

*Prepared for:*



**Waste Services, Inc.**

2893 Executive Park Drive, Suite 305

Weston, Florida 33331

**INITIAL WATER QUALITY REPORT  
(MONITORING WELL CLUSTER MW-22R)**

**J.E.D. SOLID WASTE MANAGEMENT  
FACILITY**

**OSCEOLA COUNTY, FLORIDA**

*Prepared by:*



**Geo-Services and Consulting, LLC**

23110 State Road 54, Number 159

Lutz, Florida 33549

(813) 418-2007

**June 2012**



June 4, 2012

Mr. F. Thomas Lubozynski, P.E.  
Waste Program Administrator  
Solid and Hazardous Waste Program  
Florida Department of Environmental Protection, Central District  
3319 Maguire Boulevard, Suite 232  
Orlando, Florida 32803-3767

Re: J.E.D. Solid Waste Management Facility  
Initial Water Quality Monitoring Event for MW-22R (A, B and C)  
Omni Waste of Osceola County, LLC  
1501 Omni Way  
St. Cloud, FL  
WACS Facility ID 89544

Dear Mr. Lubozynski:

On behalf of Omni Waste of Osceola County, LLC (Omni), Geo-Services and Consulting, LLC (GS&C) has prepared this report for submittal to the Florida Department of Environmental Protection (FDEP) summarizing the results of the initial water quality monitoring event performed at the J.E.D. Solid Waste Disposal Facility (JED) for background monitoring well cluster MW-22R (A, B and C). The results for this initial water quality monitoring event are provided in accordance with Rule 62-701.510(6)(b) of the Florida Administrative Code (F.A.C.) and general condition No. 26 of the Monitoring Plan Implementation Schedule (MPIS) of the current Permit (Permit Number SO49-0199726-015). The remainder of this report includes: (i) project background; (ii) monitoring well sampling information; (iii) sample analyses; (iv) summary of the analytical results; and (v) closure.

## **Project Background**

Omni is in final stages of construction of the Cell 8 disposal area located due north of abandoned monitoring well cluster MW-22 (A, B and C). Monitoring well cluster MW-22 was abandoned because it was installed in a temporary location on the Phase 3 storm water retention berm until construction of the perimeter berm for Cell 8. Omni requested approval to perform the abandonment in correspondence dated November 10, 2011, which was approved by the FDEP Central District Solid Waste Permitting Section, via e-mail on November 10, 2011. Abandonment was performed on November 11, 2011; however, the replacement of monitoring well cluster MW-22 could not be performed until certain construction activities had been complete for Cell 8 (i.e. perimeter road and berm placement and grading). The replacement monitoring well cluster MW-22R (A through C) was installed from March 14 through 16, 2012. Abandonment and drilling activities were performed by National Environmental Technology,

Inc., (NET) a Florida licensed drilling contractor. A report documenting the abandonment and well replacement/installation activities was submitted to FDEP Central District in April 2012.

The horizontal and vertical location(s) of the monitoring well cluster MW-22R was surveyed by Peavey and Associates on April 4, 2012. Table 1 summarizes the survey data and groundwater elevations for cluster MW-22R. The location of the replacement wells is shown on Figure 1. The replacement cluster location was chosen to allow for a permanent installation (i.e. outside future cell footprint) while maintaining the maximum allowable distance from background well cluster MW-23. Per FAC Rule 62-701.510(6)(b)1, replacement wells are not required to be sampled for initial background water quality; however, given the distance of the replacement wells from the original MW-22 well cluster, it was determined that establishment of initial water quality criteria for MW-22R would be appropriate.

### **Monitoring Well Sampling**

Low-flow sampling techniques were used for groundwater sample collection. All groundwater sampling was performed in accordance with the current applicable FDEP Standard Operating Procedures (DEP-SOP-001-01, December 2008) for groundwater sampling. The Groundwater Monitoring Report Form 62-701.900(31) is presented in Appendix A. A peristaltic pump was used to purge and sample shallow well MW-22RA. Intermediate well MW-22RB and deep well MW-22RC were purged and sampled using stainless steel electric submersible pumps.

During the purging process, a YSI 556 water quality meter equipped with a flow-through cell was used to monitor the following field parameters: pH; temperature; field conductivity; oxidation-reduction potential (ORP); and dissolved oxygen. Turbidity levels were measured using a LaMotte 2020e turbidity meter. Field parameters were recorded on sample collection forms, which are contained in Appendix B. Observations pertaining to the color of the groundwater samples collected were also noted on the sample collection forms. When the field parameters stabilized within the acceptable tolerances required by the FDEP SOP, well purging was considered complete and groundwater samples were collected.

### ***Turbidity Issues***

The lithology of the screened intervals for well cluster MW-22R consists primarily of a brown to dark brown, fine, silty-sand; which is typical for this site. Due to the subsurface formation properties, fine-grained and colloidal material are able to pass through the sand filter pack. This is the case even though the wells are constructed using the smallest screen slot size (0.006 in.) commonly available. It is typical on this site for newly installed wells, particularly in the B-zone and C-zone to have turbidity values in excess of the 20 nephelometric turbidity unit (NTU) criterion even after extended well development and removal of multiple well volumes. This issue has been documented in previous water quality monitoring reports for the site. During the initial well development of MW-22RB and MW-22RC, greater than 600 gallons of groundwater was purged, with final turbidity measurements of 302 NTU and 222 NTU, respectively.



However, it is anticipated that turbidity levels will improve (i.e. decrease) with time. During the initial water quality monitoring event approximately 112 gallons was purged from MW-22RB and 78 gallons from MW-22RC, with final turbidity being 195 NTU in both wells. Stability was established by purging greater than five well volumes and observing variations in the measured turbidity. Once the turbidity had stabilized and all other parameters conformed to the guidance set forth in the FDEP SOP's, samples were collected.

For MW-22RA, where a peristaltic pump was used, volatile organic compound (VOC) sample vials were filled by removing the down well sample tubing, disconnecting the tubing from the water quality meter flow-through cell, and reversing the flow direction on the peristaltic pump. For the monitoring wells that were purged and sampled with the stainless steel submersible pump, all sample aliquots were filled directly from the down-well tubing. New tubing (silicone and/or polyethylene) was used at each monitoring well.

The calibration of the water quality monitoring instruments was checked prior to commencing monitoring activities and at the completion of the sampling event. Water quality instrument calibration forms are presented in Appendix C. Samples were placed in coolers and packed with bagged ice for transport to the analytical laboratory. Chain-of-Custody (COC) forms were completed and accompanied the samples to the analytical laboratory. All COC forms are included in Appendix D. Trip blank samples accompanied all sample coolers with VOC samples. Temperature blanks were packed in each sample cooler and security seals were affixed to every cooler shipped.

### **Sample Analyses**

Samples were analyzed by Columbia Analytical Services, Inc. of Jacksonville, Florida (Columbia) in accordance with the National Environmental Laboratory Accreditation Conference (NELAC) standards. Columbia holds certification from the Florida Department of Health (FDOH) for the analytical test methods used for this project and is certified in the State of Florida for analysis of environmental samples.

Groundwater samples were analyzed for total ammonia as nitrogen, chlorides, nitrate, total dissolved solids (TDS), iron, mercury, sodium, and the parameters listed in 40 CFR Part 258 Appendix I and Appendix II. Other required parameters (i.e., pH, temperature, conductivity, turbidity, ORP, and dissolved oxygen) were measured in the field during collection of the groundwater samples.

### **Summary of Analytical Results**

The analytical laboratory test results for the cluster MW-22R initial water quality monitoring event are presented in Appendix E. Table 2 summarizes the parameters with detections above the method reporting limits for this sampling event. Any parameters exceeding the groundwater





cleanup target levels (GCTL) or secondary drinking water standards (SDWS) are highlighted **green** and are discussed below;

- pH - The groundwater pH was below the SDWS of 6.5 to 8.5 (standard units) in all three monitoring wells. The reported values ranged from 4.94 to 5.49. The groundwater pH values measured at the site have historically been below the SDWS lower limit of 6.5 standard units.
- Iron - The GCTL for iron (300 µg/L) was exceeded in the sample from MW-22RA (1,250 µg/L), MW-22RB (2,930 µg/L) and MW-22RC (3,820 µg/L). The cause of elevated iron concentrations is most likely a consequence of the oxidation-reduction conditions in the aquifer that results in an increase in the more soluble (ferrous) iron concentrations. The source of the iron is likely naturally occurring and is a common occurrence throughout much of the State of Florida and these results are consistent with period of record data for this site.

#### Closure

The initial water quality monitoring results for replacement background monitoring well cluster MW-22R are provided in accordance with the permit and Rule 62-701.510(6)(b), F.A.C. Conditioned sampling of well cluster MW-22R will be performed as part of future water quality monitoring sampling events performed at this site. Should you have comments or questions regarding the information presented herein, please contact Mr. Mike Kaiser at (904) 673-0446, [mkaiser@wsii.us](mailto:mkaiser@wsii.us) or the undersigned at (813) 418-2007.

Sincerely,

 6/4/12

Robert Thompson  
Senior Geologist  
Florida P.G. #2560

Attachments

Copy: Mike Kaiser, WSI  
Kirk Wills, WSI  
Joe Terry, WSI

## Tables

Table 1

**SUMMARY OF MONITORING WELL CONSTRUCTION DETAILS  
INITIAL WATER QUALITY MONITORING EVENT FOR WELL CLUSTER MW-22R  
J.E.D. SOLID WASTE MANAGEMENT FACILITY  
ST CLOUD, OSCEOLA COUNTY, FLORIDA**

Well Designation	Latitude <sup>1</sup> (NAD 1983)	Longitude <sup>1</sup> (NAD 1983)	WACS ID	Date Installed	Top of Casing Elevation <sup>2</sup> (ft)	Total Depth (feet BTOC <sup>3</sup> )	Screen Setting				Sand Pack (feet BTOC)	Fine-Grained Sand Seal (feet BTOC)	Depth to Water (feet BTOC) <sup>4</sup>	Groundwater Elevation (NGVD 1929)
							(feet BTOC)		(feet Elevation)					
							Top	Bottom	Top	Bottom				
MW-22RA	28°03'34.703"	81°06'00.622"	28685	14-Mar-12	95.00	23.7	12.1	22.1	82.9	72.9	10.1	9.1	14.22	80.78
MW-22RBA	28°03'34.665"	81°05'59.850"	28686	15-Mar-12	94.86	46.1	35.0	45.0	59.9	49.9	32.5	30.5	14.10	80.76
MW-22RCA	28°03'34.629"	81°05'59.854"	28687	15-Mar-12	95.13	66.6	55.7	65.7	39.4	29.4	52.7	51.7	14.34	80.79

**Notes:**

<sup>1</sup>Latitude and Longitude coordinates were surveyed by Peavey & Associates on April 4, 2012 and based on North American Datum (NAD) of 1983, 2007 adjustment

<sup>2</sup>Top of Casing (TOC) elevations were surveyed by Peavey & Associates on April 4, 2012 and based on National Geodetic Vertical Datum (NGVD) of 1929

<sup>3</sup>BTOC = Below Top of Casing

<sup>4</sup>Groundwater levels were measured on March 19, 2012

Parameter Monitored	GCTL / SDWS	Detection Limit	Units	Monitoring Results		
				MW-22RA	MW-22RB	MW-22RC
<b>Field Parameters</b>						
Dissolved Oxygen			mg/L	0.65	0.08	0.15
pH	6.5-8.5		SU	5.12	4.94	5.49
Conductivity			mS/cm	172	122	85
Temperature at Sampling Time			°C	23.50	24.51	23.96
Turbidity			NTU	0.2	195	195
<b>Laboratory Parameters</b>						
Arsenic	10	0.5	ug/L	0.7 i	2.7	3.3
Barium	2,000	0.5	ug/L	31.2	197	142
Beryllium	4	0.04	ug/L	0.05 i	0.52	0.78
Cadmium	5	0.10	ug/L	0.1 U	0.75	0.23 i
Chromium	100	0.2	ug/L	1.3	17.1	19.7
Cobalt	420	0.03	ug/L	0.5 i	2.8	0.9 i
Copper	1,000	0.3	ug/L	0.3 U	4.7	1.8
Iron	300	3	ug/L	1,250	2,930	3,820
Lead	15	0.12	ug/L	0.12 U	11.4	4.9
Mercury	2	0.02	ug/L	0.02 U	0.16	0.04 i
Nickel	100	0.5	ug/L	0.7 i	5.9	2.8
Selenium	50	1.1	ug/L	1.1 U	4.1	1.1 U
Sodium	160	0.03	mg/L	25.9	16	7.1
Vanadium	49	0.3	µg/L	1.4 i	27	20.7
Zinc	5,000	1.6	µg/L	7.9	7.4	5.4
Chloride	250	0.11	mg/L	40.7	29	9.29
Total Dissolved Solids	500	10	mg/L	118	238	148
Total Ammonia (Ammonia-N)	2.8	0.007	mg/L	0.19	0.278	0.27
<b>Notes:</b> GCTL = Groundwater Cleanup Target Level SDWS = Secondary Drinking Water Standard Concentrations in shaded cells did not meet the GCTL or SDWS Standard Criteria. Only parameters with detections above the Method Reporting Limit are shown. i = The reported value is between the laboratory Method Detection Limit and the laboratory Practical Quantitation Limit U = indicates that the compound was analyzed for but not detected at or above the value shown						

## Figures





#### Legend

● Monitor Well Location

#### NOTES:

AERIAL PHOTOGRAPH  
PROVIDED BY BULLSEYE  
DESIGN  
(2009).

WACS FACILITY ID 89455

200 100 0 200 400 600 800  
Feet  
1 in = 600 ft

WASTE SERVICES OF FLORIDA, INC.  
J.E.D. SOLID WASTE  
1501 OMNI WAY  
ST. CLOUD, FLORIDA

Geo-Services and Consulting, LLC

TAMPA, FL

APRIL 2012

FIGURE

1



## Appendix A

Water Quality Monitoring Certification  
FDEP Form 62-701.900(31)





# Florida Department of Environmental Protection

Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

DEP Form #: 62-701.900(31), F.A.C.

Form Title: Water Quality Monitoring Certification

Effective Date: January 6, 2010

Incorporated in Rule 62-701.510(9), F.A.C.

## WATER QUALITY MONITORING CERTIFICATION

### PART I GENERAL INFORMATION

- (1) Facility Name J.E.D. Soild Waste Management Facility  
Address 1501 Omni Way  
City Saint Cloud Zip 34773 County Osceola  
Telephone Number (407 ) 891-3720
- (2) WACS Facility ID 89544
- (3) DEP Permit Number SC49-0199726-017 & SO49-0199726-017
- (4) Authorized Representative's Name Mike Kaiser Title Engineer  
Address 1099 Miller Drive  
City Altamonte Springs Zip 32701 County Seminole  
Telephone Number (904 ) 673-0446  
Email address (if available) mkaiser@wsii.us

### CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submission of false information including the possibility of fine and imprisonment.

6/10/12  
(Date)

Mike Kaiser  
(Owner or Authorized Representative's Signature)

### PART II QUALITY ASSURANCE REQUIREMENTS

Sampling Organization Waste Services of Florida, Inc.  
Analytical Lab NELAC / HRS Certification # E82502  
Lab Name Columbia Analytical Services (CAS)  
Address 9143 Philips Highway, Suite 200 Jacksonville, Florida 32256  
Phone Number (904 ) 739-2277  
Email address (if available) cmyers@caslab.com

# Appendix B

## Field Sampling Logs



**Form FD 9000-24**  
**GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: MW-22R A	SAMPLE ID: MW-22R A
DATE: March 19, 2012	

**PURGING DATA**

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: 12.5 feet to 22.5 feet	STATIC DEPTH TO WATER (feet): 14.22	PURGE PUMP TYPE OR BAILER: peristaltic
<b>WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY</b> (only fill out if applicable) = ( 22.5 feet - 14.22 feet ) X 0.16 gallons/foot = 1.4 gallons				
<b>EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME</b> (only fill out if applicable) = 0.0 gallons + ( 0.0026 gallons/foot X feet ) + 0.12 gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 19	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 19	PURGING INITIATED AT: 1010	PURGING ENDED AT: 1115	TOTAL VOLUME PURGED (gallons): 6.5

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	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)	COLOR (describe)	ORP (mV)
1100	5.0	5.0	0.1	14.61	5.12	23.45	176	0.68	0.5	clear	-29.2
1105	0.5	5.5	0.1	14.61	5.09	23.49	169	0.64	0.2	clear	-41.5
1110	0.5	6.0	0.1	14.61	5.10	23.50	171	0.64	0.2	clear	-45.3
1115	0.5	6.5	0.1	14.61	5.12	23.50	172	0.65	0.2	clear	-45.6

**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: Joe Terry / WSI				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: 1120		SAMPLING ENDED AT: 1207	
PUMP OR TUBING DEPTH IN WELL (feet): 19				TUBING MATERIAL CODE: PE			FIELD-FILTERED: Y <input checked="" type="radio"/> N		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> TUBING Y <input checked="" type="radio"/> (replaced)				DUPLICATE: Y <input checked="" type="radio"/> N						

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPME N T 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			
MW-22RA	3	CG	40mL	HCL	Prefilled by lab		8260	RFPP	<100
MW-22RA	3	CG	40mL	None	None		8011	RFPP	<100
MW-22RA	1	PE	500mL	HNO <sub>3</sub>	Prefilled by lab		Metals	APP	400
MW-22RA	1	PE	125mL	H <sub>2</sub> SO <sub>4</sub>	Prefilled by lab		NH <sub>3</sub>	APP	400
MW-22RA	1	PE	500mL	None	None		TDS, Cl, NO <sub>3</sub>	APP	400
MW-22RA	1	PE	250mL	NaOH	Prefilled by lab		Cyanide	APP	400
MW-22RA	1	PE	250mL	NaOH & ZnAc	Prefilled by lab		Sulfide	APP	400
MW-22RA	6	AG	1000mL	None	None		8270,8081,8082,8151	APP	400

REMARKS: weather: M. sunny, 86°F, ~5mph gusts  
 Odor: none

**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)

Revision Date: February 12, 2009



**Form FD 9000-24**  
**GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)		SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773	
WELL NO: MW-22R B	SAMPLE ID: MW-22R B	DATE: March 19, 2012	

**PURGING DATA**

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): 0.375	WELL SCREEN INTERVAL DEPTH: 35 feet to 45 feet	STATIC DEPTH TO WATER (feet): 14.10	PURGE PUMP TYPE OR BAILER: electric submersible
<b>WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY</b> (only fill out if applicable) = ( 45 feet - 14.10 feet ) X 0.16 gallons/foot = 5.0 gallons				
<b>EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME</b> (only fill out if applicable) = 0.0 gallons + ( 0.006 gallons/foot X 60 feet ) + 0.12 gallons = 0.5 gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 40	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 40	PURGING INITIATED AT: 1000	PURGING ENDED AT: 1345	TOTAL VOLUME PURGED (gallons): 112.5

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	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)	COLOR (describe)	ORP (mV)
1320	100	100	0.5	14.67	4.95	24.51	123	0.12	186	brown	-89.8
1330	5.0	105	0.5	14.67	4.95	24.50	122	0.08	192	brown	-99.7
1340	5.0	110	0.5	14.67	4.93	24.49	122	0.09	202	brown	-95.3
1345	2.5	112.5	0.5	14.67	4.94	24.51	122	0.08	195	brown	-95.0

**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: Joe Terry / WSI				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: 1350		SAMPLING ENDED AT: 1415		
PUMP OR TUBING DEPTH IN WELL (feet): 40				TUBING MATERIAL CODE: PE		FIELD-FILTERED: <input checked="" type="checkbox"/> N Filtration Equipment Type: inline paper (metals only)				FILTER SIZE: 1 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> N				TUBING Y <input checked="" type="checkbox"/> N (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> N			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPME T 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			
MW-22RB	3	CG	40mL	HCL	Prefilled by lab		8260	ESP	<100
MW-22RB	3	CG	40mL	None	None		8011	ESP	<100
MW-22RB	1	PE	500mL	HNO <sub>3</sub>	Prefilled by lab		Metals	ESP	450
MW-22RB	1	PE	125mL	H <sub>2</sub> SO <sub>4</sub>	Prefilled by lab		NH <sub>3</sub>	ESP	450
MW-22RB	1	PE	500mL	None	None		TDS, Cl, NO <sub>3</sub>	ESP	450
MW-22RB	1	PE	250mL	NaOH	Prefilled by lab		Cyanide	ESP	450
MW-22RB	1	PE	250mL	NaOH & ZnAc	Prefilled by lab		Sulfide	ESP	450
MW-22RB	6	AG	1000mL	None	None		8270,8081,8082,8151	ESP	450

REMARKS: weather: m. sunny, 86°F, ~5mph gusts  
 Odor: sulfur-like. Initial turbidity: 242 NTU  
 Turbidity after filter: 13.4 NTU  
 Filtered sample in addition to unfiltered for metals only

**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)

Revision Date: February 12, 2009



**Form FD 9000-24**  
**GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: MW-22R C	SAMPLE ID: MW-22R C
DATE: March 19, 2012	

**PURGING DATA**

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): 0.375	WELL SCREEN INTERVAL DEPTH: 56 feet to 66 feet	STATIC DEPTH TO WATER (feet): 14.34	PURGE PUMP TYPE OR BAILER: electric submersible
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( 66 feet - 14.34 feet ) X 0.16 gallons/foot = 8.3 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = 0.0 gallons + ( 0.006 gallons/foot X 75 feet ) + 0.12 gallons = 0.6 gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 61	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 61	PURGING INITIATED AT: 0950	PURGING ENDED AT: 1245	TOTAL VOLUME PURGED (gallons): 78.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	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)	COLOR (describe)	ORP (mV)
1225	69.75	69.75	0.45	16.58	5.51	23.90	85	0.20	207	brown	-105.7
1235	4.5	74.25	0.45	16.58	5.48	23.95	85	0.16	202	brown	-95.9
1240	2.25	76.5	0.45	16.58	5.49	23.92	85	0.15	196	brown	-91.7
1245	2.25	78.75	0.45	16.58	5.49	23.96	85	0.15	195	brown	-95.1

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: Joe Terry / WSI				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: 1250		SAMPLING ENDED AT: 1315	
PUMP OR TUBING DEPTH IN WELL (feet): 61				TUBING MATERIAL CODE: PE			FIELD-FILTERED: Y (N)		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y (N)				TUBING Y (N) (replaced)			DUPLICATE: Y (N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPME T 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			
MW-22RC	3	CG	40mL	HCL	Prefilled by lab		8260	ESP	<100
MW-22RC	3	CG	40mL	None	None		8011	ESP	<100
MW-22RC	1	PE	500mL	HNO <sub>3</sub>	Prefilled by lab		Metals	ESP	400
MW-22RC	1	PE	125mL	H <sub>2</sub> SO <sub>4</sub>	Prefilled by lab		NH <sub>3</sub>	ESP	400
MW-22RC	1	PE	500mL	None	None		TDS, Cl, NO <sub>3</sub>	ESP	400
MW-22RC	1	PE	250mL	NaOH	Prefilled by lab		Cyanide	ESP	400
MW-22RC	1	PE	250mL	NaOH & ZnAc	Prefilled by lab		Sulfide	ESP	400
MW-22RC	6	AG	1000mL	None	None		8270,8081,8082,8151	ESP	400

REMARKS: weather: A. sunny, 86°F, 45 mph gusts. Initial turbidity 264 NTU  
 Odor: none

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)

Revision Date: February 12, 2009

## Appendix C

### Field Instrument Calibration Logs

# Field Instrument Calibration Record

Site: JED SWMF

Date: March 18, 2012

Water Quality Instrument Make: YSI

Instrument Model Number: 556

Instrument Serial Number: 06A2173AM

Turbidity Instrument Make: LaMotte

Instrument Model Number: 2020e

Instrument Serial Number: ME12953

Time: 2030

Calibration Standard			Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
Lot No.	Expiration Date	Standard Value						
C146449	Aug 1, 2013	pH = 4.00	4.02	0.02	0.2	Y	C	GT
C146962	Aug 13, 2013	pH = 7.00	7.07	0.07	0.2	Y	C	GT
C142848	Mar 11, 2013	pH = 10.00			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
CO40074	Aug 2012	Turbidity = 10 NTU	9.94	0.6	10%	Y	C	GT
		Turbidity = 50 NTU			6.5%			
C143339	Mar 29, 2012	Conductivity = 0.084 mS/cm	0.084	0.0	5%	Y	C	GT
C146644	Aug 14, 2013	Conductivity = 1.000 mS/cm	1.001	0.1	5%	Y	C	GT
	Per Table →	D.O. = 8.546 mg/L @ 23.2°C	8.54	0.006	0.2 mg/l	Y	C	GT

Date: March 19, 2012

Time: 1800

Calibration Standard			Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
Lot No.	Expiration Date	Standard Value						
C146449	Aug 1, 2013	pH = 4.00	4.00	0.00	0.2	Y	C	GT
C146962	Aug 13, 2013	pH = 7.00	7.09	0.09	0.2	Y	C	GT
C142848	Mar 11, 2013	pH = 10.00			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
CO40074	Aug 2012	Turbidity = 10 NTU	9.89	1.1	10%	Y	C	GT
		Turbidity = 50 NTU			6.5%			
C143339	Mar 29, 2012	Conductivity = 0.084 mS/cm	0.085	1.2	5%	Y	C	GT
C146644	Aug 14, 2013	Conductivity = 1.000 mS/cm	1.009	0.9	5%	Y	C	GT
	Per Table →	D.O. = 8.24 mg/L @ 24.8°C	8.31	0.016	0.2 mg/l	Y	C	GT

Note (1): Percent Deviation = (Standard Value – Instrument Response) ÷ Standard Value x 100

Note (2): Allowable Deviation: pH ± 0.2 of Standard Value; Conductivity ± 5 % of Standard Value; Salinity ± 3 % of Standard Value; DO ± 0.2 mg/L;

Turbidity 0.1-10 NTU ± 10% of Standard Value, 11-40 NTU ± 8% of Standard Value, 41-100 NTU ± 6.5% of Standard Value, >100 NTU ± 5% of Standard Value

Note (3): Initial, Continual, Final



## Appendix D

### Chain-of-Custody Forms



## Appendix E

### Analytical Laboratory Report



April 03, 2012

Service Request No: J1201300

Kirk Wills  
Waste Services of Florida, Inc.  
11500 43rd Street North  
Clearwater, FL 33762

**Laboratory Results for: JED SWDF**

Dear Kirk,

Enclosed are the results of the sample(s) submitted to our laboratory March 20, 2012  
For your reference, these analyses have been assigned our service request number **J1201300**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. If required, the laboratory can provide uncertainty measurements for each method employed in sample analysis; this uncertainty measurement would be generated using method validation studies and the laboratory's quality control data.

Please contact me if you have any questions. My extension is 4409. You may also contact me via email at [CMyers@caslab.com](mailto:CMyers@caslab.com).

Respectfully submitted,

**Columbia Analytical Services, Inc. dba ALS Environmental**

Craig Myers  
Project Manager



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Columbia Analytical Services, Inc.

Part of the ALS Group A Campbell Brothers Limited Company

Environmental

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RIGHT SOLUTIONS RIGHT PARTNER

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Received:** 3/20/12

## CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

### Sample Receipt

Three water samples and one trip blank were received for analysis at Columbia Analytical Services on 3/20/12. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at  $\leq 6^{\circ}\text{C}$  upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

### Volatile Organic Analyses:

No significant data anomalies were noted with this analysis.

### Semi-Volatile Organic Analyses:

Method 8270C: The CAS minimum relative response factor criterion for the following analytes was not met in the Initial Calibration (ICAL): Benzo(k)fluoranthene, Kepone, and Famphur. In accordance with CAS standard operating procedures, a Method Reporting Limit (MRL) check standard containing the analytes of concern was analyzed each day of analysis. The MRL check standard verifies instrument sensitivity was adequate to detect the analytes at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the compounds in question and the compounds were not detected in the field sample, the data quality is not significantly affected. The results for these compounds should only be evaluated to the MRL. No further corrective action was required.

