.0 U	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.23 U	1.0	0.23	ug/l	
100-42-5	Styrene	0.20 U	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.23 U	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	0.20 U	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.24 U	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	0.20 U	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.50 U	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	0.56 U	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.50 U	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.20 U	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.20 U	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	0.32 U	1.0	0.32	ug/l	
108-88-3	Toluene	0.20 U	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	0.66	1.0	0.31	ug/l	I
75-69-4	Trichlorofluoromethane	0.50 U	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	1.3	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	3.1 U	10	3.1	ug/l	
	m,p-Xylene	0.30 U	2.0	0.30	ug/l	
95-47-6	o-Xylene	0.20 U	1.0	0.20	ug/l	

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

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

4.3  
 4

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-MW-780-2-20130612 <b>Lab Sample ID:</b> FA5547-3 <b>Matrix:</b> AQ - Ground Water <b>Method:</b> SW846 8260B <b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	<b>Date Sampled:</b> 06/12/13 <b>Date Received:</b> 06/14/13 <b>Percent Solids:</b> n/a
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**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	99%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

(a) Associated BS recovery outside DOD QSM control limits.

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

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

4.3  
4

## Report of Analysis

<b>Client Sample ID:</b>	JAX-B101S-MW-780-2-20130612	<b>Date Sampled:</b>	06/12/13
<b>Lab Sample ID:</b>	FA5547-3	<b>Date Received:</b>	06/14/13
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270D SW846 3510C		
<b>Project:</b>	OU-3 B101S NAS JAX; Jacksonville, FL		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T008441.D	1	06/19/13	FS	06/18/13	OP47383	ST410
Run #2							

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

## ABN Full List

CAS No.	Compound	Result	PQL	MDL	Units	Q
65-85-0	Benzoic Acid	9.6 U	48	9.6	ug/l	
95-57-8	2-Chlorophenol	0.68 U	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	0.78 U	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	0.67 U	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	0.74 U	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	5.0 U	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	1.4 U	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	0.69 U	4.8	0.69	ug/l	
	3&4-Methylphenol	1.3 U	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	0.65 U	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	4.8 U	24	4.8	ug/l	
87-86-5	Pentachlorophenol	4.8 U	24	4.8	ug/l	
108-95-2	Phenol	0.53 U	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	0.86 U	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	0.75 U	4.8	0.75	ug/l	
83-32-9	Acenaphthene	0.67 U	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	0.67 U	4.8	0.67	ug/l	
62-53-3	Aniline	0.75 U	4.8	0.75	ug/l	
120-12-7	Anthracene	0.72 U	4.8	0.72	ug/l	
92-87-5	Benzidine	4.8 U	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	0.52 U	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	0.55 U	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	0.73 U	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.64 U	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	0.64 U	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	0.76 U	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	0.68 U	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	0.96 U	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	0.70 U	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	0.66 U	4.8	0.66	ug/l	
86-74-8	Carbazole	0.50 U	4.8	0.50	ug/l	
218-01-9	Chrysene	0.56 U	4.8	0.56	ug/l	

U = Not detected MDL - Method Detection Limit

PQL = Practical Quantitation Limit

L = Indicates value exceeds calibration range

I = Result &gt;= MDL but &lt; PQL J = Estimated value

V = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	JAX-B101S-MW-780-2-20130612	<b>Date Sampled:</b>	06/12/13
<b>Lab Sample ID:</b>	FA5547-3	<b>Date Received:</b>	06/14/13
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270D SW846 3510C		
<b>Project:</b>	OU-3 B101S NAS JAX; Jacksonville, FL		

## ABN Full List

CAS No.	Compound	Result	PQL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	0.67 U	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	0.69 U	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	0.76 U	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	0.84 U	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	0.65 U	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	0.62 U	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	0.75 U	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	0.67 U	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	0.66 U	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	0.77 U	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	0.71 U	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.56 U	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	0.72 U	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	0.96 U	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	0.96 U	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	0.96 U	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	0.77 U	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	1.1 U	4.8	1.1	ug/l	
206-44-0	Fluoranthene	0.56 U	4.8	0.56	ug/l	
86-73-7	Fluorene	0.73 U	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	0.66 U	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	0.92 U	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	0.76 U	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	0.71 U	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.55 U	4.8	0.55	ug/l	
78-59-1	Isophorone	0.61 U	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	0.68 U	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	0.66 U	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	0.72 U	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	0.62 U	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	0.93 U	4.8	0.93	ug/l	
91-20-3	Naphthalene	0.61 U	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	0.69 U	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	0.60 U	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	0.82 U	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	0.96 U	4.8	0.96	ug/l	
85-01-8	Phenanthrene	0.68 U	4.8	0.68	ug/l	
129-00-0	Pyrene	0.65 U	4.8	0.65	ug/l	
110-86-1	Pyridine	1.9 U	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.58 U	4.8	0.58	ug/l	

U = Not detected MDL - Method Detection Limit

PQL = Practical Quantitation Limit

L = Indicates value exceeds calibration range

I = Result &gt;= MDL but &lt; PQL J = Estimated value

V = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-MW-780-2-20130612	<b>Date Sampled:</b> 06/12/13
<b>Lab Sample ID:</b> FA5547-3	<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8270D SW846 3510C	
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	

**ABN Full List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	39%		14-67%
4165-62-2	Phenol-d5	27%		10-50%
118-79-6	2,4,6-Tribromophenol	105%		33-118%
4165-60-0	Nitrobenzene-d5	82%		42-108%
321-60-8	2-Fluorobiphenyl	86%		40-106%
1718-51-0	Terphenyl-d14	87%		39-121%

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

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

4.3  
4

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-MW-780-2-20130612	<b>Date Sampled:</b> 06/12/13
<b>Lab Sample ID:</b> FA5547-3	<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> FLORIDA-PRO SW846 3510C	
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	WR122.D	1	06/18/13	ME	06/18/13	OP47377	GWR5
Run #2							

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

CAS No.	Compound	Result	PQL	MDL	Units	Q
	TPH (C8-C40)	0.15 U	0.25	0.15	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	99%		43-123%		

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

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

4.3  
4

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-MW-780-2-20130612	<b>Date Sampled:</b> 06/12/13
<b>Lab Sample ID:</b> FA5547-3	<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	

**Total Metals Analysis**

Analyte	Result	PQL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	11.0	10	2.5	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Barium	33.1 I	200	1.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Beryllium	0.50 U	4.0	0.50	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Cadmium	0.50 U	5.0	0.50	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Chromium	2.0 U	10	2.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Lead	1.1 U	5.0	1.1	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Mercury	0.030 U	0.50	0.030	ug/l	1	06/18/13	06/18/13 JL	SW846 7470A <sup>2</sup>	SW846 7470A <sup>4</sup>
Molybdenum	5.8 I	50	1.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Nickel	0.50 U	40	0.50	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Selenium	2.0 U	10	2.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Silver	0.60 I	10	0.50	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Zinc	11.7 I	20	5.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>

- (1) Instrument QC Batch: MA10829
- (2) Instrument QC Batch: MA10830
- (3) Prep QC Batch: MP25319
- (4) Prep QC Batch: MP25333

PQL = Practical Quantitation Limit  
 MDL = Method Detection Limit

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

4.3  
4

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-FB-20130613		<b>Date Sampled:</b> 06/13/13
<b>Lab Sample ID:</b> FA5547-4		<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Field Blank Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B091262.D	1	06/20/13	WV	n/a	n/a	VB3737
Run #2							

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

**VOA 8260 List**

CAS No.	Compound	Result	PQL	MDL	Units	Q
67-64-1	Acetone	10 U	25	10	ug/l	
107-02-8	Acrolein	6.9 U	20	6.9	ug/l	
107-13-1	Acrylonitrile	2.0 U	10	2.0	ug/l	
71-43-2	Benzene	0.21 U	1.0	0.21	ug/l	
108-86-1	Bromobenzene	0.22 U	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	0.23 U	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.20 U	1.0	0.20	ug/l	
75-25-2	Bromoform	0.34 U	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	0.20 U	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	0.21 U	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	0.29 U	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	0.20 U	1.0	0.20	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.26 U	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	0.21 U	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	0.20 U	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	1.3 U	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	0.49 U	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	0.31 U	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	0.21 U	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	0.20 U	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	0.25 U	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	0.71 U	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	0.30 U	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	0.22 U	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	0.26 U	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	0.27 U	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	0.25 U	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	0.20 U	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	0.50 U	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.24 U	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.22 U	1.0	0.22	ug/l	

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

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

4.4  
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# Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-FB-20130613	<b>Date Sampled:</b> 06/13/13
<b>Lab Sample ID:</b> FA5547-4	<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Field Blank Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B	
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	

**VOA 8260 List**

CAS No.	Compound	Result	PQL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	0.25 U	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	0.22 U	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	0.20 U	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.23 U	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.21 U	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	0.29 U	1.0	0.29	ug/l	
591-78-6	2-Hexanone	2.0 U	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	0.20 U	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	0.20 U	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	2.3 U	5.0	2.3	ug/l	
74-83-9	Methyl bromide	0.79 U	2.0	0.79	ug/l	
74-87-3	Methyl chloride <sup>a</sup>	0.50 U	2.0	0.50	ug/l	
74-95-3	Methylene bromide	0.34 U	2.0	0.34	ug/l	
75-09-2	Methylene chloride	2.0 U	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	3.1 U	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.21 U	1.0	0.21	ug/l	
91-20-3	Naphthalene	1.0 U	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.23 U	1.0	0.23	ug/l	
100-42-5	Styrene	0.20 U	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.23 U	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	0.20 U	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.24 U	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	0.20 U	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.50 U	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	0.56 U	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.50 U	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.20 U	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.20 U	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	0.32 U	1.0	0.32	ug/l	
108-88-3	Toluene	0.25	1.0	0.20	ug/l	I
79-01-6	Trichloroethylene	0.31 U	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	0.50 U	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	0.44 U	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	3.1 U	10	3.1	ug/l	
	m,p-Xylene	0.30 U	2.0	0.30	ug/l	
95-47-6	o-Xylene	0.20 U	1.0	0.20	ug/l	

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

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

4.4  
 4

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-FB-20130613 <b>Lab Sample ID:</b> FA5547-4 <b>Matrix:</b> AQ - Field Blank Water <b>Method:</b> SW846 8260B <b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	<b>Date Sampled:</b> 06/13/13 <b>Date Received:</b> 06/14/13 <b>Percent Solids:</b> n/a
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**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	101%		79-125%
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

(a) Associated BS recovery outside DOD QSM control limits.

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

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

4.4  
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## Report of Analysis

<b>Client Sample ID:</b>	JAX-B101S-RB-20130613	<b>Date Sampled:</b>	06/13/13
<b>Lab Sample ID:</b>	FA5547-5	<b>Date Received:</b>	06/14/13
<b>Matrix:</b>	AQ - Equipment Blank	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	OU-3 B101S NAS JAX; Jacksonville, FL		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B091263.D	1	06/20/13	WV	n/a	n/a	VB3737
Run #2							

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

## VOA 8260 List

CAS No.	Compound	Result	PQL	MDL	Units	Q
67-64-1	Acetone	10 U	25	10	ug/l	
107-02-8	Acrolein	6.9 U	20	6.9	ug/l	
107-13-1	Acrylonitrile	2.0 U	10	2.0	ug/l	
71-43-2	Benzene	0.21 U	1.0	0.21	ug/l	
108-86-1	Bromobenzene	0.22 U	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	0.23 U	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.20 U	1.0	0.20	ug/l	
75-25-2	Bromoform	0.34 U	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	0.20 U	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	0.21 U	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	0.29 U	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	0.20 U	1.0	0.20	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.26 U	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	0.21 U	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	0.20 U	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	1.3 U	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	0.49 U	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	0.31 U	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	0.21 U	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	0.20 U	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	0.25 U	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	0.71 U	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	0.30 U	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	0.22 U	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	0.26 U	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	0.27 U	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	0.25 U	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	0.20 U	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	0.50 U	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.24 U	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.22 U	1.0	0.22	ug/l	

U = Not detected MDL - Method Detection Limit

PQL = Practical Quantitation Limit

L = Indicates value exceeds calibration range

I = Result &gt;= MDL but &lt; PQL J = Estimated value

V = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b>	JAX-B101S-RB-20130613	<b>Date Sampled:</b>	06/13/13
<b>Lab Sample ID:</b>	FA5547-5	<b>Date Received:</b>	06/14/13
<b>Matrix:</b>	AQ - Equipment Blank	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	OU-3 B101S NAS JAX; Jacksonville, FL		

**VOA 8260 List**

CAS No.	Compound	Result	PQL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	0.25 U	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	0.22 U	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	0.20 U	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.23 U	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.21 U	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	0.29 U	1.0	0.29	ug/l	
591-78-6	2-Hexanone	2.0 U	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	0.20 U	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	0.20 U	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	2.3 U	5.0	2.3	ug/l	
74-83-9	Methyl bromide	0.79 U	2.0	0.79	ug/l	
74-87-3	Methyl chloride <sup>a</sup>	0.50 U	2.0	0.50	ug/l	
74-95-3	Methylene bromide	0.34 U	2.0	0.34	ug/l	
75-09-2	Methylene chloride	2.0 U	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	3.1 U	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.21 U	1.0	0.21	ug/l	
91-20-3	Naphthalene	1.0 U	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.23 U	1.0	0.23	ug/l	
100-42-5	Styrene	0.20 U	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.23 U	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	0.20 U	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.24 U	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	0.20 U	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.50 U	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	0.56 U	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.50 U	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.20 U	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.20 U	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	0.32 U	1.0	0.32	ug/l	
108-88-3	Toluene	0.20 U	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	0.31 U	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	0.50 U	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	0.44 U	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	3.1 U	10	3.1	ug/l	
	m,p-Xylene	0.30 U	2.0	0.30	ug/l	
95-47-6	o-Xylene	0.20 U	1.0	0.20	ug/l	

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

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

4.5  
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## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-RB-20130613 <b>Lab Sample ID:</b> FA5547-5 <b>Matrix:</b> AQ - Equipment Blank <b>Method:</b> SW846 8260B <b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	<b>Date Sampled:</b> 06/13/13 <b>Date Received:</b> 06/14/13 <b>Percent Solids:</b> n/a
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**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	103%		83-118%

(a) Associated BS recovery outside DOD QSM control limits.