Method 8270C: Calibration points 6-8 and ICV for the Initial Calibration (ICAL) were analyzed approximately 40 minutes outside the method specified GC/MS tune window. Although the tune criterion is clearly stated in the EPA analytical method, daily operation and calibration verification procedures indicate the sample data is not significantly biased by this nonconformity. The data is flagged to indicate the method violation.

Method 8270C: The upper control criterion was exceeded for the following analytes in the Second Source Verification (SSV): Methyl Methanesulfonate, Methyl Parathion, Methapriline, Pyrene, p-Dimethylaminoazobenzene, Butyl Benzyl Phthalate, 3,3'-Dichlorobenzidine, Benzo(a) anthracene, Chrysene, and bis(2-ethylhexyl)Phthalate. The field samples analyzed in this sequence did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

Method 8270C: The lower control criterion was exceeded for the following analytes in the Second Source Verification (SSV): 1,4-Phenylenediamine, Diphenylamine, N-nitrosodiphenylamine, Kepone, and Famphur. The analytes in question were not detected in the associated field samples. Since the analytes were detected in the Method Reporting Limit (MRL) check, instrument sensitivity was documented. The data quality was not significantly affected and no further corrective action was taken.

Method 8270C: The lower control criterion was exceeded for the following analytes in the Second Source Verification (SSV): Kepone and Famphur. The analytes in question were not detected in the associated field samples. Since the analytes were



detected in the Method Reporting Limit (MRL) check, instrument sensitivity was documented. The data quality was not significantly affected and no further corrective action was taken.

Method 8270C: The upper control criterion was exceeded for the following analyte in the Second Source Verification (SSV): Kepone. The field samples analyzed in this sequence did not contain the analyte in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

Method 8270C: The upper control criterion was exceeded for the following analytes in the Continuing Calibration Verification (CCV): p-Phenylenediamine, Hexachlorocyclopentadiene, Methyl Parathion, Indeno(1,2,3-cd)pyrene, Dibenz(s,h)anthracene, and Benzo(g,h,i)perylene. The field samples analyzed in this sequence did not contain the analytes in question above the Method Reporting Limit (MRL). Since the apparent problem equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8270C: The lower control criterion was exceeded for the following analytes in the Continuing Calibration Verification (CCV): Kepone and Famphur. The analytes in question were not detected in the associated field samples. Since the analytes were detected in the MRL check standard, instrument sensitivity was documented. The data quality was not significantly affected and no further corrective action was taken.

Method 8270C: The lower control criterion was exceeded for the following analytes in the Continuing Calibration Verification (CCV): Kepone and Famphur. The analytes in question were not detected in the associated field samples. Since the analytes were detected in the MRL check standard, instrument sensitivity was documented. The data quality was not significantly affected and no further corrective action was taken.

Method 8270C: The upper control criterion was exceeded for the following surrogates in sample MW-22RA: Nitrobenzene-d5 and p-terphenyl-d14. No target analytes were detected in the sample. The error associated with an elevated recovery equates to a high bias. The quality of the sample data is not significantly affected. No further corrective action was appropriate.

Method 8270C: The spike recoveries of Famphur and p-Phenylenediamine for Laboratory Control Sample (LCS) JQ1201701-02 were outside the lower control criterion. The analytes in question were not detected in the associated field samples. The error associated with reduced recovery equates to a potential low bias. The data is flagged to indicate the problem.

Method 8011: The lower control criterion was exceeded for the following surrogate in Method Blank JQ1201718-01: 1,1,1,2-Tetrachloroethane. No target analytes were detected in the Method Blank and sample MW-22RA. The problem indicates a potential negative bias to the Method Blank results. No further corrective action was possible.

Method 8011: The control criterion was exceeded for the following surrogate in sample MW-22RB due to matrix interference: 1,1,1,2-Tetrachloroethane. A re-extraction and reanalysis was performed, but produced similar results. The results of the original analysis are reported. No further corrective action was required.

Method 8081: The upper control criterion was exceeded for the following analyte in the Continuing Calibration Verification (CCV): Toxaphene. The field samples analyzed in this sequence did not contain the analyte in question above the Method Reporting Limit (MRL). Since the apparent problem equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8081: The lower control criterion was exceeded for the following analytes in the Continuing Calibration Verification (CCV): Endrin Aldehyde and 4,4'-DDT. The analytes in question were not detected in the associated field samples. Since the analytes were detected in the MRL check standard, instrument sensitivity was documented. The data quality was not significantly affected and no further corrective action was taken.

### **Metals Analyses:**

No significant data anomalies were noted with this analysis.

Approved by  Date 4/3/2012

**General Chemistry Analyses:**

No significant data anomalies were noted with this analysis.

**Subcontracted Analytical Parameters:**

The samples were delivered to ENCO Labs in Jacksonville, FL on 3/22/12 for EPA Methods 8141 and 8151 determination. The certified analytical report has been included in its entirety in Appendix A: Subcontracted Analytical Results.



**State Certifications, Accreditations, and Licenses**

<b>Agency</b>	<b>Number</b>	<b>Expire Date</b>
Florida Department of Health	E82502	6/30/2012
North Carolina Department of Environment and Natural Resources	527	12/31/2012
Virginia Environmental Accreditation Program	460191	12/14/2012
Louisiana Department of Environmental Quality	02086	6/30/2012
Kentucky Division of Waste Management	63	7/5/2013
South Carolina Department of Health and Environmental Control	96021001	6/30/2012
Texas Commision on Environmental Quality	T104704197-09-TX	5/31/2012
Maine Department of Health and Human Services	2011006	2/3/2013
Department of Defense	66206	5/11/2012
Pennsylvania Department of Environmental Protection	68-04835	7/31/2012
New Jersey Department of Environmental Protection	FL019	6/30/2012

## **Data Qualifiers**

### **Florida-DEP**

- ! Data deviates from historically established concentration ranges
- \* Not reported due to interference
- ? Data is rejected and should not be used
- A Value reported is the arithmetic mean of two or more determinations
- B Results based upon colony counts outside the acceptable range.
- D Measurement was made in the field.
- E Extra samples were taken at composite stations
- H Value based on field kit determination; results may not be accurate.
- I The reported value is between the laboratory method detection limit and the laboratory PQL.
- J Estimated value.
- K Off scale low. The value is less than the lowest calibration standard.
- L Off scale high. The analyte is above the acceptable level of quantitation.
- M The MDL/MRL has been elevated because the analyte could not be accurately quantified.
- N Presumptive evidence of presence of material.
- O Sampled, but analysis lost or not performed
- Q Sample held beyond the acceptable holding time.
- R Significant rain in the past 48 hours (typically in excess of 0.5 inches)
- T Estimated value, less than the MDL
- U Indicates that the compound was analyzed for but not detected.
- V Indicates that the analyte was detected in both the sample and the associated method blank.
- X Insufficient individuals were present in the sample to achieve a minimum of 280 organisms for identification (Stream Condition Index Analysis only)
- Y The laboratory analysis was from an unpreserved or improperly preserved sample.
- Z Too many colonies were present, the numeric value represents the filtration volume

## Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF

**Service Request:** J1201300

**SAMPLE CROSS-REFERENCE**

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
J1201300-001	MW-22RA	3/19/2012	1120
J1201300-002	MW-22RB	3/19/2012	1350
J1201300-003	MW-22RC	3/19/2012	1250
J1201300-004	Trip Blank	3/19/2012	0000

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 11:20  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RA  
**Lab Code:** J1201300-001

**Units:** ug/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.190 U	1.00	0.190	1	03/23/12 18:32	
1,1,1-Trichloroethane (TCA)	0.170 U	1.00	0.170	1	03/23/12 18:32	
1,1,2,2-Tetrachloroethane	0.290 U	1.00	0.290	1	03/23/12 18:32	
1,1,2-Trichloroethane	0.400 U	1.00	0.400	1	03/23/12 18:32	
1,1-Dichloroethane (1,1-DCA)	0.300 U	1.00	0.300	1	03/23/12 18:32	
1,1-Dichloroethene (1,1-DCE)	0.160 U	1.00	0.160	1	03/23/12 18:32	
1,1-Dichloropropene	0.320 U	5.00	0.320	1	03/23/12 18:32	
1,2,3-Trichloropropane	0.420 U	2.00	0.420	1	03/23/12 18:32	
1,2,4-Trichlorobenzene	0.340 U	10.0	0.340	1	03/23/12 18:32	
1,2-Dibromo-3-chloropropane (DBCP)	2.30 U	5.00	2.30	1	03/23/12 18:32	
1,2-Dibromoethane (EDB)	0.460 U	1.00	0.460	1	03/23/12 18:32	
1,2-Dichlorobenzene	0.480 U	1.00	0.480	1	03/23/12 18:32	
1,2-Dichloroethane	0.220 U	1.00	0.220	1	03/23/12 18:32	
1,2-Dichloropropane	0.190 U	1.00	0.190	1	03/23/12 18:32	
1,3-Dichlorobenzene	0.220 U	1.00	0.220	1	03/23/12 18:32	
1,3-Dichloropropane	0.180 U	1.00	0.180	1	03/23/12 18:32	
1,4-Dichlorobenzene	0.160 U	1.00	0.160	1	03/23/12 18:32	
2,2-Dichloropropane	0.460 U	1.00	0.460	1	03/23/12 18:32	
2-Butanone (MEK)	3.80 U	10.0	3.80	1	03/23/12 18:32	
2-Hexanone	2.20 U	25.0	2.20	1	03/23/12 18:32	
4-Methyl-2-pentanone (MIBK)	1.10 U	25.0	1.10	1	03/23/12 18:32	
Acetone	5.60 U	50.0	5.60	1	03/23/12 18:32	
Acetonitrile	18.0 U	25.0	18.0	1	03/23/12 18:32	
Acrolein	28.0 U	50.0	28.0	1	03/23/12 18:32	
Acrylonitrile	1.50 U	10.0	1.50	1	03/23/12 18:32	
Allyl Chloride	0.390 U	5.00	0.390	1	03/23/12 18:32	
Benzene	0.210 U	1.00	0.210	1	03/23/12 18:32	
Bromochloromethane	0.270 U	5.00	0.270	1	03/23/12 18:32	
Bromodichloromethane	0.220 U	1.00	0.220	1	03/23/12 18:32	
Bromoform	0.420 U	2.00	0.420	1	03/23/12 18:32	
Bromomethane	0.230 U	5.00	0.230	1	03/23/12 18:32	
Carbon Disulfide	2.40 U	10.0	2.40	1	03/23/12 18:32	
Carbon Tetrachloride	0.340 U	1.00	0.340	1	03/23/12 18:32	
Chlorobenzene	0.160 U	1.00	0.160	1	03/23/12 18:32	
Chloroethane	0.520 U	5.00	0.520	1	03/23/12 18:32	
Chloroform	0.350 U	1.00	0.350	1	03/23/12 18:32	
Chloromethane	0.360 U	1.00	0.360	1	03/23/12 18:32	
Chloroprene	0.120 U	1.00	0.120	1	03/23/12 18:32	
cis-1,2-Dichloroethene	0.360 U	1.00	0.360	1	03/23/12 18:32	
cis-1,3-Dichloropropene	0.200 U	1.00	0.200	1	03/23/12 18:32	
Dibromochloromethane	0.210 U	1.00	0.210	1	03/23/12 18:32	
Dibromomethane	0.360 U	5.00	0.360	1	03/23/12 18:32	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 11:20  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RA  
**Lab Code:** J1201300-001

**Units:** ug/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Dichlorodifluoromethane	0.230 U	20.0	0.230	1	03/23/12 18:32	
Ethyl Methacrylate	0.350 U	1.00	0.350	1	03/23/12 18:32	
Ethylbenzene	0.210 U	1.00	0.210	1	03/23/12 18:32	
Hexachlorobutadiene	0.600 U	10.0	0.600	1	03/23/12 18:32	
Iodomethane	2.70 U	5.00	2.70	1	03/23/12 18:32	
Isobutyl Alcohol	43.0 U	100	43.0	1	03/23/12 18:32	
m,p-Xylenes	0.310 U	2.00	0.310	1	03/23/12 18:32	
Methacrylonitrile	1.60 U	5.00	1.60	1	03/23/12 18:32	
Methyl Methacrylate	0.490 U	2.00	0.490	1	03/23/12 18:32	
Methylene Chloride	0.210 U	5.00	0.210	1	03/23/12 18:32	
Naphthalene	0.380 U	10.0	0.380	1	03/23/12 18:32	
o-Xylene	0.140 U	1.00	0.140	1	03/23/12 18:32	
Propionitrile	3.90 U	25.0	3.90	1	03/23/12 18:32	
Styrene	0.290 U	1.00	0.290	1	03/23/12 18:32	
Tetrachloroethene (PCE)	0.220 U	1.00	0.220	1	03/23/12 18:32	
Toluene	0.190 U	1.00	0.190	1	03/23/12 18:32	
trans-1,2-Dichloroethene	0.190 U	1.00	0.190	1	03/23/12 18:32	
trans-1,3-Dichloropropene	0.230 U	1.00	0.230	1	03/23/12 18:32	
trans-1,4-Dichloro-2-butene	2.20 U	20.0	2.20	1	03/23/12 18:32	
Trichloroethene (TCE)	0.360 U	1.00	0.360	1	03/23/12 18:32	
Trichlorofluoromethane	0.240 U	20.0	0.240	1	03/23/12 18:32	
Vinyl Acetate	1.90 U	10.0	1.90	1	03/23/12 18:32	
Vinyl Chloride	0.360 U	1.00	0.360	1	03/23/12 18:32	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	93	68 - 118	03/23/12 18:32	
4-Bromofluorobenzene	111	78 - 129	03/23/12 18:32	
Dibromofluoromethane	96	80 - 114	03/23/12 18:32	
Toluene-d8	101	87 - 118	03/23/12 18:32	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 11:20  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RA  
**Lab Code:** J1201300-001

**Units:** ug/L  
**Basis:** NA

## Semivolatile Organic Compounds by GC/MS

**Analysis Method:** 8270C  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	1.30 U	5.38	1.30	1	03/27/12 17:13	3/21/12	
1,2,4-Trichlorobenzene	0.646 U	5.38	0.646	1	03/27/12 17:13	3/21/12	
1,2-Dichlorobenzene	0.689 U	5.38	0.689	1	03/27/12 17:13	3/21/12	
1,3,5-Trinitrobenzene	1.62 U	5.38	1.62	1	03/27/12 17:13	3/21/12	
1,3-Dichlorobenzene	0.990 U	5.38	0.990	1	03/27/12 17:13	3/21/12	
1,3-Dinitrobenzene	0.689 U	10.8	0.689	1	03/27/12 17:13	3/21/12	
1,4-Dichlorobenzene	0.979 U	5.38	0.979	1	03/27/12 17:13	3/21/12	
1,4-Naphthoquinone	1.73 U	10.8	1.73	1	03/27/12 17:13	3/21/12	
1-Naphthylamine	2.16 U	5.38	2.16	1	03/27/12 17:13	3/21/12	
2,3,4,6-Tetrachlorophenol	1.73 U	5.38	1.73	1	03/27/12 17:13	3/21/12	
2,4,5-Trichlorophenol	1.40 U	5.38	1.40	1	03/27/12 17:13	3/21/12	
2,4,6-Trichlorophenol	0.957 U	5.38	0.957	1	03/27/12 17:13	3/21/12	
2,4-Dichlorophenol	1.30 U	5.38	1.30	1	03/27/12 17:13	3/21/12	
2,4-Dimethylphenol	1.62 U	5.38	1.62	1	03/27/12 17:13	3/21/12	
2,4-Dinitrophenol	0.818 U	21.5	0.818	1	03/27/12 17:13	3/21/12	
2,4-Dinitrotoluene	1.40 U	5.38	1.40	1	03/27/12 17:13	3/21/12	
2,6-Dichlorophenol	1.40 U	10.8	1.40	1	03/27/12 17:13	3/21/12	
2,6-Dinitrotoluene	1.19 U	5.38	1.19	1	03/27/12 17:13	3/21/12	
2-Acetylaminofluorene	1.04 U	5.38	1.04	1	03/27/12 17:13	3/21/12	
2-Chloronaphthalene	4.95 U	5.38	4.95	1	03/27/12 17:13	3/21/12	
2-Chlorophenol	1.30 U	5.38	1.30	1	03/27/12 17:13	3/21/12	
2-Methylnaphthalene	0.678 U	5.38	0.678	1	03/27/12 17:13	3/21/12	
2-Methylphenol	1.40 U	5.38	1.40	1	03/27/12 17:13	3/21/12	
2-Naphthylamine	2.48 U	5.38	2.48	1	03/27/12 17:13	3/21/12	
2-Nitroaniline	1.62 U	5.38	1.62	1	03/27/12 17:13	3/21/12	
2-Nitrophenol	1.51 U	21.5	1.51	1	03/27/12 17:13	3/21/12	
3- and 4-Methylphenol Coelution	1.08 U	5.38	1.08	1	03/27/12 17:13	3/21/12	
3,3'-Dichlorobenzidine	1.51 U	21.5	1.51	1	03/27/12 17:13	3/21/12	
3,3'-Dimethylbenzidine	5.17 U	21.5	5.17	1	03/27/12 17:13	3/21/12	
3-Methylcholanthrene	1.51 U	5.38	1.51	1	03/27/12 17:13	3/21/12	
3-Nitroaniline	1.19 U	5.38	1.19	1	03/27/12 17:13	3/21/12	
4,6-Dinitro-2-methylphenol	1.08 U	21.5	1.08	1	03/27/12 17:13	3/21/12	
4-Aminobiphenyl	2.05 U	5.38	2.05	1	03/27/12 17:13	3/21/12	
4-Bromophenyl Phenyl Ether	1.40 U	5.38	1.40	1	03/27/12 17:13	3/21/12	
4-Chloro-3-methylphenol	1.94 U	5.38	1.94	1	03/27/12 17:13	3/21/12	
4-Chloroaniline	1.51 U	5.38	1.51	1	03/27/12 17:13	3/21/12	
4-Chlorophenyl Phenyl Ether	1.04 U	5.38	1.04	1	03/27/12 17:13	3/21/12	
4-Nitroaniline	1.08 U	5.38	1.08	1	03/27/12 17:13	3/21/12	
4-Nitrophenol	1.94 U	21.5	1.94	1	03/27/12 17:13	3/21/12	
5-Nitro-o-toluidine	1.19 U	5.38	1.19	1	03/27/12 17:13	3/21/12	
7,12-Dimethylbenz(a)anthracene	1.30 U	5.38	1.30	1	03/27/12 17:13	3/21/12	
Acenaphthene	4.52 U	5.38	4.52	1	03/27/12 17:13	3/21/12	



## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 11:20  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RA  
**Lab Code:** J1201300-001

**Units:** ug/L  
**Basis:** NA

## Semivolatile Organic Compounds by GC/MS

**Analysis Method:** 8270C  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	1.07 U	5.38	1.07	1	03/27/12 17:13	3/21/12	
Acetophenone	1.73 U	10.8	1.73	1	03/27/12 17:13	3/21/12	
Anthracene	1.73 U	5.38	1.73	1	03/27/12 17:13	3/21/12	
Benz(a)anthracene	1.08 U	5.38	1.08	1	03/27/12 17:13	3/21/12	
Benzo(a)pyrene	1.30 U	5.38	1.30	1	03/27/12 17:13	3/21/12	
Benzo(b)fluoranthene	1.08 U	5.38	1.08	1	03/27/12 17:13	3/21/12	
Benzo(g,h,i)perylene	1.51 U	5.38	1.51	1	03/27/12 17:13	3/21/12	
Benzo(k)fluoranthene	1.94 U	5.38	1.94	1	03/27/12 17:13	3/21/12	
Benzyl Alcohol	1.51 U	5.38	1.51	1	03/27/12 17:13	3/21/12	
Bis(2-chloroethoxy)methane	1.30 U	5.38	1.30	1	03/27/12 17:13	3/21/12	
Bis(2-chloroethyl) Ether	2.05 U	5.38	2.05	1	03/27/12 17:13	3/21/12	
Bis(2-chloroisopropyl) Ether	1.62 U	5.38	1.62	1	03/27/12 17:13	3/21/12	
Bis(2-ethylhexyl) Phthalate	1.62 U	5.38	1.62	1	03/27/12 17:13	3/21/12	
Butyl Benzyl Phthalate	0.925 U	10.8	0.925	1	03/27/12 17:13	3/21/12	
Chlorobenzilate	0.968 U	10.8	0.968	1	03/27/12 17:13	3/21/12	
Chrysene	1.30 U	5.38	1.30	1	03/27/12 17:13	3/21/12	
Diallate	1.83 U	5.38	1.83	1	03/27/12 17:13	3/21/12	
Dibenz(a,h)anthracene	1.62 U	5.38	1.62	1	03/27/12 17:13	3/21/12	
Dibenzofuran	1.40 U	5.38	1.40	1	03/27/12 17:13	3/21/12	
Diethyl Phthalate	1.83 U	5.38	1.83	1	03/27/12 17:13	3/21/12	
Dimethoate	2.05 U	5.38	2.05	1	03/27/12 17:13	3/21/12	
Dimethyl Phthalate	1.40 U	5.38	1.40	1	03/27/12 17:13	3/21/12	
Di-n-butyl Phthalate	2.37 U	5.38	2.37	1	03/27/12 17:13	3/21/12	
Di-n-octyl Phthalate	3.02 U	5.38	3.02	1	03/27/12 17:13	3/21/12	
Dinoseb	2.69 U	5.38	2.69	1	03/27/12 17:13	3/21/12	
Diphenylamine + n-Nitrosodiphenylamine	1.19 U	5.38	1.19	1	03/27/12 17:13	3/21/12	
Disulfoton	2.05 U	5.38	2.05	1	03/27/12 17:13	3/21/12	
Ethyl Methanesulfonate	1.73 U	5.38	1.73	1	03/27/12 17:13	3/21/12	
Famphur	2.05 U	10.8	2.05	1	03/27/12 17:13	3/21/12	
Fluoranthene	1.51 U	5.38	1.51	1	03/27/12 17:13	3/21/12	
Fluorene	0.904 U	5.38	0.904	1	03/27/12 17:13	3/21/12	
Hexachlorobenzene	1.83 U	5.38	1.83	1	03/27/12 17:13	3/21/12	
Hexachlorobutadiene	1.30 U	5.38	1.30	1	03/27/12 17:13	3/21/12	
Hexachlorocyclopentadiene	0.538 U	5.38	0.538	1	03/27/12 17:13	3/21/12	
Hexachloroethane	0.871 U	5.38	0.871	1	03/27/12 17:13	3/21/12	
Hexachloropropene	0.979 U	5.38	0.979	1	03/27/12 17:13	3/21/12	
Indeno(1,2,3-cd)pyrene	1.83 U	5.38	1.83	1	03/27/12 17:13	3/21/12	
Isodrin	1.94 U	10.8	1.94	1	03/27/12 17:13	3/21/12	
Isophorone	1.94 U	5.38	1.94	1	03/27/12 17:13	3/21/12	
Isosafrole	1.07 U	5.38	1.07	1	03/27/12 17:13	3/21/12	
Kepone	4.09 U	53.8	4.09	1	03/27/12 17:13	3/21/12	
Methapyrilene	3.55 U	5.38	3.55	1	03/27/12 17:13	3/21/12	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 11:20  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RA  
**Lab Code:** J1201300-001

**Units:** ug/L  
**Basis:** NA

## Semivolatile Organic Compounds by GC/MS

**Analysis Method:** 8270C  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Methyl Methanesulfonate	1.73 U	5.38	1.73	1	03/27/12 17:13	3/21/12	
Methyl Parathion	2.16 U	10.8	2.16	1	03/27/12 17:13	3/21/12	
Naphthalene	0.570 U	5.38	0.570	1	03/27/12 17:13	3/21/12	
Nitrobenzene	2.26 U	5.38	2.26	1	03/27/12 17:13	3/21/12	
N-Nitrosodiethylamine	1.62 U	5.38	1.62	1	03/27/12 17:13	3/21/12	
N-Nitrosodimethylamine	1.04 U	5.38	1.04	1	03/27/12 17:13	3/21/12	
N-Nitrosodi-n-butylamine	1.62 U	5.38	1.62	1	03/27/12 17:13	3/21/12	
N-Nitrosodi-n-propylamine	2.37 U	5.38	2.37	1	03/27/12 17:13	3/21/12	
N-Nitrosomethylethylamine	1.04 U	5.38	1.04	1	03/27/12 17:13	3/21/12	
N-Nitrosopiperidine	1.40 U	5.38	1.40	1	03/27/12 17:13	3/21/12	
N-Nitrosopyrrolidine	1.83 U	5.38	1.83	1	03/27/12 17:13	3/21/12	
O,O,O-Triethyl Phosphorothioate	0.979 U	21.5	0.979	1	03/27/12 17:13	3/21/12	
o-Toluidine	1.94 U	5.38	1.94	1	03/27/12 17:13	3/21/12	
Parathion	1.83 U	21.5	1.83	1	03/27/12 17:13	3/21/12	
p-Dimethylaminoazobenzene	1.19 U	5.38	1.19	1	03/27/12 17:13	3/21/12	
Pentachlorobenzene	0.957 U	5.38	0.957	1	03/27/12 17:13	3/21/12	
Pentachloronitrobenzene (PCNB)	2.69 U	5.38	2.69	1	03/27/12 17:13	3/21/12	
Pentachlorophenol (PCP)	1.19 U	21.5	1.19	1	03/27/12 17:13	3/21/12	
Phenacetin	2.26 U	5.38	2.26	1	03/27/12 17:13	3/21/12	
Phenanthrene	1.51 U	5.38	1.51	1	03/27/12 17:13	3/21/12	
Phenol	0.635 U	5.38	0.635	1	03/27/12 17:13	3/21/12	
Phorate	1.83 U	5.38	1.83	1	03/27/12 17:13	3/21/12	
p-Phenylenediamine	1.30 U	21.5	1.30	1	03/27/12 17:13	3/21/12	
Pronamide	1.83 U	21.5	1.83	1	03/27/12 17:13	3/21/12	
Pyrene	0.796 U	5.38	0.796	1	03/27/12 17:13	3/21/12	
Safrole	0.925 U	5.38	0.925	1	03/27/12 17:13	3/21/12	
Thionazin	1.94 U	10.8	1.94	1	03/27/12 17:13	3/21/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	153	13 - 133	03/27/12 17:13	
2-Fluorobiphenyl	152	22 - 105	03/27/12 17:13	
2-Fluorophenol	112	10 - 69	03/27/12 17:13	
Nitrobenzene-d5	136	10 - 123	03/27/12 17:13	
Phenol-d6	85	10 - 59	03/27/12 17:13	
p-Terphenyl-d14	162	20 - 128	03/27/12 17:13	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 11:20  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RA  
**Lab Code:** J1201300-001

**Units:** ug/L  
**Basis:** NA

## Base Neutral Semivolatile Organic Compounds by GC/MS SIM

**Analysis Method:** 8270C SIM  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1-Methylnaphthalene	0.0487 U	0.110	0.0487	1	03/22/12 19:35	3/22/12	
2-Methylnaphthalene	0.0487 U	0.110	0.0487	1	03/22/12 19:35	3/22/12	
Acenaphthene	0.0454 U	0.110	0.0454	1	03/22/12 19:35	3/22/12	
Acenaphthylene	0.0277 U	0.110	0.0277	1	03/22/12 19:35	3/22/12	
Anthracene	0.0420 U	0.110	0.0420	1	03/22/12 19:35	3/22/12	
Benz(a)anthracene	0.0387 U	0.110	0.0387	1	03/22/12 19:35	3/22/12	
Benzo(a)pyrene	0.0343 U	0.110	0.0343	1	03/22/12 19:35	3/22/12	
Benzo(b)fluoranthene	0.0277 U	0.110	0.0277	1	03/22/12 19:35	3/22/12	
Benzo(g,h,i)perylene	0.0431 U	0.110	0.0431	1	03/22/12 19:35	3/22/12	
Benzo(k)fluoranthene	0.0387 U	0.110	0.0387	1	03/22/12 19:35	3/22/12	
Chrysene	0.0266 U	0.110	0.0266	1	03/22/12 19:35	3/22/12	
Dibenz(a,h)anthracene	0.0398 U	0.110	0.0398	1	03/22/12 19:35	3/22/12	
Fluoranthene	0.0431 U	0.110	0.0431	1	03/22/12 19:35	3/22/12	
Fluorene	0.0520 U	0.110	0.0520	1	03/22/12 19:35	3/22/12	
Indeno(1,2,3-cd)pyrene	0.0442 U	0.110	0.0442	1	03/22/12 19:35	3/22/12	
Naphthalene	0.0431 U	0.110	0.0431	1	03/22/12 19:35	3/22/12	
Phenanthrene	0.0387 U	0.110	0.0387	1	03/22/12 19:35	3/22/12	
Pyrene	0.0343 U	0.110	0.0343	1	03/22/12 19:35	3/22/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	33	22 - 105	03/22/12 19:35	
p-Terphenyl-d14	75	25 - 127	03/22/12 19:35	

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 11:20  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RA  
**Lab Code:** J1201300-001

**Units:** ug/L  
**Basis:** NA

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by Microextraction and Gas Chromatography**

**Analysis Method:** 8011  
**Prep Method:** Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2-Dibromo-3-chloropropane (DBCP)	0.00700 U	0.0200	0.00700	1	03/23/12 18:10	3/22/12	
1,2-Dibromoethane (EDB)	0.00700 U	0.0200	0.00700	1	03/23/12 18:10	3/22/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	82	77 - 150	03/23/12 18:10	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 11:20  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RA  
**Lab Code:** J1201300-001

**Units:** ug/L  
**Basis:** NA

## Organochlorine Pesticides by Gas Chromatography

**Analysis Method:** 8081A  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	0.00837 U	0.0217	0.00837	1	03/29/12 04:19	3/26/12	
4,4'-DDE	0.0100 U	0.0217	0.0100	1	03/29/12 04:19	3/26/12	
4,4'-DDT	0.00794 U	0.0217	0.00794	1	03/29/12 04:19	3/26/12	
Aldrin	0.0100 U	0.0217	0.0100	1	03/29/12 04:19	3/26/12	
alpha-BHC	0.0109 U	0.0217	0.0109	1	03/29/12 04:19	3/26/12	
alpha-Chlordane	0.00870 U	0.0217	0.00870	1	03/29/12 04:19	3/26/12	
beta-BHC	0.0196 U	0.0217	0.0196	1	03/29/12 04:19	3/26/12	
Chlordane	0.142 U	0.543	0.142	1	03/29/12 04:19	3/26/12	
delta-BHC	0.0196 U	0.0217	0.0196	1	03/29/12 04:19	3/26/12	
Dieldrin	0.00881 U	0.0217	0.00881	1	03/29/12 04:19	3/26/12	
Endosulfan I	0.00761 U	0.0217	0.00761	1	03/29/12 04:19	3/26/12	
Endosulfan II	0.00772 U	0.0217	0.00772	1	03/29/12 04:19	3/26/12	
Endosulfan Sulfate	0.00805 U	0.0217	0.00805	1	03/29/12 04:19	3/26/12	
Endrin	0.00859 U	0.0217	0.00859	1	03/29/12 04:19	3/26/12	
Endrin Aldehyde	0.00924 U	0.0217	0.00924	1	03/29/12 04:19	3/26/12	
Endrin Ketone	0.00816 U	0.0217	0.00816	1	03/29/12 04:19	3/26/12	
gamma-BHC (Lindane)	0.0196 U	0.0217	0.0196	1	03/29/12 04:19	3/26/12	
gamma-Chlordane	0.00848 U	0.0217	0.00848	1	03/29/12 04:19	3/26/12	
Heptachlor	0.00729 U	0.0217	0.00729	1	03/29/12 04:19	3/26/12	
Heptachlor Epoxide	0.0102 U	0.0217	0.0102	1	03/29/12 04:19	3/26/12	
Methoxychlor	0.00837 U	0.0435	0.00837	1	03/29/12 04:19	3/26/12	
Toxaphene	0.283 U	0.543	0.283	1	03/29/12 04:19	3/26/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	67	10 - 160	03/29/12 04:19	
Tetrachloro-m-xylene	64	22 - 126	03/29/12 04:19	

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 11:20  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RA  
**Lab Code:** J1201300-001

**Units:** ug/L  
**Basis:** NA

**Polychlorinated Biphenyls (PCBs) by GC**

**Analysis Method:** 8082  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.142 U	0.543	0.142	1	03/29/12 04:19	3/26/12	
Aroclor 1221	0.218 U	0.543	0.218	1	03/29/12 04:19	3/26/12	
Aroclor 1232	0.250 U	0.543	0.250	1	03/29/12 04:19	3/26/12	
Aroclor 1242	0.403 U	0.543	0.403	1	03/29/12 04:19	3/26/12	
Aroclor 1248	0.207 U	0.543	0.207	1	03/29/12 04:19	3/26/12	
Aroclor 1254	0.109 U	0.543	0.109	1	03/29/12 04:19	3/26/12	
Aroclor 1260	0.544 U	0.544	0.544	1	03/29/12 04:19	3/26/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	67	10 - 151	03/29/12 04:19	



## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water  
**Sample Name:** MW-22RA  
**Lab Code:** J1201300-001

**Service Request:** J1201300  
**Date Collected:** 03/19/12 11:20  
**Date Received:** 03/20/12 09:15  
**Basis:** NA

## Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020	0.2 U	ug/L	1.0	0.2	1	03/22/12	3/21/12	
Arsenic, Total Recoverable	6020	<b>0.7 I</b>	ug/L	1.0	0.5	1	03/22/12	3/21/12	
Barium, Total Recoverable	6020	<b>31.2</b>	ug/L	2.0	0.5	1	03/22/12	3/21/12	
Beryllium, Total Recoverable	6020	<b>0.05 I</b>	ug/L	0.50	0.04	1	03/22/12	3/21/12	
Cadmium, Total Recoverable	6020	0.10 U	ug/L	0.40	0.10	1	03/22/12	3/21/12	
Chromium, Total Recoverable	6020	<b>1.3</b>	ug/L	1.0	0.2	1	03/22/12	3/21/12	
Cobalt, Total Recoverable	6020	<b>0.5 I</b>	ug/L	1.0	0.03	1	03/22/12	3/21/12	
Copper, Total Recoverable	6020	0.3 U	ug/L	1.0	0.3	1	03/22/12	3/21/12	
Iron, Total Recoverable	6010B	<b>1250</b>	ug/L	100	3	1	03/22/12	3/21/12	
Lead, Total Recoverable	6020	0.12 U	ug/L	0.50	0.12	1	03/22/12	3/21/12	
Mercury, Total	7470A	0.02 U	ug/L	0.10	0.02	1	03/22/12	3/22/12	
Nickel, Total Recoverable	6020	<b>0.7 I</b>	ug/L	2.0	0.5	1	03/22/12	3/21/12	
Selenium, Total Recoverable	6020	1.1 U	ug/L	2.0	1.1	1	03/22/12	3/21/12	
Silver, Total Recoverable	6020	0.06 U	ug/L	0.50	0.06	1	03/22/12	3/21/12	
Sodium, Total Recoverable	6010B	<b>25.9</b>	mg/L	0.50	0.03	1	03/22/12	3/21/12	
Thallium, Total Recoverable	6020	0.05 U	ug/L	0.20	0.05	1	03/22/12	3/21/12	
Tin, Total Recoverable	6020	0.2 U	ug/L	5.0	0.2	1	03/22/12	3/21/12	
Vanadium, Total Recoverable	6020	<b>1.4 I</b>	ug/L	2.0	0.3	1	03/22/12	3/21/12	
Zinc, Total Recoverable	6020	<b>7.9</b>	ug/L	5.0	1.6	1	03/22/12	3/21/12	

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water  
**Sample Name:** MW-22RA  
**Lab Code:** J1201300-001

**Service Request:** J1201300  
**Date Collected:** 03/19/12 11:20  
**Date Received:** 03/20/12 09:15  
**Basis:** NA

**General Chemistry Parameters**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Ammonia as Nitrogen	350.1	<b>0.190</b>	mg/L	0.010	0.007	1	03/23/12	NA	
Chloride	300.0	<b>40.7</b>	mg/L	0.50	0.11	1	03/20/12	NA	
Cyanide, Total	335.4	3 U	ug/L	10	3	1	03/21/12	3/21/12	
Nitrate as Nitrogen	300.0	0.03 U	mg/L	0.20	0.03	1	03/20/12	NA	
Solids, Total Dissolved	SM 2540 C	<b>118</b>	mg/L	10	10	1	03/20/12	NA	
Sulfide, Total	SM 4500-S2- F	0.4 U	mg/L	2.0	0.4	1	03/22/12	NA	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 13:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RB  
**Lab Code:** J1201300-002

**Units:** ug/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.190 U	1.00	0.190	1	03/23/12 19:02	
1,1,1-Trichloroethane (TCA)	0.170 U	1.00	0.170	1	03/23/12 19:02	
1,1,2,2-Tetrachloroethane	0.290 U	1.00	0.290	1	03/23/12 19:02	
1,1,2-Trichloroethane	0.400 U	1.00	0.400	1	03/23/12 19:02	
1,1-Dichloroethane (1,1-DCA)	0.300 U	1.00	0.300	1	03/23/12 19:02	
1,1-Dichloroethene (1,1-DCE)	0.160 U	1.00	0.160	1	03/23/12 19:02	
1,1-Dichloropropene	0.320 U	5.00	0.320	1	03/23/12 19:02	
1,2,3-Trichloropropane	0.420 U	2.00	0.420	1	03/23/12 19:02	
1,2,4-Trichlorobenzene	0.340 U	10.0	0.340	1	03/23/12 19:02	
1,2-Dibromo-3-chloropropane (DBCP)	2.30 U	5.00	2.30	1	03/23/12 19:02	
1,2-Dibromoethane (EDB)	0.460 U	1.00	0.460	1	03/23/12 19:02	
1,2-Dichlorobenzene	0.480 U	1.00	0.480	1	03/23/12 19:02	
1,2-Dichloroethane	0.220 U	1.00	0.220	1	03/23/12 19:02	
1,2-Dichloropropane	0.190 U	1.00	0.190	1	03/23/12 19:02	
1,3-Dichlorobenzene	0.220 U	1.00	0.220	1	03/23/12 19:02	
1,3-Dichloropropane	0.180 U	1.00	0.180	1	03/23/12 19:02	
1,4-Dichlorobenzene	0.160 U	1.00	0.160	1	03/23/12 19:02	
2,2-Dichloropropane	0.460 U	1.00	0.460	1	03/23/12 19:02	
2-Butanone (MEK)	3.80 U	10.0	3.80	1	03/23/12 19:02	
2-Hexanone	2.20 U	25.0	2.20	1	03/23/12 19:02	
4-Methyl-2-pentanone (MIBK)	1.10 U	25.0	1.10	1	03/23/12 19:02	
Acetone	5.60 U	50.0	5.60	1	03/23/12 19:02	
Acetonitrile	18.0 U	25.0	18.0	1	03/23/12 19:02	
Acrolein	28.0 U	50.0	28.0	1	03/23/12 19:02	
Acrylonitrile	1.50 U	10.0	1.50	1	03/23/12 19:02	
Allyl Chloride	0.390 U	5.00	0.390	1	03/23/12 19:02	
Benzene	0.210 U	1.00	0.210	1	03/23/12 19:02	
Bromochloromethane	0.270 U	5.00	0.270	1	03/23/12 19:02	
Bromodichloromethane	0.220 U	1.00	0.220	1	03/23/12 19:02	
Bromoform	0.420 U	2.00	0.420	1	03/23/12 19:02	
Bromomethane	0.230 U	5.00	0.230	1	03/23/12 19:02	
Carbon Disulfide	2.40 U	10.0	2.40	1	03/23/12 19:02	
Carbon Tetrachloride	0.340 U	1.00	0.340	1	03/23/12 19:02	
Chlorobenzene	0.160 U	1.00	0.160	1	03/23/12 19:02	
Chloroethane	0.520 U	5.00	0.520	1	03/23/12 19:02	
Chloroform	0.350 U	1.00	0.350	1	03/23/12 19:02	
Chloromethane	0.360 U	1.00	0.360	1	03/23/12 19:02	
Chloroprene	0.120 U	1.00	0.120	1	03/23/12 19:02	
cis-1,2-Dichloroethene	0.360 U	1.00	0.360	1	03/23/12 19:02	
cis-1,3-Dichloropropene	0.200 U	1.00	0.200	1	03/23/12 19:02	
Dibromochloromethane	0.210 U	1.00	0.210	1	03/23/12 19:02	
Dibromomethane	0.360 U	5.00	0.360	1	03/23/12 19:02	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 13:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RB  
**Lab Code:** J1201300-002

**Units:** ug/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Dichlorodifluoromethane	0.230 U	20.0	0.230	1	03/23/12 19:02	
Ethyl Methacrylate	0.350 U	1.00	0.350	1	03/23/12 19:02	
Ethylbenzene	0.210 U	1.00	0.210	1	03/23/12 19:02	
Hexachlorobutadiene	0.600 U	10.0	0.600	1	03/23/12 19:02	
Iodomethane	2.70 U	5.00	2.70	1	03/23/12 19:02	
Isobutyl Alcohol	43.0 U	100	43.0	1	03/23/12 19:02	
m,p-Xylenes	0.310 U	2.00	0.310	1	03/23/12 19:02	
Methacrylonitrile	1.60 U	5.00	1.60	1	03/23/12 19:02	
Methyl Methacrylate	0.490 U	2.00	0.490	1	03/23/12 19:02	
Methylene Chloride	0.210 U	5.00	0.210	1	03/23/12 19:02	
Naphthalene	0.380 U	10.0	0.380	1	03/23/12 19:02	
o-Xylene	0.140 U	1.00	0.140	1	03/23/12 19:02	
Propionitrile	3.90 U	25.0	3.90	1	03/23/12 19:02	
Styrene	0.290 U	1.00	0.290	1	03/23/12 19:02	
Tetrachloroethene (PCE)	0.220 U	1.00	0.220	1	03/23/12 19:02	
Toluene	0.190 U	1.00	0.190	1	03/23/12 19:02	
trans-1,2-Dichloroethene	0.190 U	1.00	0.190	1	03/23/12 19:02	
trans-1,3-Dichloropropene	0.230 U	1.00	0.230	1	03/23/12 19:02	
trans-1,4-Dichloro-2-butene	2.20 U	20.0	2.20	1	03/23/12 19:02	
Trichloroethene (TCE)	0.360 U	1.00	0.360	1	03/23/12 19:02	
Trichlorofluoromethane	0.240 U	20.0	0.240	1	03/23/12 19:02	
Vinyl Acetate	1.90 U	10.0	1.90	1	03/23/12 19:02	
Vinyl Chloride	0.360 U	1.00	0.360	1	03/23/12 19:02	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	93	68 - 118	03/23/12 19:02	
4-Bromofluorobenzene	110	78 - 129	03/23/12 19:02	
Dibromofluoromethane	97	80 - 114	03/23/12 19:02	
Toluene-d8	102	87 - 118	03/23/12 19:02	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 13:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RB  
**Lab Code:** J1201300-002

**Units:** ug/L  
**Basis:** NA

## Semivolatile Organic Compounds by GC/MS

**Analysis Method:** 8270C  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	1.25 U	5.21	1.25	1	03/27/12 17:56	3/21/12	
1,2,4-Trichlorobenzene	0.625 U	5.21	0.625	1	03/27/12 17:56	3/21/12	
1,2-Dichlorobenzene	0.667 U	5.21	0.667	1	03/27/12 17:56	3/21/12	
1,3,5-Trinitrobenzene	1.57 U	5.21	1.57	1	03/27/12 17:56	3/21/12	
1,3-Dichlorobenzene	0.959 U	5.21	0.959	1	03/27/12 17:56	3/21/12	
1,3-Dinitrobenzene	0.667 U	10.4	0.667	1	03/27/12 17:56	3/21/12	
1,4-Dichlorobenzene	0.948 U	5.21	0.948	1	03/27/12 17:56	3/21/12	
1,4-Naphthoquinone	1.67 U	10.4	1.67	1	03/27/12 17:56	3/21/12	
1-Naphthylamine	2.09 U	5.21	2.09	1	03/27/12 17:56	3/21/12	
2,3,4,6-Tetrachlorophenol	1.67 U	5.21	1.67	1	03/27/12 17:56	3/21/12	
2,4,5-Trichlorophenol	1.36 U	5.21	1.36	1	03/27/12 17:56	3/21/12	
2,4,6-Trichlorophenol	0.928 U	5.21	0.928	1	03/27/12 17:56	3/21/12	
2,4-Dichlorophenol	1.25 U	5.21	1.25	1	03/27/12 17:56	3/21/12	
2,4-Dimethylphenol	1.57 U	5.21	1.57	1	03/27/12 17:56	3/21/12	
2,4-Dinitrophenol	0.792 U	20.8	0.792	1	03/27/12 17:56	3/21/12	
2,4-Dinitrotoluene	1.36 U	5.21	1.36	1	03/27/12 17:56	3/21/12	
2,6-Dichlorophenol	1.36 U	10.4	1.36	1	03/27/12 17:56	3/21/12	
2,6-Dinitrotoluene	1.15 U	5.21	1.15	1	03/27/12 17:56	3/21/12	
2-Acetylaminofluorene	1.00 U	5.21	1.00	1	03/27/12 17:56	3/21/12	
2-Chloronaphthalene	4.80 U	5.21	4.80	1	03/27/12 17:56	3/21/12	
2-Chlorophenol	1.25 U	5.21	1.25	1	03/27/12 17:56	3/21/12	
2-Methylnaphthalene	0.657 U	5.21	0.657	1	03/27/12 17:56	3/21/12	
2-Methylphenol	1.36 U	5.21	1.36	1	03/27/12 17:56	3/21/12	
2-Naphthylamine	2.40 U	5.21	2.40	1	03/27/12 17:56	3/21/12	
2-Nitroaniline	1.57 U	5.21	1.57	1	03/27/12 17:56	3/21/12	
2-Nitrophenol	1.46 U	20.8	1.46	1	03/27/12 17:56	3/21/12	
3- and 4-Methylphenol Coelution	1.05 U	5.21	1.05	1	03/27/12 17:56	3/21/12	
3,3'-Dichlorobenzidine	1.46 U	20.8	1.46	1	03/27/12 17:56	3/21/12	
3,3'-Dimethylbenzidine	5.00 U	20.8	5.00	1	03/27/12 17:56	3/21/12	
3-Methylcholanthrene	1.46 U	5.21	1.46	1	03/27/12 17:56	3/21/12	
3-Nitroaniline	1.15 U	5.21	1.15	1	03/27/12 17:56	3/21/12	
4,6-Dinitro-2-methylphenol	1.05 U	20.8	1.05	1	03/27/12 17:56	3/21/12	
4-Aminobiphenyl	1.98 U	5.21	1.98	1	03/27/12 17:56	3/21/12	
4-Bromophenyl Phenyl Ether	1.36 U	5.21	1.36	1	03/27/12 17:56	3/21/12	
4-Chloro-3-methylphenol	1.88 U	5.21	1.88	1	03/27/12 17:56	3/21/12	
4-Chloroaniline	1.46 U	5.21	1.46	1	03/27/12 17:56	3/21/12	
4-Chlorophenyl Phenyl Ether	1.00 U	5.21	1.00	1	03/27/12 17:56	3/21/12	
4-Nitroaniline	1.05 U	5.21	1.05	1	03/27/12 17:56	3/21/12	
4-Nitrophenol	1.88 U	20.8	1.88	1	03/27/12 17:56	3/21/12	
5-Nitro-o-toluidine	1.15 U	5.21	1.15	1	03/27/12 17:56	3/21/12	
7,12-Dimethylbenz(a)anthracene	1.25 U	5.21	1.25	1	03/27/12 17:56	3/21/12	
Acenaphthene	4.38 U	5.21	4.38	1	03/27/12 17:56	3/21/12	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 13:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RB  
**Lab Code:** J1201300-002

**Units:** ug/L  
**Basis:** NA

## Semivolatile Organic Compounds by GC/MS

**Analysis Method:** 8270C  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	1.04 U	5.21	1.04	1	03/27/12 17:56	3/21/12	
Acetophenone	1.67 U	10.4	1.67	1	03/27/12 17:56	3/21/12	
Anthracene	1.67 U	5.21	1.67	1	03/27/12 17:56	3/21/12	
Benz(a)anthracene	1.05 U	5.21	1.05	1	03/27/12 17:56	3/21/12	
Benzo(a)pyrene	1.25 U	5.21	1.25	1	03/27/12 17:56	3/21/12	
Benzo(b)fluoranthene	1.05 U	5.21	1.05	1	03/27/12 17:56	3/21/12	
Benzo(g,h,i)perylene	1.46 U	5.21	1.46	1	03/27/12 17:56	3/21/12	
Benzo(k)fluoranthene	1.88 U	5.21	1.88	1	03/27/12 17:56	3/21/12	
Benzyl Alcohol	1.46 U	5.21	1.46	1	03/27/12 17:56	3/21/12	
Bis(2-chloroethoxy)methane	1.25 U	5.21	1.25	1	03/27/12 17:56	3/21/12	
Bis(2-chloroethyl) Ether	1.98 U	5.21	1.98	1	03/27/12 17:56	3/21/12	
Bis(2-chloroisopropyl) Ether	1.57 U	5.21	1.57	1	03/27/12 17:56	3/21/12	
Bis(2-ethylhexyl) Phthalate	1.57 U	5.21	1.57	1	03/27/12 17:56	3/21/12	
Butyl Benzyl Phthalate	0.896 U	10.4	0.896	1	03/27/12 17:56	3/21/12	
Chlorobenzilate	0.938 U	10.4	0.938	1	03/27/12 17:56	3/21/12	
Chrysene	1.25 U	5.21	1.25	1	03/27/12 17:56	3/21/12	
Diallate	1.78 U	5.21	1.78	1	03/27/12 17:56	3/21/12	
Dibenz(a,h)anthracene	1.57 U	5.21	1.57	1	03/27/12 17:56	3/21/12	
Dibenzofuran	1.36 U	5.21	1.36	1	03/27/12 17:56	3/21/12	
Diethyl Phthalate	1.78 U	5.21	1.78	1	03/27/12 17:56	3/21/12	
Dimethoate	1.98 U	5.21	1.98	1	03/27/12 17:56	3/21/12	
Dimethyl Phthalate	1.36 U	5.21	1.36	1	03/27/12 17:56	3/21/12	
Di-n-butyl Phthalate	2.30 U	5.21	2.30	1	03/27/12 17:56	3/21/12	
Di-n-octyl Phthalate	2.92 U	5.21	2.92	1	03/27/12 17:56	3/21/12	
Dinoseb	2.61 U	5.21	2.61	1	03/27/12 17:56	3/21/12	
Diphenylamine + n-Nitrosodiphenylamine	1.15 U	5.21	1.15	1	03/27/12 17:56	3/21/12	
Disulfoton	1.98 U	5.21	1.98	1	03/27/12 17:56	3/21/12	
Ethyl Methanesulfonate	1.67 U	5.21	1.67	1	03/27/12 17:56	3/21/12	
Famphur	1.98 U	10.4	1.98	1	03/27/12 17:56	3/21/12	
Fluoranthene	1.46 U	5.21	1.46	1	03/27/12 17:56	3/21/12	
Fluorene	0.875 U	5.21	0.875	1	03/27/12 17:56	3/21/12	
Hexachlorobenzene	1.78 U	5.21	1.78	1	03/27/12 17:56	3/21/12	
Hexachlorobutadiene	1.25 U	5.21	1.25	1	03/27/12 17:56	3/21/12	
Hexachlorocyclopentadiene	0.521 U	5.21	0.521	1	03/27/12 17:56	3/21/12	
Hexachloroethane	0.844 U	5.21	0.844	1	03/27/12 17:56	3/21/12	
Hexachloropropene	0.948 U	5.21	0.948	1	03/27/12 17:56	3/21/12	
Indeno(1,2,3-cd)pyrene	1.78 U	5.21	1.78	1	03/27/12 17:56	3/21/12	
Isodrin	1.88 U	10.4	1.88	1	03/27/12 17:56	3/21/12	
Isophorone	1.88 U	5.21	1.88	1	03/27/12 17:56	3/21/12	
Isosafrole	1.04 U	5.21	1.04	1	03/27/12 17:56	3/21/12	
Kepone	3.96 U	52.1	3.96	1	03/27/12 17:56	3/21/12	
Methapyrilene	3.44 U	5.21	3.44	1	03/27/12 17:56	3/21/12	



## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 13:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RB  
**Lab Code:** J1201300-002

**Units:** ug/L  
**Basis:** NA

## Semivolatile Organic Compounds by GC/MS

**Analysis Method:** 8270C  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Methyl Methanesulfonate	1.67 U	5.21	1.67	1	03/27/12 17:56	3/21/12	
Methyl Parathion	2.09 U	10.4	2.09	1	03/27/12 17:56	3/21/12	
Naphthalene	0.553 U	5.21	0.553	1	03/27/12 17:56	3/21/12	
Nitrobenzene	2.19 U	5.21	2.19	1	03/27/12 17:56	3/21/12	
N-Nitrosodiethylamine	1.57 U	5.21	1.57	1	03/27/12 17:56	3/21/12	
N-Nitrosodimethylamine	1.00 U	5.21	1.00	1	03/27/12 17:56	3/21/12	
N-Nitrosodi-n-butylamine	1.57 U	5.21	1.57	1	03/27/12 17:56	3/21/12	
N-Nitrosodi-n-propylamine	2.30 U	5.21	2.30	1	03/27/12 17:56	3/21/12	
N-Nitrosomethylethylamine	1.00 U	5.21	1.00	1	03/27/12 17:56	3/21/12	
N-Nitrosopiperidine	1.36 U	5.21	1.36	1	03/27/12 17:56	3/21/12	
N-Nitrosopyrrolidine	1.78 U	5.21	1.78	1	03/27/12 17:56	3/21/12	
O,O,O-Triethyl Phosphorothioate	0.948 U	20.8	0.948	1	03/27/12 17:56	3/21/12	
o-Toluidine	1.88 U	5.21	1.88	1	03/27/12 17:56	3/21/12	
Parathion	1.78 U	20.8	1.78	1	03/27/12 17:56	3/21/12	
p-Dimethylaminoazobenzene	1.15 U	5.21	1.15	1	03/27/12 17:56	3/21/12	
Pentachlorobenzene	0.928 U	5.21	0.928	1	03/27/12 17:56	3/21/12	
Pentachloronitrobenzene (PCNB)	2.61 U	5.21	2.61	1	03/27/12 17:56	3/21/12	
Pentachlorophenol (PCP)	1.15 U	20.8	1.15	1	03/27/12 17:56	3/21/12	
Phenacetin	2.19 U	5.21	2.19	1	03/27/12 17:56	3/21/12	
Phenanthrene	1.46 U	5.21	1.46	1	03/27/12 17:56	3/21/12	
Phenol	0.615 U	5.21	0.615	1	03/27/12 17:56	3/21/12	
Phorate	1.78 U	5.21	1.78	1	03/27/12 17:56	3/21/12	
p-Phenylenediamine	1.25 U	20.8	1.25	1	03/27/12 17:56	3/21/12	
Pronamide	1.78 U	20.8	1.78	1	03/27/12 17:56	3/21/12	
Pyrene	0.771 U	5.21	0.771	1	03/27/12 17:56	3/21/12	
Safrole	0.896 U	5.21	0.896	1	03/27/12 17:56	3/21/12	
Thionazin	1.88 U	10.4	1.88	1	03/27/12 17:56	3/21/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	74	13 - 133	03/27/12 17:56	
2-Fluorobiphenyl	80	22 - 105	03/27/12 17:56	
2-Fluorophenol	54	10 - 69	03/27/12 17:56	
Nitrobenzene-d5	74	10 - 123	03/27/12 17:56	
Phenol-d6	42	10 - 59	03/27/12 17:56	
p-Terphenyl-d14	58	20 - 128	03/27/12 17:56	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 13:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RB  
**Lab Code:** J1201300-002