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

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

4.5  
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## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-RB-20130613		<b>Date Sampled:</b> 06/13/13
<b>Lab Sample ID:</b> FA5547-5		<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Equipment Blank		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8270D SW846 3510C		
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T008462.D	1	06/20/13	FS	06/20/13	OP47411	ST411
Run #2	L064199.D	1	06/21/13	NAF	06/20/13	OP47411	SL3241

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

**ABN Full List**

CAS No.	Compound	Result	PQL	MDL	Units	Q
65-85-0	Benzoic Acid	9.6 U	48	9.6	ug/l	
95-57-8	2-Chlorophenol	0.68 U	4.8	0.68	ug/l	
59-50-7	4-Chloro-3-methyl phenol	0.78 U	4.8	0.78	ug/l	
120-83-2	2,4-Dichlorophenol	0.67 U	4.8	0.67	ug/l	
105-67-9	2,4-Dimethylphenol	0.74 U	4.8	0.74	ug/l	
51-28-5	2,4-Dinitrophenol	5.0 U	24	5.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	1.4 U	9.6	1.4	ug/l	
95-48-7	2-Methylphenol	0.69 U	4.8	0.69	ug/l	
	3&4-Methylphenol	1.3 U	4.8	1.3	ug/l	
88-75-5	2-Nitrophenol	0.65 U	4.8	0.65	ug/l	
100-02-7	4-Nitrophenol	4.8 U	24	4.8	ug/l	
87-86-5	Pentachlorophenol	4.8 U	24	4.8	ug/l	
108-95-2	Phenol	0.53 U	4.8	0.53	ug/l	
95-95-4	2,4,5-Trichlorophenol	0.86 U	4.8	0.86	ug/l	
88-06-2	2,4,6-Trichlorophenol	0.75 U	4.8	0.75	ug/l	
83-32-9	Acenaphthene	0.67 U	4.8	0.67	ug/l	
208-96-8	Acenaphthylene	0.67 U	4.8	0.67	ug/l	
62-53-3	Aniline	0.75 U <sup>a</sup>	4.8	0.75	ug/l	
120-12-7	Anthracene	0.72 U	4.8	0.72	ug/l	
92-87-5	Benzidine	4.8 U	24	4.8	ug/l	
56-55-3	Benzo(a)anthracene	0.52 U	4.8	0.52	ug/l	
50-32-8	Benzo(a)pyrene	0.55 U	4.8	0.55	ug/l	
205-99-2	Benzo(b)fluoranthene	0.73 U	4.8	0.73	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.64 U	4.8	0.64	ug/l	
207-08-9	Benzo(k)fluoranthene	0.64 U	4.8	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	0.76 U	4.8	0.76	ug/l	
85-68-7	Butyl benzyl phthalate	0.68 U	4.8	0.68	ug/l	
100-51-6	Benzyl Alcohol	0.96 U	4.8	0.96	ug/l	
91-58-7	2-Chloronaphthalene	0.70 U	4.8	0.70	ug/l	
106-47-8	4-Chloroaniline	0.66 U	4.8	0.66	ug/l	
86-74-8	Carbazole	0.50 U	4.8	0.50	ug/l	
218-01-9	Chrysene	0.56 U	4.8	0.56	ug/l	

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

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

4.5  
4

## Report of Analysis

<b>Client Sample ID:</b>	JAX-B101S-RB-20130613	<b>Date Sampled:</b>	06/13/13
<b>Lab Sample ID:</b>	FA5547-5	<b>Date Received:</b>	06/14/13
<b>Matrix:</b>	AQ - Equipment Blank	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270D SW846 3510C		
<b>Project:</b>	OU-3 B101S NAS JAX; Jacksonville, FL		

## ABN Full List

CAS No.	Compound	Result	PQL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	0.67 U	4.8	0.67	ug/l	
111-44-4	bis(2-Chloroethyl)ether	0.69 U	4.8	0.69	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	0.76 U	4.8	0.76	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	0.84 U	4.8	0.84	ug/l	
95-50-1	1,2-Dichlorobenzene	0.65 U	4.8	0.65	ug/l	
122-66-7	1,2-Diphenylhydrazine	0.62 U	4.8	0.62	ug/l	
541-73-1	1,3-Dichlorobenzene	0.75 U	4.8	0.75	ug/l	
106-46-7	1,4-Dichlorobenzene	0.67 U	4.8	0.67	ug/l	
121-14-2	2,4-Dinitrotoluene	0.66 U	4.8	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	0.77 U	4.8	0.77	ug/l	
91-94-1	3,3'-Dichlorobenzidine	0.71 U	4.8	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.56 U	4.8	0.56	ug/l	
132-64-9	Dibenzofuran	0.72 U	4.8	0.72	ug/l	
84-74-2	Di-n-butyl phthalate	0.96 U	4.8	0.96	ug/l	
117-84-0	Di-n-octyl phthalate	0.96 U	4.8	0.96	ug/l	
84-66-2	Diethyl phthalate	0.96 U	4.8	0.96	ug/l	
131-11-3	Dimethyl phthalate	0.77 U	4.8	0.77	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	1.1 U	4.8	1.1	ug/l	
206-44-0	Fluoranthene	0.56 U	4.8	0.56	ug/l	
86-73-7	Fluorene	0.73 U	4.8	0.73	ug/l	
118-74-1	Hexachlorobenzene	0.66 U	4.8	0.66	ug/l	
87-68-3	Hexachlorobutadiene	0.92 U	4.8	0.92	ug/l	
77-47-4	Hexachlorocyclopentadiene	0.76 U	4.8	0.76	ug/l	
67-72-1	Hexachloroethane	0.71 U	4.8	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.55 U	4.8	0.55	ug/l	
78-59-1	Isophorone	0.61 U	4.8	0.61	ug/l	
90-12-0	1-Methylnaphthalene	0.68 U	4.8	0.68	ug/l	
91-57-6	2-Methylnaphthalene	0.66 U	4.8	0.66	ug/l	
88-74-4	2-Nitroaniline	0.72 U	4.8	0.72	ug/l	
99-09-2	3-Nitroaniline	0.62 U	4.8	0.62	ug/l	
100-01-6	4-Nitroaniline	0.93 U	4.8	0.93	ug/l	
91-20-3	Naphthalene	0.61 U	4.8	0.61	ug/l	
98-95-3	Nitrobenzene	0.69 U	4.8	0.69	ug/l	
62-75-9	N-Nitrosodimethylamine	0.60 U	4.8	0.60	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	0.82 U	4.8	0.82	ug/l	
86-30-6	N-Nitrosodiphenylamine	0.96 U	4.8	0.96	ug/l	
85-01-8	Phenanthrene	0.68 U	4.8	0.68	ug/l	
129-00-0	Pyrene	0.65 U	4.8	0.65	ug/l	
110-86-1	Pyridine	1.9 U	9.6	1.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.58 U	4.8	0.58	ug/l	

U = Not detected MDL - Method Detection Limit

PQL = Practical Quantitation Limit

L = Indicates value exceeds calibration range

I = Result &gt;= MDL but &lt; PQL J = Estimated value

V = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-RB-20130613	<b>Date Sampled:</b> 06/13/13
<b>Lab Sample ID:</b> FA5547-5	<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Equipment Blank	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8270D SW846 3510C	
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	

**ABN Full List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	40%	38%	14-67%
4165-62-2	Phenol-d5	27%	26%	10-50%
118-79-6	2,4,6-Tribromophenol	81%	75%	33-118%
4165-60-0	Nitrobenzene-d5	71%	72%	42-108%
321-60-8	2-Fluorobiphenyl	73%	72%	40-106%
1718-51-0	Terphenyl-d14	88%	80%	39-121%

(a) Result is from Run# 2

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

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

4.5  
4

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-RB-20130613	<b>Date Sampled:</b> 06/13/13
<b>Lab Sample ID:</b> FA5547-5	<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Equipment Blank	<b>Percent Solids:</b> n/a
<b>Method:</b> FLORIDA-PRO SW846 3510C	
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	WR133.D	1	06/19/13	ME	06/18/13	OP47377	GWR5
Run #2							

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

CAS No.	Compound	Result	PQL	MDL	Units	Q
	TPH (C8-C40)	0.15 U	0.24	0.15	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	79%		43-123%		

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

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

4.5  
4

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-RB-20130613 <b>Lab Sample ID:</b> FA5547-5 <b>Matrix:</b> AQ - Equipment Blank <b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	<b>Date Sampled:</b> 06/13/13 <b>Date Received:</b> 06/14/13 <b>Percent Solids:</b> n/a
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**Total Metals Analysis**

Analyte	Result	PQL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	2.5 U	10	2.5	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Barium	1.0 U	200	1.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Beryllium	0.50 U	4.0	0.50	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Cadmium	0.50 U	5.0	0.50	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Chromium	2.0 U	10	2.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Lead	1.1 U	5.0	1.1	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Mercury	0.030 U	0.50	0.030	ug/l	1	06/18/13	06/18/13 JL	SW846 7470A <sup>2</sup>	SW846 7470A <sup>4</sup>
Molybdenum	1.0 U	50	1.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Nickel	0.50 U	40	0.50	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Selenium	2.0 U	10	2.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Silver	0.50 U	10	0.50	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>
Zinc	5.0 U	20	5.0	ug/l	1	06/14/13	06/17/13 LM	SW846 6010C <sup>1</sup>	SW846 3010A <sup>3</sup>

- (1) Instrument QC Batch: MA10829
- (2) Instrument QC Batch: MA10830
- (3) Prep QC Batch: MP25319
- (4) Prep QC Batch: MP25333

PQL = Practical Quantitation Limit  
 MDL = Method Detection Limit

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

4.5  
4

## Report of Analysis

<b>Client Sample ID:</b>	JAX-B101S-TB-20130613	<b>Date Sampled:</b>	06/13/13
<b>Lab Sample ID:</b>	FA5547-6	<b>Date Received:</b>	06/14/13
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	OU-3 B101S NAS JAX; Jacksonville, FL		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B091264.D	1	06/20/13	WV	n/a	n/a	VB3737
Run #2							

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

## VOA 8260 List

CAS No.	Compound	Result	PQL	MDL	Units	Q
67-64-1	Acetone	10 U	25	10	ug/l	
107-02-8	Acrolein	6.9 U	20	6.9	ug/l	
107-13-1	Acrylonitrile	2.0 U	10	2.0	ug/l	
71-43-2	Benzene	0.21 U	1.0	0.21	ug/l	
108-86-1	Bromobenzene	0.22 U	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	0.23 U	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.20 U	1.0	0.20	ug/l	
75-25-2	Bromoform	0.34 U	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	0.20 U	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	0.21 U	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	0.29 U	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	0.20 U	1.0	0.20	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.26 U	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	0.21 U	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	0.20 U	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	1.3 U	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	0.49 U	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	0.31 U	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	0.21 U	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	0.20 U	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	0.25 U	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	0.71 U	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	0.30 U	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	0.22 U	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	0.26 U	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	0.27 U	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	0.25 U	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	0.20 U	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	0.50 U	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.24 U	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.22 U	1.0	0.22	ug/l	

U = Not detected MDL - Method Detection Limit

PQL = Practical Quantitation Limit

L = Indicates value exceeds calibration range

I = Result &gt;= MDL but &lt; PQL J = Estimated value

V = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	JAX-B101S-TB-20130613	<b>Date Sampled:</b>	06/13/13
<b>Lab Sample ID:</b>	FA5547-6	<b>Date Received:</b>	06/14/13
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	OU-3 B101S NAS JAX; Jacksonville, FL		