**Units:** ug/L  
**Basis:** NA

## Base Neutral Semivolatile Organic Compounds by GC/MS SIM

**Analysis Method:** 8270C SIM  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1-Methylnaphthalene	0.0461 U	0.105	0.0461	1	03/22/12 19:55	3/22/12	
2-Methylnaphthalene	0.0461 U	0.105	0.0461	1	03/22/12 19:55	3/22/12	
Acenaphthene	0.0430 U	0.105	0.0430	1	03/22/12 19:55	3/22/12	
Acenaphthylene	0.0262 U	0.105	0.0262	1	03/22/12 19:55	3/22/12	
Anthracene	0.0398 U	0.105	0.0398	1	03/22/12 19:55	3/22/12	
Benz(a)anthracene	0.0367 U	0.105	0.0367	1	03/22/12 19:55	3/22/12	
Benzo(a)pyrene	0.0325 U	0.105	0.0325	1	03/22/12 19:55	3/22/12	
Benzo(b)fluoranthene	0.0262 U	0.105	0.0262	1	03/22/12 19:55	3/22/12	
Benzo(g,h,i)perylene	0.0409 U	0.105	0.0409	1	03/22/12 19:55	3/22/12	
Benzo(k)fluoranthene	0.0367 U	0.105	0.0367	1	03/22/12 19:55	3/22/12	
Chrysene	0.0252 U	0.105	0.0252	1	03/22/12 19:55	3/22/12	
Dibenz(a,h)anthracene	0.0377 U	0.105	0.0377	1	03/22/12 19:55	3/22/12	
Fluoranthene	0.0409 U	0.105	0.0409	1	03/22/12 19:55	3/22/12	
Fluorene	0.0493 U	0.105	0.0493	1	03/22/12 19:55	3/22/12	
Indeno(1,2,3-cd)pyrene	0.0419 U	0.105	0.0419	1	03/22/12 19:55	3/22/12	
Naphthalene	0.0409 U	0.105	0.0409	1	03/22/12 19:55	3/22/12	
Phenanthrene	0.0367 U	0.105	0.0367	1	03/22/12 19:55	3/22/12	
Pyrene	0.0325 U	0.105	0.0325	1	03/22/12 19:55	3/22/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	47	22 - 105	03/22/12 19:55	
p-Terphenyl-d14	70	25 - 127	03/22/12 19:55	

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 13:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RB  
**Lab Code:** J1201300-002

**Units:** ug/L  
**Basis:** NA

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by Microextraction and Gas Chromatography**

**Analysis Method:** 8011  
**Prep Method:** Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2-Dibromo-3-chloropropane (DBCP)	0.00709 U	0.0202	0.00709	1	03/29/12 22:21	3/29/12	
1,2-Dibromoethane (EDB)	0.00709 U	0.0202	0.00709	1	03/29/12 22:21	3/29/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	72	77 - 150	03/29/12 22:21	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
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**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 13:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RB  
**Lab Code:** J1201300-002

**Units:** ug/L  
**Basis:** NA

## Organochlorine Pesticides by Gas Chromatography

**Analysis Method:** 8081A  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	0.00811 U	0.0211	0.00811	1	03/29/12 04:44	3/26/12	
4,4'-DDE	0.00969 U	0.0211	0.00969	1	03/29/12 04:44	3/26/12	
4,4'-DDT	0.00769 U	0.0211	0.00769	1	03/29/12 04:44	3/26/12	
Aldrin	0.00969 U	0.0211	0.00969	1	03/29/12 04:44	3/26/12	
alpha-BHC	0.0106 U	0.0211	0.0106	1	03/29/12 04:44	3/26/12	
alpha-Chlordane	0.00843 U	0.0211	0.00843	1	03/29/12 04:44	3/26/12	
beta-BHC	0.0190 U	0.0211	0.0190	1	03/29/12 04:44	3/26/12	
Chlordane	0.137 U	0.526	0.137	1	03/29/12 04:44	3/26/12	
delta-BHC	0.0190 U	0.0211	0.0190	1	03/29/12 04:44	3/26/12	
Dieldrin	0.00853 U	0.0211	0.00853	1	03/29/12 04:44	3/26/12	
Endosulfan I	0.00737 U	0.0211	0.00737	1	03/29/12 04:44	3/26/12	
Endosulfan II	0.00748 U	0.0211	0.00748	1	03/29/12 04:44	3/26/12	
Endosulfan Sulfate	0.00779 U	0.0211	0.00779	1	03/29/12 04:44	3/26/12	
Endrin	0.00832 U	0.0211	0.00832	1	03/29/12 04:44	3/26/12	
Endrin Aldehyde	0.00895 U	0.0211	0.00895	1	03/29/12 04:44	3/26/12	
Endrin Ketone	0.00790 U	0.0211	0.00790	1	03/29/12 04:44	3/26/12	
gamma-BHC (Lindane)	0.0190 U	0.0211	0.0190	1	03/29/12 04:44	3/26/12	
gamma-Chlordane	0.00822 U	0.0211	0.00822	1	03/29/12 04:44	3/26/12	
Heptachlor	0.00706 U	0.0211	0.00706	1	03/29/12 04:44	3/26/12	
Heptachlor Epoxide	0.00979 U	0.0211	0.00979	1	03/29/12 04:44	3/26/12	
Methoxychlor	0.00811 U	0.0421	0.00811	1	03/29/12 04:44	3/26/12	
Toxaphene	0.274 U	0.526	0.274	1	03/29/12 04:44	3/26/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	41	10 - 160	03/29/12 04:44	
Tetrachloro-m-xylene	59	22 - 126	03/29/12 04:44	

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 13:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RB  
**Lab Code:** J1201300-002

**Units:** ug/L  
**Basis:** NA

**Polychlorinated Biphenyls (PCBs) by GC**

**Analysis Method:** 8082  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.137 U	0.526	0.137	1	03/29/12 04:44	3/26/12	
Aroclor 1221	0.211 U	0.526	0.211	1	03/29/12 04:44	3/26/12	
Aroclor 1232	0.243 U	0.526	0.243	1	03/29/12 04:44	3/26/12	
Aroclor 1242	0.390 U	0.526	0.390	1	03/29/12 04:44	3/26/12	
Aroclor 1248	0.200 U	0.526	0.200	1	03/29/12 04:44	3/26/12	
Aroclor 1254	0.106 U	0.526	0.106	1	03/29/12 04:44	3/26/12	
Aroclor 1260	0.527 U	0.527	0.527	1	03/29/12 04:44	3/26/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	41	10 - 151	03/29/12 04:44	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 13:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RB  
**Lab Code:** J1201300-002

**Basis:** NA

## Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Dissolved	6020	0.2 U	ug/L	1.0	0.2	1	03/26/12	3/23/12	
Antimony, Total Recoverable	6020	<b>0.3 I</b>	ug/L	1.0	0.2	1	03/22/12	3/21/12	
Arsenic, Dissolved	6020	<b>0.7 I</b>	ug/L	1.0	0.5	1	03/26/12	3/23/12	
Arsenic, Total Recoverable	6020	<b>2.7</b>	ug/L	1.0	0.5	1	03/22/12	3/21/12	
Barium, Dissolved	6020	<b>19.4</b>	ug/L	2.0	0.5	1	03/26/12	3/23/12	
Barium, Total Recoverable	6020	<b>197</b>	ug/L	2.0	0.5	1	03/22/12	3/21/12	
Beryllium, Dissolved	6020	<b>0.04 I</b>	ug/L	0.50	0.04	1	03/26/12	3/23/12	
Beryllium, Total Recoverable	6020	<b>0.52</b>	ug/L	0.50	0.04	1	03/22/12	3/21/12	
Cadmium, Dissolved	6020	0.10 U	ug/L	0.40	0.10	1	03/26/12	3/23/12	
Cadmium, Total Recoverable	6020	<b>0.75</b>	ug/L	0.40	0.10	1	03/22/12	3/21/12	
Chromium, Dissolved	6020	<b>1.0 I</b>	ug/L	1.0	0.2	1	03/26/12	3/23/12	
Chromium, Total Recoverable	6020	<b>17.1</b>	ug/L	1.0	0.2	1	03/22/12	3/21/12	
Cobalt, Dissolved	6020	<b>0.4 I</b>	ug/L	1.0	0.03	1	03/26/12	3/23/12	
Cobalt, Total Recoverable	6020	<b>2.8</b>	ug/L	1.0	0.03	1	03/22/12	3/21/12	
Copper, Dissolved	6020	0.3 U	ug/L	1.0	0.3	1	03/26/12	3/23/12	
Copper, Total Recoverable	6020	<b>4.7</b>	ug/L	1.0	0.3	1	03/22/12	3/21/12	
Iron, Dissolved	6010B	<b>1610</b>	ug/L	100	3	1	03/26/12	3/22/12	
Iron, Total Recoverable	6010B	<b>2930</b>	ug/L	100	3	1	03/22/12	3/21/12	
Lead, Dissolved	6020	<b>0.28 I</b>	ug/L	0.50	0.12	1	03/26/12	3/23/12	
Lead, Total Recoverable	6020	<b>11.4</b>	ug/L	0.50	0.12	1	03/22/12	3/21/12	
Mercury, Dissolved	7470A	0.07 U	ug/L	0.10	0.07	1	03/22/12	3/22/12	
Mercury, Total	7470A	<b>0.16</b>	ug/L	0.10	0.02	1	03/22/12	3/22/12	
Nickel, Dissolved	6020	0.5 U	ug/L	2.0	0.5	1	03/26/12	3/23/12	
Nickel, Total Recoverable	6020	<b>5.9</b>	ug/L	2.0	0.5	1	03/22/12	3/21/12	
Selenium, Dissolved	6020	1.1 U	ug/L	2.0	1.1	1	03/26/12	3/23/12	
Selenium, Total Recoverable	6020	<b>4.1</b>	ug/L	2.0	1.1	1	03/22/12	3/21/12	
Silver, Dissolved	6020	0.06 U	ug/L	0.50	0.06	1	03/26/12	3/23/12	
Silver, Total Recoverable	6020	0.06 U	ug/L	0.50	0.06	1	03/22/12	3/21/12	
Sodium, Dissolved	6010B	<b>15.9</b>	mg/L	0.50	0.03	1	03/26/12	3/22/12	
Sodium, Total Recoverable	6010B	<b>16.0</b>	mg/L	0.50	0.03	1	03/22/12	3/21/12	
Thallium, Dissolved	6020	0.05 U	ug/L	0.20	0.05	1	03/26/12	3/23/12	
Thallium, Total Recoverable	6020	<b>0.11 I</b>	ug/L	0.20	0.05	1	03/22/12	3/21/12	
Tin, Dissolved	6020	0.2 U	ug/L	5.0	0.2	1	03/26/12	3/23/12	
Tin, Total Recoverable	6020	0.2 U	ug/L	5.0	0.2	1	03/22/12	3/21/12	
Vanadium, Dissolved	6020	<b>2.0 I</b>	ug/L	2.0	0.3	1	03/26/12	3/23/12	
Vanadium, Total Recoverable	6020	<b>27.0</b>	ug/L	2.0	0.3	1	03/22/12	3/21/12	
Zinc, Dissolved	6020	<b>4.0 I</b>	ug/L	5.0	1.6	1	03/26/12	3/23/12	
Zinc, Total Recoverable	6020	<b>7.4</b>	ug/L	5.0	1.6	1	03/22/12	3/21/12	



**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water  
**Sample Name:** MW-22RB  
**Lab Code:** J1201300-002

**Service Request:** J1201300  
**Date Collected:** 03/19/12 13:50  
**Date Received:** 03/20/12 09:15  
**Basis:** NA

**General Chemistry Parameters**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Ammonia as Nitrogen	350.1	<b>0.278</b>	mg/L	0.010	0.007	1	03/23/12	NA	
Chloride	300.0	<b>29.0</b>	mg/L	0.50	0.11	1	03/20/12	NA	
Cyanide, Total	335.4	3 U	ug/L	10	3	1	03/21/12	3/21/12	
Nitrate as Nitrogen	300.0	0.03 U	mg/L	0.20	0.03	1	03/20/12	NA	
Solids, Total Dissolved	SM 2540 C	<b>238</b>	mg/L	10	10	1	03/20/12	NA	
Sulfide, Total	SM 4500-S2- F	<b>1.4 I</b>	mg/L	2.0	0.4	1	03/22/12	NA	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 12:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RC  
**Lab Code:** J1201300-003

**Units:** ug/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.190 U	1.00	0.190	1	03/23/12 19:32	
1,1,1-Trichloroethane (TCA)	0.170 U	1.00	0.170	1	03/23/12 19:32	
1,1,2,2-Tetrachloroethane	0.290 U	1.00	0.290	1	03/23/12 19:32	
1,1,2-Trichloroethane	0.400 U	1.00	0.400	1	03/23/12 19:32	
1,1-Dichloroethane (1,1-DCA)	0.300 U	1.00	0.300	1	03/23/12 19:32	
1,1-Dichloroethene (1,1-DCE)	0.160 U	1.00	0.160	1	03/23/12 19:32	
1,1-Dichloropropene	0.320 U	5.00	0.320	1	03/23/12 19:32	
1,2,3-Trichloropropane	0.420 U	2.00	0.420	1	03/23/12 19:32	
1,2,4-Trichlorobenzene	0.340 U	10.0	0.340	1	03/23/12 19:32	
1,2-Dibromo-3-chloropropane (DBCP)	2.30 U	5.00	2.30	1	03/23/12 19:32	
1,2-Dibromoethane (EDB)	0.460 U	1.00	0.460	1	03/23/12 19:32	
1,2-Dichlorobenzene	0.480 U	1.00	0.480	1	03/23/12 19:32	
1,2-Dichloroethane	0.220 U	1.00	0.220	1	03/23/12 19:32	
1,2-Dichloropropane	0.190 U	1.00	0.190	1	03/23/12 19:32	
1,3-Dichlorobenzene	0.220 U	1.00	0.220	1	03/23/12 19:32	
1,3-Dichloropropane	0.180 U	1.00	0.180	1	03/23/12 19:32	
1,4-Dichlorobenzene	0.160 U	1.00	0.160	1	03/23/12 19:32	
2,2-Dichloropropane	0.460 U	1.00	0.460	1	03/23/12 19:32	
2-Butanone (MEK)	3.80 U	10.0	3.80	1	03/23/12 19:32	
2-Hexanone	2.20 U	25.0	2.20	1	03/23/12 19:32	
4-Methyl-2-pentanone (MIBK)	1.10 U	25.0	1.10	1	03/23/12 19:32	
Acetone	5.60 U	50.0	5.60	1	03/23/12 19:32	
Acetonitrile	18.0 U	25.0	18.0	1	03/23/12 19:32	
Acrolein	28.0 U	50.0	28.0	1	03/23/12 19:32	
Acrylonitrile	1.50 U	10.0	1.50	1	03/23/12 19:32	
Allyl Chloride	0.390 U	5.00	0.390	1	03/23/12 19:32	
Benzene	0.210 U	1.00	0.210	1	03/23/12 19:32	
Bromochloromethane	0.270 U	5.00	0.270	1	03/23/12 19:32	
Bromodichloromethane	0.220 U	1.00	0.220	1	03/23/12 19:32	
Bromoform	0.420 U	2.00	0.420	1	03/23/12 19:32	
Bromomethane	0.230 U	5.00	0.230	1	03/23/12 19:32	
Carbon Disulfide	2.40 U	10.0	2.40	1	03/23/12 19:32	
Carbon Tetrachloride	0.340 U	1.00	0.340	1	03/23/12 19:32	
Chlorobenzene	0.160 U	1.00	0.160	1	03/23/12 19:32	
Chloroethane	0.520 U	5.00	0.520	1	03/23/12 19:32	
Chloroform	0.350 U	1.00	0.350	1	03/23/12 19:32	
Chloromethane	0.360 U	1.00	0.360	1	03/23/12 19:32	
Chloroprene	0.120 U	1.00	0.120	1	03/23/12 19:32	
cis-1,2-Dichloroethene	0.360 U	1.00	0.360	1	03/23/12 19:32	
cis-1,3-Dichloropropene	0.200 U	1.00	0.200	1	03/23/12 19:32	
Dibromochloromethane	0.210 U	1.00	0.210	1	03/23/12 19:32	
Dibromomethane	0.360 U	5.00	0.360	1	03/23/12 19:32	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 12:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RC  
**Lab Code:** J1201300-003

**Units:** ug/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Dichlorodifluoromethane	0.230 U	20.0	0.230	1	03/23/12 19:32	
Ethyl Methacrylate	0.350 U	1.00	0.350	1	03/23/12 19:32	
Ethylbenzene	0.210 U	1.00	0.210	1	03/23/12 19:32	
Hexachlorobutadiene	0.600 U	10.0	0.600	1	03/23/12 19:32	
Iodomethane	2.70 U	5.00	2.70	1	03/23/12 19:32	
Isobutyl Alcohol	43.0 U	100	43.0	1	03/23/12 19:32	
m,p-Xylenes	0.310 U	2.00	0.310	1	03/23/12 19:32	
Methacrylonitrile	1.60 U	5.00	1.60	1	03/23/12 19:32	
Methyl Methacrylate	0.490 U	2.00	0.490	1	03/23/12 19:32	
Methylene Chloride	0.210 U	5.00	0.210	1	03/23/12 19:32	
Naphthalene	0.380 U	10.0	0.380	1	03/23/12 19:32	
o-Xylene	0.140 U	1.00	0.140	1	03/23/12 19:32	
Propionitrile	3.90 U	25.0	3.90	1	03/23/12 19:32	
Styrene	0.290 U	1.00	0.290	1	03/23/12 19:32	
Tetrachloroethene (PCE)	0.220 U	1.00	0.220	1	03/23/12 19:32	
Toluene	0.190 U	1.00	0.190	1	03/23/12 19:32	
trans-1,2-Dichloroethene	0.190 U	1.00	0.190	1	03/23/12 19:32	
trans-1,3-Dichloropropene	0.230 U	1.00	0.230	1	03/23/12 19:32	
trans-1,4-Dichloro-2-butene	2.20 U	20.0	2.20	1	03/23/12 19:32	
Trichloroethene (TCE)	0.360 U	1.00	0.360	1	03/23/12 19:32	
Trichlorofluoromethane	0.240 U	20.0	0.240	1	03/23/12 19:32	
Vinyl Acetate	1.90 U	10.0	1.90	1	03/23/12 19:32	
Vinyl Chloride	0.360 U	1.00	0.360	1	03/23/12 19:32	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	94	68 - 118	03/23/12 19:32	
4-Bromofluorobenzene	111	78 - 129	03/23/12 19:32	
Dibromofluoromethane	97	80 - 114	03/23/12 19:32	
Toluene-d8	98	87 - 118	03/23/12 19:32	

## COLUMBIA ANALYTICAL SERVICES, INC.

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## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 12:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RC  
**Lab Code:** J1201300-003

**Units:** ug/L  
**Basis:** NA

## Semivolatile Organic Compounds by GC/MS

**Analysis Method:** 8270C  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	1.28 U	5.32	1.28	1	03/27/12 18:39	3/21/12	
1,2,4-Trichlorobenzene	0.639 U	5.32	0.639	1	03/27/12 18:39	3/21/12	
1,2-Dichlorobenzene	0.681 U	5.32	0.681	1	03/27/12 18:39	3/21/12	
1,3,5-Trinitrobenzene	1.60 U	5.32	1.60	1	03/27/12 18:39	3/21/12	
1,3-Dichlorobenzene	0.979 U	5.32	0.979	1	03/27/12 18:39	3/21/12	
1,3-Dinitrobenzene	0.681 U	10.6	0.681	1	03/27/12 18:39	3/21/12	
1,4-Dichlorobenzene	0.969 U	5.32	0.969	1	03/27/12 18:39	3/21/12	
1,4-Naphthoquinone	1.71 U	10.6	1.71	1	03/27/12 18:39	3/21/12	
1-Naphthylamine	2.13 U	5.32	2.13	1	03/27/12 18:39	3/21/12	
2,3,4,6-Tetrachlorophenol	1.71 U	5.32	1.71	1	03/27/12 18:39	3/21/12	
2,4,5-Trichlorophenol	1.39 U	5.32	1.39	1	03/27/12 18:39	3/21/12	
2,4,6-Trichlorophenol	0.947 U	5.32	0.947	1	03/27/12 18:39	3/21/12	
2,4-Dichlorophenol	1.28 U	5.32	1.28	1	03/27/12 18:39	3/21/12	
2,4-Dimethylphenol	1.60 U	5.32	1.60	1	03/27/12 18:39	3/21/12	
2,4-Dinitrophenol	0.809 U	21.3	0.809	1	03/27/12 18:39	3/21/12	
2,4-Dinitrotoluene	1.39 U	5.32	1.39	1	03/27/12 18:39	3/21/12	
2,6-Dichlorophenol	1.39 U	10.6	1.39	1	03/27/12 18:39	3/21/12	
2,6-Dinitrotoluene	1.18 U	5.32	1.18	1	03/27/12 18:39	3/21/12	
2-Acetylaminofluorene	1.03 U	5.32	1.03	1	03/27/12 18:39	3/21/12	
2-Chloronaphthalene	4.90 U	5.32	4.90	1	03/27/12 18:39	3/21/12	
2-Chlorophenol	1.28 U	5.32	1.28	1	03/27/12 18:39	3/21/12	
2-Methylnaphthalene	0.671 U	5.32	0.671	1	03/27/12 18:39	3/21/12	
2-Methylphenol	1.39 U	5.32	1.39	1	03/27/12 18:39	3/21/12	
2-Naphthylamine	2.45 U	5.32	2.45	1	03/27/12 18:39	3/21/12	
2-Nitroaniline	1.60 U	5.32	1.60	1	03/27/12 18:39	3/21/12	
2-Nitrophenol	1.49 U	21.3	1.49	1	03/27/12 18:39	3/21/12	
3- and 4-Methylphenol Coelution	1.07 U	5.32	1.07	1	03/27/12 18:39	3/21/12	
3,3'-Dichlorobenzidine	1.49 U	21.3	1.49	1	03/27/12 18:39	3/21/12	
3,3'-Dimethylbenzidine	5.11 U	21.3	5.11	1	03/27/12 18:39	3/21/12	
3-Methylcholanthrene	1.49 U	5.32	1.49	1	03/27/12 18:39	3/21/12	
3-Nitroaniline	1.18 U	5.32	1.18	1	03/27/12 18:39	3/21/12	
4,6-Dinitro-2-methylphenol	1.07 U	21.3	1.07	1	03/27/12 18:39	3/21/12	
4-Aminobiphenyl	2.03 U	5.32	2.03	1	03/27/12 18:39	3/21/12	
4-Bromophenyl Phenyl Ether	1.39 U	5.32	1.39	1	03/27/12 18:39	3/21/12	
4-Chloro-3-methylphenol	1.92 U	5.32	1.92	1	03/27/12 18:39	3/21/12	
4-Chloroaniline	1.49 U	5.32	1.49	1	03/27/12 18:39	3/21/12	
4-Chlorophenyl Phenyl Ether	1.03 U	5.32	1.03	1	03/27/12 18:39	3/21/12	
4-Nitroaniline	1.07 U	5.32	1.07	1	03/27/12 18:39	3/21/12	
4-Nitrophenol	1.92 U	21.3	1.92	1	03/27/12 18:39	3/21/12	
5-Nitro-o-toluidine	1.18 U	5.32	1.18	1	03/27/12 18:39	3/21/12	
7,12-Dimethylbenz(a)anthracene	1.28 U	5.32	1.28	1	03/27/12 18:39	3/21/12	
Acenaphthene	4.47 U	5.32	4.47	1	03/27/12 18:39	3/21/12	

## COLUMBIA ANALYTICAL SERVICES, INC.

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## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 12:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RC  
**Lab Code:** J1201300-003

**Units:** ug/L  
**Basis:** NA

## Semivolatile Organic Compounds by GC/MS

**Analysis Method:** 8270C  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	1.06 U	5.32	1.06	1	03/27/12 18:39	3/21/12	
Acetophenone	1.71 U	10.6	1.71	1	03/27/12 18:39	3/21/12	
Anthracene	1.71 U	5.32	1.71	1	03/27/12 18:39	3/21/12	
Benz(a)anthracene	1.07 U	5.32	1.07	1	03/27/12 18:39	3/21/12	
Benzo(a)pyrene	1.28 U	5.32	1.28	1	03/27/12 18:39	3/21/12	
Benzo(b)fluoranthene	1.07 U	5.32	1.07	1	03/27/12 18:39	3/21/12	
Benzo(g,h,i)perylene	1.49 U	5.32	1.49	1	03/27/12 18:39	3/21/12	
Benzo(k)fluoranthene	1.92 U	5.32	1.92	1	03/27/12 18:39	3/21/12	
Benzyl Alcohol	1.49 U	5.32	1.49	1	03/27/12 18:39	3/21/12	
Bis(2-chloroethoxy)methane	1.28 U	5.32	1.28	1	03/27/12 18:39	3/21/12	
Bis(2-chloroethyl) Ether	2.03 U	5.32	2.03	1	03/27/12 18:39	3/21/12	
Bis(2-chloroisopropyl) Ether	1.60 U	5.32	1.60	1	03/27/12 18:39	3/21/12	
Bis(2-ethylhexyl) Phthalate	1.60 U	5.32	1.60	1	03/27/12 18:39	3/21/12	
Butyl Benzyl Phthalate	0.915 U	10.6	0.915	1	03/27/12 18:39	3/21/12	
Chlorobenzilate	0.958 U	10.6	0.958	1	03/27/12 18:39	3/21/12	
Chrysene	1.28 U	5.32	1.28	1	03/27/12 18:39	3/21/12	
Diallate	1.81 U	5.32	1.81	1	03/27/12 18:39	3/21/12	
Dibenz(a,h)anthracene	1.60 U	5.32	1.60	1	03/27/12 18:39	3/21/12	
Dibenzofuran	1.39 U	5.32	1.39	1	03/27/12 18:39	3/21/12	
Diethyl Phthalate	1.81 U	5.32	1.81	1	03/27/12 18:39	3/21/12	
Dimethoate	2.03 U	5.32	2.03	1	03/27/12 18:39	3/21/12	
Dimethyl Phthalate	1.39 U	5.32	1.39	1	03/27/12 18:39	3/21/12	
Di-n-butyl Phthalate	2.35 U	5.32	2.35	1	03/27/12 18:39	3/21/12	
Di-n-octyl Phthalate	2.98 U	5.32	2.98	1	03/27/12 18:39	3/21/12	
Dinoseb	2.66 U	5.32	2.66	1	03/27/12 18:39	3/21/12	
Diphenylamine + n-Nitrosodiphenylamine	1.18 U	5.32	1.18	1	03/27/12 18:39	3/21/12	
Disulfoton	2.03 U	5.32	2.03	1	03/27/12 18:39	3/21/12	
Ethyl Methanesulfonate	1.71 U	5.32	1.71	1	03/27/12 18:39	3/21/12	
Famphur	2.03 U	10.6	2.03	1	03/27/12 18:39	3/21/12	
Fluoranthene	1.49 U	5.32	1.49	1	03/27/12 18:39	3/21/12	
Fluorene	0.894 U	5.32	0.894	1	03/27/12 18:39	3/21/12	
Hexachlorobenzene	1.81 U	5.32	1.81	1	03/27/12 18:39	3/21/12	
Hexachlorobutadiene	1.28 U	5.32	1.28	1	03/27/12 18:39	3/21/12	
Hexachlorocyclopentadiene	0.532 U	5.32	0.532	1	03/27/12 18:39	3/21/12	
Hexachloroethane	0.862 U	5.32	0.862	1	03/27/12 18:39	3/21/12	
Hexachloropropene	0.969 U	5.32	0.969	1	03/27/12 18:39	3/21/12	
Indeno(1,2,3-cd)pyrene	1.81 U	5.32	1.81	1	03/27/12 18:39	3/21/12	
Isodrin	1.92 U	10.6	1.92	1	03/27/12 18:39	3/21/12	
Isophorone	1.92 U	5.32	1.92	1	03/27/12 18:39	3/21/12	
Isosafrole	1.06 U	5.32	1.06	1	03/27/12 18:39	3/21/12	
Kepone	4.05 U	53.2	4.05	1	03/27/12 18:39	3/21/12	
Methapyrilene	3.52 U	5.32	3.52	1	03/27/12 18:39	3/21/12	



## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 12:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RC  
**Lab Code:** J1201300-003

**Units:** ug/L  
**Basis:** NA

## Semivolatile Organic Compounds by GC/MS

**Analysis Method:** 8270C  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Methyl Methanesulfonate	1.71 U	5.32	1.71	1	03/27/12 18:39	3/21/12	
Methyl Parathion	2.13 U	10.6	2.13	1	03/27/12 18:39	3/21/12	
Naphthalene	0.564 U	5.32	0.564	1	03/27/12 18:39	3/21/12	
Nitrobenzene	2.24 U	5.32	2.24	1	03/27/12 18:39	3/21/12	
N-Nitrosodiethylamine	1.60 U	5.32	1.60	1	03/27/12 18:39	3/21/12	
N-Nitrosodimethylamine	1.03 U	5.32	1.03	1	03/27/12 18:39	3/21/12	
N-Nitrosodi-n-butylamine	1.60 U	5.32	1.60	1	03/27/12 18:39	3/21/12	
N-Nitrosodi-n-propylamine	2.35 U	5.32	2.35	1	03/27/12 18:39	3/21/12	
N-Nitrosomethylethylamine	1.03 U	5.32	1.03	1	03/27/12 18:39	3/21/12	
N-Nitrosopiperidine	1.39 U	5.32	1.39	1	03/27/12 18:39	3/21/12	
N-Nitrosopyrrolidine	1.81 U	5.32	1.81	1	03/27/12 18:39	3/21/12	
O,O,O-Triethyl Phosphorothioate	0.969 U	21.3	0.969	1	03/27/12 18:39	3/21/12	
o-Toluidine	1.92 U	5.32	1.92	1	03/27/12 18:39	3/21/12	
Parathion	1.81 U	21.3	1.81	1	03/27/12 18:39	3/21/12	
p-Dimethylaminoazobenzene	1.18 U	5.32	1.18	1	03/27/12 18:39	3/21/12	
Pentachlorobenzene	0.947 U	5.32	0.947	1	03/27/12 18:39	3/21/12	
Pentachloronitrobenzene (PCNB)	2.66 U	5.32	2.66	1	03/27/12 18:39	3/21/12	
Pentachlorophenol (PCP)	1.18 U	21.3	1.18	1	03/27/12 18:39	3/21/12	
Phenacetin	2.24 U	5.32	2.24	1	03/27/12 18:39	3/21/12	
Phenanthrene	1.49 U	5.32	1.49	1	03/27/12 18:39	3/21/12	
Phenol	0.628 U	5.32	0.628	1	03/27/12 18:39	3/21/12	
Phorate	1.81 U	5.32	1.81	1	03/27/12 18:39	3/21/12	
p-Phenylenediamine	1.28 U	21.3	1.28	1	03/27/12 18:39	3/21/12	
Pronamide	1.81 U	21.3	1.81	1	03/27/12 18:39	3/21/12	
Pyrene	0.788 U	5.32	0.788	1	03/27/12 18:39	3/21/12	
Safrole	0.915 U	5.32	0.915	1	03/27/12 18:39	3/21/12	
Thionazin	1.92 U	10.6	1.92	1	03/27/12 18:39	3/21/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	69	13 - 133	03/27/12 18:39	
2-Fluorobiphenyl	86	22 - 105	03/27/12 18:39	
2-Fluorophenol	59	10 - 69	03/27/12 18:39	
Nitrobenzene-d5	78	10 - 123	03/27/12 18:39	
Phenol-d6	44	10 - 59	03/27/12 18:39	
p-Terphenyl-d14	70	20 - 128	03/27/12 18:39	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 12:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RC  
**Lab Code:** J1201300-003

**Units:** ug/L  
**Basis:** NA

## Base Neutral Semivolatile Organic Compounds by GC/MS SIM

**Analysis Method:** 8270C SIM  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1-Methylnaphthalene	0.0481 U	0.109	0.0481	1	03/22/12 20:16	3/22/12	
2-Methylnaphthalene	0.0481 U	0.109	0.0481	1	03/22/12 20:16	3/22/12	
Acenaphthene	0.0449 U	0.109	0.0449	1	03/22/12 20:16	3/22/12	
Acenaphthylene	0.0274 U	0.109	0.0274	1	03/22/12 20:16	3/22/12	
Anthracene	0.0416 U	0.109	0.0416	1	03/22/12 20:16	3/22/12	
Benz(a)anthracene	0.0383 U	0.109	0.0383	1	03/22/12 20:16	3/22/12	
Benzo(a)pyrene	0.0339 U	0.109	0.0339	1	03/22/12 20:16	3/22/12	
Benzo(b)fluoranthene	0.0274 U	0.109	0.0274	1	03/22/12 20:16	3/22/12	
Benzo(g,h,i)perylene	0.0427 U	0.109	0.0427	1	03/22/12 20:16	3/22/12	
Benzo(k)fluoranthene	0.0383 U	0.109	0.0383	1	03/22/12 20:16	3/22/12	
Chrysene	0.0263 U	0.109	0.0263	1	03/22/12 20:16	3/22/12	
Dibenz(a,h)anthracene	0.0394 U	0.109	0.0394	1	03/22/12 20:16	3/22/12	
Fluoranthene	0.0427 U	0.109	0.0427	1	03/22/12 20:16	3/22/12	
Fluorene	0.0514 U	0.109	0.0514	1	03/22/12 20:16	3/22/12	
Indeno(1,2,3-cd)pyrene	0.0438 U	0.109	0.0438	1	03/22/12 20:16	3/22/12	
Naphthalene	0.0427 U	0.109	0.0427	1	03/22/12 20:16	3/22/12	
Phenanthrene	0.0383 U	0.109	0.0383	1	03/22/12 20:16	3/22/12	
Pyrene	0.0339 U	0.109	0.0339	1	03/22/12 20:16	3/22/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	67	22 - 105	03/22/12 20:16	
p-Terphenyl-d14	85	25 - 127	03/22/12 20:16	

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 12:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RC  
**Lab Code:** J1201300-003

**Units:** ug/L  
**Basis:** NA

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by Microextraction and Gas Chromatography**

**Analysis Method:** 8011  
**Prep Method:** Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2-Dibromo-3-chloropropane (DBCP)	0.00703 U	0.0201	0.00703	1	03/29/12 22:41	3/29/12	
1,2-Dibromoethane (EDB)	0.00703 U	0.0201	0.00703	1	03/29/12 22:41	3/29/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	87	77 - 150	03/29/12 22:41	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 12:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RC  
**Lab Code:** J1201300-003

**Units:** ug/L  
**Basis:** NA

## Organochlorine Pesticides by Gas Chromatography

**Analysis Method:** 8081A  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	0.00811 U	0.0211	0.00811	1	03/29/12 05:09	3/26/12	
4,4'-DDE	0.00969 U	0.0211	0.00969	1	03/29/12 05:09	3/26/12	
4,4'-DDT	0.00769 U	0.0211	0.00769	1	03/29/12 05:09	3/26/12	
Aldrin	0.00969 U	0.0211	0.00969	1	03/29/12 05:09	3/26/12	
alpha-BHC	0.0106 U	0.0211	0.0106	1	03/29/12 05:09	3/26/12	
alpha-Chlordane	0.00843 U	0.0211	0.00843	1	03/29/12 05:09	3/26/12	
beta-BHC	0.0190 U	0.0211	0.0190	1	03/29/12 05:09	3/26/12	
Chlordane	0.137 U	0.526	0.137	1	03/29/12 05:09	3/26/12	
delta-BHC	0.0190 U	0.0211	0.0190	1	03/29/12 05:09	3/26/12	
Dieldrin	0.00853 U	0.0211	0.00853	1	03/29/12 05:09	3/26/12	
Endosulfan I	0.00737 U	0.0211	0.00737	1	03/29/12 05:09	3/26/12	
Endosulfan II	0.00748 U	0.0211	0.00748	1	03/29/12 05:09	3/26/12	
Endosulfan Sulfate	0.00779 U	0.0211	0.00779	1	03/29/12 05:09	3/26/12	
Endrin	0.00832 U	0.0211	0.00832	1	03/29/12 05:09	3/26/12	
Endrin Aldehyde	0.00895 U	0.0211	0.00895	1	03/29/12 05:09	3/26/12	
Endrin Ketone	0.00790 U	0.0211	0.00790	1	03/29/12 05:09	3/26/12	
gamma-BHC (Lindane)	0.0190 U	0.0211	0.0190	1	03/29/12 05:09	3/26/12	
gamma-Chlordane	0.00822 U	0.0211	0.00822	1	03/29/12 05:09	3/26/12	
Heptachlor	0.00706 U	0.0211	0.00706	1	03/29/12 05:09	3/26/12	
Heptachlor Epoxide	0.00979 U	0.0211	0.00979	1	03/29/12 05:09	3/26/12	
Methoxychlor	0.00811 U	0.0421	0.00811	1	03/29/12 05:09	3/26/12	
Toxaphene	0.274 U	0.526	0.274	1	03/29/12 05:09	3/26/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	34	10 - 160	03/29/12 05:09	
Tetrachloro-m-xylene	64	22 - 126	03/29/12 05:09	

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 12:50  
**Date Received:** 03/20/12 09:15

**Sample Name:** MW-22RC  
**Lab Code:** J1201300-003

**Units:** ug/L  
**Basis:** NA

**Polychlorinated Biphenyls (PCBs) by GC**

**Analysis Method:** 8082  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.137 U	0.526	0.137	1	03/29/12 05:09	3/26/12	
Aroclor 1221	0.211 U	0.526	0.211	1	03/29/12 05:09	3/26/12	
Aroclor 1232	0.243 U	0.526	0.243	1	03/29/12 05:09	3/26/12	
Aroclor 1242	0.390 U	0.526	0.390	1	03/29/12 05:09	3/26/12	
Aroclor 1248	0.200 U	0.526	0.200	1	03/29/12 05:09	3/26/12	
Aroclor 1254	0.106 U	0.526	0.106	1	03/29/12 05:09	3/26/12	
Aroclor 1260	0.527 U	0.527	0.527	1	03/29/12 05:09	3/26/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	34	10 - 151	03/29/12 05:09	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water  
**Sample Name:** MW-22RC  
**Lab Code:** J1201300-003

**Service Request:** J1201300  
**Date Collected:** 03/19/12 12:50  
**Date Received:** 03/20/12 09:15

**Basis:** NA

## Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020	0.2 U	ug/L	1.0	0.2	1	03/22/12	3/21/12	
Arsenic, Total Recoverable	6020	3.3	ug/L	1.0	0.5	1	03/22/12	3/21/12	
Barium, Total Recoverable	6020	142	ug/L	2.0	0.5	1	03/22/12	3/21/12	
Beryllium, Total Recoverable	6020	0.78	ug/L	0.50	0.04	1	03/22/12	3/21/12	
Cadmium, Total Recoverable	6020	0.23 I	ug/L	0.40	0.10	1	03/22/12	3/21/12	
Chromium, Total Recoverable	6020	19.7	ug/L	1.0	0.2	1	03/22/12	3/21/12	
Cobalt, Total Recoverable	6020	0.9 I	ug/L	1.0	0.03	1	03/22/12	3/21/12	
Copper, Total Recoverable	6020	1.8	ug/L	1.0	0.3	1	03/22/12	3/21/12	
Iron, Total Recoverable	6010B	3820	ug/L	100	3	1	03/22/12	3/21/12	
Lead, Total Recoverable	6020	4.90	ug/L	0.50	0.12	1	03/22/12	3/21/12	
Mercury, Total	7470A	0.04 I	ug/L	0.10	0.02	1	03/22/12	3/22/12	
Nickel, Total Recoverable	6020	2.8	ug/L	2.0	0.5	1	03/22/12	3/21/12	
Selenium, Total Recoverable	6020	1.1 U	ug/L	2.0	1.1	1	03/22/12	3/21/12	
Silver, Total Recoverable	6020	0.06 U	ug/L	0.50	0.06	1	03/22/12	3/21/12	
Sodium, Total Recoverable	6010B	7.10	mg/L	0.50	0.03	1	03/22/12	3/21/12	
Thallium, Total Recoverable	6020	0.06 I	ug/L	0.20	0.05	1	03/22/12	3/21/12	
Tin, Total Recoverable	6020	0.2 I	ug/L	5.0	0.2	1	03/22/12	3/21/12	
Vanadium, Total Recoverable	6020	20.7	ug/L	2.0	0.3	1	03/22/12	3/21/12	
Zinc, Total Recoverable	6020	5.4	ug/L	5.0	1.6	1	03/22/12	3/21/12	

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water  
**Sample Name:** MW-22RC  
**Lab Code:** J1201300-003

**Service Request:** J1201300  
**Date Collected:** 03/19/12 12:50  
**Date Received:** 03/20/12 09:15  
**Basis:** NA

**General Chemistry Parameters**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Ammonia as Nitrogen	350.1	<b>0.270</b>	mg/L	0.010	0.007	1	03/23/12	NA	
Chloride	300.0	<b>9.29</b>	mg/L	0.50	0.11	1	03/20/12	NA	
Cyanide, Total	335.4	3 U	ug/L	10	3	1	03/21/12	3/21/12	
Nitrate as Nitrogen	300.0	0.03 U	mg/L	0.20	0.03	1	03/20/12	NA	
Solids, Total Dissolved	SM 2540 C	<b>148</b>	mg/L	10	10	1	03/20/12	NA	
Sulfide, Total	SM 4500-S2- F	<b>1.3 I</b>	mg/L	2.0	0.4	1	03/22/12	NA	



## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 00:00  
**Date Received:** 03/20/12 09:15

**Sample Name:** Trip Blank  
**Lab Code:** J1201300-004

**Units:** ug/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.190 U	1.00	0.190	1	03/23/12 20:02	
1,1,1-Trichloroethane (TCA)	0.170 U	1.00	0.170	1	03/23/12 20:02	
1,1,2,2-Tetrachloroethane	0.290 U	1.00	0.290	1	03/23/12 20:02	
1,1,2-Trichloroethane	0.400 U	1.00	0.400	1	03/23/12 20:02	
1,1-Dichloroethane (1,1-DCA)	0.300 U	1.00	0.300	1	03/23/12 20:02	
1,1-Dichloroethene (1,1-DCE)	0.160 U	1.00	0.160	1	03/23/12 20:02	
1,1-Dichloropropene	0.320 U	5.00	0.320	1	03/23/12 20:02	
1,2,3-Trichloropropane	0.420 U	2.00	0.420	1	03/23/12 20:02	
1,2,4-Trichlorobenzene	0.340 U	10.0	0.340	1	03/23/12 20:02	
1,2-Dibromo-3-chloropropane (DBCP)	2.30 U	5.00	2.30	1	03/23/12 20:02	
1,2-Dibromoethane (EDB)	0.460 U	1.00	0.460	1	03/23/12 20:02	
1,2-Dichlorobenzene	0.480 U	1.00	0.480	1	03/23/12 20:02	
1,2-Dichloroethane	0.220 U	1.00	0.220	1	03/23/12 20:02	
1,2-Dichloropropane	0.190 U	1.00	0.190	1	03/23/12 20:02	
1,3-Dichlorobenzene	0.220 U	1.00	0.220	1	03/23/12 20:02	
1,3-Dichloropropane	0.180 U	1.00	0.180	1	03/23/12 20:02	
1,4-Dichlorobenzene	0.160 U	1.00	0.160	1	03/23/12 20:02	
2,2-Dichloropropane	0.460 U	1.00	0.460	1	03/23/12 20:02	
2-Butanone (MEK)	3.80 U	10.0	3.80	1	03/23/12 20:02	
2-Hexanone	2.20 U	25.0	2.20	1	03/23/12 20:02	
4-Methyl-2-pentanone (MIBK)	1.10 U	25.0	1.10	1	03/23/12 20:02	
Acetone	5.60 U	50.0	5.60	1	03/23/12 20:02	
Acetonitrile	18.0 U	25.0	18.0	1	03/23/12 20:02	
Acrolein	28.0 U	50.0	28.0	1	03/23/12 20:02	
Acrylonitrile	1.50 U	10.0	1.50	1	03/23/12 20:02	
Allyl Chloride	0.390 U	5.00	0.390	1	03/23/12 20:02	
Benzene	0.210 U	1.00	0.210	1	03/23/12 20:02	
Bromochloromethane	0.270 U	5.00	0.270	1	03/23/12 20:02	
Bromodichloromethane	0.220 U	1.00	0.220	1	03/23/12 20:02	
Bromoform	0.420 U	2.00	0.420	1	03/23/12 20:02	
Bromomethane	0.230 U	5.00	0.230	1	03/23/12 20:02	
Carbon Disulfide	2.40 U	10.0	2.40	1	03/23/12 20:02	
Carbon Tetrachloride	0.340 U	1.00	0.340	1	03/23/12 20:02	
Chlorobenzene	0.160 U	1.00	0.160	1	03/23/12 20:02	
Chloroethane	0.520 U	5.00	0.520	1	03/23/12 20:02	
Chloroform	0.350 U	1.00	0.350	1	03/23/12 20:02	
Chloromethane	0.360 U	1.00	0.360	1	03/23/12 20:02	
Chloroprene	0.120 U	1.00	0.120	1	03/23/12 20:02	
cis-1,2-Dichloroethene	0.360 U	1.00	0.360	1	03/23/12 20:02	
cis-1,3-Dichloropropene	0.200 U	1.00	0.200	1	03/23/12 20:02	
Dibromochloromethane	0.210 U	1.00	0.210	1	03/23/12 20:02	
Dibromomethane	0.360 U	5.00	0.360	1	03/23/12 20:02	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12 00:00  
**Date Received:** 03/20/12 09:15

**Sample Name:** Trip Blank  
**Lab Code:** J1201300-004

**Units:** ug/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Dichlorodifluoromethane	0.230 U	20.0	0.230	1	03/23/12 20:02	
Ethyl Methacrylate	0.350 U	1.00	0.350	1	03/23/12 20:02	
Ethylbenzene	0.210 U	1.00	0.210	1	03/23/12 20:02	
Hexachlorobutadiene	0.600 U	10.0	0.600	1	03/23/12 20:02	
Iodomethane	2.70 U	5.00	2.70	1	03/23/12 20:02	
Isobutyl Alcohol	43.0 U	100	43.0	1	03/23/12 20:02	
m,p-Xylenes	0.310 U	2.00	0.310	1	03/23/12 20:02	
Methacrylonitrile	1.60 U	5.00	1.60	1	03/23/12 20:02	
Methyl Methacrylate	0.490 U	2.00	0.490	1	03/23/12 20:02	
Methylene Chloride	0.210 U	5.00	0.210	1	03/23/12 20:02	
Naphthalene	0.380 U	10.0	0.380	1	03/23/12 20:02	
o-Xylene	0.140 U	1.00	0.140	1	03/23/12 20:02	
Propionitrile	3.90 U	25.0	3.90	1	03/23/12 20:02	
Styrene	0.290 U	1.00	0.290	1	03/23/12 20:02	
Tetrachloroethene (PCE)	0.220 U	1.00	0.220	1	03/23/12 20:02	
Toluene	0.190 U	1.00	0.190	1	03/23/12 20:02	
trans-1,2-Dichloroethene	0.190 U	1.00	0.190	1	03/23/12 20:02	
trans-1,3-Dichloropropene	0.230 U	1.00	0.230	1	03/23/12 20:02	
trans-1,4-Dichloro-2-butene	2.20 U	20.0	2.20	1	03/23/12 20:02	
Trichloroethene (TCE)	0.360 U	1.00	0.360	1	03/23/12 20:02	
Trichlorofluoromethane	0.240 U	20.0	0.240	1	03/23/12 20:02	
Vinyl Acetate	1.90 U	10.0	1.90	1	03/23/12 20:02	
Vinyl Chloride	0.360 U	1.00	0.360	1	03/23/12 20:02	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	94	68 - 118	03/23/12 20:02	
4-Bromofluorobenzene	110	78 - 129	03/23/12 20:02	
Dibromofluoromethane	95	80 - 114	03/23/12 20:02	
Toluene-d8	101	87 - 118	03/23/12 20:02	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** JQ1201767-04

**Units:** ug/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.190 U	1.00	0.190	1	03/23/12 15:33	
1,1,1-Trichloroethane (TCA)	0.170 U	1.00	0.170	1	03/23/12 15:33	
1,1,2,2-Tetrachloroethane	0.290 U	1.00	0.290	1	03/23/12 15:33	
1,1,2-Trichloroethane	0.400 U	1.00	0.400	1	03/23/12 15:33	
1,1-Dichloroethane (1,1-DCA)	0.300 U	1.00	0.300	1	03/23/12 15:33	
1,1-Dichloroethene (1,1-DCE)	0.160 U	1.00	0.160	1	03/23/12 15:33	
1,1-Dichloropropene	0.320 U	5.00	0.320	1	03/23/12 15:33	
1,2,3-Trichloropropane	0.420 U	2.00	0.420	1	03/23/12 15:33	
1,2,4-Trichlorobenzene	0.340 U	10.0	0.340	1	03/23/12 15:33	
1,2-Dibromo-3-chloropropane (DBCP)	2.30 U	5.00	2.30	1	03/23/12 15:33	
1,2-Dibromoethane (EDB)	0.460 U	1.00	0.460	1	03/23/12 15:33	
1,2-Dichlorobenzene	0.480 U	1.00	0.480	1	03/23/12 15:33	
1,2-Dichloroethane	0.220 U	1.00	0.220	1	03/23/12 15:33	
1,2-Dichloropropane	0.190 U	1.00	0.190	1	03/23/12 15:33	
1,3-Dichlorobenzene	0.220 U	1.00	0.220	1	04/23/12 15:33	
1,3-Dichloropropane	0.180 U	1.00	0.180	1	03/23/12 15:33	
1,4-Dichlorobenzene	0.160 U	1.00	0.160	1	03/23/12 15:33	
2,2-Dichloropropane	0.460 U	1.00	0.460	1	03/23/12 15:33	
2-Butanone (MEK)	3.80 U	10.0	3.80	1	03/23/12 15:33	
2-Hexanone	2.20 U	25.0	2.20	1	03/23/12 15:33	
4-Methyl-2-pentanone (MIBK)	1.10 U	25.0	1.10	1	03/23/12 15:33	
Acetone	5.60 U	50.0	5.60	1	03/23/12 15:33	
Acetonitrile	18.0 U	25.0	18.0	1	03/23/12 15:33	
Acrolein	28.0 U	50.0	28.0	1	03/23/12 15:33	
Acrylonitrile	1.50 U	10.0	1.50	1	03/23/12 15:33	
Allyl Chloride	0.390 U	5.00	0.390	1	03/23/12 15:33	
Benzene	0.210 U	1.00	0.210	1	03/23/12 15:33	
Bromochloromethane	0.270 U	5.00	0.270	1	03/23/12 15:33	
Bromodichloromethane	0.220 U	1.00	0.220	1	03/23/12 15:33	
Bromoform	0.420 U	2.00	0.420	1	03/23/12 15:33	
Bromomethane	0.230 U	5.00	0.230	1	03/23/12 15:33	
Carbon Disulfide	2.40 U	10.0	2.40	1	03/23/12 15:33	
Carbon Tetrachloride	0.340 U	1.00	0.340	1	03/23/12 15:33	
Chlorobenzene	0.160 U	1.00	0.160	1	03/23/12 15:33	
Chloroethane	0.520 U	5.00	0.520	1	03/23/12 15:33	
Chloroform	0.350 U	1.00	0.350	1	03/23/12 15:33	
Chloromethane	0.360 U	1.00	0.360	1	03/23/12 15:33	
Chloroprene	0.120 U	1.00	0.120	1	03/23/12 15:33	
cis-1,2-Dichloroethene	0.360 U	1.00	0.360	1	03/23/12 15:33	
cis-1,3-Dichloropropene	0.200 U	1.00	0.200	1	03/23/12 15:33	
Dibromochloromethane	0.210 U	1.00	0.210	1	03/23/12 15:33	
Dibromomethane	0.360 U	5.00	0.360	1	03/23/12 15:33	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** JQ1201767-04

**Units:** ug/L  
**Basis:** NA

## Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Dichlorodifluoromethane	0.230 U	20.0	0.230	1	03/23/12 15:33	
Ethyl Methacrylate	0.350 U	1.00	0.350	1	03/23/12 15:33	
Ethylbenzene	0.210 U	1.00	0.210	1	03/23/12 15:33	
Hexachlorobutadiene	0.600 U	10.0	0.600	1	03/23/12 15:33	
Iodomethane	2.70 U	5.00	2.70	1	03/23/12 15:33	
Isobutyl Alcohol	43.0 U	100	43.0	1	03/23/12 15:33	
m,p-Xylenes	0.310 U	2.00	0.310	1	03/23/12 15:33	
Methacrylonitrile	1.60 U	5.00	1.60	1	03/23/12 15:33	
Methyl Methacrylate	0.490 U	2.00	0.490	1	03/23/12 15:33	
Methylene Chloride	0.210 U	5.00	0.210	1	03/23/12 15:33	
Naphthalene	0.380 U	10.0	0.380	1	03/23/12 15:33	
o-Xylene	0.140 U	1.00	0.140	1	03/23/12 15:33	
Propionitrile	3.90 U	25.0	3.90	1	03/23/12 15:33	
Styrene	0.290 U	1.00	0.290	1	03/23/12 15:33	
Tetrachloroethene (PCE)	0.220 U	1.00	0.220	1	03/23/12 15:33	
Toluene	0.190 U	1.00	0.190	1	03/23/12 15:33	
trans-1,2-Dichloroethene	0.190 U	1.00	0.190	1	03/23/12 15:33	
trans-1,3-Dichloropropene	0.230 U	1.00	0.230	1	03/23/12 15:33	
trans-1,4-Dichloro-2-butene	2.20 U	20.0	2.20	1	03/23/12 15:33	
Trichloroethene (TCE)	0.360 U	1.00	0.360	1	03/23/12 15:33	
Trichlorofluoromethane	0.240 U	20.0	0.240	1	03/23/12 15:33	
Vinyl Acetate	1.90 U	10.0	1.90	1	03/23/12 15:33	
Vinyl Chloride	0.360 U	1.00	0.360	1	03/23/12 15:33	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	95	68 - 118	03/23/12 15:33	
4-Bromofluorobenzene	109	78 - 129	03/23/12 15:33	
Dibromofluoromethane	98	80 - 114	03/23/12 15:33	
Toluene-d8	101	87 - 118	03/23/12 15:33	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** JQ1201701-01