## VOA 8260 List

CAS No.	Compound	Result	PQL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	0.25 U	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	0.22 U	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	0.20 U	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.23 U	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.21 U	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	0.29 U	1.0	0.29	ug/l	
591-78-6	2-Hexanone	2.0 U	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	0.20 U	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	0.20 U	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	2.3 U	5.0	2.3	ug/l	
74-83-9	Methyl bromide	0.79 U	2.0	0.79	ug/l	
74-87-3	Methyl chloride <sup>a</sup>	0.50 U	2.0	0.50	ug/l	
74-95-3	Methylene bromide	0.34 U	2.0	0.34	ug/l	
75-09-2	Methylene chloride	2.0 U	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	3.1 U	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.21 U	1.0	0.21	ug/l	
91-20-3	Naphthalene	1.0 U	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.23 U	1.0	0.23	ug/l	
100-42-5	Styrene	0.20 U	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.23 U	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	0.20 U	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.24 U	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	0.20 U	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.50 U	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	0.56 U	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.50 U	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.20 U	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.20 U	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	0.32 U	1.0	0.32	ug/l	
108-88-3	Toluene	0.20 U	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	0.31 U	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	0.50 U	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	0.44 U	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	3.1 U	10	3.1	ug/l	
	m,p-Xylene	0.30 U	2.0	0.30	ug/l	
95-47-6	o-Xylene	0.20 U	1.0	0.20	ug/l	

U = Not detected MDL - Method Detection Limit

PQL = Practical Quantitation Limit

L = Indicates value exceeds calibration range

I = Result &gt;= MDL but &lt; PQL J = Estimated value

V = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-TB-20130613	<b>Date Sampled:</b> 06/13/13
<b>Lab Sample ID:</b> FA5547-6	<b>Date Received:</b> 06/14/13
<b>Matrix:</b> AQ - Trip Blank Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B	
<b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	

4.6  
4

**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	101%		79-125%
2037-26-5	Toluene-D8	104%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

(a) Associated BS recovery outside DOD QSM control limits.

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

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

## Report of Analysis

<b>Client Sample ID:</b>	JAX-B101S-TB-20130613-2	<b>Date Sampled:</b>	06/13/13
<b>Lab Sample ID:</b>	FA5547-7	<b>Date Received:</b>	06/14/13
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	OU-3 B101S NAS JAX; Jacksonville, FL		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B091265.D	1	06/20/13	WV	n/a	n/a	VB3737
Run #2							

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

## VOA 8260 List

CAS No.	Compound	Result	PQL	MDL	Units	Q
67-64-1	Acetone	10 U	25	10	ug/l	
107-02-8	Acrolein	6.9 U	20	6.9	ug/l	
107-13-1	Acrylonitrile	2.0 U	10	2.0	ug/l	
71-43-2	Benzene	0.21 U	1.0	0.21	ug/l	
108-86-1	Bromobenzene	0.22 U	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	0.23 U	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.20 U	1.0	0.20	ug/l	
75-25-2	Bromoform	0.34 U	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	0.20 U	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	0.21 U	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	0.29 U	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	0.20 U	1.0	0.20	ug/l	
75-00-3	Chloroethane	0.50 U	2.0	0.50	ug/l	
67-66-3	Chloroform	0.26 U	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	0.21 U	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	0.20 U	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	1.3 U	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	0.49 U	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	0.31 U	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	0.21 U	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	0.20 U	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	0.25 U	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	0.71 U	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	0.30 U	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	0.22 U	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	0.26 U	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	0.27 U	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	0.25 U	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	0.20 U	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	0.50 U	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.24 U	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.22 U	1.0	0.22	ug/l	

U = Not detected MDL - Method Detection Limit

PQL = Practical Quantitation Limit

L = Indicates value exceeds calibration range

I = Result &gt;= MDL but &lt; PQL J = Estimated value

V = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	JAX-B101S-TB-20130613-2	<b>Date Sampled:</b>	06/13/13
<b>Lab Sample ID:</b>	FA5547-7	<b>Date Received:</b>	06/14/13
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	OU-3 B101S NAS JAX; Jacksonville, FL		

## VOA 8260 List

CAS No.	Compound	Result	PQL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	0.25 U	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	0.22 U	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	0.20 U	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.23 U	1.0	0.23	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.21 U	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	0.29 U	1.0	0.29	ug/l	
591-78-6	2-Hexanone	2.0 U	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	0.20 U	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	0.20 U	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	2.3 U	5.0	2.3	ug/l	
74-83-9	Methyl bromide	0.79 U	2.0	0.79	ug/l	
74-87-3	Methyl chloride <sup>a</sup>	0.50 U	2.0	0.50	ug/l	
74-95-3	Methylene bromide	0.34 U	2.0	0.34	ug/l	
75-09-2	Methylene chloride	2.0 U	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	3.1 U	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.21 U	1.0	0.21	ug/l	
91-20-3	Naphthalene	1.0 U	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.23 U	1.0	0.23	ug/l	
100-42-5	Styrene	0.20 U	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.23 U	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	0.20 U	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.24 U	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	0.20 U	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.50 U	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	0.56 U	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.50 U	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.20 U	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.20 U	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	0.32 U	1.0	0.32	ug/l	
108-88-3	Toluene	0.20 U	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	0.31 U	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	0.50 U	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	0.44 U	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	3.1 U	10	3.1	ug/l	
	m,p-Xylene	0.30 U	2.0	0.30	ug/l	
95-47-6	o-Xylene	0.20 U	1.0	0.20	ug/l	

U = Not detected MDL - Method Detection Limit

PQL = Practical Quantitation Limit

L = Indicates value exceeds calibration range

I = Result &gt;= MDL but &lt; PQL J = Estimated value

V = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> JAX-B101S-TB-20130613-2 <b>Lab Sample ID:</b> FA5547-7 <b>Matrix:</b> AQ - Trip Blank Water <b>Method:</b> SW846 8260B <b>Project:</b> OU-3 B101S NAS JAX; Jacksonville, FL	<b>Date Sampled:</b> 06/13/13 <b>Date Received:</b> 06/14/13 <b>Percent Solids:</b> n/a
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**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	103%		83-118%

(a) Associated BS recovery outside DOD QSM control limits.

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

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

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## Misc. Forms

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## Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody



ACCUTEST

Accutest Laboratories Southeast Chain of Custody

Vineyard Road, Suite C-15 Orlando, FL 32811 TEL: 407-425-6700 FAX: 407-425-0707 www.accutest.com

4405

ACCUTEST JOB #:

FA 5547

PAGE 1 OF 1

Client / Reporting Information		Project Information		Accutest Quote #		SKIFF #															
Company Name: Solutions IES, Inc.		Project Name: NAS JAX - B101S																			
Address: 1101 Nowell Road		Street																			
City: Raleigh State: NC Zip		City: Jacksonville State: FL																			
Project Contact: James Tiger E-mail: jtiger@solutions-ies.com		Project # 2013.0029																			
Phone # 919-873-1060		Fax # 919-873-1074																			
Sampler(s) Name(s) (Printed)		Client Purchase Order #																			
Sampler 1:		Sampler 2:																			
Accutest Sample #	Field ID / Point of Collection	COLLECTION		CONTAINER INFORMATION												RCRA Metals, Be, Mo, Ni, Zn	FL PRO TRPH	V8260STD	8270 D	Analytical Information	Matrix Codes
		DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	MOE	ICI	MECH	INOS	PERCA	MOH+ZNA	DI WATER	MECH						
1	JAX-B101S-MW-101S-01-201306/3	6/13/13	935	SM	GW	8		X	X	X	X	X					X	X	X	X	DW - Drinking Water
2	JAX-B101S-MW-780-1-201306/13	6/13/13	940	SP	GW	8		X	X	X	X	X					X	X	X	X	GW - Ground Water
3	JAX-B101S-MW-780-2-201306/12	6/12/13	1000	NS	GW	8		X	X	X	X	X					X	X	X	X	Water
4	JAX-B101S-FB-201306/3	6/13/13	920	SM	DI	3		X	X	X	X	X					X	X	X	X	SW - Surface Water
5	JAX-B101S-RB-201306/13	6/13/13	1030	SM	DI	8		X	X	X	X	X					X	X	X	X	Water
6	JAX-B101S-TB-201306/13				DI	2															SO - Soil
7	JAX-B101S-201306/13-2				DI	2		X													SL - Sludge
Turnaround Time (Business days)		Data Deliverable Information		Comments / Remarks																	
Std: 10 Business Days		Approved By: / Date/Rush Code:		<input type="checkbox"/> COMMERCIAL "A" (RESULTS ONLY) <input type="checkbox"/> COMMERCIAL "B" (RESULTS PLUS QC) <input type="checkbox"/> REDT1 (EPA LEVEL 3) <input type="checkbox"/> FULLT1 (EPA LEVEL 4) <input type="checkbox"/> EDD'S																	
7 Day RUSH																					
5 Day RUSH																					
3 Day EMERGENCY																					
2 Day EMERGENCY																					
1 Day EMERGENCY																					
Other																					
Emergency or Rush T/A Data Available VIA Email or Lablink																					
Sample Custody must be documented below each time samples change possession, including courier delivery.																					
Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Date Time:	Relinquished By/Affiliation	Date Time:	Received By/Affiliation	Date Time:	Relinquished By/Affiliation	Date Time:	Received By/Affiliation	Date Time:	Relinquished By/Affiliation	Date Time:	Received By/Affiliation	Date Time:	Relinquished By/Affiliation	Date Time:				
1	6/13/13 1730	James Glover	6-13-13 1730	3	James Glover	6-13-13 2030	6-13-13 2030	6	James Glover	6-14-13	6-14-13	7	James Glover	6-14-13	6-14-13	8	James Glover	6-14-13			
5				6				7				8				9					
Lab Use Only: Custody Seal In Place: Y N Temp Blank Provided: Y N Preserved Where Applicable: Y N Total # of Coolers: 2 Cooler Temperature (s) Celsius: 26.30																					

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FA5547: Chain of Custody

Page 1 of 3

**ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION**

ACCUTEST'S JOB NUMBER: FA 5547 CLIENT: SOLUTIONS PROJECT: NAS JAX  
 DATE/TIME RECEIVED: 6-14-13 08:00 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 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
- 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 2
- RECEIVED SOIL TRIP BLANK

**MISC. INFORMATION**

NUMBER OF ENCORES? 25-GRAM \_\_\_\_\_ 5-GRAM \_\_\_\_\_  
 NUMBER OF 5035 FIELD KITS? \_\_\_\_\_  
 NUMBER OF LAB FILTERED METALS? \_\_\_\_\_

**TEMPERATURE INFORMATION**

IR THERM ID 3 CORR. FACTOR 1.04  
 OBSERVED TEMPS: 2.2 2.6  
 CORRECTED TEMPS: 2.6 3.0

**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: SAMPLES G, I TB WATER

TECHNICIAN SIGNATURE/DATE SC 6-14-13 REVIEWER SIGNATURE/DATE [Signature]

NF 12/10

receipt confirmation 122910.xls

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**Job Change Order: FA5547\_6/20/2013**

<b>Requested Date:</b>	6/20/2013	<b>Received Date:</b>	6/14/2013
<b>Account Name:</b>	Solutions-IES, Inc	<b>Due Date:</b>	6/21/2013
<b>Project</b>	OU-3 B101S NAS JAX; Jacksonville, FL	<b>Deliverable:</b>	COMMBN
<b>CSR:</b>	JDS	<b>TAT (Days):</b>	7

**Sample #:**  
FA5547-7

**Change:** Please change the sample ID to  
JAX-B101S-TB-20130613-2, per client request.  
Thank you

JAX-B101S-20130613-2

**Above Changes Per:** client, James Tiger, via e-mail

**Date:** 6/20/2013

**FA5547: Chain of Custody**

**Page 3 of 3**

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

Page 1 of 1

## GC/MS Volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3737-MB	B091258.D	1	06/20/13	WV	n/a	n/a	VB3737

The QC reported here applies to the following samples:

Method: SW846 8260B

FA5547-1, FA5547-2, FA5547-3, FA5547-4, FA5547-5, FA5547-6, FA5547-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	6.9	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.21	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.34	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.21	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.26	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.21	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.49	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.25	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.30	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.26	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.27	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.25	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.23	ug/l	

## Method Blank Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3737-MB	B091258.D	1	06/20/13	WV	n/a	n/a	VB3737

The QC reported here applies to the following samples:

Method: SW846 8260B

FA5547-1, FA5547-2, FA5547-3, FA5547-4, FA5547-5, FA5547-6, FA5547-7

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.29	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.79	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.34	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	3.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.21	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.56	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.31	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
108-05-4	Vinyl Acetate	ND	10	3.1	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

## Method Blank Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3737-MB	B091258.D	1	06/20/13	WV	n/a	n/a	VB3737

The QC reported here applies to the following samples:

Method: SW846 8260B

FA5547-1, FA5547-2, FA5547-3, FA5547-4, FA5547-5, FA5547-6, FA5547-7

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	98% 83-118%
17060-07-0	1,2-Dichloroethane-D4	101% 79-125%
2037-26-5	Toluene-D8	102% 85-112%
460-00-4	4-Bromofluorobenzene	104% 83-118%

# Blank Spike Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3737-BS	B091257.D	1	06/20/13	WV	n/a	n/a	VB3737

The QC reported here applies to the following samples:

Method: SW846 8260B

FA5547-1, FA5547-2, FA5547-3, FA5547-4, FA5547-5, FA5547-6, FA5547-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	107	86	50-147
107-02-8	Acrolein	125	179	143	31-154
107-13-1	Acrylonitrile	125	116	93	58-126
71-43-2	Benzene	25	25.8	103	81-122
108-86-1	Bromobenzene	25	24.0	96	80-121
74-97-5	Bromochloromethane	25	24.1	96	76-123
75-27-4	Bromodichloromethane	25	25.2	101	79-123
75-25-2	Bromoform	25	24.8	99	66-123
104-51-8	n-Butylbenzene	25	25.1	100	79-126
135-98-8	sec-Butylbenzene	25	27.6	110	83-133
98-06-6	tert-Butylbenzene	25	27.1	108	80-133
108-90-7	Chlorobenzene	25	26.7	107	82-124
75-00-3	Chloroethane	25	25.7	103	62-144
67-66-3	Chloroform	25	24.7	99	80-124
95-49-8	o-Chlorotoluene	25	26.6	106	81-127
106-43-4	p-Chlorotoluene	25	27.0	108	83-130
110-75-8	2-Chloroethyl vinyl ether	125	104	83	56-122
75-15-0	Carbon disulfide	25	31.1	124	66-148
56-23-5	Carbon tetrachloride	25	29.0	116	76-136
75-34-3	1,1-Dichloroethane	25	26.2	105	81-122
75-35-4	1,1-Dichloroethylene	25	28.8	115	78-137
563-58-6	1,1-Dichloropropene	25	27.5	110	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	22.6	90	64-123
106-93-4	1,2-Dibromoethane	25	23.8	95	75-120
107-06-2	1,2-Dichloroethane	25	24.5	98	75-125
78-87-5	1,2-Dichloropropane	25	24.9	100	76-124
142-28-9	1,3-Dichloropropane	25	23.9	96	80-118
594-20-7	2,2-Dichloropropane	25	28.0	112	74-139
124-48-1	Dibromochloromethane	25	25.0	100	78-122
75-71-8	Dichlorodifluoromethane	25	32.3	129	42-167
156-59-2	cis-1,2-Dichloroethylene	25	25.2	101	78-120
10061-01-5	cis-1,3-Dichloropropene	25	24.9	100	75-118
541-73-1	m-Dichlorobenzene	25	25.9	104	84-125
95-50-1	o-Dichlorobenzene	25	25.4	102	82-124
106-46-7	p-Dichlorobenzene	25	23.7	95	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.5	106	76-127

\* = Outside of Control Limits.

## Blank Spike Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3737-BS	B091257.D	1	06/20/13	WV	n/a	n/a	VB3737

The QC reported here applies to the following samples:

Method: SW846 8260B

FA5547-1, FA5547-2, FA5547-3, FA5547-4, FA5547-5, FA5547-6, FA5547-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	26.7	107	80-120
100-41-4	Ethylbenzene	25	26.2	105	81-121
591-78-6	2-Hexanone	125	106	85	61-129
87-68-3	Hexachlorobutadiene	25	26.3	105	75-142
98-82-8	Isopropylbenzene	25	28.0	112	83-132
99-87-6	p-Isopropyltoluene	25	27.1	108	79-130
108-10-1	4-Methyl-2-pentanone	125	110	88	66-122
74-83-9	Methyl bromide	25	32.4	130	59-143
74-87-3	Methyl chloride	25	33.1	132	50-159
74-95-3	Methylene bromide	25	23.4	94	78-119
75-09-2	Methylene chloride	25	25.8	103	69-135
78-93-3	Methyl ethyl ketone	125	110	88	56-143
1634-04-4	Methyl Tert Butyl Ether	25	23.2	93	72-117
91-20-3	Naphthalene	25	21.6	86	63-132
103-65-1	n-Propylbenzene	25	27.8	111	82-133
100-42-5	Styrene	25	24.6	98	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	27.1	108	77-122
71-55-6	1,1,1-Trichloroethane	25	27.3	109	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	21.7	87	72-120
79-00-5	1,1,2-Trichloroethane	25	23.5	94	76-119
87-61-6	1,2,3-Trichlorobenzene	25	22.3	89	68-131
96-18-4	1,2,3-Trichloropropane	25	22.4	90	77-120
120-82-1	1,2,4-Trichlorobenzene	25	23.3	93	73-129
95-63-6	1,2,4-Trimethylbenzene	25	24.6	98	79-120
108-67-8	1,3,5-Trimethylbenzene	25	24.8	99	79-120
127-18-4	Tetrachloroethylene	25	26.1	104	76-135
108-88-3	Toluene	25	25.0	100	80-120
79-01-6	Trichloroethylene	25	26.4	106	81-126
75-69-4	Trichlorofluoromethane	25	28.3	113	71-156
75-01-4	Vinyl chloride	25	26.2	105	69-159
108-05-4	Vinyl Acetate	125	124	99	43-154
	m,p-Xylene	50	53.8	108	79-126
95-47-6	o-Xylene	25	27.2	109	80-127

\* = Outside of Control Limits.

## Blank Spike Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3737-BS	B091257.D	1	06/20/13	WV	n/a	n/a	VB3737

The QC reported here applies to the following samples:

Method: SW846 8260B

FA5547-1, FA5547-2, FA5547-3, FA5547-4, FA5547-5, FA5547-6, FA5547-7

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	79-125%
2037-26-5	Toluene-D8	102%	85-112%
460-00-4	4-Bromofluorobenzene	98%	83-118%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA5547-1MS	B091266.D	1	06/20/13	WV	n/a	n/a	VB3737
FA5547-1MSD	B091267.D	1	06/20/13	WV	n/a	n/a	VB3737
FA5547-1	B091259.D	1	06/20/13	WV	n/a	n/a	VB3737

The QC reported here applies to the following samples:

Method: SW846 8260B

FA5547-1, FA5547-2, FA5547-3, FA5547-4, FA5547-5, FA5547-6, FA5547-7

CAS No.	Compound	FA5547-1		Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
67-64-1	Acetone	25 U		125	124	99	128	102	3	50-147/21
107-02-8	Acrolein	20 U		125	215	172*	204	163*	5	31-154/29
107-13-1	Acrylonitrile	10 U		125	111	89	113	90	2	58-126/16
71-43-2	Benzene	1.0 U		25	26.5	106	25.9	104	2	81-122/14
108-86-1	Bromobenzene	1.0 U		25	23.9	96	23.5	94	2	80-121/14
74-97-5	Bromochloromethane	1.0 U		25	23.6	94	24.2	97	3	76-123/14
75-27-4	Bromodichloromethane	1.0 U		25	24.7	99	24.9	100	1	79-123/19
75-25-2	Bromoform	1.0 U		25	24.4	98	24.8	99	2	66-123/21
104-51-8	n-Butylbenzene	1.0 U		25	25.8	103	25.0	100	3	79-126/16
135-98-8	sec-Butylbenzene	1.0 U		25	28.0	112	26.7	107	5	83-133/16
98-06-6	tert-Butylbenzene	1.0 U		25	27.2	109	26.5	106	3	80-133/16
108-90-7	Chlorobenzene	1.0 U		25	26.7	107	26.3	105	2	82-124/14
75-00-3	Chloroethane	2.0 U		25	25.8	103	24.3	97	6	62-144/20
67-66-3	Chloroform	1.0 U		25	24.7	99	24.3	97	2	80-124/15
95-49-8	o-Chlorotoluene	1.0 U		25	26.6	106	26.2	105	2	81-127/15
106-43-4	p-Chlorotoluene	1.0 U		25	27.7	111	27.0	108	3	83-130/15
110-75-8	2-Chloroethyl vinyl ether	5.0 U		125	7.8	6*	ND	0*	200*	56-122/23
75-15-0	Carbon disulfide	2.0 U		25	31.6	126	30.6	122	3	66-148/23
56-23-5	Carbon tetrachloride	1.0 U		25	29.7	119	28.3	113	5	76-136/23
75-34-3	1,1-Dichloroethane	1.0 U		25	27.3	109	26.3	105	4	81-122/15
75-35-4	1,1-Dichloroethylene	1.0 U		25	29.4	118	28.3	113	4	78-137/18
563-58-6	1,1-Dichloropropene	1.0 U		25	28.2	113	26.7	107	5	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U		25	22.2	89	23.1	92	4	64-123/18
106-93-4	1,2-Dibromoethane	1.0 U		25	24.0	96	23.9	96	0	75-120/13
107-06-2	1,2-Dichloroethane	1.0 U		25	24.3	97	24.8	99	2	75-125/14
78-87-5	1,2-Dichloropropane	1.0 U		25	25.4	102	25.3	101	0	76-124/14
142-28-9	1,3-Dichloropropane	1.0 U		25	24.3	97	24.7	99	2	80-118/13
594-20-7	2,2-Dichloropropane	1.0 U		25	28.2	113	26.9	108	5	74-139/17
124-48-1	Dibromochloromethane	1.0 U		25	24.8	99	24.7	99	0	78-122/19
75-71-8	Dichlorodifluoromethane	2.0 U		25	32.5	130	30.8	123	5	42-167/19
156-59-2	cis-1,2-Dichloroethylene	1.0 U		25	25.5	102	24.9	100	2	78-120/15
10061-01-5	cis-1,3-Dichloropropene	1.0 U		25	24.5	98	24.4	98	0	75-118/23
541-73-1	m-Dichlorobenzene	1.0 U		25	26.7	107	25.6	102	4	84-125/14
95-50-1	o-Dichlorobenzene	1.0 U		25	25.4	102	25.0	100	2	82-124/14
106-46-7	p-Dichlorobenzene	1.0 U		25	24.6	98	23.9	96	3	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.0 U		25	27.3	109	26.1	104	4	76-127/17

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA5547-1MS	B091266.D	1	06/20/13	WV	n/a	n/a	VB3737
FA5547-1MSD	B091267.D	1	06/20/13	WV	n/a	n/a	VB3737
FA5547-1	B091259.D	1	06/20/13	WV	n/a	n/a	VB3737

The QC reported here applies to the following samples:

Method: SW846 8260B

FA5547-1, FA5547-2, FA5547-3, FA5547-4, FA5547-5, FA5547-6, FA5547-7

CAS No.	Compound	FA5547-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	1.0 U	25	26.2	105	26.3	105	0	80-120/22
100-41-4	Ethylbenzene	1.0 U	25	26.0	104	25.3	101	3	81-121/14
591-78-6	2-Hexanone	10 U	125	119	95	126	101	6	61-129/18
87-68-3	Hexachlorobutadiene	2.0 U	25	24.9	100	23.7	95	5	75-142/19
98-82-8	Isopropylbenzene	1.0 U	25	27.3	109	26.9	108	1	83-132/15
99-87-6	p-Isopropyltoluene	1.0 U	25	27.1	108	26.0	104	4	79-130/16
108-10-1	4-Methyl-2-pentanone	5.0 U	125	126	101	131	105	4	66-122/16
74-83-9	Methyl bromide	2.0 U	25	31.4	126	29.1	116	8	59-143/19
74-87-3	Methyl chloride	2.0 U	25	32.5	130	31.5	126	3	50-159/19
74-95-3	Methylene bromide	2.0 U	25	23.7	95	24.0	96	1	78-119/14
75-09-2	Methylene chloride	5.0 U	25	26.7	107	26.8	107	0	69-135/16
78-93-3	Methyl ethyl ketone	5.0 U	125	108	86	114	91	5	56-143/18
1634-04-4	Methyl Tert Butyl Ether	1.0 U	25	23.0	92	23.4	94	2	72-117/14
91-20-3	Naphthalene	5.0 U	25	21.9	88	22.9	92	4	63-132/25
103-65-1	n-Propylbenzene	1.0 U	25	28.1	112	27.6	110	2	82-133/15
100-42-5	Styrene	1.0 U	25	25.3	101	24.7	99	2	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U	25	26.4	106	26.0	104	2	77-122/19
71-55-6	1,1,1-Trichloroethane	1.0 U	25	27.0	108	26.1	104	3	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	25	22.3	89	23.2	93	4	72-120/14
79-00-5	1,1,2-Trichloroethane	1.0 U	25	23.8	95	23.8	95	0	76-119/14
87-61-6	1,2,3-Trichlorobenzene	1.0 U	25	22.4	90	22.7	91	1	68-131/25
96-18-4	1,2,3-Trichloropropane	2.0 U	25	23.0	92	23.4	94	2	77-120/16
120-82-1	1,2,4-Trichlorobenzene	1.0 U	25	22.6	90	22.8	91	1	73-129/20
95-63-6	1,2,4-Trimethylbenzene	2.0 U	25	25.1	100	23.8	95	5	79-120/18
108-67-8	1,3,5-Trimethylbenzene	2.0 U	25	24.5	98	24.2	97	1	79-120/19
127-18-4	Tetrachloroethylene	1.0 U	25	26.0	104	24.9	100	4	76-135/16
108-88-3	Toluene	1.0 U	25	25.3	101	24.2	97	4	80-120/14
79-01-6	Trichloroethylene	1.0 U	25	26.0	104	25.5	102	2	81-126/15
75-69-4	Trichlorofluoromethane	2.0 U	25	29.4	118	27.0	108	9	71-156/21
75-01-4	Vinyl chloride	1.0 U	25	25.8	103	24.5	98	5	69-159/18
108-05-4	Vinyl Acetate	10 U	125	120	96	121	97	1	43-154/14
	m,p-Xylene	2.0 U	50	55.4	111	53.6	107	3	79-126/15
95-47-6	o-Xylene	1.0 U	25	27.7	111	27.0	108	3	80-127/14

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA5547-1MS	B091266.D	1	06/20/13	WV	n/a	n/a	VB3737
FA5547-1MSD	B091267.D	1	06/20/13	WV	n/a	n/a	VB3737
FA5547-1	B091259.D	1	06/20/13	WV	n/a	n/a	VB3737

The QC reported here applies to the following samples:

Method: SW846 8260B

FA5547-1, FA5547-2, FA5547-3, FA5547-4, FA5547-5, FA5547-6, FA5547-7

CAS No.	Surrogate Recoveries	MS	MSD	FA5547-1	Limits
1868-53-7	Dibromofluoromethane	99%	100%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	99%	99%	79-125%
2037-26-5	Toluene-D8	103%	102%	104%	85-112%
460-00-4	4-Bromofluorobenzene	97%	99%	104%	83-118%

\* = Outside of Control Limits.

## GC/MS Semi-volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47383-MB	T008424.D	1	06/19/13	FS	06/18/13	OP47383	ST410

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-1, FA5547-2, FA5547-3

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	50	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.71	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.81	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.70	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.77	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.2	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.4	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.68	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.90	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.78	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.69	ug/l	
62-53-3	Aniline	ND	5.0	0.78	ug/l	
120-12-7	Anthracene	ND	5.0	0.75	ug/l	
92-87-5	Benzidine	ND	25	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.55	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.57	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.76	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.66	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.79	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.71	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.73	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.69	ug/l	
86-74-8	Carbazole	ND	5.0	0.52	ug/l	
218-01-9	Chrysene	ND	5.0	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.72	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.87	ug/l	

## Method Blank Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47383-MB	T008424.D	1	06/19/13	FS	06/18/13	OP47383	ST410

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-1, FA5547-2, FA5547-3

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.68	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.64	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.78	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.69	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.69	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.81	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.74	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.75	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	1.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	1.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.81	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.2	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.59	ug/l	
86-73-7	Fluorene	ND	5.0	0.76	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.69	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.96	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	0.79	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.74	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.57	ug/l	
78-59-1	Isophorone	ND	5.0	0.64	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.69	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.75	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.65	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.97	ug/l	
91-20-3	Naphthalene	ND	5.0	0.64	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.72	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	0.63	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.85	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	1.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.71	ug/l	
129-00-0	Pyrene	ND	5.0	0.68	ug/l	
110-86-1	Pyridine	ND	10	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.61	ug/l	

7.1.1  
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## Method Blank Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47383-MB	T008424.D	1	06/19/13	FS	06/18/13	OP47383	ST410

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-1, FA5547-2, FA5547-3

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	42% 14-67%
4165-62-2	Phenol-d5	29% 10-50%
118-79-6	2,4,6-Tribromophenol	86% 33-118%
4165-60-0	Nitrobenzene-d5	70% 42-108%
321-60-8	2-Fluorobiphenyl	73% 40-106%
1718-51-0	Terphenyl-d14	95% 39-121%

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

(a) No TICs detected.

7.1.1  
7

## Method Blank Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47411-MB	T008461.D	1	06/20/13	FS	06/20/13	OP47411	ST411

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-5

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	50	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.71	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.81	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.70	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.77	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	5.2	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.4	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.68	ug/l	
100-02-7	4-Nitrophenol	ND	25	5.0	ug/l	
87-86-5	Pentachlorophenol	ND	25	5.0	ug/l	
108-95-2	Phenol	ND	5.0	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.90	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.78	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.69	ug/l	
62-53-3	Aniline	ND	5.0	0.78	ug/l	
120-12-7	Anthracene	ND	5.0	0.75	ug/l	
92-87-5	Benzidine	ND	25	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.55	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.57	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.76	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.66	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.79	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.71	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.73	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.69	ug/l	
86-74-8	Carbazole	ND	5.0	0.52	ug/l	
218-01-9	Chrysene	ND	5.0	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.70	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.72	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.79	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.87	ug/l	

## Method Blank Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47411-MB	T008461.D	1	06/20/13	FS	06/20/13	OP47411	ST411

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.68	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.64	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.78	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.69	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.69	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.81	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.74	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.75	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	1.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	1.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.81	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	1.2	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.59	ug/l	
86-73-7	Fluorene	ND	5.0	0.76	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.69	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.96	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	0.79	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.74	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.57	ug/l	
78-59-1	Isophorone	ND	5.0	0.64	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.69	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.75	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.65	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.97	ug/l	
91-20-3	Naphthalene	ND	5.0	0.64	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.72	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	0.63	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.85	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	1.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.71	ug/l	
129-00-0	Pyrene	ND	5.0	0.68	ug/l	
110-86-1	Pyridine	ND	10	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.61	ug/l	

## Method Blank Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47411-MB	T008461.D	1	06/20/13	FS	06/20/13	OP47411	ST411

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-5

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	51%	14-67%
4165-62-2	Phenol-d5	39%	10-50%
118-79-6	2,4,6-Tribromophenol	79%	33-118%
4165-60-0	Nitrobenzene-d5	72%	42-108%
321-60-8	2-Fluorobiphenyl	71%	40-106%
1718-51-0	Terphenyl-d14	90%	39-121%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
110-82-7	Cyclohexane	2.18	5.3	ug/l	JN
	Total TIC, Semi-Volatile		5.3	ug/l	J

# Blank Spike Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47383-BS	T008423.D	1	06/19/13	FS	06/18/13	OP47383	ST410

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-1, FA5547-2, FA5547-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	25.2	25	10-69
95-57-8	2-Chlorophenol	50	40.1	80	52-98
59-50-7	4-Chloro-3-methyl phenol	50	40.1	80	54-103
120-83-2	2,4-Dichlorophenol	50	41.6	83	53-103
105-67-9	2,4-Dimethylphenol	50	35.2	70	43-90
51-28-5	2,4-Dinitrophenol	100	83.1	83	44-112
534-52-1	4,6-Dinitro-o-cresol	100	106	106	66-121
95-48-7	2-Methylphenol	50	35.0	70	43-90
	3&4-Methylphenol	100	63.3	63	36-88
88-75-5	2-Nitrophenol	50	39.2	78	53-102
100-02-7	4-Nitrophenol	100	37.4	37	18-62
87-86-5	Pentachlorophenol	100	77.0	77	61-115
108-95-2	Phenol	50	19.1	38	19-56
95-95-4	2,4,5-Trichlorophenol	50	45.2	90	62-109
88-06-2	2,4,6-Trichlorophenol	50	44.0	88	59-107
83-32-9	Acenaphthene	50	43.6	87	61-107
208-96-8	Acenaphthylene	50	43.7	87	60-104
62-53-3	Aniline	50	32.8	66	47-100
120-12-7	Anthracene	50	44.0	88	65-108
92-87-5	Benzidine	50	27.4	55	25-99
56-55-3	Benzo(a)anthracene	50	44.9	90	66-111
50-32-8	Benzo(a)pyrene	50	41.5	83	62-107
205-99-2	Benzo(b)fluoranthene	50	46.7	93	65-114
191-24-2	Benzo(g,h,i)perylene	50	43.2	86	66-116
207-08-9	Benzo(k)fluoranthene	50	44.5	89	65-114
101-55-3	4-Bromophenyl phenyl ether	50	47.0	94	65-109
85-68-7	Butyl benzyl phthalate	50	46.1	92	65-112
100-51-6	Benzyl Alcohol	50	37.2	74	46-94
91-58-7	2-Chloronaphthalene	50	41.5	83	57-103
106-47-8	4-Chloroaniline	50	39.3	79	49-105
86-74-8	Carbazole	50	45.5	91	59-113
218-01-9	Chrysene	50	42.5	85	66-111
111-91-1	bis(2-Chloroethoxy)methane	50	39.1	78	51-102
111-44-4	bis(2-Chloroethyl)ether	50	39.9	80	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	34.4	69	45-106
7005-72-3	4-Chlorophenyl phenyl ether	50	44.4	89	62-105

\* = Outside of Control Limits.

# Blank Spike Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47383-BS	T008423.D	1	06/19/13	FS	06/18/13	OP47383	ST410

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-1, FA5547-2, FA5547-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	39.6	79	48-97
122-66-7	1,2-Diphenylhydrazine	50	42.6	85	61-110
541-73-1	1,3-Dichlorobenzene	50	38.1	76	45-95
106-46-7	1,4-Dichlorobenzene	50	38.7	77	45-98
121-14-2	2,4-Dinitrotoluene	50	42.8	86	61-110
606-20-2	2,6-Dinitrotoluene	50	42.7	85	63-108
91-94-1	3,3'-Dichlorobenzidine	50	42.9	86	46-117
53-70-3	Dibenzo(a,h)anthracene	50	44.6	89	66-119
132-64-9	Dibenzofuran	50	44.2	88	61-106
84-74-2	Di-n-butyl phthalate	50	43.0	86	65-107
117-84-0	Di-n-octyl phthalate	50	49.8	100	62-118
84-66-2	Diethyl phthalate	50	42.9	86	64-108
131-11-3	Dimethyl phthalate	50	43.2	86	63-106
117-81-7	bis(2-Ethylhexyl)phthalate	50	46.7	93	61-117
206-44-0	Fluoranthene	50	41.3	83	63-106
86-73-7	Fluorene	50	42.9	86	62-108
118-74-1	Hexachlorobenzene	50	46.1	92	63-108
87-68-3	Hexachlorobutadiene	50	38.9	78	42-102
77-47-4	Hexachlorocyclopentadiene	50	37.3	75	39-102
67-72-1	Hexachloroethane	50	38.3	77	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	44.9	90	64-119
78-59-1	Isophorone	50	32.7	65	43-87
90-12-0	1-Methylnaphthalene	50	41.4	83	53-102
91-57-6	2-Methylnaphthalene	50	42.1	84	51-102
88-74-4	2-Nitroaniline	50	44.6	89	54-128
99-09-2	3-Nitroaniline	50	40.5	81	56-106
100-01-6	4-Nitroaniline	50	44.0	88	55-120
91-20-3	Naphthalene	50	37.2	74	47-100
98-95-3	Nitrobenzene	50	37.5	75	50-104
62-75-9	N-Nitrosodimethylamine	50	21.9	44	28-78
621-64-7	N-Nitroso-di-n-propylamine	50	36.2	72	52-104
86-30-6	N-Nitrosodiphenylamine	50	46.4	93	64-108
85-01-8	Phenanthrene	50	44.3	89	66-110
129-00-0	Pyrene	50	47.0	94	64-113
110-86-1	Pyridine	50	18.9	38	23-74
120-82-1	1,2,4-Trichlorobenzene	50	37.8	76	45-97

\* = Outside of Control Limits.

## Blank Spike Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47383-BS	T008423.D	1	06/19/13	FS	06/18/13	OP47383	ST410

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-1, FA5547-2, FA5547-3

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	49%	14-67%
4165-62-2	Phenol-d5	33%	10-50%
118-79-6	2,4,6-Tribromophenol	92%	33-118%
4165-60-0	Nitrobenzene-d5	74%	42-108%
321-60-8	2-Fluorobiphenyl	87%	40-106%
1718-51-0	Terphenyl-d14	98%	39-121%

\* = Outside of Control Limits.