**Units:** ug/L  
**Basis:** NA

## Semivolatile Organic Compounds by GC/MS

**Analysis Method:** 8270C  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	1.20 U	5.00	1.20	1	03/26/12 05:49	3/21/12	
1,2,4-Trichlorobenzene	0.600 U	5.00	0.600	1	03/29/12 04:13	3/21/12	
1,2-Dichlorobenzene	0.640 U	5.00	0.640	1	03/29/12 04:13	3/21/12	
1,3,5-Trinitrobenzene	1.50 U	5.00	1.50	1	03/26/12 05:49	3/21/12	
1,3-Dichlorobenzene	0.920 U	5.00	0.920	1	03/29/12 04:13	3/21/12	
1,3-Dinitrobenzene	0.640 U	10.0	0.640	1	03/26/12 05:49	3/21/12	
1,4-Dichlorobenzene	0.910 U	5.00	0.910	1	03/29/12 04:13	3/21/12	
1,4-Naphthoquinone	1.60 U	10.0	1.60	1	03/26/12 05:49	3/21/12	
1-Naphthylamine	2.00 U	5.00	2.00	1	03/26/12 05:49	3/21/12	
2,3,4,6-Tetrachlorophenol	1.60 U	5.00	1.60	1	03/26/12 05:49	3/21/12	
2,4,5-Trichlorophenol	1.30 U	5.00	1.30	1	03/29/12 04:13	3/21/12	
2,4,6-Trichlorophenol	0.890 U	5.00	0.890	1	03/29/12 04:13	3/21/12	
2,4-Dichlorophenol	1.20 U	5.00	1.20	1	03/29/12 04:13	3/21/12	
2,4-Dimethylphenol	1.50 U	5.00	1.50	1	03/29/12 04:13	3/21/12	
2,4-Dinitrophenol	0.760 U	20.0	0.760	1	03/29/12 04:13	3/21/12	
2,4-Dinitrotoluene	1.30 U	5.00	1.30	1	03/29/12 04:13	3/21/12	
2,6-Dichlorophenol	1.30 U	10.0	1.30	1	03/26/12 05:49	3/21/12	
2,6-Dinitrotoluene	1.10 U	5.00	1.10	1	03/29/12 04:13	3/21/12	
2-Acetylaminofluorene	0.960 U	5.00	0.960	1	03/26/12 05:49	3/21/12	
2-Chloronaphthalene	4.60 U	5.00	4.60	1	03/29/12 04:13	3/21/12	
2-Chlorophenol	1.20 U	5.00	1.20	1	03/29/12 04:13	3/21/12	
2-Methylnaphthalene	0.630 U	5.00	0.630	1	03/29/12 04:13	3/21/12	
2-Methylphenol	1.30 U	5.00	1.30	1	03/29/12 04:13	3/21/12	
2-Naphthylamine	2.30 U	5.00	2.30	1	03/26/12 05:49	3/21/12	
2-Nitroaniline	1.50 U	5.00	1.50	1	03/29/12 04:13	3/21/12	
2-Nitrophenol	1.40 U	20.0	1.40	1	03/29/12 04:13	3/21/12	
3- and 4-Methylphenol Coelution	1.00 U	5.00	1.00	1	03/29/12 04:13	3/21/12	
3,3'-Dichlorobenzidine	1.40 U	20.0	1.40	1	03/29/12 04:13	3/21/12	
3,3'-Dimethylbenzidine	4.80 U	20.0	4.80	1	03/26/12 05:49	3/21/12	
3-Methylcholanthrene	1.40 U	5.00	1.40	1	03/26/12 05:49	3/21/12	
3-Nitroaniline	1.10 U	5.00	1.10	1	03/29/12 04:13	3/21/12	
4,6-Dinitro-2-methylphenol	1.00 U	20.0	1.00	1	03/29/12 04:13	3/21/12	
4-Aminobiphenyl	1.90 U	5.00	1.90	1	03/26/12 05:49	3/21/12	
4-Bromophenyl Phenyl Ether	1.30 U	5.00	1.30	1	03/29/12 04:13	3/21/12	
4-Chloro-3-methylphenol	1.80 U	5.00	1.80	1	03/29/12 04:13	3/21/12	
4-Chloroaniline	1.40 U	5.00	1.40	1	03/29/12 04:13	3/21/12	
4-Chlorophenyl Phenyl Ether	0.960 U	5.00	0.960	1	03/29/12 04:13	3/21/12	
4-Nitroaniline	1.00 U	5.00	1.00	1	03/29/12 04:13	3/21/12	
4-Nitrophenol	1.80 U	20.0	1.80	1	03/29/12 04:13	3/21/12	
5-Nitro-o-toluidine	1.10 U	5.00	1.10	1	03/26/12 05:49	3/21/12	
7,12-Dimethylbenz(a)anthracene	1.20 U	5.00	1.20	1	03/26/12 05:49	3/21/12	
Acenaphthene	4.20 U	5.00	4.20	1	03/29/12 04:13	3/21/12	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** JQ1201701-01

**Units:** ug/L  
**Basis:** NA

## Semivolatile Organic Compounds by GC/MS

**Analysis Method:** 8270C  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthylene	0.990 U	5.00	0.990	1	03/29/12 04:13	3/21/12	
Acetophenone	1.60 U	10.0	1.60	1	03/29/12 04:13	3/21/12	
Anthracene	1.60 U	5.00	1.60	1	03/29/12 04:13	3/21/12	
Benz(a)anthracene	1.00 U	5.00	1.00	1	03/29/12 04:13	3/21/12	
Benzo(a)pyrene	1.20 U	5.00	1.20	1	03/29/12 04:13	3/21/12	
Benzo(b)fluoranthene	1.00 U	5.00	1.00	1	03/29/12 04:13	3/21/12	
Benzo(g,h,i)perylene	1.40 U	5.00	1.40	1	03/29/12 04:13	3/21/12	
Benzo(k)fluoranthene	1.80 U	5.00	1.80	1	03/29/12 04:13	3/21/12	
Benzyl Alcohol	1.40 U	5.00	1.40	1	03/29/12 04:13	3/21/12	
Bis(2-chloroethoxy)methane	1.20 U	5.00	1.20	1	03/29/12 04:13	3/21/12	
Bis(2-chloroethyl) Ether	1.90 U	5.00	1.90	1	03/29/12 04:13	3/21/12	
Bis(2-chloroisopropyl) Ether	1.50 U	5.00	1.50	1	03/29/12 04:13	3/21/12	
Bis(2-ethylhexyl) Phthalate	1.50 U	5.00	1.50	1	03/29/12 04:13	3/21/12	
Butyl Benzyl Phthalate	0.860 U	10.0	0.860	1	03/29/12 04:13	3/21/12	
Chlorobenzilate	0.900 U	10.0	0.900	1	03/26/12 05:49	3/21/12	
Chrysene	1.20 U	5.00	1.20	1	03/29/12 04:13	3/21/12	
Diallate	1.70 U	5.00	1.70	1	03/26/12 05:49	3/21/12	
Dibenz(a,h)anthracene	1.50 U	5.00	1.50	1	03/29/12 04:13	3/21/12	
Dibenzofuran	1.30 U	5.00	1.30	1	03/29/12 04:13	3/21/12	
Diethyl Phthalate	1.70 U	5.00	1.70	1	03/29/12 04:13	3/21/12	
Dimethoate	1.90 U	5.00	1.90	1	03/26/12 05:49	3/21/12	
Dimethyl Phthalate	1.30 U	5.00	1.30	1	03/29/12 04:13	3/21/12	
Di-n-butyl Phthalate	2.20 U	5.00	2.20	1	03/29/12 04:13	3/21/12	
Di-n-octyl Phthalate	2.80 U	5.00	2.80	1	03/29/12 04:13	3/21/12	
Dinoseb	2.50 U	5.00	2.50	1	03/26/12 05:49	3/21/12	
Diphenylamine + n-Nitrosodiphenylamine	1.10 U	5.00	1.10	1	03/29/12 04:13	3/21/12	
Disulfoton	1.90 U	5.00	1.90	1	03/26/12 05:49	3/21/12	
Ethyl Methanesulfonate	1.60 U	5.00	1.60	1	03/26/12 05:49	3/21/12	
Famphur	1.90 U	10.0	1.90	1	03/29/12 04:13	3/21/12	
Fluoranthene	1.40 U	5.00	1.40	1	03/29/12 04:13	3/21/12	
Fluorene	0.840 U	5.00	0.840	1	03/29/12 04:13	3/21/12	
Hexachlorobenzene	1.70 U	5.00	1.70	1	03/29/12 04:13	3/21/12	
Hexachlorobutadiene	1.20 U	5.00	1.20	1	03/29/12 04:13	3/21/12	
Hexachlorocyclopentadiene	0.500 U	5.00	0.500	1	03/29/12 04:13	3/21/12	
Hexachloroethane	0.810 U	5.00	0.810	1	03/29/12 04:13	3/21/12	
Hexachloropropene	0.910 U	5.00	0.910	1	03/26/12 05:49	3/21/12	
Indeno(1,2,3-cd)pyrene	1.70 U	5.00	1.70	1	03/29/12 04:13	3/21/12	
Isodrin	1.80 U	10.0	1.80	1	03/26/12 05:49	3/21/12	
Isophorone	1.80 U	5.00	1.80	1	03/29/12 04:13	3/21/12	
Isosafrole	0.990 U	5.00	0.990	1	03/26/12 05:49	3/21/12	
Kepone	3.80 U	50.0	3.80	1	03/29/12 04:13	3/21/12	
Methapyrilene	3.30 U	5.00	3.30	1	03/26/12 05:49	3/21/12	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** JQ1201701-01

**Units:** ug/L  
**Basis:** NA

## Semivolatile Organic Compounds by GC/MS

**Analysis Method:** 8270C  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Methyl Methanesulfonate	1.60 U	5.00	1.60	1	03/26/12 05:49	3/21/12	
Methyl Parathion	2.00 U	10.0	2.00	1	03/26/12 05:49	3/21/12	
Naphthalene	0.530 U	5.00	0.530	1	03/29/12 04:13	3/21/12	
Nitrobenzene	2.10 U	5.00	2.10	1	03/29/12 04:13	3/21/12	
N-Nitrosodiethylamine	1.50 U	5.00	1.50	1	03/26/12 05:49	3/21/12	
N-Nitrosodimethylamine	0.960 U	5.00	0.960	1	03/26/12 05:49	3/21/12	
N-Nitrosodi-n-butylamine	1.50 U	5.00	1.50	1	03/26/12 05:49	3/21/12	
N-Nitrosodi-n-propylamine	2.20 U	5.00	2.20	1	03/29/12 04:13	3/21/12	
N-Nitrosomethylethylamine	0.960 U	5.00	0.960	1	03/26/12 05:49	3/21/12	
N-Nitrosopiperidine	1.30 U	5.00	1.30	1	03/26/12 05:49	3/21/12	
N-Nitrosopyrrolidine	1.70 U	5.00	1.70	1	03/26/12 05:49	3/21/12	
O,O,O-Triethyl Phosphorothioate	0.910 U	20.0	0.910	1	03/26/12 05:49	3/21/12	
o-Toluidine	1.80 U	5.00	1.80	1	03/26/12 05:49	3/21/12	
Parathion	1.70 U	20.0	1.70	1	03/26/12 05:49	3/21/12	
p-Dimethylaminoazobenzene	1.10 U	5.00	1.10	1	03/26/12 05:49	3/21/12	
Pentachlorobenzene	0.890 U	5.00	0.890	1	03/26/12 05:49	3/21/12	
Pentachloronitrobenzene (PCNB)	2.50 U	5.00	2.50	1	03/26/12 05:49	3/21/12	
Pentachlorophenol (PCP)	1.10 U	20.0	1.10	1	03/29/12 04:13	3/21/12	
Phenacetin	2.10 U	5.00	2.10	1	03/26/12 05:49	3/21/12	
Phenanthrene	1.40 U	5.00	1.40	1	03/29/12 04:13	3/21/12	
Phenol	0.590 U	5.00	0.590	1	03/29/12 04:13	3/21/12	
Phorate	1.70 U	5.00	1.70	1	03/26/12 05:49	3/21/12	
p-Phenylenediamine	1.20 U	20.0	1.20	1	03/26/12 05:49	3/21/12	
Pronamide	1.70 U	20.0	1.70	1	03/26/12 05:49	3/21/12	
Pyrene	0.740 U	5.00	0.740	1	03/29/12 04:13	3/21/12	
Safrole	0.860 U	5.00	0.860	1	03/26/12 05:49	3/21/12	
Thionazin	1.80 U	10.0	1.80	1	03/26/12 05:49	3/21/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	92	13 - 133	03/29/12 04:13	
2-Fluorobiphenyl	81	22 - 105	03/29/12 04:13	
2-Fluorophenol	68	10 - 69	03/29/12 04:13	
Nitrobenzene-d5	82	10 - 123	03/29/12 04:13	
Phenol-d6	48	10 - 59	03/29/12 04:13	
p-Terphenyl-d14	95	20 - 128	03/29/12 04:13	



## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** JQ1201702-01

**Units:** ug/L  
**Basis:** NA

## Base Neutral Semivolatile Organic Compounds by GC/MS SIM

**Analysis Method:** 8270C SIM  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1-Methylnaphthalene	0.0440 U	0.100	0.0440	1	03/22/12 17:31	3/22/12	
2-Methylnaphthalene	0.0440 U	0.100	0.0440	1	03/22/12 17:31	3/22/12	
Acenaphthene	0.0410 U	0.100	0.0410	1	03/22/12 17:31	3/22/12	
Acenaphthylene	0.0250 U	0.100	0.0250	1	03/22/12 17:31	3/22/12	
Anthracene	0.0380 U	0.100	0.0380	1	03/22/12 17:31	3/22/12	
Benz(a)anthracene	0.0350 U	0.100	0.0350	1	03/22/12 17:31	3/22/12	
Benzo(a)pyrene	0.0310 U	0.100	0.0310	1	03/22/12 17:31	3/22/12	
Benzo(b)fluoranthene	0.0250 U	0.100	0.0250	1	03/22/12 17:31	3/22/12	
Benzo(g,h,i)perylene	0.0390 U	0.100	0.0390	1	03/22/12 17:31	3/22/12	
Benzo(k)fluoranthene	0.0350 U	0.100	0.0350	1	03/22/12 17:31	3/22/12	
Chrysene	0.0240 U	0.100	0.0240	1	03/22/12 17:31	3/22/12	
Dibenz(a,h)anthracene	0.0360 U	0.100	0.0360	1	03/22/12 17:31	3/22/12	
Fluoranthene	0.0390 U	0.100	0.0390	1	03/22/12 17:31	3/22/12	
Fluorene	0.0470 U	0.100	0.0470	1	03/22/12 17:31	3/22/12	
Indeno(1,2,3-cd)pyrene	0.0400 U	0.100	0.0400	1	03/22/12 17:31	3/22/12	
Naphthalene	0.0390 U	0.100	0.0390	1	03/22/12 17:31	3/22/12	
Phenanthrene	0.0350 U	0.100	0.0350	1	03/22/12 17:31	3/22/12	
Pyrene	0.0310 U	0.100	0.0310	1	03/22/12 17:31	3/22/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	59	22 - 105	03/22/12 17:31	
p-Terphenyl-d14	95	25 - 127	03/22/12 17:31	

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** JQ1201718-01

**Units:** ug/L  
**Basis:** NA

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by Microextraction and Gas Chromatography**

**Analysis Method:** 8011  
**Prep Method:** Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2-Dibromo-3-chloropropane (DBCP)	0.00700 U	0.0200	0.00700	1	03/23/12 16:51	3/22/12	
1,2-Dibromoethane (EDB)	0.00700 U	0.0200	0.00700	1	03/23/12 16:51	3/22/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	75	77 - 150	03/23/12 16:51	

**COLUMBIA ANALYTICAL SERVICES, INC.**

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## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** JQ1201884-01

**Units:** ug/L  
**Basis:** NA

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by Microextraction and Gas Chromatography**

**Analysis Method:** 8011  
**Prep Method:** Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2-Dibromo-3-chloropropane (DBCP)	0.00700 U	0.0200	0.00700	1	03/29/12 21:02	3/29/12	
1,2-Dibromoethane (EDB)	0.00700 U	0.0200	0.00700	1	03/29/12 21:02	3/29/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	89	77 - 150	03/29/12 21:02	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** JQ1201804-01

**Units:** ug/L  
**Basis:** NA

## Organochlorine Pesticides by Gas Chromatography

**Analysis Method:** 8081A  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
4,4'-DDD	0.00770 U	0.0200	0.00770	1	03/29/12 02:14	3/26/12	
4,4'-DDE	0.00920 U	0.0200	0.00920	1	03/29/12 02:14	3/26/12	
4,4'-DDT	0.00730 U	0.0200	0.00730	1	03/29/12 02:14	3/26/12	
Aldrin	0.00920 U	0.0200	0.00920	1	03/29/12 02:14	3/26/12	
alpha-BHC	0.0100 U	0.0200	0.0100	1	03/29/12 02:14	3/26/12	
alpha-Chlordane	0.00800 U	0.0200	0.00800	1	03/29/12 02:14	3/26/12	
beta-BHC	0.0180 U	0.0200	0.0180	1	03/29/12 02:14	3/26/12	
Chlordane	0.130 U	0.500	0.130	1	03/29/12 02:14	3/26/12	
delta-BHC	0.0180 U	0.0200	0.0180	1	03/29/12 02:14	3/26/12	
Dieldrin	0.00810 U	0.0200	0.00810	1	03/29/12 02:14	3/26/12	
Endosulfan I	0.00700 U	0.0200	0.00700	1	03/29/12 02:14	3/26/12	
Endosulfan II	0.00710 U	0.0200	0.00710	1	03/29/12 02:14	3/26/12	
Endosulfan Sulfate	0.00740 U	0.0200	0.00740	1	03/29/12 02:14	3/26/12	
Endrin	0.00790 U	0.0200	0.00790	1	03/29/12 02:14	3/26/12	
Endrin Aldehyde	0.00850 U	0.0200	0.00850	1	03/29/12 02:14	3/26/12	
Endrin Ketone	0.00750 U	0.0200	0.00750	1	03/29/12 02:14	3/26/12	
gamma-BHC (Lindane)	0.0180 U	0.0200	0.0180	1	03/29/12 02:14	3/26/12	
gamma-Chlordane	0.00780 U	0.0200	0.00780	1	03/29/12 02:14	3/26/12	
Heptachlor	0.00670 U	0.0200	0.00670	1	03/29/12 02:14	3/26/12	
Heptachlor Epoxide	0.00930 U	0.0200	0.00930	1	03/29/12 02:14	3/26/12	
Methoxychlor	0.00770 U	0.0400	0.00770	1	03/29/12 02:14	3/26/12	
Toxaphene	0.260 U	0.500	0.260	1	03/29/12 02:14	3/26/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	66	10 - 160	03/29/12 02:14	
Tetrachloro-m-xylene	64	22 - 126	03/29/12 02:14	

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** JQ1201804-01

**Units:** ug/L  
**Basis:** NA

**Polychlorinated Biphenyls (PCBs) by GC**

**Analysis Method:** 8082  
**Prep Method:** EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.130 U	0.500	0.130	1	03/29/12 02:14	3/26/12	
Aroclor 1221	0.200 U	0.500	0.200	1	03/29/12 02:14	3/26/12	
Aroclor 1232	0.230 U	0.500	0.230	1	03/29/12 02:14	3/26/12	
Aroclor 1242	0.370 U	0.500	0.370	1	03/29/12 02:14	3/26/12	
Aroclor 1248	0.190 U	0.500	0.190	1	03/29/12 02:14	3/26/12	
Aroclor 1254	0.100 U	0.500	0.100	1	03/29/12 02:14	3/26/12	
Aroclor 1260	0.500 U	0.500	0.500	1	03/29/12 02:14	3/26/12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	66	10 - 151	03/29/12 02:14	

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** J1201300-MB

**Basis:** NA

## Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Dissolved	6020	0.2 U	ug/L	1.0	0.2	1	03/26/12	3/23/12	
Antimony, Total Recoverable	6020	0.2 U	ug/L	1.0	0.2	1	03/22/12	3/21/12	
Arsenic, Dissolved	6020	0.5 U	ug/L	1.0	0.5	1	03/26/12	3/23/12	
Arsenic, Total Recoverable	6020	0.5 U	ug/L	1.0	0.5	1	03/22/12	3/21/12	
Barium, Dissolved	6020	0.5 U	ug/L	2.0	0.5	1	03/26/12	3/23/12	
Barium, Total Recoverable	6020	0.5 U	ug/L	2.0	0.5	1	03/22/12	3/21/12	
Beryllium, Dissolved	6020	0.04 U	ug/L	0.50	0.04	1	03/26/12	3/23/12	
Beryllium, Total Recoverable	6020	0.04 U	ug/L	0.50	0.04	1	03/22/12	3/21/12	
Cadmium, Dissolved	6020	0.10 U	ug/L	0.40	0.10	1	03/26/12	3/23/12	
Cadmium, Total Recoverable	6020	0.10 U	ug/L	0.40	0.10	1	03/22/12	3/21/12	
Chromium, Dissolved	6020	0.2 U	ug/L	1.0	0.2	1	03/26/12	3/23/12	
Chromium, Total Recoverable	6020	0.2 U	ug/L	1.0	0.2	1	03/22/12	3/21/12	
Cobalt, Dissolved	6020	0.03 U	ug/L	1.0	0.03	1	03/26/12	3/23/12	
Cobalt, Total Recoverable	6020	0.03 U	ug/L	1.0	0.03	1	03/22/12	3/21/12	
Copper, Dissolved	6020	0.3 U	ug/L	1.0	0.3	1	03/26/12	3/23/12	
Copper, Total Recoverable	6020	0.3 U	ug/L	1.0	0.3	1	03/22/12	3/21/12	
Iron, Dissolved	6010B	3 I	ug/L	100	3	1	03/26/12	3/22/12	
Iron, Total Recoverable	6010B	3 U	ug/L	100	3	1	03/22/12	3/21/12	
Lead, Dissolved	6020	0.12 U	ug/L	0.50	0.12	1	03/26/12	3/23/12	
Lead, Total Recoverable	6020	0.12 U	ug/L	0.50	0.12	1	03/22/12	3/21/12	
Mercury, Dissolved	7470A	0.02 U	ug/L	0.10	0.02	1	03/22/12	3/22/12	
Mercury, Total	7470A	0.02 U	ug/L	0.10	0.02	1	03/22/12	3/22/12	
Nickel, Dissolved	6020	0.5 U	ug/L	2.0	0.5	1	03/26/12	3/23/12	
Nickel, Total Recoverable	6020	0.5 U	ug/L	2.0	0.5	1	03/22/12	3/21/12	
Selenium, Dissolved	6020	1.1 U	ug/L	2.0	1.1	1	03/26/12	3/23/12	
Selenium, Total Recoverable	6020	1.1 U	ug/L	2.0	1.1	1	03/22/12	3/21/12	
Silver, Dissolved	6020	0.06 U	ug/L	0.50	0.06	1	03/26/12	3/23/12	
Silver, Total Recoverable	6020	0.06 U	ug/L	0.50	0.06	1	03/22/12	3/21/12	
Sodium, Dissolved	6010B	0.03 U	mg/L	0.50	0.03	1	03/26/12	3/22/12	
Sodium, Total Recoverable	6010B	0.03 U	mg/L	0.50	0.03	1	03/22/12	3/21/12	
Thallium, Dissolved	6020	0.05 U	ug/L	0.20	0.05	1	03/26/12	3/23/12	
Thallium, Total Recoverable	6020	0.05 U	ug/L	0.20	0.05	1	03/22/12	3/21/12	
Tin, Dissolved	6020	0.2 U	ug/L	5.0	0.2	1	03/26/12	3/23/12	
Tin, Total Recoverable	6020	0.6 I	ug/L	5.0	0.2	1	03/22/12	3/21/12	
Vanadium, Dissolved	6020	0.3 U	ug/L	2.0	0.3	1	03/26/12	3/23/12	
Vanadium, Total Recoverable	6020	0.3 U	ug/L	2.0	0.3	1	03/22/12	3/21/12	
Zinc, Dissolved	6020	1.6 U	ug/L	5.0	1.6	1	03/26/12	3/23/12	
Zinc, Total Recoverable	6020	1.6 U	ug/L	5.0	1.6	1	03/22/12	3/21/12	

**COLUMBIA ANALYTICAL SERVICES, INC.**

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## Analytical Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** NA  
**Date Received:** NA

**Sample Name:** Method Blank  
**Lab Code:** J1201300-MB

**Basis:** NA

**General Chemistry Parameters**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Ammonia as Nitrogen	350.1	0.007 U	mg/L	0.010	0.007	1	03/23/12	NA	
Chloride	300.0	0.11 U	mg/L	0.50	0.11	1	03/20/12	NA	
Cyanide, Total	335.4	3 U	ug/L	10	3	1	03/21/12	3/21/12	
Nitrate as Nitrogen	300.0	0.03 U	mg/L	0.20	0.03	1	03/20/12	NA	
Solids, Total Dissolved	SM 2540 C	10 U	mg/L	10	10	1	03/20/12	NA	
Sulfide, Total	SM 4500-S2- F	0.4 U	mg/L	2.0	0.4	1	03/22/12	NA	



**COLUMBIA ANALYTICAL SERVICES, INC.**

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QA/QC Report

**Client:** Waste Services of Florida, Inc.**Service Request:** J1201300**Project:** JED SWDF**Sample Matrix:** Water**SURROGATE RECOVERY SUMMARY**  
**Volatile Organic Compounds by GC/MS****Analysis Method:** 8260B

Sample Name	Lab Code	1,2-Dichloroethane-d4	4-Bromofluorobenzene	Dibromofluoromethane
		68 - 118	78 - 129	80 - 114
MW-22RA	J1201300-001	93	111	96
MW-22RB	J1201300-002	93	110	97
MW-22RC	J1201300-003	94	111	97
Trip Blank	J1201300-004	94	110	95
Lab Control Sample	JQ1201767-03	93	103	98
Method Blank	JQ1201767-04	95	109	98

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

QA/QC Report

**Client:** Waste Services of Florida, Inc.**Service Request:** J1201300**Project:** JED SWDF**Sample Matrix:** Water**SURROGATE RECOVERY SUMMARY**

Volatile Organic Compounds by GC/MS

**Analysis Method:** 8260B

Sample Name	Lab Code	Toluene-d8
		87 - 118
MW-22RA	J1201300-001	101
MW-22RB	J1201300-002	102
MW-22RC	J1201300-003	98
Trip Blank	J1201300-004	101
Lab Control Sample	JQ1201767-03	99
Method Blank	JQ1201767-04	101

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Analyzed:** 03/23/12

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Analysis Lot:** 284681

**Lab Control Sample**  
**JQ1201767-03**

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	19.4	20.0	97	79-120
1,1,1-Trichloroethane (TCA)	20.0	20.0	100	78-120
1,1,2,2-Tetrachloroethane	19.3	20.0	97	65-137
1,1,2-Trichloroethane	19.3	20.0	97	81-121
1,1-Dichloroethane (1,1-DCA)	21.2	20.0	106	83-119
1,1-Dichloroethene (1,1-DCE)	23.7	20.0	119	79-123
1,1-Dichloropropene	23.9	20.0	119	81-120
1,2,3-Trichloropropane	18.3	20.0	91	71-129
1,2,4-Trichlorobenzene	18.6	20.0	93	53-146
1,2-Dibromo-3-chloropropane (DBCP)	16.6	20.0	83	36-143
1,2-Dibromoethane (EDB)	18.2	20.0	91	80-122
1,2-Dichlorobenzene	19.9	20.0	100	79-114
1,2-Dichloroethane	19.2	20.0	96	73-120
1,2-Dichloropropane	20.3	20.0	102	86-116
1,3-Dichlorobenzene	21.2	20.0	106	79-122
1,3-Dichloropropane	18.9	20.0	94	83-119
1,4-Dichlorobenzene	20.4	20.0	102	77-117
2,2-Dichloropropane	22.7	20.0	113	61-135
2-Butanone (MEK)	97.7	100	98	38-152
2-Hexanone	89.7	100	90	63-131
4-Methyl-2-pentanone (MIBK)	91.4	100	91	69-127
Acetone	78.5	100	78	45-157
Acetonitrile	97.6	100	98	10-189
Acrolein	40.3	40.0	101	10-184
Acrylonitrile	98.6	100	99	56-139
Allyl Chloride	21.6	20.0	108	51-146
Benzene	21.8	20.0	109	83-118
Bromochloromethane	19.3	20.0	96	82-117
Bromodichloromethane	20.0	20.0	100	77-120
Bromoform	18.3	20.0	91	38-149
Bromomethane	19.3	20.0	97	78-132
Carbon Disulfide	126	100	126	74-132
Carbon Tetrachloride	19.1	20.0	95	67-129
Chlorobenzene	20.5	20.0	102	83-122
Chloroethane	20.6	20.0	103	80-129
Chloroform	19.8	20.0	99	81-118
Chloromethane	21.6	20.0	108	61-138
Chloroprene	19.3	20.0	97	73-126
cis-1,2-Dichloroethene	21.3	20.0	107	74-127
cis-1,3-Dichloropropene	20.0	20.0	100	80-120
Dibromochloromethane	18.3	20.0	92	71-122