# Blank Spike Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47411-BS	T008460.D	1	06/20/13	FS	06/20/13	OP47411	ST411

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	100	30.0	30	10-69
95-57-8	2-Chlorophenol	50	36.9	74	52-98
59-50-7	4-Chloro-3-methyl phenol	50	36.7	73	54-103
120-83-2	2,4-Dichlorophenol	50	35.7	71	53-103
105-67-9	2,4-Dimethylphenol	50	30.9	62	43-90
51-28-5	2,4-Dinitrophenol	100	74.9	75	44-112
534-52-1	4,6-Dinitro-o-cresol	100	96.1	96	66-121
95-48-7	2-Methylphenol	50	34.2	68	43-90
	3&4-Methylphenol	100	64.7	65	36-88
88-75-5	2-Nitrophenol	50	34.6	69	53-102
100-02-7	4-Nitrophenol	100	42.9	43	18-62
87-86-5	Pentachlorophenol	100	86.3	86	61-115
108-95-2	Phenol	50	21.0	42	19-56
95-95-4	2,4,5-Trichlorophenol	50	41.5	83	62-109
88-06-2	2,4,6-Trichlorophenol	50	41.1	82	59-107
83-32-9	Acenaphthene	50	40.8	82	61-107
208-96-8	Acenaphthylene	50	41.2	82	60-104
62-53-3	Aniline	50	39.4	79	47-100
120-12-7	Anthracene	50	42.2	84	65-108
92-87-5	Benzidine	50	37.5	75	25-99
56-55-3	Benzo(a)anthracene	50	42.2	84	66-111
50-32-8	Benzo(a)pyrene	50	38.6	77	62-107
205-99-2	Benzo(b)fluoranthene	50	43.2	86	65-114
191-24-2	Benzo(g,h,i)perylene	50	43.0	86	66-116
207-08-9	Benzo(k)fluoranthene	50	41.7	83	65-114
101-55-3	4-Bromophenyl phenyl ether	50	43.9	88	65-109
85-68-7	Butyl benzyl phthalate	50	42.9	86	65-112
100-51-6	Benzyl Alcohol	50	35.3	71	46-94
91-58-7	2-Chloronaphthalene	50	39.8	80	57-103
106-47-8	4-Chloroaniline	50	36.6	73	49-105
86-74-8	Carbazole	50	42.9	86	59-113
218-01-9	Chrysene	50	42.2	84	66-111
111-91-1	bis(2-Chloroethoxy)methane	50	36.2	72	51-102
111-44-4	bis(2-Chloroethyl)ether	50	38.5	77	53-100
108-60-1	bis(2-Chloroisopropyl)ether	50	37.3	75	45-106
7005-72-3	4-Chlorophenyl phenyl ether	50	41.5	83	62-105

\* = Outside of Control Limits.

# Blank Spike Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47411-BS	T008460.D	1	06/20/13	FS	06/20/13	OP47411	ST411

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	35.8	72	48-97
122-66-7	1,2-Diphenylhydrazine	50	42.4	85	61-110
541-73-1	1,3-Dichlorobenzene	50	34.8	70	45-95
106-46-7	1,4-Dichlorobenzene	50	35.4	71	45-98
121-14-2	2,4-Dinitrotoluene	50	40.7	81	61-110
606-20-2	2,6-Dinitrotoluene	50	41.7	83	63-108
91-94-1	3,3'-Dichlorobenzidine	50	39.2	78	46-117
53-70-3	Dibenzo(a,h)anthracene	50	44.0	88	66-119
132-64-9	Dibenzofuran	50	42.2	84	61-106
84-74-2	Di-n-butyl phthalate	50	41.7	83	65-107
117-84-0	Di-n-octyl phthalate	50	43.0	86	62-118
84-66-2	Diethyl phthalate	50	42.3	85	64-108
131-11-3	Dimethyl phthalate	50	42.5	85	63-106
117-81-7	bis(2-Ethylhexyl)phthalate	50	42.7	85	61-117
206-44-0	Fluoranthene	50	41.1	82	63-106
86-73-7	Fluorene	50	41.9	84	62-108
118-74-1	Hexachlorobenzene	50	43.0	86	63-108
87-68-3	Hexachlorobutadiene	50	33.1	66	42-102
77-47-4	Hexachlorocyclopentadiene	50	30.2	60	39-102
67-72-1	Hexachloroethane	50	34.3	69	42-100
193-39-5	Indeno(1,2,3-cd)pyrene	50	42.8	86	64-119
78-59-1	Isophorone	50	31.1	62	43-87
90-12-0	1-Methylnaphthalene	50	36.0	72	53-102
91-57-6	2-Methylnaphthalene	50	36.0	72	51-102
88-74-4	2-Nitroaniline	50	43.2	86	54-128
99-09-2	3-Nitroaniline	50	39.3	79	56-106
100-01-6	4-Nitroaniline	50	41.7	83	55-120
91-20-3	Naphthalene	50	33.5	67	47-100
98-95-3	Nitrobenzene	50	36.1	72	50-104
62-75-9	N-Nitrosodimethylamine	50	27.8	56	28-78
621-64-7	N-Nitroso-di-n-propylamine	50	37.2	74	52-104
86-30-6	N-Nitrosodiphenylamine	50	42.6	85	64-108
85-01-8	Phenanthrene	50	42.1	84	66-110
129-00-0	Pyrene	50	42.6	85	64-113
110-86-1	Pyridine	50	26.4	53	23-74
120-82-1	1,2,4-Trichlorobenzene	50	32.9	66	45-97

\* = Outside of Control Limits.

## Blank Spike Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47411-BS	T008460.D	1	06/20/13	FS	06/20/13	OP47411	ST411

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-5

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	55%	14-67%
4165-62-2	Phenol-d5	40%	10-50%
118-79-6	2,4,6-Tribromophenol	85%	33-118%
4165-60-0	Nitrobenzene-d5	71%	42-108%
321-60-8	2-Fluorobiphenyl	81%	40-106%
1718-51-0	Terphenyl-d14	90%	39-121%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47383-MS	T008429.D	1	06/19/13	FS	06/18/13	OP47383	ST410
OP47383-MSD	T008430.D	1	06/19/13	FS	06/18/13	OP47383	ST410
FA5545-1	T008428.D	1	06/19/13	FS	06/18/13	OP47383	ST410

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-1, FA5547-2, FA5547-3

CAS No.	Compound	FA5545-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	48 U	200		32.6	16	98.6	49	101*	10-69/39
95-57-8	2-Chlorophenol	4.8 U	100		69.6	70	84.3	84	19	52-98/25
59-50-7	4-Chloro-3-methyl phenol	4.8 U	100		77.4	77	83.2	83	7	54-103/23
120-83-2	2,4-Dichlorophenol	4.8 U	100		71.2	71	84.0	84	16	53-103/26
105-67-9	2,4-Dimethylphenol	4.8 U	100		69.0	69	73.3	73	6	43-90/27
51-28-5	2,4-Dinitrophenol	24 U	200		96.1	48	172	86	57*	44-112/25
534-52-1	4,6-Dinitro-o-cresol	9.6 U	200		147	74	220	110	40*	66-121/23
95-48-7	2-Methylphenol	4.8 U	100		70.5	71	77.7	78	10	43-90/28
	3&4-Methylphenol	4.8 U	200		128	64	139	70	8	36-88/28
88-75-5	2-Nitrophenol	4.8 U	100		67.2	67	80.7	81	18	53-102/29
100-02-7	4-Nitrophenol	24 U	200		65.7	33	131	66*	66*	18-62/33
87-86-5	Pentachlorophenol	24 U	200		126	63	167	84	28*	61-115/26
108-95-2	Phenol	4.8 U	100		39.8	40	51.2	51	25	19-56/35
95-95-4	2,4,5-Trichlorophenol	4.8 U	100		73.0	73	91.3	91	22	62-109/22
88-06-2	2,4,6-Trichlorophenol	4.8 U	100		66.1	66	88.0	88	28*	59-107/23
83-32-9	Acenaphthene	4.8 U	100		84.4	84	87.7	88	4	61-107/22
208-96-8	Acenaphthylene	4.8 U	100		84.2	84	87.7	88	4	60-104/22
62-53-3	Aniline	4.8 U	100		79.0	79	66.1	66	18	47-100/30
120-12-7	Anthracene	4.8 U	100		87.2	87	89.7	90	3	65-108/20
92-87-5	Benzidine	24 U	100		29.4	29	23.7	24*	21	25-99/31
56-55-3	Benzo(a)anthracene	4.8 U	100		88.0	88	91.3	91	4	66-111/22
50-32-8	Benzo(a)pyrene	4.8 U	100		82.8	83	84.4	84	2	62-107/23
205-99-2	Benzo(b)fluoranthene	4.8 U	100		91.5	92	96.9	97	6	65-114/23
191-24-2	Benzo(g,h,i)perylene	4.8 U	100		90.4	90	91.0	91	1	66-116/23
207-08-9	Benzo(k)fluoranthene	4.8 U	100		90.5	91	88.1	88	3	65-114/24
101-55-3	4-Bromophenyl phenyl ether	4.8 U	100		94.0	94	96.6	97	3	65-109/23
85-68-7	Butyl benzyl phthalate	4.8 U	100		89.5	90	93.3	93	4	65-112/24
100-51-6	Benzyl Alcohol	4.8 U	100		74.4	74	84.1	84	12	46-94/27
91-58-7	2-Chloronaphthalene	4.8 U	100		80.5	81	82.6	83	3	57-103/23
106-47-8	4-Chloroaniline	4.8 U	100		72.1	72	75.2	75	4	49-105/27
86-74-8	Carbazole	4.8 U	100		89.5	90	92.3	92	3	59-113/21
218-01-9	Chrysene	4.8 U	100		83.8	84	86.9	87	4	66-111/22
111-91-1	bis(2-Chloroethoxy)methane	4.8 U	100		75.1	75	77.4	77	3	51-102/28
111-44-4	bis(2-Chloroethyl)ether	4.8 U	100		76.8	77	80.3	80	4	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	4.8 U	100		68.9	69	68.9	69	0	45-106/26
7005-72-3	4-Chlorophenyl phenyl ether	4.8 U	100		86.7	87	88.9	89	3	62-105/20

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47383-MS	T008429.D	1	06/19/13	FS	06/18/13	OP47383	ST410
OP47383-MSD	T008430.D	1	06/19/13	FS	06/18/13	OP47383	ST410
FA5545-1	T008428.D	1	06/19/13	FS	06/18/13	OP47383	ST410

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-1, FA5547-2, FA5547-3

CAS No.	Compound	FA5545-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	4.8 U	100	79.4	79	83.8	84	5	48-97/24
122-66-7	1,2-Diphenylhydrazine	4.8 U	100	84.1	84	87.3	87	4	61-110/24
541-73-1	1,3-Dichlorobenzene	4.8 U	100	77.2	77	82.5	83	7	45-95/25
106-46-7	1,4-Dichlorobenzene	4.8 U	100	78.1	78	82.6	83	6	45-98/25
121-14-2	2,4-Dinitrotoluene	4.8 U	100	82.8	83	85.6	86	3	61-110/21
606-20-2	2,6-Dinitrotoluene	4.8 U	100	83.2	83	85.6	86	3	63-108/21
91-94-1	3,3'-Dichlorobenzidine	4.8 U	100	82.7	83	83.0	83	0	46-117/29
53-70-3	Dibenzo(a,h)anthracene	4.8 U	100	90.3	90	91.8	92	2	66-119/24
132-64-9	Dibenzofuran	4.8 U	100	85.6	86	84.6	85	1	61-106/21
84-74-2	Di-n-butyl phthalate	4.8 U	100	85.5	86	87.6	88	2	65-107/21
117-84-0	Di-n-octyl phthalate	4.8 U	100	96.4	96	99.1	99	3	62-118/24
84-66-2	Diethyl phthalate	4.8 U	100	84.0	84	86.5	87	3	64-108/21
131-11-3	Dimethyl phthalate	4.8 U	100	83.7	84	86.3	86	3	63-106/22
117-81-7	bis(2-Ethylhexyl)phthalate	4.8 U	100	90.7	91	94.1	94	4	61-117/23
206-44-0	Fluoranthene	4.8 U	100	83.2	83	85.3	85	2	63-106/21
86-73-7	Fluorene	4.8 U	100	83.9	84	86.6	87	3	62-108/20
118-74-1	Hexachlorobenzene	4.8 U	100	92.8	93	95.7	96	3	63-108/22
87-68-3	Hexachlorobutadiene	4.8 U	100	79.6	80	84.3	84	6	42-102/28
77-47-4	Hexachlorocyclopentadiene	4.8 U	100	70.5	71	79.4	79	12	39-102/29
67-72-1	Hexachloroethane	4.8 U	100	77.4	77	82.2	82	6	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	4.8 U	100	92.1	92	93.9	94	2	64-119/24
78-59-1	Isophorone	4.8 U	100	63.5	64	65.6	66	3	43-87/25
90-12-0	1-Methylnaphthalene	4.8 U	100	81.4	81	83.3	83	2	53-102/27
91-57-6	2-Methylnaphthalene	4.8 U	100	82.6	83	84.9	85	3	51-102/26
88-74-4	2-Nitroaniline	4.8 U	100	85.5	86	89.7	90	5	54-128/24
99-09-2	3-Nitroaniline	4.8 U	100	75.2	75	76.2	76	1	56-106/27
100-01-6	4-Nitroaniline	4.8 U	100	83.4	83	87.7	88	5	55-120/24
91-20-3	Naphthalene	4.8 U	100	75.8	76	75.9	76	0	47-100/29
98-95-3	Nitrobenzene	4.8 U	100	73.9	74	76.7	77	4	50-104/28
62-75-9	N-Nitrosodimethylamine	4.8 U	100	52.3	52	64.8	65	21	28-78/30
621-64-7	N-Nitroso-di-n-propylamine	4.8 U	100	73.9	74	72.2	72	2	52-104/25
86-30-6	N-Nitrosodiphenylamine	4.8 U	100	90.3	90	93.8	94	4	64-108/23
85-01-8	Phenanthrene	4.8 U	100	87.5	88	89.8	90	3	66-110/21
129-00-0	Pyrene	4.8 U	100	90.9	91	93.2	93	2	64-113/23
110-86-1	Pyridine	9.6 U	100	42.0	42	48.9	49	15	23-74/34
120-82-1	1,2,4-Trichlorobenzene	4.8 U	100	80.8	81	80.0	80	1	45-97/28

\* = Outside of Control Limits.

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# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47383-MS	T008429.D	1	06/19/13	FS	06/18/13	OP47383	ST410
OP47383-MSD	T008430.D	1	06/19/13	FS	06/18/13	OP47383	ST410
FA5545-1	T008428.D	1	06/19/13	FS	06/18/13	OP47383	ST410

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-1, FA5547-2, FA5547-3

CAS No.	Surrogate Recoveries	MS	MSD	FA5545-1	Limits
367-12-4	2-Fluorophenol	45%	64%	33%	14-67%
4165-62-2	Phenol-d5	35%	47%	21%	10-50%
118-79-6	2,4,6-Tribromophenol	82%	94%	85%	33-118%
4165-60-0	Nitrobenzene-d5	74%	75%	71%	42-108%
321-60-8	2-Fluorobiphenyl	85%	87%	75%	40-106%
1718-51-0	Terphenyl-d14	97%	98%	86%	39-121%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47411-MS	T008464.D	1	06/20/13	FS	06/20/13	OP47411	ST411
OP47411-MSD	T008465.D	1	06/20/13	FS	06/20/13	OP47411	ST411
FA5581-2	T008463.D	1	06/20/13	FS	06/20/13	OP47411	ST411

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-5

CAS No.	Compound	FA5581-2 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	49 U	192	86.4	45	90.8	47	5	10-69/39
95-57-8	2-Chlorophenol	4.9 U	96.2	73.0	76	71.1	74	3	52-98/25
59-50-7	4-Chloro-3-methyl phenol	4.9 U	96.2	71.8	75	70.4	73	2	54-103/23
120-83-2	2,4-Dichlorophenol	4.9 U	96.2	71.1	74	71.2	74	0	53-103/26
105-67-9	2,4-Dimethylphenol	4.9 U	96.2	60.4	63	61.7	64	2	43-90/27
51-28-5	2,4-Dinitrophenol	25 U	192	142	74	141	73	1	44-112/25
534-52-1	4,6-Dinitro-o-cresol	9.8 U	192	179	93	177	92	1	66-121/23
95-48-7	2-Methylphenol	4.9 U	96.2	71.5	74	69.3	72	3	43-90/28
	3&4-Methylphenol	4.9 U	192	144	75	135	70	6	36-88/28
88-75-5	2-Nitrophenol	4.9 U	96.2	68.8	72	68.3	71	1	53-102/29
100-02-7	4-Nitrophenol	25 U	192	92.3	48	101	53	9	18-62/33
87-86-5	Pentachlorophenol	25 U	192	166	86	163	85	2	61-115/26
108-95-2	Phenol	4.9 U	96.2	48.6	51	47.5	49	2	19-56/35
95-95-4	2,4,5-Trichlorophenol	4.9 U	96.2	77.6	81	75.4	78	3	62-109/22
88-06-2	2,4,6-Trichlorophenol	4.9 U	96.2	77.0	80	76.2	79	1	59-107/23
83-32-9	Acenaphthene	4.9 U	96.2	77.2	80	75.9	79	2	61-107/22
208-96-8	Acenaphthylene	4.9 U	96.2	77.8	81	76.1	79	2	60-104/22
62-53-3	Aniline	4.9 U	96.2	78.2	81	72.6	76	7	47-100/30
120-12-7	Anthracene	4.9 U	96.2	80.0	83	78.1	81	2	65-108/20
92-87-5	Benzidine	25 U	96.2	15.5	16*	10.7	11*	37*	25-99/31
56-55-3	Benzo(a)anthracene	4.9 U	96.2	79.8	83	79.1	82	1	66-111/22
50-32-8	Benzo(a)pyrene	4.9 U	96.2	73.4	76	71.9	75	2	62-107/23
205-99-2	Benzo(b)fluoranthene	4.9 U	96.2	79.7	83	80.6	84	1	65-114/23
191-24-2	Benzo(g,h,i)perylene	4.9 U	96.2	80.8	84	81.0	84	0	66-116/23
207-08-9	Benzo(k)fluoranthene	4.9 U	96.2	81.3	85	77.2	80	5	65-114/24
101-55-3	4-Bromophenyl phenyl ether	4.9 U	96.2	83.3	87	80.2	83	4	65-109/23
85-68-7	Butyl benzyl phthalate	4.9 U	96.2	81.9	85	81.8	85	0	65-112/24
100-51-6	Benzyl Alcohol	4.9 U	96.2	75.6	79	71.7	75	5	46-94/27
91-58-7	2-Chloronaphthalene	4.9 U	96.2	77.2	80	75.5	79	2	57-103/23
106-47-8	4-Chloroaniline	4.9 U	96.2	65.0	68	63.6	66	2	49-105/27
86-74-8	Carbazole	4.9 U	96.2	79.0	82	77.0	80	3	59-113/21
218-01-9	Chrysene	4.9 U	96.2	81.9	85	79.6	83	3	66-111/22
111-91-1	bis(2-Chloroethoxy)methane	4.9 U	96.2	72.0	75	71.1	74	1	51-102/28
111-44-4	bis(2-Chloroethyl)ether	4.9 U	96.2	75.8	79	73.2	76	3	53-100/27
108-60-1	bis(2-Chloroisopropyl)ether	4.9 U	96.2	74.6	78	70.9	74	5	45-106/26
7005-72-3	4-Chlorophenyl phenyl ether	4.9 U	96.2	77.7	81	76.1	79	2	62-105/20

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47411-MS	T008464.D	1	06/20/13	FS	06/20/13	OP47411	ST411
OP47411-MSD	T008465.D	1	06/20/13	FS	06/20/13	OP47411	ST411
FA5581-2	T008463.D	1	06/20/13	FS	06/20/13	OP47411	ST411

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-5

CAS No.	Compound	FA5581-2 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	4.9 U	96.2	74.3	77	73.2	76	1	48-97/24
122-66-7	1,2-Diphenylhydrazine	4.9 U	96.2	81.3	85	78.1	81	4	61-110/24
541-73-1	1,3-Dichlorobenzene	4.9 U	96.2	72.9	76	71.1	74	3	45-95/25
106-46-7	1,4-Dichlorobenzene	4.9 U	96.2	74.5	77	71.9	75	4	45-98/25
121-14-2	2,4-Dinitrotoluene	4.9 U	96.2	74.4	77	74.5	77	0	61-110/21
606-20-2	2,6-Dinitrotoluene	4.9 U	96.2	77.6	81	75.2	78	3	63-108/21
91-94-1	3,3'-Dichlorobenzidine	4.9 U	96.2	67.0	70	66.8	69	0	46-117/29
53-70-3	Dibenzo(a,h)anthracene	4.9 U	96.2	81.9	85	82.1	85	0	66-119/24
132-64-9	Dibenzofuran	4.9 U	96.2	78.9	82	76.7	80	3	61-106/21
84-74-2	Di-n-butyl phthalate	4.9 U	96.2	78.4	82	77.1	80	2	65-107/21
117-84-0	Di-n-octyl phthalate	4.9 U	96.2	82.0	85	81.4	85	1	62-118/24
84-66-2	Diethyl phthalate	4.9 U	96.2	77.4	80	76.5	80	1	64-108/21
131-11-3	Dimethyl phthalate	4.9 U	96.2	79.1	82	77.7	81	2	63-106/22
117-81-7	bis(2-Ethylhexyl)phthalate	4.9 U	96.2	82.6	86	81.4	85	1	61-117/23
206-44-0	Fluoranthene	4.9 U	96.2	77.0	80	74.3	77	4	63-106/21
86-73-7	Fluorene	4.9 U	96.2	77.5	81	76.0	79	2	62-108/20
118-74-1	Hexachlorobenzene	4.9 U	96.2	81.4	85	77.8	81	5	63-108/22
87-68-3	Hexachlorobutadiene	4.9 U	96.2	69.7	72	70.6	73	1	42-102/28
77-47-4	Hexachlorocyclopentadiene	4.9 U	96.2	54.1	56	57.7	60	6	39-102/29
67-72-1	Hexachloroethane	4.9 U	96.2	73.9	77	71.0	74	4	42-100/29
193-39-5	Indeno(1,2,3-cd)pyrene	4.9 U	96.2	81.4	85	80.0	83	2	64-119/24
78-59-1	Isophorone	4.9 U	96.2	60.2	63	60.0	62	0	43-87/25
90-12-0	1-Methylnaphthalene	4.9 U	96.2	73.4	76	72.6	76	1	53-102/27
91-57-6	2-Methylnaphthalene	4.9 U	96.2	72.2	75	71.3	74	1	51-102/26
88-74-4	2-Nitroaniline	4.9 U	96.2	78.2	81	79.5	83	2	54-128/24
99-09-2	3-Nitroaniline	4.9 U	96.2	65.2	68	65.0	68	0	56-106/27
100-01-6	4-Nitroaniline	4.9 U	96.2	75.1	78	74.1	77	1	55-120/24
91-20-3	Naphthalene	4.9 U	96.2	68.8	72	67.5	70	2	47-100/29
98-95-3	Nitrobenzene	4.9 U	96.2	71.4	74	71.0	74	1	50-104/28
62-75-9	N-Nitrosodimethylamine	4.9 U	96.2	62.0	64	61.6	64	1	28-78/30
621-64-7	N-Nitroso-di-n-propylamine	4.9 U	96.2	75.4	78	71.0	74	6	52-104/25
86-30-6	N-Nitrosodiphenylamine	4.9 U	96.2	80.9	84	78.6	82	3	64-108/23
85-01-8	Phenanthrene	4.9 U	96.2	80.0	83	77.8	81	3	66-110/21
129-00-0	Pyrene	4.9 U	96.2	81.5	85	80.4	84	1	64-113/23
110-86-1	Pyridine	9.8 U	96.2	56.3	59	55.8	58	1	23-74/34
120-82-1	1,2,4-Trichlorobenzene	4.9 U	96.2	67.9	71	68.0	71	0	45-97/28

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47411-MS	T008464.D	1	06/20/13	FS	06/20/13	OP47411	ST411
OP47411-MSD	T008465.D	1	06/20/13	FS	06/20/13	OP47411	ST411
FA5581-2	T008463.D	1	06/20/13	FS	06/20/13	OP47411	ST411

The QC reported here applies to the following samples:

Method: SW846 8270D

FA5547-5

CAS No.	Surrogate Recoveries	MS	MSD	FA5581-2	Limits
367-12-4	2-Fluorophenol	62%	61%	44%	14-67%
4165-62-2	Phenol-d5	48%	48%	29%	10-50%
118-79-6	2,4,6-Tribromophenol	86%	83%	87%	33-118%
4165-60-0	Nitrobenzene-d5	71%	71%	80%	42-108%
321-60-8	2-Fluorobiphenyl	78%	78%	80%	40-106%
1718-51-0	Terphenyl-d14	87%	86%	87%	39-121%

\* = Outside of Control Limits.

## GC Semi-volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47377-MB	WR111.D	1	06/18/13	ME	06/18/13	OP47377	GWR5

The QC reported here applies to the following samples:

Method: FLORIDA-PRO

FA5547-3, FA5547-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	ND	0.25	0.15	mg/l	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	90% 43-123%

## Method Blank Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47429-MB	ZF060395.D	1	06/22/13	FEA	06/20/13	OP47429	GZF2138

The QC reported here applies to the following samples:

Method: FLORIDA-PRO

FA5547-1, FA5547-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	ND	0.25	0.15	mg/l	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	99% 43-123%

# Blank Spike Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47377-BS	WR110.D	1	06/18/13	ME	06/18/13	OP47377	GWR5

The QC reported here applies to the following samples:

Method: FLORIDA-PRO

FA5547-3, FA5547-5

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C8-C40)	0.85	0.981	115*	48-113

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	97%	43-123%

8.2.1  
8

\* = Outside of Control Limits.