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Analyzed:** 03/23/12

**Lab Control Sample Summary**  
**Volatile Organic Compounds by GC/MS**

**Analysis Method:** 8260B

**Units:** ug/L  
**Basis:** NA  
**Analysis Lot:** 284681

**Lab Control Sample**  
**JQ1201767-03**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
Dibromomethane	18.9	20.0	95	73-125
Dichlorodifluoromethane	19.0	20.0	95	57-139
Ethyl Methacrylate	19.3	20.0	96	62-140
Ethylbenzene	21.5	20.0	108	82-124
Hexachlorobutadiene	20.2	20.0	101	60-149
Iodomethane	123	100	123	78-128
Isobutyl Alcohol	491	400	123	10-201
m,p-Xylenes	42.8	40.0	107	82-125
Methacrylonitrile	18.8	20.0	94	46-154
Methyl Methacrylate	18.8	20.0	94	55-148
Methylene Chloride	20.9	20.0	104	70-134
Naphthalene	20.2	20.0	101	54-140
o-Xylene	21.3	20.0	106	82-122
Propionitrile	92.0	100	92	24-172
Styrene	21.0	20.0	105	82-123
Tetrachloroethene (PCE)	20.5	20.0	103	77-129
Toluene	20.7	20.0	103	82-122
trans-1,2-Dichloroethene	20.9	20.0	105	81-119
trans-1,3-Dichloropropene	19.1	20.0	96	71-124
trans-1,4-Dichloro-2-butene	18.3	20.0	91	10-172
Trichloroethene (TCE)	20.8	20.0	104	81-120
Trichlorofluoromethane	19.7	20.0	99	72-127
Vinyl Acetate	94.7	100	95	50-145
Vinyl Chloride	18.8	20.0	94	72-133

**COLUMBIA ANALYTICAL SERVICES, INC.**

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## QA/QC Report

**Client:** Waste Services of Florida, Inc.**Service Request:** J1201300**Project:** JED SWDF**Sample Matrix:** Water**SURROGATE RECOVERY SUMMARY****Semivolatile Organic Compounds by GC/MS****Analysis Method:** 8270C**Extraction Method:** EPA 3510C

Sample Name	Lab Code	2,4,6-Tribromophenol	2-Fluorobiphenyl	2-Fluorophenol
		13 - 133	22 - 105	10 - 69
MW-22RA	J1201300-001	153	152	112
MW-22RB	J1201300-002	74	80	54
MW-22RC	J1201300-003	69	86	59
Method Blank	JQ1201701-01	92	81	68
Lab Control Sample	JQ1201701-02	101	79	52

**COLUMBIA ANALYTICAL SERVICES, INC.**

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QA/QC Report

**Client:** Waste Services of Florida, Inc.**Service Request:** J1201300**Project:** JED SWDF**Sample Matrix:** Water**SURROGATE RECOVERY SUMMARY**

Semivolatile Organic Compounds by GC/MS

**Analysis Method:** 8270C**Extraction Method:** EPA 3510C

Sample Name	Lab Code	Nitrobenzene-d5	Phenol-d6	p-Terphenyl-d14
		10 - 123	10 - 59	20 - 128
MW-22RA	J1201300-001	136	85	162
MW-22RB	J1201300-002	74	42	58
MW-22RC	J1201300-003	78	44	70
Method Blank	JQ1201701-01	82	48	95
Lab Control Sample	JQ1201701-02	72	37	87

**COLUMBIA ANALYTICAL SERVICES, INC.**

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QA/QC Report

**Client:** Waste Services of Florida, Inc.**Service Request:** J1201300**Project:** JED SWDF**Sample Matrix:** Water**SURROGATE RECOVERY SUMMARY**

Semivolatile Organic Compounds by GC/MS

**Analysis Method:** 8270C**Extraction Method:** EPA 3510C

Sample Name	Lab Code
MW-22RA	J1201300-001
MW-22RB	J1201300-002
MW-22RC	J1201300-003
Method Blank	JQ1201701-01
Lab Control Sample	JQ1201701-02



**COLUMBIA ANALYTICAL SERVICES, INC.**

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QA/QC Report

**Client:** Waste Services of Florida, Inc.**Service Request:** J1201300**Project:** JED SWDF**Sample Matrix:** Water**SURROGATE RECOVERY SUMMARY****Base Neutral Semivolatile Organic Compounds by GC/MS SIM****Analysis Method:** 8270C SIM**Extraction Method:** EPA 3510C

Sample Name	Lab Code	2-Fluorobiphenyl	p-Terphenyl-d14
		22 - 105	25 - 127
MW-22RA	J1201300-001	33	75
MW-22RB	J1201300-002	47	70
MW-22RC	J1201300-003	67	85
Method Blank	JQ1201702-01	59	95
Lab Control Sample	JQ1201702-02	75	99

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Analyzed:** 03/26/12  
**Date Extracted:** 03/21/12

**Lab Control Sample Summary**  
**Semivolatile Organic Compounds by GC/MS**

**Analysis Method:** 8270C  
**Prep Method:** EPA 3510C

**Units:** ug/L  
**Basis:** NA  
**Analysis Lot:** 284968

**Lab Control Sample**  
**JQ1201701-02**

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,2,4,5-Tetrachlorobenzene	38.1	50.0	76	46-108
1,2,4-Trichlorobenzene	33.4	50.0	67	38-105
1,2-Dichlorobenzene	30.6	50.0	61	32-103
1,3,5-Trinitrobenzene	46.9	50.0	94	51-144
1,3-Dichlorobenzene	31.0	50.0	62	29-103
1,3-Dinitrobenzene	48.1	50.0	96	53-125
1,4-Dichlorobenzene	31.3	50.0	63	34-99
1,4-Naphthoquinone	65.2	50.0	130	32-134
1-Naphthylamine	45.0	50.0	90	13-145
2,3,4,6-Tetrachlorophenol	43.8	50.0	88	52-123
2,4,5-Trichlorophenol	47.8	50.0	96	51-126
2,4,6-Trichlorophenol	47.8	50.0	96	51-120
2,4-Dichlorophenol	41.3	50.0	83	46-115
2,4-Dimethylphenol	38.5	50.0	77	17-128
2,4-Dinitrophenol	58.2	50.0	116	29-131
2,4-Dinitrotoluene	50.2	50.0	100	59-133
2,6-Dichlorophenol	40.5	50.0	81	49-114
2,6-Dinitrotoluene	49.3	50.0	99	58-120
2-Acetylaminofluorene	46.6	50.0	93	53-157
2-Chloronaphthalene	39.6	50.0	79	53-108
2-Chlorophenol	34.6	50.0	69	31-107
2-Methylnaphthalene	34.8	50.0	70	47-113
2-Methylphenol	35.6	50.0	71	26-108
2-Naphthylamine	42.9	50.0	86	10-165
2-Nitroaniline	43.8	50.0	88	62-126
2-Nitrophenol	41.4	50.0	83	45-110
3- and 4-Methylphenol Coelution	36.0	50.0	72	23-104
3,3'-Dichlorobenzidine	44.8	50.0	90	56-137
3,3'-Dimethylbenzidine	23.4	50.0	47	10-172
3-Methylcholanthrene	49.0	50.0	98	34-154
3-Nitroaniline	44.5	50.0	89	57-116
4,6-Dinitro-2-methylphenol	55.6	50.0	111	32-141
4-Aminobiphenyl	37.5	50.0	75	35-142
4-Bromophenyl Phenyl Ether	41.7	50.0	83	62-120
4-Chloro-3-methylphenol	43.9	50.0	88	49-124
4-Chloroaniline	39.1	50.0	78	10-142
4-Chlorophenyl Phenyl Ether	40.4	50.0	81	58-124
4-Nitroaniline	42.8	50.0	86	60-121
4-Nitrophenol	23.9	50.0	48	10-78
5-Nitro-o-toluidine	45.5	50.0	91	64-126
7,12-Dimethylbenz(a)anthracene	45.6	50.0	91	15-165

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Analyzed:** 03/26/12  
**Date Extracted:** 03/21/12

**Lab Control Sample Summary**  
**Semivolatile Organic Compounds by GC/MS**

**Analysis Method:** 8270C  
**Prep Method:** EPA 3510C

**Units:** ug/L  
**Basis:** NA  
**Analysis Lot:** 284968

**Lab Control Sample**  
**JQ1201701-02**

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Acenaphthene	40.1	50.0	80	56-114
Acenaphthylene	39.5	50.0	79	53-119
Acetophenone	36.8	50.0	74	44-112
Anthracene	43.0	50.0	86	59-127
Benz(a)anthracene	44.5	50.0	89	61-140
Benzo(a)pyrene	43.8	50.0	88	51-151
Benzo(b)fluoranthene	37.0	50.0	74	55-144
Benzo(g,h,i)perylene	42.5	50.0	85	48-162
Benzo(k)fluoranthene	43.2	50.0	86	61-131
Benzyl Alcohol	37.2	50.0	74	26-101
Bis(2-chloroethoxy)methane	38.1	50.0	76	55-110
Bis(2-chloroethyl) Ether	35.1	50.0	70	42-103
Bis(2-chloroisopropyl) Ether	33.9	50.0	68	32-137
Bis(2-ethylhexyl) Phthalate	42.6	50.0	85	61-143
Butyl Benzyl Phthalate	44.6	50.0	89	57-145
Chlorobenzilate	46.7	50.0	93	28-192
Chrysene	42.5	50.0	85	65-127
Diallate	44.3	50.0	89	60-126
Dibenz(a,h)anthracene	44.3	50.0	89	49-166
Dibenzofuran	40.8	50.0	82	56-122
Diethyl Phthalate	43.5	50.0	87	63-122
Dimethoate	74.5	50.0	149	52-154
Dimethyl Phthalate	43.3	50.0	87	60-120
Di-n-butyl Phthalate	44.8	50.0	90	62-133
Di-n-octyl Phthalate	43.1	50.0	86	57-151
Diphenylamine + n-Nitrosodiphenylamine	44.3	50.0	89	59-120
Disulfoton	42.4	50.0	85	41-139
Ethyl Methanesulfonate	37.4	50.0	75	40-108
Famphur	24.7	50.0	49 *	51-195
Fluoranthene	44.8	50.0	90	61-137
Fluorene	42.0	50.0	84	55-119
Hexachlorobenzene	42.4	50.0	85	49-140
Hexachlorobutadiene	31.4	50.0	63	18-131
Hexachlorocyclopentadiene	44.9	50.0	90	32-112
Hexachloroethane	32.9	50.0	66	26-112
Hexachloropropene	38.8	50.0	78	38-98
Indeno(1,2,3-cd)pyrene	44.3	50.0	89	47-150
Isodrin	42.4	50.0	85	60-128
Isophorone	38.5	50.0	77	55-116
Isosafrole	40.5	50.0	81	42-117
Kepone	6.05	50.0	12	11-183

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Analyzed:** 03/26/12  
**Date Extracted:** 03/21/12

**Lab Control Sample Summary**  
**Semivolatile Organic Compounds by GC/MS**

**Analysis Method:** 8270C  
**Prep Method:** EPA 3510C

**Units:** ug/L  
**Basis:** NA  
**Analysis Lot:** 284968

**Lab Control Sample**  
**JQ1201701-02**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
Methapyrilene	31.7	50.0	63	10-215
Methyl Methanesulfonate	32.4	50.0	65	24-87
Methyl Parathion	74.3	50.0	149	65-152
Naphthalene	35.4	50.0	71	44-106
Nitrobenzene	34.7	50.0	69	17-150
N-Nitrosodiethylamine	36.5	50.0	73	35-114
N-Nitrosodimethylamine	25.4	50.0	51	19-66
N-Nitrosodi-n-butylamine	40.2	50.0	80	53-109
N-Nitrosodi-n-propylamine	35.8	50.0	72	47-119
N-Nitrosomethylethylamine	34.2	50.0	68	30-105
N-Nitrosopiperidine	40.7	50.0	81	40-106
N-Nitrosopyrrolidine	40.7	50.0	81	45-111
O,O,O-Triethyl Phosphorothioate	39.9	50.0	80	51-107
o-Toluidine	37.2	50.0	74	10-132
Parathion	49.5	50.0	99	60-151
p-Dimethylaminoazobenzene	43.6	50.0	87	66-139
Pentachlorobenzene	40.4	50.0	81	57-114
Pentachloronitrobenzene (PCNB)	44.5	50.0	89	65-129
Pentachlorophenol (PCP)	49.2	50.0	98	29-145
Phenacetin	45.4	50.0	91	57-147
Phenanthrene	42.7	50.0	85	63-123
Phenol	19.9	50.0	40	10-84
Phorate	40.5	50.0	81	57-129
p-Phenylenediamine	1.20	50.0	0 *	62-125
Pronamide	45.7	50.0	91	61-136
Pyrene	42.6	50.0	85	61-126
Safrole	39.0	50.0	78	46-117
Thionazin	44.2	50.0	88	62-124

## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Analyzed:** 03/22/12  
**Date Extracted:** 03/22/12

**Lab Control Sample Summary**  
**Base Neutral Semivolatile Organic Compounds by GC/MS SIM**

**Analysis Method:** 8270C SIM  
**Prep Method:** EPA 3510C

**Units:** ug/L  
**Basis:** NA  
**Analysis Lot:** 284592

**Lab Control Sample**  
**JQ1201702-02**

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1-Methylnaphthalene	3.40	5.00	68	34-107
2-Methylnaphthalene	3.33	5.00	67	41-107
Acenaphthene	3.52	5.00	70	41-109
Acenaphthylene	3.40	5.00	68	44-120
Anthracene	3.67	5.00	73	50-115
Benz(a)anthracene	4.07	5.00	81	46-133
Benzo(a)pyrene	3.97	5.00	79	49-122
Benzo(b)fluoranthene	4.19	5.00	84	48-122
Benzo(g,h,i)perylene	4.08	5.00	82	49-114
Benzo(k)fluoranthene	4.14	5.00	83	51-119
Chrysene	3.84	5.00	77	51-117
Dibenz(a,h)anthracene	4.45	5.00	89	48-121
Fluoranthene	3.93	5.00	79	52-122
Fluorene	3.71	5.00	74	46-113
Indeno(1,2,3-cd)pyrene	4.18	5.00	84	45-121
Naphthalene	3.34	5.00	67	42-104
Phenanthrene	3.72	5.00	74	49-107
Pyrene	3.98	5.00	80	49-128

**COLUMBIA ANALYTICAL SERVICES, INC.**

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QA/QC Report

**Client:** Waste Services of Florida, Inc.**Service Request:** J1201300**Project:** JED SWDF**Sample Matrix:** Water**SURROGATE RECOVERY SUMMARY****1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by Microextraction and Gas Chromatography****Analysis Method:** 8011**Extraction Method:** Method

1,1,1,2-Tetrachloroethane		
Sample Name	Lab Code	77 - 150
MW-22RA	J1201300-001	82
MW-22RB	J1201300-002	72
MW-22RC	J1201300-003	87
Method Blank	JQ1201718-01	75
Lab Control Sample	JQ1201718-02	92
MW-22RA	JQ1201718-03	68
MW-22RA	JQ1201718-04	74
Method Blank	JQ1201884-01	89
Lab Control Sample	JQ1201884-02	93

**COLUMBIA ANALYTICAL SERVICES, INC.**

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QA/QC Report

**Client:** Waste Services of Florida, Inc.**Service Request:** J1201300**Project:** JED SWDF**Sample Matrix:** Water**SURROGATE RECOVERY SUMMARY****Organochlorine Pesticides by Gas Chromatography****Analysis Method:** 8081A**Extraction Method:** EPA 3510C

Sample Name	Lab Code	Decachlorobiphenyl	Tetrachloro-m-xylene
		10 - 160	22 - 126
MW-22RA	J1201300-001	67	64
MW-22RB	J1201300-002	41	59
MW-22RC	J1201300-003	34	64
Method Blank	JQ1201804-01	66	64
Lab Control Sample	JQ1201804-02	40	76

**COLUMBIA ANALYTICAL SERVICES, INC.**

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QA/QC Report

**Client:** Waste Services of Florida, Inc.**Service Request:** J1201300**Project:** JED SWDF**Sample Matrix:** Water**SURROGATE RECOVERY SUMMARY**  
**Polychlorinated Biphenyls (PCBs) by GC****Analysis Method:** 8082**Extraction Method:** EPA 3510C

Sample Name	Lab Code	Decachlorobiphenyl
		10 - 151
MW-22RA	J1201300-001	67
MW-22RB	J1201300-002	41
MW-22RC	J1201300-003	34
Method Blank	JQ1201804-01	66
Lab Control Sample	JQ1201804-03	74
MW-22RA	JQ1201804-04	87
MW-22RA	JQ1201804-05	63



**COLUMBIA ANALYTICAL SERVICES, INC.**

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## QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12  
**Date Received:** 03/20/12  
**Date Analyzed:** 03/23/12  
**Date Extracted:** 03/22/12

**Duplicate Matrix Spike Summary****1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by Microextraction and Gas Chromatography**

**Sample Name:** MW-22RA **Units:** ug/L  
**Lab Code:** J1201300-001 **Basis:** NA  
**Analysis Method:** 8011  
**Prep Method:** Method

**Matrix Spike**

JQ1201718-03

**Duplicate Matrix Spike**

JQ1201718-04

<b>Analyte Name</b>	<b>Sample Result</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>	<b>RPD</b>	<b>RPD Limit</b>
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.189	0.251	75	0.188	0.251	75	65-135	<1	30
1,2-Dibromoethane (EDB)	ND	0.203	0.251	81	0.177	0.251	71	65-135	14	30

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12  
**Date Received:** 03/20/12  
**Date Analyzed:** 03/29/12  
**Date Extracted:** 03/26/12

**Duplicate Matrix Spike Summary**  
**Polychlorinated Biphenyls (PCBs) by GC**

**Sample Name:** MW-22RA  
**Lab Code:** J1201300-001  
**Analysis Method:** 8082  
**Prep Method:** EPA 3510C

**Units:** ug/L  
**Basis:** NA

Analyte Name	Sample Result	Result	Matrix Spike JQ1201804-04		Result	Duplicate Matrix Spike JQ1201804-05		% Rec Limits	RPD	RPD Limit
			Spike Amount	% Rec		Spike Amount	% Rec			
Aroclor 1016	ND	8.27	8.84	94	6.53	8.84	74	27-120	24	30
Aroclor 1260	ND	8.42	8.84	95	6.39	8.84	72	33-112	28	30

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**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Analyzed:** 03/23/12  
**Date Extracted:** 03/22/12

**Lab Control Sample Summary**

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by Microextraction and Gas Chromatography**

**Analysis Method:** 8011  
**Prep Method:** Method

**Units:** ug/L  
**Basis:** NA  
**Analysis Lot:** 284790

**Lab Control Sample  
JQ1201718-02**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
1,2-Dibromo-3-chloropropane (DBCP)	0.256	0.250	102	70-130
1,2-Dibromoethane (EDB)	0.260	0.250	104	70-130

**COLUMBIA ANALYTICAL SERVICES, INC.**

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QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Analyzed:** 03/29/12  
**Date Extracted:** 03/29/12

**Lab Control Sample Summary**

**1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by Microextraction and Gas Chromatography**

**Analysis Method:** 8011  
**Prep Method:** Method

**Units:** ug/L  
**Basis:** NA  
**Analysis Lot:** 285443

**Lab Control Sample  
JQ1201884-02**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
1,2-Dibromo-3-chloropropane (DBCP)	0.244	0.250	98	70-130
1,2-Dibromoethane (EDB)	0.250	0.250	100	70-130

**COLUMBIA ANALYTICAL SERVICES, INC.**

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QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Analyzed:** 03/29/12  
**Date Extracted:** 03/26/12

**Lab Control Sample Summary**  
**Organochlorine Pesticides by Gas Chromatography**

**Analysis Method:** 8081A  
**Prep Method:** EPA 3510C

**Units:** ug/L  
**Basis:** NA  
**Analysis Lot:** 285367

**Lab Control Sample**  
**JQ1201804-02**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
4,4'-DDD	0.336	0.400	84	12-121
4,4'-DDE	0.269	0.400	67	28-117
4,4'-DDT	0.267	0.400	67	32-126
Aldrin	0.269	0.400	67	30-100
alpha-BHC	0.342	0.400	86	30-111
alpha-Chlordane	0.314	0.400	79	32-118
beta-BHC	0.364	0.400	91	35-112
delta-BHC	0.364	0.400	91	34-120
Dieldrin	0.361	0.400	90	33-118
Endosulfan I	0.367	0.400	92	14-131
Endosulfan II	0.397	0.400	99	13-134
Endosulfan Sulfate	0.425	0.400	106	33-129
Endrin	0.360	0.400	90	24-141
Endrin Aldehyde	0.412	0.400	103	10-136
Endrin Ketone	0.442	0.400	111	34-118
gamma-BHC (Lindane)	0.377	0.400	94	26-114
gamma-Chlordane	0.308	0.400	77	33-117
Heptachlor	0.286	0.400	72	27-119
Heptachlor Epoxide	0.352	0.400	88	30-124
Methoxychlor	0.298	0.400	75	18-153

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Analyzed:** 03/29/12  
**Date Extracted:** 03/26/12

**Lab Control Sample Summary**  
**Polychlorinated Biphenyls (PCBs) by GC**

**Analysis Method:** 8082  
**Prep Method:** EPA 3510C

**Units:** ug/L  
**Basis:** NA  
**Analysis Lot:** 285367

**Lab Control Sample**  
**JQ1201804-03**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
Aroclor 1016	3.47	4.00	87	27-120
Aroclor 1260	3.48	4.00	87	33-112

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Collected:** 03/19/12  
**Date Received:** 03/20/12  
**Date Analyzed:** 03/22/12  
**Date Extracted:** 03/22/12

**Duplicate Matrix Spike Summary**  
**Inorganic Parameters**

**Sample Name:** MW-22RA **Units:** ug/L  
**Lab Code:** J1201300-001 **Basis:** NA  
**Analysis Method:** 7470A  
**Prep Method:** Method

Analyte Name	Sample Result	Result	Matrix Spike J1201300-001MS		Result	Duplicate Matrix Spike J1201300-001DMS		% Rec Limits	RPD	RPD Limit
			Spike Amount	% Rec		Spike Amount	% Rec			
Mercury, Total	ND	1.0	1.25	81	1.0	1.25	82	75-125	2	20

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## COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Analyzed:** 03/22/12 - 03/26/12

**Lab Control Sample Summary**  
**Inorganic Parameters**

Units: ug/L

Basis: NA

**Lab Control Sample**

J1201300-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Antimony, Dissolved	6020	51.2	50.0	102	80-120
Antimony, Total Recoverable	6020	53.3	50.0	107	80-120
Arsenic, Dissolved	6020	49.2	50.0	98	80-120
Arsenic, Total Recoverable	6020	50.4	50.0	101	80-120
Barium, Dissolved	6020	48.7	50.0	97	80-120
Barium, Total Recoverable	6020	50.1	50.0	100	80-120
Beryllium, Dissolved	6020	46.1	50.0	92	80-120
Beryllium, Total Recoverable	6020	49.6	50.0	99	80-120
Cadmium, Dissolved	6020	48.3	50.0	97	80-120
Cadmium, Total Recoverable	6020	49.3	50.0	99	80-120
Chromium, Dissolved	6020	47.1	50.0	94	80-120
Chromium, Total Recoverable	6020	49.9	50.0	100	80-120
Cobalt, Dissolved	6020	48.0	50.0	96	80-120
Cobalt, Total Recoverable	6020	51.2	50.0	102	80-120
Copper, Dissolved	6020	47.9	50.0	96	80-120
Copper, Total Recoverable	6020	51.1	50.0	102	80-120
Iron, Dissolved	6010B	4950	5000	99	80-120
Iron, Total Recoverable	6010B	4850	5000	97	80-120
Lead, Dissolved	6020	48.5	50.0	97	80-120
Lead, Total Recoverable	6020	50.7	50.0	101	80-120
Mercury, Dissolved	7470A	1.30	1.25	104	80-120
Mercury, Total	7470A	1.30	1.25	104	80-120
Nickel, Dissolved	6020	47.8	50.0	96	80-120
Nickel, Total Recoverable	6020	51.5	50.0	103	80-120
Selenium, Dissolved	6020	48.2	50.0	96	80-120
Selenium, Total Recoverable	6020	49.8	50.0	100	80-120
Silver, Dissolved	6020	49.0	50.0	98	80-120
Silver, Total Recoverable	6020	51.3	50.0	103	80-120
Thallium, Dissolved	6020	48.7	50.0	97	80-120
Thallium, Total Recoverable	6020	50.4	50.0	101	80-120
Tin, Dissolved	6020	48.6	50.0	97	80-120
Tin, Total Recoverable	6020	52.1	50.0	104	80-120
Vanadium, Dissolved	6020	47.5	50.0	95	80-120



**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Analyzed:** 03/22/12 - 03/26/12

**Lab Control Sample Summary**  
**Inorganic Parameters**

**Units:** ug/L**Basis:** NA

**Lab Control Sample**  
J1201300-LCS

<b>Analyte Name</b>	<b>Analytical Method</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
Vanadium, Total Recoverable	6020	49.5	50.0	99	80-120
Zinc, Dissolved	6020	96.1	100	96	80-120
Zinc, Total Recoverable	6020	101	100	101	80-120

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Analyzed:** 03/22/12 - 03/26/12

**Lab Control Sample Summary**  
**Inorganic Parameters**

**Units:** mg/L**Basis:** NA

**Lab Control Sample**  
J1201300-LCS

<b>Analyte Name</b>	<b>Analytical Method</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
Sodium, Dissolved	6010B	25.1	25.0	100	80-120
Sodium, Total Recoverable	6010B	25.3	25.0	101	80-120

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Analyzed:** 03/20/12 - 03/23/12

**Lab Control Sample Summary**  
**General Chemistry Parameters**

**Units:** mg/L**Basis:** NA**Lab Control Sample**

J1201300-LCS2

<b>Analyte Name</b>	<b>Analytical Method</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
Ammonia as Nitrogen	350.1	0.979	1.00	98	90-110
Chloride	300.0	50.5	50.0	101	90-110
Nitrate as Nitrogen	300.0	5.18	5.00	104	90-110
Solids, Total Dissolved	SM 2540 C	303	300	101	85-115

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Analyzed:** 3/21/12

**Lab Control Sample Summary**  
**General Chemistry Parameters**

**Units:** ug/L  
**Basis:** NA

**Lab Control Sample**  
J1201300-LCS2

<b>Analyte Name</b>	<b>Analytical Method</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>
Cyanide, Total	335.4	102	100	102	90-110

**COLUMBIA ANALYTICAL SERVICES, INC.**

Now part of the ALS Group

QA/QC Report

**Client:** Waste Services of Florida, Inc.  
**Project:** JED SWDF  
**Sample Matrix:** Water

**Service Request:** J1201300  
**Date Analyzed:** 03/22/12

**Duplicate Lab Control Sample Summary**  
**General Chemistry Parameters**

**Analysis Method:** SM 4500-S2- F

**Units:** mg/L

**Basis:** NA

**Analysis Lot:** 284276

**Lab Control Sample**  
**J1201300-LCS1**

**Duplicate Lab Control Sample**  
**J1201300-DLCS1**

<b>Analyte Name</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>Result</b>	<b>Spike Amount</b>	<b>% Rec</b>	<b>% Rec Limits</b>	<b>RPD</b>	<b>RPD Limit</b>
Sulfide, Total	18.9	20.0	95	18.6	20.0	93	85-115	2	20

# Cooler Receipt Form

Client: WSD Service Request #: 51201300  
 Project: JED SWDF  
 Cooler received on 3-20-12 and opened on 3-20-12 by SL  
 COURIER: CAS ☒ UPS ☐ FEDEX Client Other \_\_\_\_\_ Airbill # J206 515 2465

- 1 Were custody seals on outside of cooler? ☒ Yes ☐ No  
 If yes, how many and where? # 1 on lid other \_\_\_\_\_
- 2 Were seals intact and signature and date correct? ☒ Yes ☐ No ☐ N/A
- 3 Were custody papers properly filled out? ☒ Yes ☐ No ☐ N/A
- 4 Temperature of cooler(s) upon receipt (Should be > 0°C and < 6°C) 1.5 5.1 5.2 \_\_\_\_\_  
771 771 771 \_\_\_\_\_
- 5 Thermometer ID \_\_\_\_\_
- 6 Temperature Blank Present? ☒ Yes ☐ No
- 7 Were Ice or Ice Packs present ☒ Ice ☐ Ice Packs ☐ No
- 8 Did all bottles arrive in good condition (unbroken, etc....)? ☒ Yes ☐ No ☐ N/A
- 9 Type of packing material present ☒ Netting ☐ Vial Holder ☒ Bubble Wrap  
☐ Paper ☐ Styrofoam ☐ Other ☐ N/A
- 10 Were all bottle labels complete (sample ID, preservation, etc....)? ☒ Yes ☐ No ☐ N/A
- 11 Did all bottle labels and tags agree with custody papers? ☒ Yes ☐ No ☐ N/A
- 12 Were the correct bottles used for the tests indicated? ☒ Yes ☐ No ☐ N/A
- 13 Were all of the preserved bottles received with the appropriate preservative? ☒ Yes ☐ No ☐ N/A  
HNO3 pH<2 H2SO4 pH<2 ZnAc2/NaOH pH>9 NaOH pH>12 HCl pH<2  
Preservative additions noted below
- 14 Were all samples received within analysis holding times? ☒ Yes ☐ No ☐ N/A
- 15 Were all VOA vials free of air bubbles? If present, note below ☒ Yes ☐ No ☐ N/A
- 16 Where did the bottles originate? ☒ CAS ☐ Client

Sample ID	Reagent	Lot #	ml added	Initials Date/Time

Additional comments and/or explanation of all discrepancies noted above:

Client approval to run samples if discrepancies noted:

Date:



# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

SR #

J1201300

Waste Services of Florida, Inc.

JED SWDF

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ANALYSIS REQUESTED (Include Method Number and JED SWDF)

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SR #

J1201300

Waste Services of Florida, Inc.

JED SWDF

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J1201300

Waste Services of Florida, Inc.

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Waste Services of Florida, Inc.

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# **Appendix A**

## **Subcontracted Analytical Results**



**Environmental Conservation Laboratories, Inc.**

10775 Central Port Drive

Orlando FL, 32824

Phone: 407.826.5314 FAX: 407.850.6945



Friday, March 30, 2012

Columbia Analytical Svcs. (CO009)

Attn: Craig Myers

9143 Philips Highway, Suite 200

Jacksonville, FL 32256

**RE: Laboratory Results for**

**Project Number: J1201300, Project Name/Desc: J1201300**

**ENCO Workorder(s): A201570**

Dear Craig Myers,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, March 22, 2012.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Orlando. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, which appears to read "Marcia Colon". The signature is fluid and cursive.

Marcia Colon For Ronald Wambles

Project Manager

Enclosure(s)

The total number of pages in this report, including this page is 15.



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**SAMPLE SUMMARY/LABORATORY CHRONICLE**

<b>Client ID:</b>	<b>J1201300-001 (MW-22RA)</b>	<b>Lab ID:</b>	<b>A201570-01</b>	<b>Sampled:</b>	<b>03/19/12 11:20</b>	<b>Received:</b>	<b>03/22/12 08:00</b>
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Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8141B	03/26/12	05/03/12	03/24/12 14:00		3/29/2012 06:03
EPA 8151A	03/26/12	05/05/12	03/26/12 12:50		3/27/2012 18:28

<b>Client ID:</b>	<b>J1201300-002 (MW-22RB)</b>	<b>Lab ID:</b>	<b>A201570-02</b>	<b>Sampled:</b>	<b>03/19/12 13:50</b>	<b>Received:</b>	<b>03/22/12 08:00</b>
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Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8141B	03/26/12	05/03/12	03/24/12 14:00		3/29/2012 07:06
EPA 8151A	03/26/12	05/05/12	03/26/12 12:50		3/27/2012 18:54

<b>Client ID:</b>	<b>J1201300-003 (MW-22RC)</b>	<b>Lab ID:</b>	<b>A201570-03</b>	<b>Sampled:</b>	<b>03/19/12 13:50</b>	<b>Received:</b>	<b>03/22/12 08:00</b>
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Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8141B	03/26/12	05/03/12	03/24/12 14:00		3/29/2012 08:09
EPA 8151A	03/26/12	05/05/12	03/26/12 12:50		3/27/2012 19:20

**SAMPLE DETECTION SUMMARY**

**No positive results detected.**

# ANALYTICAL RESULTS

Description: J1201300-001 (MW-22RA)

Lab Sample ID: A201570-01

Received: 03/22/12 08:00

Matrix: Water

Sampled: 03/19/12 11:20

Work Order: A201570

Project: J1201300

Sampled By: Craig Myers

## Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5] ^	0.23	U	ug/L	1	0.23	0.50	2C26001	EPA 8151A	03/27/12 18:28	RGG	
2,4,5-TP (Silvex) [93-72-1] ^	0.20	U	ug/L	1	0.20	0.50	2C26001	EPA 8151A	03/27/12 18:28	RGG	
2,4-D [94-75-7] ^	0.16	U	ug/L	1	0.16	0.50	2C26001	EPA 8151A	03/27/12 18:28	RGG	
Dinoseb [88-85-7] ^	0.32	U	ug/L	1	0.32	0.50	2C26001	EPA 8151A	03/27/12 18:28	RGG	
Pentachlorophenol [87-86-5] ^	0.19	U	ug/L	1	0.19	0.50	2C26001	EPA 8151A	03/27/12 18:28	RGG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
2,4-DCAA	1.8	1	2.00	92 %	68-139	2C26001	EPA 8151A	03/27/12 18:28	RGG	



www.encolabs.com

Description: J1201300-001 (MW-22RA)

Lab Sample ID: A201570-01

Received: 03/22/12 08:00

Matrix: Water

Sampled: 03/19/12 11:20

Work Order: A201570

Project: J1201300

Sampled By: Craig Myers

### Organophosphorus Compounds by GC

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Azinphos-methyl [86-50-0] ^	0.29	U	ug/L	1	0.29	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Bolstar [35400-43-2] ^	0.23	U	ug/L	1	0.23	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Chlorpyrifos [2921-88-2] ^	0.18	U	ug/L	1	0.18	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Coumaphos [56-72-4] ^	0.26	U	ug/L	1	0.26	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Demeton [8065-48-3]	0.16	U	ug/L	1	0.16	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Diazinon [333-41-5] ^	0.18	U	ug/L	1	0.18	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Dichlorofenthion [97-17-6] ^	0.16	U	ug/L	1	0.16	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Dichlorvos [62-73-7] ^	0.18	U	ug/L	1	0.18	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Dimethoate [60-51-5] ^	0.24	U	ug/L	1	0.24	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Disulfoton [298-04-4] ^	0.16	U	ug/L	1	0.16	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
EPN [2104-64-5] ^	0.16	U	ug/L	1	0.16	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Ethion [563-12-2] ^	0.19	U	ug/L	1	0.19	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Ethoprop [13194-48-4] ^	0.19	U	ug/L	1	0.19	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	QV-02
Ethyl Parathion [56-38-2] ^	0.25	U	ug/L	1	0.25	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Fensulfothion [115-90-2] ^	0.32	U	ug/L	1	0.32	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Fenthion [55-38-9] ^	0.21	U	ug/L	1	0.21	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Malathion [121-75-5] ^	0.23	U	ug/L	1	0.23	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Merphos [150-50-5] ^	0.38	U	ug/L	1	0.38	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Methyl parathion [298-00-0] ^	0.21	U	ug/L	1	0.21	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Mevinphos [7786-34-7] ^	0.47	U	ug/L	1	0.47	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Monocrotophos [6923-22-4]	0.14	U	ug/L	1	0.14	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Naled [300-76-5]	0.39	U	ug/L	1	0.39	1.0	2C24005	EPA 8141B	03/29/12 06:03	RC	
Phorate [298-02-2] ^	0.15	U	ug/L	1	0.15	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	QV-02
Ronnel [299-84-3] ^	0.18	U	ug/L	1	0.18	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Stirophos (Tetrachlorvinphos) [22248-79-9] ^	0.32	U	ug/L	1	0.32	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
Sulfotep [3689-24-5]	0.16	U	ug/L	1	0.16	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	
TEPP [107-49-3] ^	0.31	U	ug/L	1	0.31	1.0	2C24005	EPA 8141B	03/29/12 06:03	RC	
Tokuthion (Prothiofos) [34643-46-4] ^	0.24	U	ug/L	1	0.24	0.50	2C24005	EPA 8141B	03/29/12 06:03	RC	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Triphenyl phosphate	5.4	1	5.00	108 %	22-165	2C24005	EPA 8141B	03/29/12 06:03	RC	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

Description: J1201300-002 (MW-22RB)

Lab Sample ID: A201570-02

Received: 03/22/12 08:00

Matrix: Water

Sampled: 03/19/12 13:50

Work Order: A201570

Project: J1201300

Sampled By: Craig Myers

# Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5] ^	0.23	U	ug/L	1	0.23	0.50	2C26001	EPA 8151A	03/27/12 18:54	RGG	
2,4,5-TP (Silvex) [93-72-1] ^	0.20	U	ug/L	1	0.20	0.50	2C26001	EPA 8151A	03/27/12 18:54	RGG	
2,4-D [94-75-7] ^	0.16	U	ug/L	1	0.16	0.50	2C26001	EPA 8151A	03/27/12 18:54	RGG	
Dinoseb [88-85-7] ^	0.32	U	ug/L	1	0.32	0.50	2C26001	EPA 8151A	03/27/12 18:54	RGG	
Pentachlorophenol [87-86-5] ^	0.19	U	ug/L	1	0.19	0.50	2C26001	EPA 8151A	03/27/12 18:54	RGG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
2,4-DCAA	1.4	1	2.00	70 %	68-139	2C26001	EPA 8151A	03/27/12 18:54	RGG		

Description: J1201300-002 (MW-22RB)

Lab Sample ID: A201570-02

Received: 03/22/12 08:00

Matrix: Water

Sampled: 03/19/12 13:50

Work Order: A201570

Project: J1201300

Sampled By: Craig Myers

# Organophosphorus Compounds by GC

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Azinphos-methyl [86-50-0] ^	0.29	U	ug/L	1	0.29	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Bolstar [35400-43-2] ^	0.23	U	ug/L	1	0.23	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Chlorpyrifos [2921-88-2] ^	0.18	U	ug/L	1	0.18	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Coumaphos [56-72-4] ^	0.26	U	ug/L	1	0.26	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Demeton [8065-48-3] ^	0.16	U	ug/L	1	0.16	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Diazinon [333-41-5] ^	0.18	U	ug/L	1	0.18	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Dichlorofenthion [97-17-6] ^	0.16	U	ug/L	1	0.16	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Dichlorvos [62-73-7] ^	0.18	U	ug/L	1	0.18	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Dimethoate [60-51-5] ^	0.24	U	ug/L	1	0.24	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Disulfoton [298-04-4] ^	0.16	U	ug/L	1	0.16	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
EPN [2104-64-5] ^	0.16	U	ug/L	1	0.16	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Ethion [563-12-2] ^	0.19	U	ug/L	1	0.19	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Ethoprop [13194-48-4] ^	0.19	U	ug/L	1	0.19	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	QV-02
Ethyl Parathion [56-38-2] ^	0.25	U	ug/L	1	0.25	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Fensulfothion [115-90-2] ^	0.32	U	ug/L	1	0.32	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Fenthion [55-38-9] ^	0.21	U	ug/L	1	0.21	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Malathion [121-75-5] ^	0.23	U	ug/L	1	0.23	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Merphos [150-50-5] ^	0.38	U	ug/L	1	0.38	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Methyl parathion [298-00-0] ^	0.21	U	ug/L	1	0.21	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Mevinphos [7786-34-7] ^	0.47	U	ug/L	1	0.47	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Monocrotophos [6923-22-4]	0.14	U	ug/L	1	0.14	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Naled [300-76-5]	0.39	U	ug/L	1	0.39	1.0	2C24005	EPA 8141B	03/29/12 07:06	RC	
Phorate [298-02-2] ^	0.15	U	ug/L	1	0.15	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	QV-02
Ronnel [299-84-3] ^	0.18	U	ug/L	1	0.18	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Stirophos (Tetrachlorvinphos) [22248-79-9] ^	0.32	U	ug/L	1	0.32	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
Sulfotep [3689-24-5]	0.16	U	ug/L	1	0.16	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	
TEPP [107-49-3] ^	0.31	U	ug/L	1	0.31	1.0	2C24005	EPA 8141B	03/29/12 07:06	RC	
Tokuthion (Prothiofos) [34643-46-4] ^	0.24	U	ug/L	1	0.24	0.50	2C24005	EPA 8141B	03/29/12 07:06	RC	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Triphenyl phosphate	5.0	1	5.00	99 %	22-165	2C24005	EPA 8141B	03/29/12 07:06	RC	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.



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Description: J1201300-003 (MW-22RC)

Lab Sample ID: A201570-03

Received: 03/22/12 08:00

Matrix: Water

Sampled: 03/19/12 13:50

Work Order: A201570

Project: J1201300

Sampled By: Craig Myers

### Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5] ^	0.23	U	ug/L	1	0.23	0.50	2C26001	EPA 8151A	03/27/12 19:20	RGG	
2,4,5-TP (Silvex) [93-72-1] ^	0.20	U	ug/L	1	0.20	0.50	2C26001	EPA 8151A	03/27/12 19:20	RGG	
2,4-D [94-75-7] ^	0.16	U	ug/L	1	0.16	0.50	2C26001	EPA 8151A	03/27/12 19:20	RGG	
Dinoseb [88-85-7] ^	0.32	U	ug/L	1	0.32	0.50	2C26001	EPA 8151A	03/27/12 19:20	RGG	
Pentachlorophenol [87-86-5] ^	0.19	U	ug/L	1	0.19	0.50	2C26001	EPA 8151A	03/27/12 19:20	RGG	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
2,4-DCAA	1.7	1	2.00	85 %	68-139	2C26001	EPA 8151A	03/27/12 19:20	RGG		



Description: J1201300-003 (MW-22RC)

Lab Sample ID: A201570-03

Received: 03/22/12 08:00

Matrix: Water

Sampled: 03/19/12 13:50

Work Order: A201570

Project: J1201300

Sampled By: Craig Myers

# Organophosphorus Compounds by GC

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Azinphos-methyl [86-50-0] ^	0.29	U	ug/L	1	0.29	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Bolstar [35400-43-2] ^	0.23	U	ug/L	1	0.23	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Chlorpyrifos [2921-88-2] ^	0.18	U	ug/L	1	0.18	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Coumaphos [56-72-4] ^	0.26	U	ug/L	1	0.26	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Demeton [8065-48-3]	0.16	U	ug/L	1	0.16	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Diazinon [333-41-5] ^	0.18	U	ug/L	1	0.18	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Dichlorofenthion [97-17-6] ^	0.16	U	ug/L	1	0.16	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Dichlorvos [62-73-7] ^	0.18	U	ug/L	1	0.18	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Dimethoate [60-51-5] ^	0.24	U	ug/L	1	0.24	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Disulfoton [298-04-4] ^	0.16	U	ug/L	1	0.16	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
EPN [2104-64-5] ^	0.16	U	ug/L	1	0.16	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Ethion [563-12-2] ^	0.19	U	ug/L	1	0.19	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Ethoprop [13194-48-4] ^	0.19	U	ug/L	1	0.19	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	QV-02
Ethyl Parathion [56-38-2] ^	0.25	U	ug/L	1	0.25	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Fensulfothion [115-90-2] ^	0.32	U	ug/L	1	0.32	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Fenthion [55-38-9] ^	0.21	U	ug/L	1	0.21	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Malathion [121-75-5] ^	0.23	U	ug/L	1	0.23	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Merphos [150-50-5] ^	0.38	U	ug/L	1	0.38	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Methyl parathion [298-00-0] ^	0.21	U	ug/L	1	0.21	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Mevinphos [7786-34-7] ^	0.47	U	ug/L	1	0.47	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Monocrotophos [6923-22-4]	0.14	U	ug/L	1	0.14	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Naled [300-76-5]	0.39	U	ug/L	1	0.39	1.0	2C24005	EPA 8141B	03/29/12 08:09	RC	
Phorate [298-02-2] ^	0.15	U	ug/L	1	0.15	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	QV-02
Ronnel [299-84-3] ^	0.18	U	ug/L	1	0.18	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Stirophos (Tetrachlorvinphos) [22248-79-9] ^	0.32	U	ug/L	1	0.32	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
Sulfotep [3689-24-5]	0.16	U	ug/L	1	0.16	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	
TEPP [107-49-3] ^	0.31	U	ug/L	1	0.31	1.0	2C24005	EPA 8141B	03/29/12 08:09	RC	
Tokuthion (Prothiofos) [34643-46-4] ^	0.24	U	ug/L	1	0.24	0.50	2C24005	EPA 8141B	03/29/12 08:09	RC	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
Triphenyl phosphate	4.7	1	5.00	93 %	22-165	2C24005	EPA 8141B	03/29/12 08:09	RC	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

### QUALITY CONTROL

#### Chlorinated Herbicides by GC - Quality Control

Batch 2C26001 - EPA 3510C

Blank (2C26001-BLK1)

Prepared: 03/26/2012 12:50 Analyzed: 03/27/2012 15:52

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.23	U	0.50	ug/L							
2,4,5-TP (Silvex)	0.20	U	0.50	ug/L							
2,4-D	0.16	U	0.50	ug/L							
Dinoseb	0.32	U	0.50	ug/L							
Pentachlorophenol	0.19	U	0.50	ug/L							
Surrogate: 2,4-DCAA	2.0			ug/L	2.00		99	68-139			

Blank (2C26001-BLK2)

Prepared: 03/27/2012 10:15 Analyzed: 03/28/2012 15:57

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	1.2	U	2.5	ug/L							
2,4,5-TP (Silvex)	1.0	U	2.5	ug/L							
2,4-D	0.80	U	2.5	ug/L							
Dinoseb	1.6	U	2.5	ug/L							
Pentachlorophenol	0.95	U	2.5	ug/L							
Surrogate: 2,4-DCAA	11			ug/L	10.0		106	68-139			

LCS (2C26001-BS1)

Prepared: 03/26/2012 12:50 Analyzed: 03/27/2012 16:18

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.8		0.50	ug/L	2.00		92	70-114			
2,4-D	2.1		0.50	ug/L	2.00		104	37-129			
Surrogate: 2,4-DCAA	2.0			ug/L	2.00		102	68-139			

Matrix Spike (2C26001-MS1)

Prepared: 03/26/2012 12:50 Analyzed: 03/27/2012 16:44

Source: A201529-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.8		0.50	ug/L	2.00	0.20 U	91	70-114			
2,4-D	2.0		0.50	ug/L	2.00	0.16 U	102	37-129			
Surrogate: 2,4-DCAA	2.0			ug/L	2.00		98	68-139			

Matrix Spike (2C26001-MS2)

Prepared: 03/27/2012 10:15 Analyzed: 03/28/2012 16:23

Source: A201678-04

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.6		0.50	ug/L	2.00	0.20 U	78	70-114			
2,4-D	2.6		0.50	ug/L	2.00	0.16 U	128	37-129			
Surrogate: 2,4-DCAA	2.4			ug/L	2.00		121	68-139			

Matrix Spike (2C26001-MS3)

Prepared: 03/27/2012 10:15 Analyzed: 03/28/2012 17:41

Source: A201679-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	2.2		0.50	ug/L	2.00	0.20 U	110	70-114			

### QUALITY CONTROL

#### Chlorinated Herbicides by GC - Quality Control

Batch 2C26001 - EPA 3510C

Matrix Spike (2C26001-MS3) Continued

Prepared: 03/27/2012 10:15 Analyzed: 03/28/2012 17:41

Source: A201679-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4-D	2.5		0.50	ug/L	2.00	0.16 U	126	37-129			
Surrogate: 2,4-DCAA [2C]	2.6			ug/L	2.00		131	68-139			

Matrix Spike Dup (2C26001-MSD1)

Prepared: 03/26/2012 12:50 Analyzed: 03/27/2012 17:10

Source: A201529-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.8		0.50	ug/L	2.00	0.20 U	92	70-114	2	15	
2,4-D	2.1		0.50	ug/L	2.00	0.16 U	103	37-129	2	33	
Surrogate: 2,4-DCAA	2.0			ug/L	2.00		101	68-139			

Matrix Spike Dup (2C26001-MSD2)

Prepared: 03/27/2012 10:15 Analyzed: 03/28/2012 16:49

Source: A201678-04

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.7		0.50	ug/L	2.00	0.20 U	84	70-114	7	15	
2,4-D	2.9		0.50	ug/L	2.00	0.16 U	145	37-129	13	33	QM-07
Surrogate: 2,4-DCAA	2.4			ug/L	2.00		122	68-139			

Matrix Spike Dup (2C26001-MSD3)

Prepared: 03/27/2012 10:15 Analyzed: 03/28/2012 18:07

Source: A201679-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	1.9		0.50	ug/L	2.00	0.20 U	96	70-114	14	15	
2,4-D	2.1		0.50	ug/L	2.00	0.16 U	107	37-129	16	33	
Surrogate: 2,4-DCAA	2.7			ug/L	2.00		136	68-139			

#### Organophosphorus Compounds by GC - Quality Control

Batch 2C24005 - EPA 3510C

Blank (2C24005-BLK1)

Prepared: 03/24/2012 14:00 Analyzed: 03/29/2012 00:49

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Azinphos-methyl	0.29	U	0.50	ug/L							
Bolstar	0.23	U	0.50	ug/L							
Chlorpyrifos	0.18	U	0.50	ug/L							
Coumaphos	0.26	U	0.50	ug/L							
Demeton	0.16	U	0.50	ug/L							
Diazinon	0.18	U	0.50	ug/L							
Dichlorofenthion	0.16	U	0.50	ug/L							
Dichlorvos	0.18	U	0.50	ug/L							
Dimethoate	0.24	U	0.50	ug/L							
Disulfoton	0.16	U	0.50	ug/L							
EPN	0.16	U	0.50	ug/L							

# QUALITY CONTROL

## Organophosphorus Compounds by GC - Quality Control

Batch 2C24005 - EPA 3510C

### Blank (2C24005-BLK1) Continued

Prepared: 03/24/2012 14:00 Analyzed: 03/29/2012 00:49

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Ethion	0.19	U	0.50	ug/L							
Ethoprop	0.19	U	0.50	ug/L							
Ethyl Parathion	0.25	U	0.50	ug/L							
Fensulfothion	0.32	U	0.50	ug/L							
Fenthion	0.21	U	0.50	ug/L							
Malathion	0.23	U	0.50	ug/L							
Merphos	0.38	U	0.50	ug/L							
Methyl parathion	0.21	U	0.50	ug/L							
Mevinphos	0.47	U	0.50	ug/L							
Monocrotophos	0.14	U	0.50	ug/L							
Naled	0.39	U	1.0	ug/L							
Phorate	0.15	U	0.50	ug/L							
Ronnel	0.18	U	0.50	ug/L							
Stirophos (Tetrachlorvinphos)	0.32	U	0.50	ug/L							
Sulfotep	0.16	U	0.50	ug/L							
TEPP	0.31	U	1.0	ug/L							
Tokuthion (Prothiofos)	0.24	U	0.50	ug/L							
Surrogate: Triphenyl phosphate	6.0			ug/L	10.0		60	22-165			

### LCS (2C24005-BS1)

Prepared: 03/24/2012 14:00 Analyzed: 03/29/2012 01:52

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dimethoate	3.7		0.50	ug/L	4.00		93	10-171			
EPN	4.1		0.50	ug/L	4.00		104	10-168			
Malathion	4.6		0.50	ug/L	4.00		115	17-167			
Monocrotophos	4.2		0.50	ug/L	4.00		105	10-197			
Naled	4.6		1.0	ug/L	4.00		115	10-200			
Sulfotep	4.0		0.50	ug/L	4.00		99	50-200			
TEPP	4.1		1.0	ug/L	4.00		104	10-106			
Surrogate: Triphenyl phosphate	6.9			ug/L	10.0		69	22-165			

### Matrix Spike (2C24005-MS1)

Prepared: 03/24/2012 14:00 Analyzed: 03/29/2012 02:55

Source: A201459-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dimethoate	4.5		0.50	ug/L	4.00	0.24 U	113	10-171			
EPN	5.1		0.50	ug/L	4.00	0.16 U	127	10-168			
Malathion	5.6		0.50	ug/L	4.00	0.23 U	139	17-167			
Monocrotophos	5.0		0.50	ug/L	4.00	0.14 U	125	10-197			
Naled	5.4		1.0	ug/L	4.00	0.39 U	135	10-200			
Sulfotep	4.8		0.50	ug/L	4.00	0.16 U	119	50-200			
TEPP	5.6		1.0	ug/L	4.00	0.31 U	141	10-106			QM-07
Surrogate: Triphenyl phosphate	7.9			ug/L	10.0		79	22-165			

### Matrix Spike Dup (2C24005-MSD1)

Prepared: 03/24/2012 14:00 Analyzed: 03/29/2012 03:58

Source: A201459-02

### QUALITY CONTROL

#### Organophosphorus Compounds by GC - Quality Control

Batch 2C24005 - EPA 3510C

Matrix Spike Dup (2C24005-MSD1) Continued

Prepared: 03/24/2012 14:00 Analyzed: 03/29/2012 03:58

Source: A201459-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dimethoate	4.2		0.50	ug/L	4.00	0.24 U	105	10-171	8	20	
EPN	4.7		0.50	ug/L	4.00	0.16 U	118	10-168	7	50	
Malathion	5.1		0.50	ug/L	4.00	0.23 U	128	17-167	8	39	
Monocrotophos	4.6		0.50	ug/L	4.00	0.14 U	116	10-197	8	29	
Naled	4.9		1.0	ug/L	4.00	0.39 U	123	10-200	10	50	
Sulfotep	4.4		0.50	ug/L	4.00	0.16 U	110	50-200	8	25	
TEPP	5.6		1.0	ug/L	4.00	0.31 U	141	10-106	0.09	28	QM-07
Surrogate: Triphenyl phosphate	7.4			ug/L	10.0		74	22-165			

**FLAGS/NOTES AND DEFINITIONS**

PQL	PQL: Practical Quantitation Limit.
B	Results are based upon membrane filter colony counts that are outside the method indicated ideal range.
I	The reported value is between the laboratory method detection limit (MDL) and the practical quantitation limit (PQL).
J	Estimated value.
K	Off-scale low; Actual value is known to be less than the value given.
L	Off-scale high; Actual value is known to be greater than value given.
M	Presence of analyte is verified but not quantified; the actual value is less than the MRL but greater than the MDL.
N	Presumptive evidence of presence of material.
O	Sampled, but analysis lost or not performed.
Q	Sample exceeded the accepted holding time.
T	Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.
U	Indicates that the compound was analyzed for but not detected.
V	Indicates that the analyte was detected in both the sample and the associated method blank.
Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.
Z	Too many colonies were present (TNTC); the numeric value represents the filtration volume.
?	Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.
*	Not reported due to interference.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QV-02	The associated continuing calibration verification standard exhibited low bias; the reported result should be considered to be a minimum estimate.

Project Number: J1201300  
Project Manager: Craig Myers

Columbia Analytical Services, Inc. Chain of Custody  
9141 Phillips Highway • Jacksonville, FL 32256 • 904-739-2277 • FAX 904-739-2011

CAS Contract: Craig Myers *CM*

Lab Code	Sample ID	# of Cont.	Matrix	Sample		Lab ID	HERB 8151A	Pest OP 8141B
				Date	Time			
J1201300-001	MW-228A	2	Water	3/19/12	1120	ENCO	X	X
J1201300-002	MW-228B	1	Water	3/19/12	1350	ENCO	✓	✓
J1201300-003	MW-228C	1	Water	3/19/12	1250	ENCO	✓	✓

Test Comments  
Pest OP - 8141B  
HERB - 8151A  
J1201300-001,2,3  
J1201300-001,2,3  
Report Appendix II List  
Report Appendix II List

Special Instructions/Comments		Turnaround Requirements RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 <input checked="" type="checkbox"/> STANDARD Requested FAX Date _____ Requested Report Date <u>04/03/12</u>		Report Requirements <input type="checkbox"/> I Results Only <input checked="" type="checkbox"/> II Results + QC Summaries <input type="checkbox"/> III Results + QC and Calibration Summaries <input type="checkbox"/> IV Data Validation Report with Raw Data POL/AND/J _____ EDD <u>Y</u>		Invoice Information IN# J1201300 Bill to	
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Relinquished By:

*[Signature]*

Received By:

*[Signature]* 3-21-12

Arb# Number:

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