# Blank Spike Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47429-BS	ZF060394.D	1	06/22/13	FEA	06/20/13	OP47429	GZF2138

The QC reported here applies to the following samples:

Method: FLORIDA-PRO

FA5547-1, FA5547-2

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C8-C40)	0.85	0.912	107	48-113

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	95%	43-123%

8.2.2

8

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47377-MS	WR113.D	1	06/18/13	ME	06/18/13	OP47377	GWR5
OP47377-MSD	WR114.D	1	06/18/13	ME	06/18/13	OP47377	GWR5
FA5519-1 <sup>a</sup>	WR112.D	1	06/18/13	ME	06/18/13	OP47377	GWR5

The QC reported here applies to the following samples:

Method: FLORIDA-PRO

FA5547-3, FA5547-5

CAS No.	Compound	FA5519-1 mg/l	Spike Q mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C8-C40)	0.612	1.67	2.47	111	2.54	116*	3	48-113/27

CAS No.	Surrogate Recoveries	MS	MSD	FA5519-1	Limits
84-15-1	o-Terphenyl	89%	100%	96%	43-123%

(a) Associated BS recovery outside control limits. Insufficient sample to re-extract.

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA5547  
**Account:** SIESNCR Solutions-IES, Inc  
**Project:** OU-3 B101S NAS JAX; Jacksonville, FL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47429-MS	ZF060399.D	1	06/22/13	FEA	06/20/13	OP47429	GZF2138
OP47429-MSD	ZF060400.D	1	06/22/13	FEA	06/20/13	OP47429	GZF2138
FA5626-5	ZF060398.D	1	06/22/13	FEA	06/20/13	OP47429	GZF2138

The QC reported here applies to the following samples:

Method: FLORIDA-PRO

FA5547-1, FA5547-2

CAS No.	Compound	FA5626-5 mg/l	Spike Q	mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C8-C40)	0.178	I	1.63	1.76	97	1.83	101	4	48-113/27

CAS No.	Surrogate Recoveries	MS	MSD	FA5626-5	Limits
84-15-1	o-Terphenyl	94%	96%	109%	43-123%

\* = Outside of Control Limits.

## Metals Analysis

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: FA5547  
Account: SIESNCR - Solutions-IES, Inc  
Project: OU-3 B101S NAS JAX; Jacksonville, FL

QC Batch ID: MP25319  
Matrix Type: AQUEOUS

Methods: SW846 6010C  
Units: ug/l

Prep Date: 06/14/13

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	15	15		
Antimony	6.0	1.3	1.3		
Arsenic	10	1.6	2.5	-0.60	<10
Barium	200	1	1	0.0	<200
Beryllium	4.0	.5	.5	0.0	<4.0
Cadmium	5.0	.5	.5	0.0	<5.0
Calcium	1000	50	50		
Chromium	10	1.8	2	0.0	<10
Cobalt	50	.5	.5		
Copper	25	1	1		
Iron	300	29	29		
Lead	5.0	1.1	1.1	0.0	<5.0
Magnesium	5000	74	74		
Manganese	15	.7	.7		
Molybdenum	50	.6	1	-0.10	<50
Nickel	40	.5	.5	0.0	<40
Potassium	10000	200	200		
Selenium	10	2	2	0.10	<10
Silver	10	.5	.5	-0.10	<10
Sodium	10000	500	500		
Strontium	10	.5	.5		
Thallium	10	1.3	1.3		
Tin	50	.7	1.8		
Titanium	10	.9	1		
Vanadium	50	.5	1		
Zinc	20	3	5	2.0	<20

Associated samples MP25319: FA5547-1, FA5547-2, FA5547-3, FA5547-5

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

9.1.1  
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA5547  
 Account: SIESNCR - Solutions-IES, Inc  
 Project: OU-3 B101S NAS JAX; Jacksonville, FL

QC Batch ID: MP25319  
 Matrix Type: AQUEOUS

Methods: SW846 6010C  
 Units: ug/l

Prep Date: 06/14/13 06/14/13

Metal	FA5451-1 Original	DUP	RPD	QC Limits	FA5451-1 Original MS	Spikelot MPFLICP1	% Rec	QC Limits	
Aluminum									
Antimony									
Arsenic	42.4	42.0	0.9	0-20	42.4	2090	2000	102.4	80-120
Barium	2.4	2.4	0.0	0-20	2.4	2120	2000	105.9	80-120
Beryllium	0.0	0.0	NC	0-20	0.0	53.8	50	107.6	80-120
Cadmium	0.0	0.0	NC	0-20	0.0	51.7	50	103.4	80-120
Calcium									
Chromium	0.0	0.0	NC	0-20	0.0	214	200	107.0	80-120
Cobalt									
Copper									
Iron	anr								
Lead	0.0	0.0	NC	0-20	0.0	504	500	100.8	80-120
Magnesium									
Manganese	anr								
Molybdenum	3.3	3.3	0.0	0-20	3.3	557	500	110.7	80-120
Nickel	0.0	0.0	NC	0-20	0.0	499	500	99.8	80-120
Potassium									
Selenium	0.0	0.0	NC	0-20	0.0	2030	2000	101.5	80-120
Silver	0.0	0.0	NC	0-20	0.0	44.5	50	89.0	80-120
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	7.0	7.9	12.1	0-20	7.0	535	500	105.6	80-120

Associated samples MP25319: FA5547-1, FA5547-2, FA5547-3, FA5547-5

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

9.12  
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA5547  
 Account: SIESNCR - Solutions-IES, Inc  
 Project: OU-3 B101S NAS JAX; Jacksonville, FL

QC Batch ID: MP25319  
 Matrix Type: AQUEOUS

Methods: SW846 6010C  
 Units: ug/l

Prep Date: 06/14/13

Metal	FA5451-1 Original	MSD	SpikeLot MPFLICP1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	42.4	2050	2000	100.4	1.9	20
Barium	2.4	2090	2000	104.4	1.4	20
Beryllium	0.0	52.8	50	105.6	1.9	20
Cadmium	0.0	50.8	50	101.6	1.8	20
Calcium						
Chromium	0.0	209	200	104.5	2.4	20
Cobalt						
Copper						
Iron	anr					
Lead	0.0	496	500	99.2	1.6	20
Magnesium						
Manganese	anr					
Molybdenum	3.3	536	500	106.5	3.8	20
Nickel	0.0	489	500	97.8	2.0	20
Potassium						
Selenium	0.0	2000	2000	100.0	1.5	20
Silver	0.0	44.8	50	89.6	0.7	20
Sodium	anr					
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	7.0	528	500	104.2	1.3	20

Associated samples MP25319: FA5547-1, FA5547-2, FA5547-3, FA5547-5

Results < IDL are shown as zero for calculation purposes

- (\*) Outside of QC limits
- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested

9.12  
9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA5547  
 Account: SIESNCR - Solutions-IES, Inc  
 Project: OU-3 B101S NAS JAX; Jacksonville, FL

QC Batch ID: MP25319  
 Matrix Type: AQUEOUS

Methods: SW846 6010C  
 Units: ug/l

Prep Date: 06/14/13

Metal	BSP Result	Spikelot MPFLICP1	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	2070	2000	103.5	80-120
Barium	2130	2000	106.5	80-120
Beryllium	53.5	50	107.0	80-120
Cadmium	53.1	50	106.2	80-120
Calcium				
Chromium	216	200	108.0	80-120
Cobalt				
Copper				
Iron	anr			
Lead	504	500	100.8	80-120
Magnesium				
Manganese	anr			
Molybdenum	524	500	104.8	80-120
Nickel	512	500	102.4	80-120
Potassium				
Selenium	2060	2000	103.0	80-120
Silver	49.0	50	98.0	80-120
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	542	500	108.4	80-120

Associated samples MP25319: FA5547-1, FA5547-2, FA5547-3, FA5547-5

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

9.1.3  
 9

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA5547  
 Account: SIESNCR - Solutions-IES, Inc  
 Project: OU-3 B101S NAS JAX; Jacksonville, FL

QC Batch ID: MP25319  
 Matrix Type: AQUEOUS

Methods: SW846 6010C  
 Units: ug/l

Prep Date: 06/14/13

Metal	FA5451-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	42.4	40.4	4.7	0-10
Barium	2.40	0.00	100.0(a)	0-10
Beryllium	0.00	0.00	NC	0-10
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper				
Iron	anr			
Lead	0.00	0.00	NC	0-10
Magnesium				
Manganese	anr			
Molybdenum	3.30	0.00	100.0(a)	0-10
Nickel	0.00	0.00	NC	0-10
Potassium				
Selenium	0.00	0.00	NC	0-10
Silver	0.00	0.00	NC	0-10
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	7.00	0.00	100.0(a)	0-10

Associated samples MP25319: FA5547-1, FA5547-2, FA5547-3, FA5547-5

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

9.1.4  
**9**

POST DIGESTATE SPIKE SUMMARY

Login Number: FA5547  
 Account: SIESNCR - Solutions-IES, Inc  
 Project: OU-3 B101S NAS JAX; Jacksonville, FL

QC Batch ID: MP25319  
 Matrix Type: AQUEOUS

Methods: SW846 6010C  
 Units: ug/l

Prep Date:

06/14/13

Metal	Sample ml	Final ml	FA5451-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.8	10	42.4	41.552	145.3	0.2	12.5	250	41.5*(a)	80-120
Barium	9.8	10	2.4	2.352	262.3	0.2	12.5	250	104.0	80-120
Beryllium	9.8	10	0	0	53.7	0.2	2.5	50	107.4	80-120
Cadmium	9.8	10	0	0	52.8	0.2	2.5	50	105.6	80-120
Calcium										
Chromium	9.8	10	0	0	53.1	0.2	2.5	50	106.2	80-120
Cobalt										
Copper										
Iron										
Lead	9.8	10	0	0	49.1	0.2	2.5	50	98.2	80-120
Magnesium										
Manganese										
Molybdenum	9.8	10	3.3	3.234	109.9	0.2	5	100	106.7	80-120
Nickel	9.8	10	0	0	101.3	0.2	5	100	101.3	80-120
Potassium										
Selenium	9.8	10	0	0	100.4	0.2	5	100	100.4	80-120
Silver	9.8	10	0	0	45.3	0.2	2.5	50	90.6	80-120
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc	9.8	10	7	6.86	310.7	0.2	12.5	250	121.5*(a)	80-120

Associated samples MP25319: FA5547-1, FA5547-2, FA5547-3, FA5547-5

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(\*\*) Corr. sample result = Raw \* (sample volume / final volume)

(anr) Analyte not requested

(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

9.15  
9

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: FA5547  
Account: SIESNCR - Solutions-IES, Inc  
Project: OU-3 B101S NAS JAX; Jacksonville, FL

QC Batch ID: MP25333  
Matrix Type: AQUEOUS

Methods: SW846 7470A  
Units: ug/l

Prep Date: 06/18/13

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.50	.03	.03	-0.037	<0.50

Associated samples MP25333: FA5547-1, FA5547-2, FA5547-3, FA5547-5

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA5547  
 Account: SIESNCR - Solutions-IES, Inc  
 Project: OU-3 B101S NAS JAX; Jacksonville, FL

QC Batch ID: MP25333  
 Matrix Type: AQUEOUS

Methods: SW846 7470A  
 Units: ug/l

Prep Date: 06/18/13 06/18/13

Metal	FA5537-1		QC	FA5537-1		Spikelot	QC		
	Original	DUP	RPD	Limits	Original	MS	HGFLWS1 % Rec	Limits	
Mercury	0.0	0.0	NC	0-20	0.0	3.2	3	106.7	80-120

Associated samples MP25333: FA5547-1, FA5547-2, FA5547-3, FA5547-5

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA5547  
 Account: SIESNCR - Solutions-IES, Inc  
 Project: OU-3 B101S NAS JAX; Jacksonville, FL

QC Batch ID: MP25333  
 Matrix Type: AQUEOUS

Methods: SW846 7470A  
 Units: ug/l

Prep Date: 06/18/13

Metal	FA5537-1 Original MSD	Spikelot HGFLWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0	3.2	3	106.7	0.0 20

Associated samples MP25333: FA5547-1, FA5547-2, FA5547-3, FA5547-5

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA5547  
Account: SIESNCR - Solutions-IES, Inc  
Project: OU-3 B101S NAS JAX; Jacksonville, FL

QC Batch ID: MP25333  
Matrix Type: AQUEOUS

Methods: SW846 7470A  
Units: ug/l

Prep Date: 06/18/13

Metal	BSP Result	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	3.2	3	106.7	80-120

Associated samples MP25333: FA5547-1, FA5547-2, FA5547-3, FA5547-5

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA5547  
Account: SIESNCR - Solutions-IES, Inc  
Project: OU-3 B101S NAS JAX; Jacksonville, FL

QC Batch ID: MP25333  
Matrix Type: AQUEOUS

Methods: SW846 7470A  
Units: ug/l

Prep Date: 06/18/13

Metal	FA5537-1 Original	SDL 1:5	%DIF	QC Limits
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Mercury 0.00 0.00 NC 0-10

Associated samples MP25333: FA5547-1, FA5547-2, FA5547-3, FA5547-5

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested