



October 28, 2014

F. Thomas Lubozynski, P.E.
Waste & Air Resource Programs Administrator
Florida Department of Environmental Protection
Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Subject: Groundwater Contamination Assessment
Quarter 4 Evaluation Monitoring Report
J.E.D. Solid Waste Management Facility
Osceola County, Florida
Permit Nos. SO49-0199726-022

Dear Mr. Lubozynski:

On behalf of Omni Waste of Osceola County, LLC (Omni), HDR is submitting this sampling report for the three evaluation monitoring wells CW-1A, CW-2A and CW-3A installed in December 2013 at the J.E.D. Solid Waste Management Facility (facility). This is the fourth of four quarterly evaluation monitoring reports as required by the Work Plan submitted on October 31, 2013. The wells were installed to address volatile organic compound (VOC) detections in groundwater samples collected from select groundwater monitoring wells at the facility. Routine groundwater monitoring has at times detected Benzene in groundwater at levels slightly above the Primary Drinking Water Standard (PDWS) in samples collected from eleven shallow groundwater monitoring wells and vinyl chloride from three shallow groundwater monitoring wells located along the disposal boundary of the northern portion of the landfill. To evaluate these detections, Omni conducted several investigations which indicated the probable source of these VOCs was landfill gas migration beyond the lined disposal boundary.

Omni subsequently implemented a Soil Vapor Extraction (SVE) pilot test study in March 2013. As discussed in a July 23, 2013 meeting with the Florida Department of Environmental Protection (Department) (and subsequent July 30, 2013 letter from Omni), based on the groundwater quality data collected since installation of the SVE pilot system Omni recommended that the SVE pilot test study be discontinued and instead focus continued efforts on proactively expanding the Landfill Gas Collection Control System (GCCS) within the landfill disposal footprint. Additionally, as summarized in an August 6, 2013 letter to the Department, Omni prepared a contamination evaluation Work Plan to delineate the extent of the impacts and predict the likelihood that water quality standards will be violated outside the zone of discharge (ZOD) (if any) and evaluate potential preventative methods. The Work Plan outlined the installation procedures for three new temporary delineation wells CW-1A, CW-2A and CW-3A. The three evaluation monitoring wells are shown in Attachment 1, Figure 1.



Well Sampling and Analysis

The Work Plan requires four quarterly compliance well sampling events/reports as follows:

Quarter 1 – December 2013 (complete)

Quarter 2 – February 2014 /March 2014 (complete)

Quarter 3 – May 2014/June 2014 (complete)

Quarter 4 – August 2014/September 2014

The samples collected in Quarter 1 were analyzed for parameters required for an initial sampling event as listed in Chapter 62-701.510(7)(a) and (c).

The required sample parameters collected for Quarters 2, 3, and 4 include those listed in Chapter 62-701.510(7)(a) only. The parameter lists have been provided below for reference.

Chapter 62-701.510(7)(a)

Field Parameters

Static water level before purge
Specific conductivity
pH
Dissolved Oxygen
Turbidity
Temperature
Colors and sheens by observation
ALS Environmental

Laboratory Parameters

Total ammonia – N
Chlorides
Iron
Mercury
Nitrate
Sodium
Total dissolved solids (TDS)
Those parameters listed in 40 CFR Part 258
Appendix I

Chapter 62-701.510(7)(c)

Those parameters listed in 40 CFR Part 258 Appendix II.

Results

The lab analysis results for the Quarter 4 sampling event are provided in Attachment 2 – Laboratory and Field Data. The detected parameters have been listed in Tables 1 – CW-1A, Table 2 – CW-2A, and Table 3 – CW-3A below.

Table 1 – Summary of Parameters detected during Lab Analysis CW-1A

Parameters	CW-1A Result				MCL	MDL	PQL	Units
	Q1	Q2	Q3	Q4				
Chloride	21.7	21.2	17.6	18.1	250**	0.11	0.5	mg/L
Ammonia as Nitrogen	1.05	0.783	0.575	1.13	2.8***	0.007	0.01	mg/L
Iron, Total Recoverable	11,900	9,870	6,390	14,600	300**	3	100	ug/L
Sodium, Total Recoverable	20.4	17.1	15.1	17.6	160*	0.03	0.5	mg/L
Arsenic, Total Recoverable	278	166	77.6	161	10*	0.5	1	ug/L
Barium, Total Recoverable	55.2	46.4	33.3	68.6	2000*	0.5	2	ug/L
Beryllium, Total Recoverable	0.15 I	0.06 I	0.05 I	0.07 I	4*	0.04	0.5	ug/L
Cadmium, Total Recoverable	0.87	ND	ND	ND	5*	0.1	0.4	ug/L
Cobalt, Total Recoverable	3.2	2.2	1.4	2.8	420	0.03	1	ug/L
Chromium, Total Recoverable	11.1	6.6	3.2	4.8	100*	0.2	1	ug/L
Copper, Total Recoverable	0.8 I	ND	ND	0.7 I	1000**	0.3	1	ug/L
Nickel, Total Recoverable	6.1	1 I	0.8	1.3	100*	0.5	2	ug/L
Lead, Total Recoverable	1.05	0.16 I	0.27	0.6	15*	0.12	0.5	ug/L
Selenium, Total Recoverable	2.8	ND	ND	ND	50*	1.1	2	ug/L
Thallium, Total Recoverable	0.05 I	ND	ND	ND	2*	0.05	0.2	ug/L
Vanadium, Total Recoverable	12.3	3.5	2.9	8.2	49***	0.3	2	ug/L
Zinc, Total Recoverable	2.8 I	4.9 I	5.2	6 I	5000**	1.6	5	ug/L
Mercury, Total	ND	ND	ND	0.02 I	2	0.02	0.10	ug/
Toluene	0.23 I	ND	ND	ND	1000**	0.19	1	ug/L
Solids, Total Dissolved	445	268	237	348	500**	10	10	mg/L

Notes:

ND = Not Detect

MDL = Method Detection Limit

PQL = Practical Quantitation Limit

I = The reported value is between the laboratory method detection limit and the laboratory PQL.

MCL = Maximum Contaminant Level (PDWS*, SDWS**, GCTL***)

PDWS = Primary Drinking Water Standard

SDWS = Secondary Drinking Water Standard

GCTL = Groundwater Cleanup Target Level

**Table 2 – Summary of Parameters detected during Lab Analysis CW-2A**

Parameters	CW-2A Result				MCL	MDL	PQL	Units
	Q1	Q2	Q3	Q4				
Chloride	76.3	92.1	106	90.5	250**	0.11	0.5	mg/L
Ammonia as Nitrogen	6.72	6.83	7.19	7.28	2.8***	0.007	0.01	mg/L
Iron, Total Recoverable	8,070	4,050	3,270	1,450	300**	3	100	ug/L
Sodium, Total Recoverable	50.4	59.4	66.8	74.2	160*	0.03	0.5	mg/L
Arsenic, Total Recoverable	1 I	2.2	1.3	ND	10*	0.5	1	ug/L
Barium, Total Recoverable	54	54.1	54.2	47	2000*	0.5	2	ug/L
Beryllium, Total Recoverable	0.54	0.38	0.36	0.4	4*	0.04	0.5	ug/L
Cobalt, Total Recoverable	2.6	1.8	1.4	0.9	420	0.03	1	ug/L
Chromium, Total Recoverable	1.5	1.9	1.6	ND	100*	0.2	1	ug/L
Copper, Total Recoverable	0.4 I	0.4	0.3	ND	1000**	0.3	1	ug/L
Nickel, Total Recoverable	2.5	2.9	2.5	4	100*	0.5	2	ug/L
Vanadium, Total Recoverable	9.2	8.6	7.8	12	49***	0.3	2	ug/L
Zinc, Total Recoverable	3.7 I	3.8	4.1	ND	5000**	1.6	5	ug/L
Mercury, Total	0.03 I	ND	ND	ND	2*	0.02	0.1	ug/L
Chloroethane	ND	ND	ND	19 ND†	12***	0.52	5.0	ug/L
Solids, Total Dissolved	918	952	958	1,010	500**	10	10	mg/L

Notes:

ND = Not Detect

MDL = Method Detection Limit

PQL = Practical Quantitation Limit

I = The reported value is between the laboratory method detection limit and the laboratory PQL.

MCL = Maximum Contaminant Level (PDWS*, SDWS**, GCTL***)

PDWS = Primary Drinking Water Standard

SDWS = Secondary Drinking Water Standard

GCTL = Groundwater Cleanup Target Level

† Chloroethane was detected at 19 ug/L (8/14), but was not detected in resample (9/14)

Table 3 – Summary of Parameters detected during Lab Analysis CW-3A

Parameters	CW-3A Result				MCL	MDL	PQL	Units
	Q1	Q2	Q3	Q4				
Chloride	62	63	59.6	65.1	250**	0.11	0.5	mg/L
Ammonia as Nitrogen	11.1	8.17	7.8	9.52	2.8***	0.007	0.01	mg/L
Iron, Total Recoverable	126,000	115,000	123,000	110,000	300**	3	100	ug/L
Sodium, Total Recoverable	65.5	68.5	57.9	49.8	160*	0.03	0.5	mg/L
Arsenic, Total Recoverable	2.1	2	1.7	2.3	10*	0.5	1	ug/L
Barium, Total Recoverable	173	108	121	120	2000*	0.5	2	ug/L
Beryllium, Total Recoverable	0.63	0.67	0.61	0.98	4*	0.04	0.5	ug/L
Cobalt, Total Recoverable	12.9	13	12.6	15.2	420	0.03	1	ug/L
Chromium, Total Recoverable	12.5	8.3	9.3	10.0	100*	0.2	1	ug/L
Copper, Total Recoverable	0.6 I	.4 I	0.5	0.4	1000**	0.3	1	ug/L
Nickel, Total Recoverable	3.1	2.1	2.5	2.9	100*	0.5	2	ug/L
Lead, Total Recoverable	2.08	ND	ND	ND	15*	0.12	0.5	ug/L
Selenium, Total Recoverable	1.8 I	ND	ND	ND	50*	1.1	2	ug/L
Vanadium, Total Recoverable	15	11.3	10.9	11.5	49***	0.3	2	ug/L
Zinc, Total Recoverable	3.7 I	6.5	4.5	2.3	5000**	1.6	5	ug/L
Mercury, Total	0.05 I	ND	ND	0.07	2*	0.02	0.1	ug/L
Solids, Total Dissolved	1,190	1,230	1,360	1,360	500**	10	10	mg/L

Notes:

ND = Not Detect

MDL = Method Detection Limit

PQL = Practical Quantitation Limit

I = The reported value is between the laboratory method detection limit and the laboratory PQL.

MCL = Maximum Contaminant Level (PDWS*, SDWS**, GCTL ***)

PDWS = Primary Drinking Water Standard

SDWS = Secondary Drinking Water Standard

GCTL = Groundwater Cleanup Target Level

VOCs were not detected during Quarter 1, Quarter 2, Quarter 3 or Quarter 4, with the exceptions of very low level toluene in CW-1A during Quarter 1 and chloroethane above the GCTL in CW-2A during Quarter 4. Note that chloroethane was also detected in the trip blank between the MDL and the PQL, in both the Quarter 4 sample and the method blank. CW-2A was resampled, and methylene chloride was not detected in the resample. The Quarter 1 toluene concentration (0.23 ug/L) was between the MDL and the PQL and well below the SDWS of 1000 ug/L, and toluene was not confirmed during Quarter 2, Quarter 3, or Quarter 4. Ammonia (N), iron, TDS, and arsenic have been the only parameters detected above groundwater standards. Each of these parameters has been historically detected in the “A” Zone wells, and both arsenic and TDS levels are frequently associated with high iron concentrations. Iron exceeded the SDWS in each of the three evaluation monitoring wells, however with the exception of CW-3A, levels were within the historical range. Iron was reported in CW-3A at 126,000 ug/L (Quarter 1), 115,000 ug/L (Quarter 2), 123,000 ug/L (Quarter 3), and 110,000 ug/L (Quarter 4). Laboratory error was suspected in the Quarter 1 analysis, but the Quarter 2, Quarter 3, and Quarter 4 results have confirmed high iron concentration. High turbidity and low Oxidation/Reduction Potential (ORP) can also result in high levels of dissolved iron, but the reported levels of turbidity and ORP in CW-3A do not support that conclusion. Turbidity in CW-3A in Quarter 1 (32 to 35 NTU) was higher than the other evaluation monitoring wells, but in Quarters 2, 3 and 4, turbidity was very low (<0.4, 1.1, and 2.7 NTU, respectively) as comparable to the other wells. The ORP levels in CW-3A have also been comparable to levels in CW-1A and CW-2A. ORP ranged from 42 to 61.1 mV in CW-1A, -12.7 to 77.7 mV in CW-2A, and 19.0 to 72.5 mV in CW-3A. ORP levels during Quarter 4 were lower in all three wells than in previous events.

Arsenic was also reported above the PDWS of 10 ug/L in CW-1A at 278 ug/L in Quarter 1, 166 ug/L in Quarter 2, 77.6 ug/L in Quarter 3, and 161 ug/L in Quarter 4. CW-1A was installed at a location west of the landfill to delineate MW-3A, however MW-3A rarely reports arsenic levels above 2 ug/L, and CW-2A and CW-3A reported arsenic at < 2.2 ug/L in both Quarter 1 and Quarter 2. In Quarter 4, arsenic was not detected in CW-2A, and the arsenic level in CW-3A was 2.4 ug/L. Based on low arsenic levels in the detection wells, there may be a secondary source, such as the nearby electrical power pole that may have been treated with an arsenic compound such as CCA. Although the arsenic level in CW-1A was again reported above the PDWS, levels decreased by an order of magnitude, from 278 ug/L (Quarter 1) to 77.6 ug/L (Quarter 3), but levels have increased to 161 ug/L in Quarter 4.

Based on historical detections, arsenic, which has a geochemical association with iron, is frequently detected in “A” Zone monitoring wells. Arsenic is occasionally detected above the MCL, but when reported above the MCL the range is typically between 10 and 20 ug/L in two wells (MW-11A and MW-13A) on the east side of the landfill. However, arsenic was barely detected in the wells downgradient of MW-11A and MW-13A. TDS levels reported exceeding the SDWS in CW-2A and CW-3A and just below the MCL in CW-1A are attributable to the high iron levels in these wells.

In summary, the three evaluation monitoring wells were installed to delineate VOCs (primarily benzene and vinyl chloride) that have been reported from samples collected in the shallow (“A” Zone) wells. Neither of these VOCs has been detected in the evaluation monitoring wells. Additionally, chloride, which is an excellent conservative indicator of leachate in groundwater, was detected at low levels and well balanced with sodium. These findings support the suggestion that



the VOCs which have been detected above groundwater standards in upgradient wells were likely associated with landfill gas.

Recommendations

The Work Plan submitted October 31, 2013 required installing the three evaluation monitoring wells described herein. The Work Plan requires sampling and analyzing groundwater from the three wells for the purpose of delineating VOCs, primarily benzene and vinyl chloride, within the landfill compliance zone. This report is the fourth of four quarterly reports required for submittal during the evaluation monitoring described in the Work Plan. Based on the results of the four quarterly sampling events – significant VOC levels were not detected – the evaluation monitoring program is complete. It is noted that elevated levels of iron were detected in samples collected from the evaluation monitoring wells, and elevated arsenic levels were detected in evaluation monitoring well CW-1A. There is a history of low level arsenic detections at the site, but the detections in CW-1A appear to be isolated and they indicate a secondary source. Iron is also commonly detected at the site, although the levels detected in SW-3A are unusual. Neither the iron detections nor the arsenic detections appear to be associated with the VOC Evaluation Monitoring Work Plan, and it is recommended to close out this Evaluation Monitoring project.

Closing

HDR has prepared this report on behalf of Omni to maintain compliance with the Florida Water Quality Regulations. Thank you in advance for your review. If you have any questions or comments, please contact me at (904) 598-8900 or Mr. Mike Kaiser at (904) 673-0446.

Sincerely,

A handwritten signature in blue ink that reads "John S. Catches".

John S. Catches, P.G.
Sr. Project Manager

Attachments

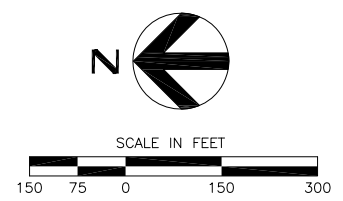
Cc: Mike Kaiser, Progressive Waste Solutions, Inc.



1

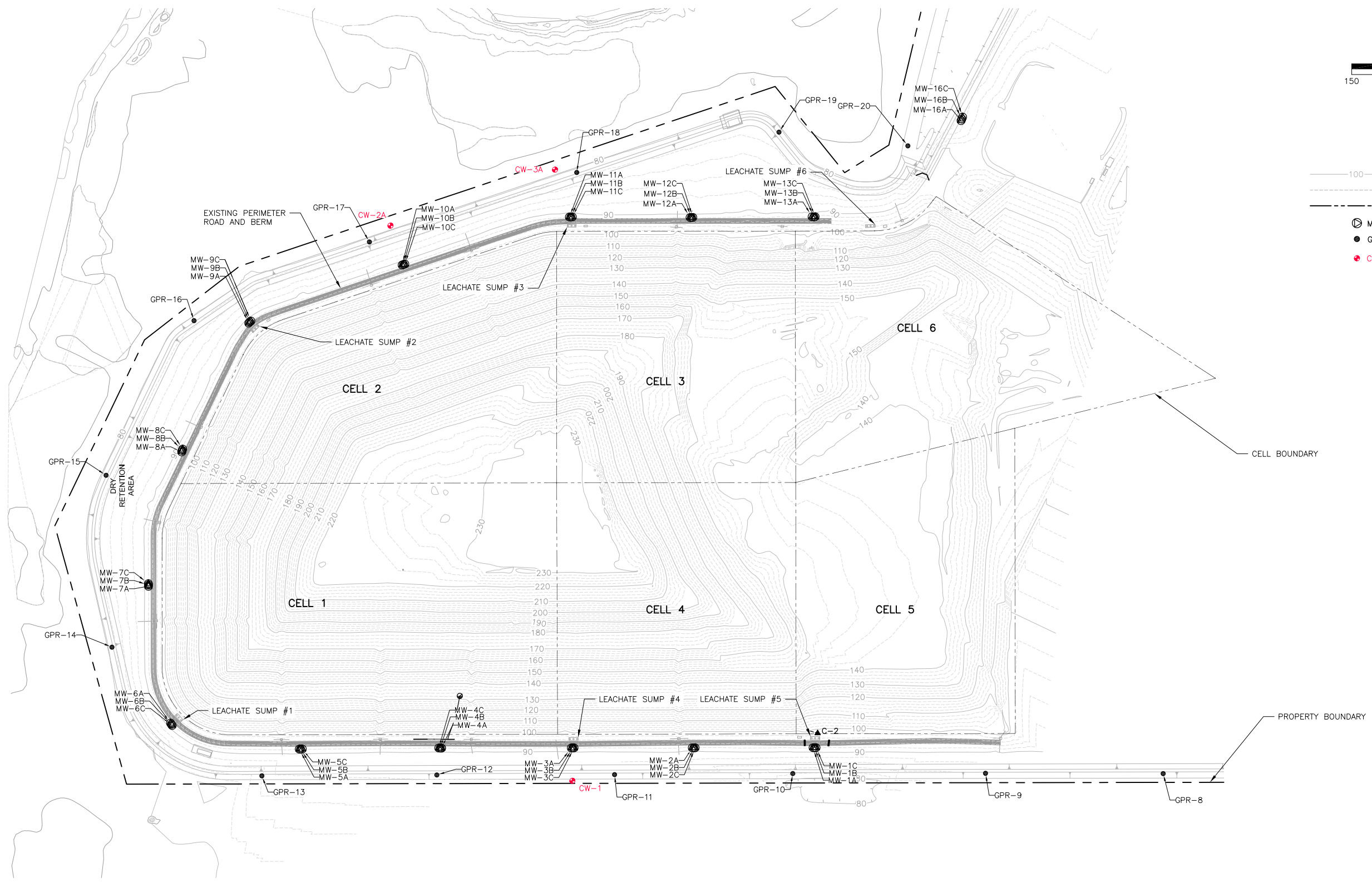
Attachment One

FIGURES AND WATER TABLE ELEVATIONS



LEGEND

- 100 EXISTING CONTOURS (MAJOR)
- EXISTING CONTOURS (MINOR)
- EXISTING CELL BOUNDARY
- MW-1A EXISTING MONITORING WELLS
- GPR-1 PERIMETER GAS MONITORING PROBE
- CW-1 PROPOSED COMPLIANCE MONITORING WELL



ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	B. STONE, P.E.
DESIGN BY	C. KOENIG, P.E.
DESIGN BY	
CHECKED BY	B. STONE, P.E.
DRAWN BY	C. BREWER
PROJECT NUMBER	174075



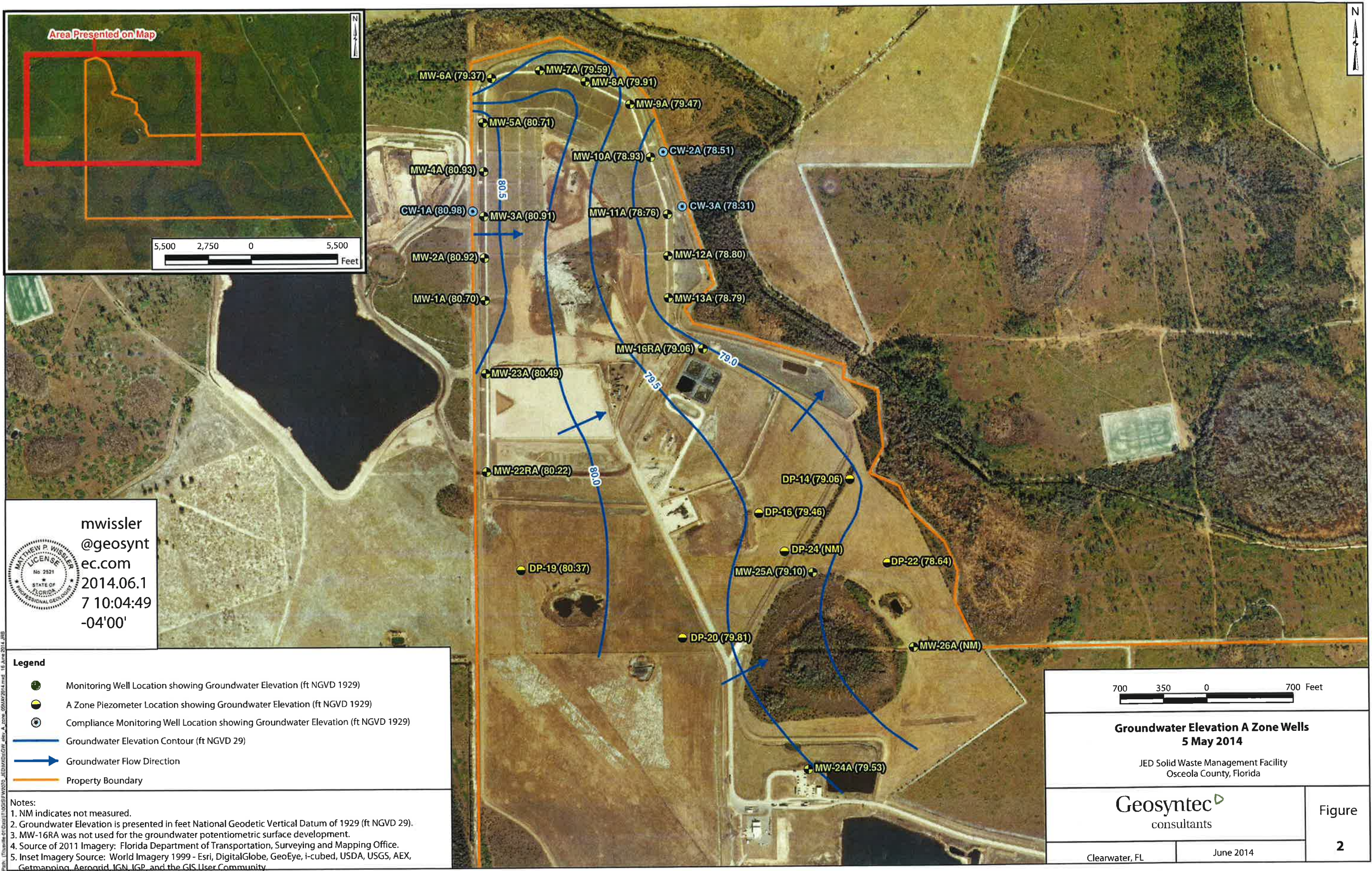
J.E.D. Solid Waste Management Facility
Omni Waste of Osceola County, LLC

1501 Omni Way St. Cloud, FL. 34773
(407) 891-3720

2013 J.E.D. LANDFILL
GROUNDWATER ASSESSMENT STUDY PLAN

FILENAME OOC-01.dwg
SCALE AS SHOWN

SHEET
Figure 1



**GROUNDWATER LEVEL MEASUREMENTS
QUARTERLY COMPLIANCE WELL SAMPLING EVENT
J.E.D. SOLID WASTE MANAGEMENT FACILITY**

Site Name: <u>JED Solid Waste Management Facility</u>				
Location: <u>Osceola County, Florida</u>				
Date: <u>5-May-2014</u>				
Well ID	Time	TOC Elevation	Depth to Water (ft)	GW Elevation
CW-1A	15:40	84.53	3.55	80.98
CW-2A	14:40	82.81	4.30	78.51
CW-3A	13:35	81.89	3.58	78.31
DP-19	10:37	84.34	3.97	80.37
DP-20	10:30	83.07	3.26	79.81
DP-22	10:00	81.00	2.36	78.64
MW-1A	11:00	95.12	14.42	80.70
MW-2A	11:10	95.21	14.29	80.92
MW-3A	11:15	94.64	13.73	80.91
MW-4A	11:20	95.48	14.55	80.93
MW-5A	11:25	95.32	14.61	80.71
MW-6A	11:30	94.72	15.35	79.37
MW-7A	11:35	95.48	15.89	79.59
MW-8A	11:45	94.67	14.76	79.91
MW-9A	11:50	94.66	15.19	79.47
MW-10A	12:00	96.25	17.32	78.93
MW-11A	12:05	93.56	14.80	78.76
MW-12A	12:15	95.10	16.30	78.80
MW-13A	12:20	95.19	16.40	78.79
MW-16RA	12:25	95.01	15.95	79.06
MW-22RA	10:45	95.00	14.78	80.22
MW-23A	10:55	97.90	17.41	80.49
MW-24A	9:12	86.97	7.44	79.53

A decorative graphic consisting of several overlapping rectangles. A large blue rectangle is on the left. A grey rectangle is at the top right. A tan rectangle is at the bottom left. A dark grey rectangle is at the bottom right. The number '2' is centered in the white space between the blue and grey rectangles.

2

Attachment Two

LABORATORY AND FIELD DATA



September 16, 2014

Service Request No:J1406394

Mike Kaiser
Waste Services of Florida, Inc.
1501 Omni Way
St Cloud, FL 34773

Laboratory Results for: JED Compliance Wells

Dear Mike,

Enclosed are the results of the sample(s) submitted to our laboratory August 21, 2014
For your reference, these analyses have been assigned our service request number **J1406394**.

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 ALS Environmental 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. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 4409. You may also contact me via email at Craig.Myers@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Craig Myers
Project Manager

ADDRESS 9143 Philips Highway, Suite 200, Jacksonville, FL 32256
PHONE +1 904 739 2277 | FAX +1 904 739 2011
ALS Group USA, Corp.
dba ALS Environmental

SAMPLE DETECTION SUMMARY

CLIENT ID: CW-1A		Lab ID: J1406394-001				
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Analyte	Results	Flag	MDL	PQL	Units	Method
Chloride	18.1		0.2	1.0	mg/L	300.0
Nitrate as Nitrogen	0.08	I	0.03	0.20	mg/L	300.0
Ammonia as Nitrogen	1.13		0.007	0.010	mg/L	350.1
Iron, Total Recoverable	14600		3	100	ug/L	6010B
Sodium, Total Recoverable	17.6		0.03	0.50	mg/L	6010B
Arsenic, Total Recoverable	161		0.9	2.0	ug/L	6020
Barium, Total Recoverable	68.6		0.9	4.0	ug/L	6020
Beryllium, Total Recoverable	0.07	I	0.07	1.0	ug/L	6020
Cobalt, Total Recoverable	2.8		0.06	2.0	ug/L	6020
Chromium, Total Recoverable	4.8		0.4	2.0	ug/L	6020
Copper, Total Recoverable	0.7	I	0.5	2.0	ug/L	6020
Nickel, Total Recoverable	1.3	I	1.0	4.0	ug/L	6020
Lead, Total Recoverable	0.6	I	0.3	1.0	ug/L	6020
Vanadium, Total Recoverable	8.2		0.5	4.0	ug/L	6020
Zinc, Total Recoverable	6	I	4	10	ug/L	6020
Mercury, Total	0.02	I	0.02	0.10	ug/L	7470A
Solids, Total Dissolved	348		10	10	mg/L	SM 2540 C

CLIENT ID: CW-2A		Lab ID: J1406394-002				
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Analyte	Results	Flag	MDL	PQL	Units	Method
Chloride	90.5		0.2	1.0	mg/L	300.0
Ammonia as Nitrogen	7.28		0.007	0.010	mg/L	350.1
Iron, Total Recoverable	1450		3	100	ug/L	6010B
Sodium, Total Recoverable	74.2		0.03	0.50	mg/L	6010B
Barium, Total Recoverable	47		3	10	ug/L	6020
Beryllium, Total Recoverable	0.4	I	0.2	2.5	ug/L	6020
Cobalt, Total Recoverable	0.9	I	0.2	5.0	ug/L	6020
Nickel, Total Recoverable	4	I	3	10	ug/L	6020
Vanadium, Total Recoverable	12		2	10	ug/L	6020
Chloroethane	19		0.52	5.0	ug/L	8260B
Solids, Total Dissolved	1010		20	20	mg/L	SM 2540 C

CLIENT ID: CW-3A		Lab ID: J1406394-003				
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Analyte	Results	Flag	MDL	PQL	Units	Method
Chloride	65.1		0.2	1.0	mg/L	300.0
Nitrate as Nitrogen	0.1	I	0.03	0.20	mg/L	300.0
Ammonia as Nitrogen	9.52		0.007	0.010	mg/L	350.1
Iron, Total Recoverable	110000		3	100	ug/L	6010B
Sodium, Total Recoverable	49.8		0.03	0.50	mg/L	6010B
Arsenic, Total Recoverable	2.3		0.5	1.0	ug/L	6020
Barium, Total Recoverable	120		0.5	2.0	ug/L	6020
Beryllium, Total Recoverable	0.98		0.04	0.50	ug/L	6020

SAMPLE DETECTION SUMMARY

CLIENT ID: CW-3A	Lab ID: J1406394-003
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Analyte	Results	Flag	MDL	PQL	Units	Method
Cobalt, Total Recoverable	15.2		0.03	1.0	ug/L	6020
Chromium, Total Recoverable	10.0		0.2	1.0	ug/L	6020
Copper, Total Recoverable	0.4	I	0.3	1.0	ug/L	6020
Nickel, Total Recoverable	2.9		0.5	2.0	ug/L	6020
Vanadium, Total Recoverable	11.5		0.3	2.0	ug/L	6020
Zinc, Total Recoverable	2.3	I	1.6	5.0	ug/L	6020
Mercury, Total	0.07	I	0.02	0.10	ug/L	7470A
Solids, Total Dissolved	1360		20	20	mg/L	SM 2540 C

CLIENT ID: Duplicate	Lab ID: J1406394-004
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Analyte	Results	Flag	MDL	PQL	Units	Method
Chloride	18.4		0.2	1.0	mg/L	300.0
Nitrate as Nitrogen	0.08	I	0.03	0.20	mg/L	300.0
Ammonia as Nitrogen	1.09		0.007	0.010	mg/L	350.1
Iron, Total Recoverable	14600		3	100	ug/L	6010B
Sodium, Total Recoverable	17.6		0.03	0.50	mg/L	6010B
Arsenic, Total Recoverable	187		0.5	1.0	ug/L	6020
Barium, Total Recoverable	70.1		0.5	2.0	ug/L	6020
Beryllium, Total Recoverable	0.1	I	0.04	0.50	ug/L	6020
Cadmium, Total Recoverable	0.14	I	0.10	0.40	ug/L	6020
Cobalt, Total Recoverable	2.7		0.03	1.0	ug/L	6020
Chromium, Total Recoverable	6.1		0.2	1.0	ug/L	6020
Copper, Total Recoverable	0.7	I	0.3	1.0	ug/L	6020
Nickel, Total Recoverable	1.2	I	0.5	2.0	ug/L	6020
Lead, Total Recoverable	0.57		0.12	0.50	ug/L	6020
Selenium, Total Recoverable	1.3	I	1.1	2.0	ug/L	6020
Vanadium, Total Recoverable	7.2		0.3	2.0	ug/L	6020
Zinc, Total Recoverable	5.5		1.6	5.0	ug/L	6020
Solids, Total Dissolved	335		10	10	mg/L	SM 2540 C

CLIENT ID: Trip Blank	Lab ID: J1406394-005
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Analyte	Results	Flag	MDL	PQL	Units	Method
Methylene Chloride	0.23	IV	0.21	5.0	ug/L	8260B

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Department of Defense	66206	11/1/2014
Florida Department of Health	E82502	6/30/2015
Georgia Department of Natural Resources	958	6/30/2015
Kentucky Division of Waste Management	63	6/30/2015
Louisiana Department of Environmental Quality	02086	6/30/2015
Maine Department of Health and Human Services	2011006	2/3/2015
North Carolina Department of Environment and Natural Resources	527	12/31/2014
Pennsylvania Department of Environmental Protection	68-04835	8/31/2015
South Carolina Department of Health and Environmental Control	96021001	6/30/2015
Texas Commision on Environmental Quality	T104704197-13-5	5/31/2015
Virginia Environmental Accreditation Program	460191	12/14/2014

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

ALS Laboratory Group

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 Compliance Wells

Service Request:J1406394

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
J1406394-001	CW-1A	8/20/2014	0940
J1406394-002	CW-2A	8/20/2014	1100
J1406394-003	CW-3A	8/20/2014	1140
J1406394-004	Duplicate	8/20/2014	0000
J1406394-005	Trip Blank	8/20/2014	0000

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14 09:40
Date Received: 08/21/14 09:20

Sample Name: CW-1A
Lab Code: J1406394-001

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	1.0	0.19	1	09/03/14 06:45	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	09/03/14 06:45	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	09/03/14 06:45	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	09/03/14 06:45	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	09/03/14 06:45	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	09/03/14 06:45	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	09/03/14 06:45	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	5.0	2.3	1	09/03/14 06:45	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	09/03/14 06:45	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	09/03/14 06:45	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	09/03/14 06:45	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	09/03/14 06:45	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	09/03/14 06:45	
2-Butanone (MEK)	3.8 U	10	3.8	1	09/03/14 06:45	
2-Hexanone	2.2 U	25	2.2	1	09/03/14 06:45	
4-Methyl-2-pentanone (MIBK)	1.1 U	25	1.1	1	09/03/14 06:45	
Acetone	5.6 U	50	5.6	1	09/03/14 06:45	
Acrylonitrile	1.5 U	10	1.5	1	09/03/14 06:45	
Benzene	0.21 U	1.0	0.21	1	09/03/14 06:45	
Bromochloromethane	0.27 U	5.0	0.27	1	09/03/14 06:45	
Bromodichloromethane	0.22 U	1.0	0.22	1	09/03/14 06:45	
Bromoform	0.42 U	2.0	0.42	1	09/03/14 06:45	
Bromomethane	0.23 U	5.0	0.23	1	09/03/14 06:45	
Carbon Disulfide	2.4 U	10	2.4	1	09/03/14 06:45	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	09/03/14 06:45	
Chlorobenzene	0.16 U	1.0	0.16	1	09/03/14 06:45	
Chloroethane	0.52 U	5.0	0.52	1	09/03/14 06:45	
Chloroform	0.35 U	1.0	0.35	1	09/03/14 06:45	
Chloromethane	0.36 U	1.0	0.36	1	09/03/14 06:45	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	09/03/14 06:45	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	09/03/14 06:45	
Dibromochloromethane	0.21 U	1.0	0.21	1	09/03/14 06:45	
Dibromomethane	0.36 U	5.0	0.36	1	09/03/14 06:45	
Ethylbenzene	0.21 U	1.0	0.21	1	09/03/14 06:45	
Iodomethane	2.7 U	5.0	2.7	1	09/03/14 06:45	
m,p-Xylenes	0.31 U	2.0	0.31	1	09/03/14 06:45	
Methylene Chloride	0.21 U	5.0	0.21	1	09/03/14 06:45	
o-Xylene	0.14 U	1.0	0.14	1	09/03/14 06:45	
Styrene	0.29 U	1.0	0.29	1	09/03/14 06:45	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	09/03/14 06:45	
Toluene	0.19 U	1.0	0.19	1	09/03/14 06:45	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	09/03/14 06:45	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	09/03/14 06:45	

ALS Group USA, Corp.
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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14 09:40
Date Received: 08/21/14 09:20

Sample Name: CW-1A
Lab Code: J1406394-001

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	20	2.2	1	09/03/14 06:45	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	09/03/14 06:45	
Trichlorofluoromethane	0.24 U	20	0.24	1	09/03/14 06:45	
Vinyl Acetate	1.9 U	10	1.9	1	09/03/14 06:45	
Vinyl Chloride	0.36 U	1.0	0.36	1	09/03/14 06:45	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	102	72 - 121	09/03/14 06:45	
4-Bromofluorobenzene	99	86 - 113	09/03/14 06:45	
Dibromofluoromethane	97	86 - 112	09/03/14 06:45	
Toluene-d8	103	88 - 115	09/03/14 06:45	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14 09:40
Date Received: 08/21/14 09:20

Sample Name: CW-1A
Lab Code: J1406394-001

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	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2-Dibromo-3-chloropropane (DBCP)	0.00704 U	0.0201	0.00704	1	09/02/14 17:39	9/2/14	
1,2-Dibromoethane (EDB)	0.00704 U	0.0201	0.00704	1	09/02/14 17:39	9/2/14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	112	70 - 130	09/02/14 17:39	

ALS Group USA, Corp.
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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Sample Name: CW-1A
Lab Code: J1406394-001

Service Request: J1406394
Date Collected: 08/20/14 09:40
Date Received: 08/21/14 09:20

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020	0.4 U	ug/L	2.0	0.4	2	08/28/14 20:52	08/22/14	
Arsenic, Total Recoverable	6020	161	ug/L	2.0	0.9	2	08/28/14 20:52	08/22/14	
Barium, Total Recoverable	6020	68.6	ug/L	4.0	0.9	2	08/28/14 20:52	08/22/14	
Beryllium, Total Recoverable	6020	0.07 I	ug/L	1.0	0.07	2	08/28/14 20:52	08/22/14	
Cadmium, Total Recoverable	6020	0.19 U	ug/L	0.80	0.19	2	08/28/14 20:52	08/22/14	
Chromium, Total Recoverable	6020	4.8	ug/L	2.0	0.4	2	08/28/14 20:52	08/22/14	
Cobalt, Total Recoverable	6020	2.8	ug/L	2.0	0.06	2	08/28/14 20:52	08/22/14	
Copper, Total Recoverable	6020	0.7 I	ug/L	2.0	0.5	2	08/28/14 20:52	08/22/14	
Iron, Total Recoverable	6010B	14600	ug/L	100	3	1	08/31/14 18:45	08/28/14	
Lead, Total Recoverable	6020	0.6 I	ug/L	1.0	0.3	2	08/28/14 20:52	08/22/14	
Mercury, Total	7470A	0.02 I	ug/L	0.10	0.02	1	09/03/14 13:27	08/27/14	
Nickel, Total Recoverable	6020	1.3 I	ug/L	4.0	1.0	2	08/28/14 20:52	08/22/14	
Selenium, Total Recoverable	6020	2.2 U	ug/L	4.0	2.2	2	08/28/14 20:52	08/22/14	
Silver, Total Recoverable	6020	0.2 U	ug/L	1.0	0.2	2	08/28/14 20:52	08/22/14	
Sodium, Total Recoverable	6010B	17.6	mg/L	0.50	0.03	1	08/31/14 18:45	08/28/14	
Thallium, Total Recoverable	6020	0.10 U	ug/L	0.40	0.10	2	08/28/14 20:52	08/22/14	
Vanadium, Total Recoverable	6020	8.2	ug/L	4.0	0.5	2	08/28/14 20:52	08/22/14	
Zinc, Total Recoverable	6020	6 I	ug/L	10	4	2	08/28/14 20:52	08/22/14	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water
Sample Name: CW-1A
Lab Code: J1406394-001

Service Request: J1406394
Date Collected: 08/20/14 09:40
Date Received: 08/21/14 09:20
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Q
Ammonia as Nitrogen	350.1	1.13	mg/L	0.010	0.007	1	08/25/14 15:32	
Chloride	300.0	18.1	mg/L	1.0	0.2	1	08/21/14 23:27	
Nitrate as Nitrogen	300.0	0.08 I	mg/L	0.20	0.03	1	08/21/14 23:27	
Solids, Total Dissolved	SM 2540 C	348	mg/L	10	10	1	08/25/14 16:29	

ALS Group USA, Corp.
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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14 11:00
Date Received: 08/21/14 09:20

Sample Name: CW-2A
Lab Code: J1406394-002

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	1.0	0.19	1	09/03/14 07:12	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	09/03/14 07:12	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	09/03/14 07:12	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	09/03/14 07:12	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	09/03/14 07:12	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	09/03/14 07:12	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	09/03/14 07:12	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	5.0	2.3	1	09/03/14 07:12	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	09/03/14 07:12	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	09/03/14 07:12	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	09/03/14 07:12	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	09/03/14 07:12	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	09/03/14 07:12	
2-Butanone (MEK)	3.8 U	10	3.8	1	09/03/14 07:12	
2-Hexanone	2.2 U	25	2.2	1	09/03/14 07:12	
4-Methyl-2-pentanone (MIBK)	1.1 U	25	1.1	1	09/03/14 07:12	
Acetone	5.6 U	50	5.6	1	09/03/14 07:12	
Acrylonitrile	1.5 U	10	1.5	1	09/03/14 07:12	
Benzene	0.21 U	1.0	0.21	1	09/03/14 07:12	
Bromochloromethane	0.27 U	5.0	0.27	1	09/03/14 07:12	
Bromodichloromethane	0.22 U	1.0	0.22	1	09/03/14 07:12	
Bromoform	0.42 U	2.0	0.42	1	09/03/14 07:12	
Bromomethane	0.23 U	5.0	0.23	1	09/03/14 07:12	
Carbon Disulfide	2.4 U	10	2.4	1	09/03/14 07:12	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	09/03/14 07:12	
Chlorobenzene	0.16 U	1.0	0.16	1	09/03/14 07:12	
Chloroethane	19	5.0	0.52	1	09/03/14 07:12	
Chloroform	0.35 U	1.0	0.35	1	09/03/14 07:12	
Chloromethane	0.36 U	1.0	0.36	1	09/03/14 07:12	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	09/03/14 07:12	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	09/03/14 07:12	
Dibromochloromethane	0.21 U	1.0	0.21	1	09/03/14 07:12	
Dibromomethane	0.36 U	5.0	0.36	1	09/03/14 07:12	
Ethylbenzene	0.21 U	1.0	0.21	1	09/03/14 07:12	
Iodomethane	2.7 U	5.0	2.7	1	09/03/14 07:12	
m,p-Xylenes	0.31 U	2.0	0.31	1	09/03/14 07:12	
Methylene Chloride	0.21 U	5.0	0.21	1	09/03/14 07:12	
o-Xylene	0.14 U	1.0	0.14	1	09/03/14 07:12	
Styrene	0.29 U	1.0	0.29	1	09/03/14 07:12	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	09/03/14 07:12	
Toluene	0.19 U	1.0	0.19	1	09/03/14 07:12	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	09/03/14 07:12	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	09/03/14 07:12	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14 11:00
Date Received: 08/21/14 09:20

Sample Name: CW-2A
Lab Code: J1406394-002

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	20	2.2	1	09/03/14 07:12	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	09/03/14 07:12	
Trichlorofluoromethane	0.24 U	20	0.24	1	09/03/14 07:12	
Vinyl Acetate	1.9 U	10	1.9	1	09/03/14 07:12	
Vinyl Chloride	0.36 U	1.0	0.36	1	09/03/14 07:12	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	103	72 - 121	09/03/14 07:12	
4-Bromofluorobenzene	99	86 - 113	09/03/14 07:12	
Dibromofluoromethane	95	86 - 112	09/03/14 07:12	
Toluene-d8	103	88 - 115	09/03/14 07:12	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14 11:00
Date Received: 08/21/14 09:20

Sample Name: CW-2A
Lab Code: J1406394-002

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	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2-Dibromo-3-chloropropane (DBCP)	0.00713 U	0.0204	0.00713	1	08/27/14 23:57	8/27/14	
1,2-Dibromoethane (EDB)	0.00713 U	0.0204	0.00713	1	08/27/14 23:57	8/27/14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	88	70 - 130	08/27/14 23:57	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Sample Name: CW-2A
Lab Code: J1406394-002

Service Request: J1406394
Date Collected: 08/20/14 11:00
Date Received: 08/21/14 09:20

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020	0.8 U	ug/L	5.0	0.8	5	08/28/14 20:57	08/22/14	
Arsenic, Total Recoverable	6020	2.1 U	ug/L	5.0	2.1	5	08/28/14 20:57	08/22/14	
Barium, Total Recoverable	6020	47	ug/L	10	3	5	08/28/14 20:57	08/22/14	
Beryllium, Total Recoverable	6020	0.4 I	ug/L	2.5	0.2	5	08/28/14 20:57	08/22/14	
Cadmium, Total Recoverable	6020	0.5 U	ug/L	2.0	0.5	5	08/28/14 20:57	08/22/14	
Chromium, Total Recoverable	6020	0.9 U	ug/L	5.0	0.9	5	08/28/14 20:57	08/22/14	
Cobalt, Total Recoverable	6020	0.9 I	ug/L	5.0	0.2	5	08/28/14 20:57	08/22/14	
Copper, Total Recoverable	6020	1.2 U	ug/L	5.0	1.2	5	08/28/14 20:57	08/22/14	
Iron, Total Recoverable	6010B	1450	ug/L	100	3	1	08/31/14 18:50	08/28/14	
Lead, Total Recoverable	6020	0.6 U	ug/L	2.5	0.6	5	08/28/14 20:57	08/22/14	
Mercury, Total	7470A	0.02 U	ug/L	0.10	0.02	1	09/03/14 13:28	08/27/14	
Nickel, Total Recoverable	6020	4 I	ug/L	10	3	5	08/28/14 20:57	08/22/14	
Selenium, Total Recoverable	6020	6 U	ug/L	10	6	5	08/28/14 20:57	08/22/14	
Silver, Total Recoverable	6020	0.3 U	ug/L	2.5	0.3	5	08/28/14 20:57	08/22/14	
Sodium, Total Recoverable	6010B	74.2	mg/L	0.50	0.03	1	08/31/14 18:50	08/28/14	
Thallium, Total Recoverable	6020	0.3 U	ug/L	1.0	0.3	5	08/28/14 20:57	08/22/14	
Vanadium, Total Recoverable	6020	12	ug/L	10	2	5	08/28/14 20:57	08/22/14	
Zinc, Total Recoverable	6020	8 U	ug/L	25	8	5	08/28/14 20:57	08/22/14	

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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water
Sample Name: CW-2A
Lab Code: J1406394-002

Service Request: J1406394
Date Collected: 08/20/14 11:00
Date Received: 08/21/14 09:20
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Q
Ammonia as Nitrogen	350.1	7.28	mg/L	0.010	0.007	1	08/25/14 15:33	
Chloride	300.0	90.5	mg/L	1.0	0.2	1	08/22/14 00:15	
Nitrate as Nitrogen	300.0	0.03 U	mg/L	0.20	0.03	1	08/22/14 00:15	
Solids, Total Dissolved	SM 2540 C	1010	mg/L	20	20	2	08/25/14 16:29	

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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14 11:40
Date Received: 08/21/14 09:20

Sample Name: CW-3A
Lab Code: J1406394-003

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	1.0	0.19	1	09/03/14 07:39	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	09/03/14 07:39	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	09/03/14 07:39	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	09/03/14 07:39	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	09/03/14 07:39	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	09/03/14 07:39	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	09/03/14 07:39	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	5.0	2.3	1	09/03/14 07:39	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	09/03/14 07:39	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	09/03/14 07:39	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	09/03/14 07:39	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	09/03/14 07:39	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	09/03/14 07:39	
2-Butanone (MEK)	3.8 U	10	3.8	1	09/03/14 07:39	
2-Hexanone	2.2 U	25	2.2	1	09/03/14 07:39	
4-Methyl-2-pentanone (MIBK)	1.1 U	25	1.1	1	09/03/14 07:39	
Acetone	5.6 U	50	5.6	1	09/03/14 07:39	
Acrylonitrile	1.5 U	10	1.5	1	09/03/14 07:39	
Benzene	0.21 U	1.0	0.21	1	09/03/14 07:39	
Bromochloromethane	0.27 U	5.0	0.27	1	09/03/14 07:39	
Bromodichloromethane	0.22 U	1.0	0.22	1	09/03/14 07:39	
Bromoform	0.42 U	2.0	0.42	1	09/03/14 07:39	
Bromomethane	0.23 U	5.0	0.23	1	09/03/14 07:39	
Carbon Disulfide	2.4 U	10	2.4	1	09/03/14 07:39	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	09/03/14 07:39	
Chlorobenzene	0.16 U	1.0	0.16	1	09/03/14 07:39	
Chloroethane	0.52 U	5.0	0.52	1	09/03/14 07:39	
Chloroform	0.35 U	1.0	0.35	1	09/03/14 07:39	
Chloromethane	0.36 U	1.0	0.36	1	09/03/14 07:39	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	09/03/14 07:39	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	09/03/14 07:39	
Dibromochloromethane	0.21 U	1.0	0.21	1	09/03/14 07:39	
Dibromomethane	0.36 U	5.0	0.36	1	09/03/14 07:39	
Ethylbenzene	0.21 U	1.0	0.21	1	09/03/14 07:39	
Iodomethane	2.7 U	5.0	2.7	1	09/03/14 07:39	
m,p-Xylenes	0.31 U	2.0	0.31	1	09/03/14 07:39	
Methylene Chloride	0.21 U	5.0	0.21	1	09/03/14 07:39	
o-Xylene	0.14 U	1.0	0.14	1	09/03/14 07:39	
Styrene	0.29 U	1.0	0.29	1	09/03/14 07:39	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	09/03/14 07:39	
Toluene	0.19 U	1.0	0.19	1	09/03/14 07:39	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	09/03/14 07:39	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	09/03/14 07:39	

ALS Group USA, Corp.
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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14 11:40
Date Received: 08/21/14 09:20

Sample Name: CW-3A
Lab Code: J1406394-003

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	20	2.2	1	09/03/14 07:39	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	09/03/14 07:39	
Trichlorofluoromethane	0.24 U	20	0.24	1	09/03/14 07:39	
Vinyl Acetate	1.9 U	10	1.9	1	09/03/14 07:39	
Vinyl Chloride	0.36 U	1.0	0.36	1	09/03/14 07:39	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	102	72 - 121	09/03/14 07:39	
4-Bromofluorobenzene	99	86 - 113	09/03/14 07:39	
Dibromofluoromethane	95	86 - 112	09/03/14 07:39	
Toluene-d8	102	88 - 115	09/03/14 07:39	

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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14 11:40
Date Received: 08/21/14 09:20

Sample Name: CW-3A
Lab Code: J1406394-003

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	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2-Dibromo-3-chloropropane (DBCP)	0.00713 U	0.0204	0.00713	1	09/02/14 18:01	9/2/14	
1,2-Dibromoethane (EDB)	0.00713 U	0.0204	0.00713	1	09/02/14 18:01	9/2/14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	107	70 - 130	09/02/14 18:01	

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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14 11:40
Date Received: 08/21/14 09:20

Sample Name: CW-3A
Lab Code: J1406394-003

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020	0.2 U	ug/L	1.0	0.2	1	09/03/14 19:15	08/27/14	
Arsenic, Total Recoverable	6020	2.3	ug/L	1.0	0.5	1	09/03/14 19:15	08/27/14	
Barium, Total Recoverable	6020	120	ug/L	2.0	0.5	1	09/03/14 19:15	08/27/14	
Beryllium, Total Recoverable	6020	0.98	ug/L	0.50	0.04	1	09/03/14 19:15	08/27/14	
Cadmium, Total Recoverable	6020	0.10 U	ug/L	0.40	0.10	1	09/03/14 19:15	08/27/14	
Chromium, Total Recoverable	6020	10.0	ug/L	1.0	0.2	1	09/03/14 19:15	08/27/14	
Cobalt, Total Recoverable	6020	15.2	ug/L	1.0	0.03	1	09/03/14 19:15	08/27/14	
Copper, Total Recoverable	6020	0.4 I	ug/L	1.0	0.3	1	09/03/14 19:15	08/27/14	
Iron, Total Recoverable	6010B	110000	ug/L	100	3	1	08/31/14 18:55	08/28/14	
Lead, Total Recoverable	6020	0.12 U	ug/L	0.50	0.12	1	09/03/14 19:15	08/27/14	
Mercury, Total	7470A	0.07 I	ug/L	0.10	0.02	1	09/03/14 13:32	08/27/14	
Nickel, Total Recoverable	6020	2.9	ug/L	2.0	0.5	1	09/03/14 19:15	08/27/14	
Selenium, Total Recoverable	6020	1.1 U	ug/L	2.0	1.1	1	09/03/14 19:15	08/27/14	
Silver, Total Recoverable	6020	0.06 U	ug/L	0.50	0.06	1	09/03/14 19:15	08/27/14	
Sodium, Total Recoverable	6010B	49.8	mg/L	0.50	0.03	1	08/31/14 18:55	08/28/14	
Thallium, Total Recoverable	6020	0.05 U	ug/L	0.20	0.05	1	09/03/14 19:15	08/27/14	
Vanadium, Total Recoverable	6020	11.5	ug/L	2.0	0.3	1	09/03/14 19:15	08/27/14	
Zinc, Total Recoverable	6020	2.3 I	ug/L	5.0	1.6	1	09/03/14 19:15	08/27/14	

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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water
Sample Name: CW-3A
Lab Code: J1406394-003

Service Request: J1406394
Date Collected: 08/20/14 11:40
Date Received: 08/21/14 09:20
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Q
Ammonia as Nitrogen	350.1	9.52	mg/L	0.010	0.007	1	08/25/14 15:34	
Chloride	300.0	65.1	mg/L	1.0	0.2	1	08/22/14 00:47	
Nitrate as Nitrogen	300.0	0.1 I	mg/L	0.20	0.03	1	08/22/14 00:47	
Solids, Total Dissolved	SM 2540 C	1360	mg/L	20	20	2	08/25/14 16:29	

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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14 00:00
Date Received: 08/21/14 09:20

Sample Name: Duplicate
Lab Code: J1406394-004

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	1.0	0.19	1	09/03/14 08:06	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	09/03/14 08:06	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	09/03/14 08:06	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	09/03/14 08:06	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	09/03/14 08:06	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	09/03/14 08:06	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	09/03/14 08:06	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	5.0	2.3	1	09/03/14 08:06	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	09/03/14 08:06	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	09/03/14 08:06	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	09/03/14 08:06	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	09/03/14 08:06	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	09/03/14 08:06	
2-Butanone (MEK)	3.8 U	10	3.8	1	09/03/14 08:06	
2-Hexanone	2.2 U	25	2.2	1	09/03/14 08:06	
4-Methyl-2-pentanone (MIBK)	1.1 U	25	1.1	1	09/03/14 08:06	
Acetone	5.6 U	50	5.6	1	09/03/14 08:06	
Acrylonitrile	1.5 U	10	1.5	1	09/03/14 08:06	
Benzene	0.21 U	1.0	0.21	1	09/03/14 08:06	
Bromochloromethane	0.27 U	5.0	0.27	1	09/03/14 08:06	
Bromodichloromethane	0.22 U	1.0	0.22	1	09/03/14 08:06	
Bromoform	0.42 U	2.0	0.42	1	09/03/14 08:06	
Bromomethane	0.23 U	5.0	0.23	1	09/03/14 08:06	
Carbon Disulfide	2.4 U	10	2.4	1	09/03/14 08:06	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	09/03/14 08:06	
Chlorobenzene	0.16 U	1.0	0.16	1	09/03/14 08:06	
Chloroethane	0.52 U	5.0	0.52	1	09/03/14 08:06	
Chloroform	0.35 U	1.0	0.35	1	09/03/14 08:06	
Chloromethane	0.36 U	1.0	0.36	1	09/03/14 08:06	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	09/03/14 08:06	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	09/03/14 08:06	
Dibromochloromethane	0.21 U	1.0	0.21	1	09/03/14 08:06	
Dibromomethane	0.36 U	5.0	0.36	1	09/03/14 08:06	
Ethylbenzene	0.21 U	1.0	0.21	1	09/03/14 08:06	
Iodomethane	2.7 U	5.0	2.7	1	09/03/14 08:06	
m,p-Xylenes	0.31 U	2.0	0.31	1	09/03/14 08:06	
Methylene Chloride	0.21 U	5.0	0.21	1	09/03/14 08:06	
o-Xylene	0.14 U	1.0	0.14	1	09/03/14 08:06	
Styrene	0.29 U	1.0	0.29	1	09/03/14 08:06	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	09/03/14 08:06	
Toluene	0.19 U	1.0	0.19	1	09/03/14 08:06	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	09/03/14 08:06	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	09/03/14 08:06	

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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14 00:00
Date Received: 08/21/14 09:20

Sample Name: Duplicate
Lab Code: J1406394-004

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	20	2.2	1	09/03/14 08:06	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	09/03/14 08:06	
Trichlorofluoromethane	0.24 U	20	0.24	1	09/03/14 08:06	
Vinyl Acetate	1.9 U	10	1.9	1	09/03/14 08:06	
Vinyl Chloride	0.36 U	1.0	0.36	1	09/03/14 08:06	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	103	72 - 121	09/03/14 08:06	
4-Bromofluorobenzene	99	86 - 113	09/03/14 08:06	
Dibromofluoromethane	96	86 - 112	09/03/14 08:06	
Toluene-d8	102	88 - 115	09/03/14 08:06	

ALS Group USA, Corp.
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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14 00:00
Date Received: 08/21/14 09:20

Sample Name: Duplicate
Lab Code: J1406394-004

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	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2-Dibromo-3-chloropropane (DBCP)	0.00714 U	0.0204	0.00714	1	09/02/14 18:23	9/2/14	
1,2-Dibromoethane (EDB)	0.00714 U	0.0204	0.00714	1	09/02/14 18:23	9/2/14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	93	70 - 130	09/02/14 18:23	

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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14 00:00
Date Received: 08/21/14 09:20

Sample Name: Duplicate
Lab Code: J1406394-004

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020	0.2 U	ug/L	1.0	0.2	1	09/03/14 19:20	08/27/14	
Arsenic, Total Recoverable	6020	187	ug/L	1.0	0.5	1	09/03/14 19:20	08/27/14	
Barium, Total Recoverable	6020	70.1	ug/L	2.0	0.5	1	09/03/14 19:20	08/27/14	
Beryllium, Total Recoverable	6020	0.1 I	ug/L	0.50	0.04	1	09/03/14 19:20	08/27/14	
Cadmium, Total Recoverable	6020	0.14 I	ug/L	0.40	0.10	1	09/03/14 19:20	08/27/14	
Chromium, Total Recoverable	6020	6.1	ug/L	1.0	0.2	1	09/03/14 19:20	08/27/14	
Cobalt, Total Recoverable	6020	2.7	ug/L	1.0	0.03	1	09/03/14 19:20	08/27/14	
Copper, Total Recoverable	6020	0.7 I	ug/L	1.0	0.3	1	09/03/14 19:20	08/27/14	
Iron, Total Recoverable	6010B	14600	ug/L	100	3	1	08/31/14 18:59	08/28/14	
Lead, Total Recoverable	6020	0.57	ug/L	0.50	0.12	1	09/03/14 19:20	08/27/14	
Mercury, Total	7470A	0.02 U	ug/L	0.10	0.02	1	09/03/14 13:33	08/27/14	
Nickel, Total Recoverable	6020	1.2 I	ug/L	2.0	0.5	1	09/03/14 19:20	08/27/14	
Selenium, Total Recoverable	6020	1.3 I	ug/L	2.0	1.1	1	09/03/14 19:20	08/27/14	
Silver, Total Recoverable	6020	0.06 U	ug/L	0.50	0.06	1	09/03/14 19:20	08/27/14	
Sodium, Total Recoverable	6010B	17.6	mg/L	0.50	0.03	1	08/31/14 18:59	08/28/14	
Thallium, Total Recoverable	6020	0.05 U	ug/L	0.20	0.05	1	09/03/14 19:20	08/27/14	
Vanadium, Total Recoverable	6020	7.2	ug/L	2.0	0.3	1	09/03/14 19:20	08/27/14	
Zinc, Total Recoverable	6020	5.5	ug/L	5.0	1.6	1	09/03/14 19:20	08/27/14	

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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water
Sample Name: Duplicate
Lab Code: J1406394-004

Service Request: J1406394
Date Collected: 08/20/14 00:00
Date Received: 08/21/14 09:20
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Q
Ammonia as Nitrogen	350.1	1.09	mg/L	0.010	0.007	1	08/25/14 15:38	
Chloride	300.0	18.4	mg/L	1.0	0.2	1	08/22/14 01:51	
Nitrate as Nitrogen	300.0	0.08 I	mg/L	0.20	0.03	1	08/22/14 01:51	
Solids, Total Dissolved	SM 2540 C	335	mg/L	10	10	1	08/26/14 12:29	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14 00:00
Date Received: 08/21/14 09:20

Sample Name: Trip Blank
Lab Code: J1406394-005

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	1.0	0.19	1	09/03/14 06:18	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	09/03/14 06:18	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	09/03/14 06:18	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	09/03/14 06:18	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	09/03/14 06:18	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	09/03/14 06:18	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	09/03/14 06:18	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	5.0	2.3	1	09/03/14 06:18	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	09/03/14 06:18	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	09/03/14 06:18	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	09/03/14 06:18	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	09/03/14 06:18	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	09/03/14 06:18	
2-Butanone (MEK)	3.8 U	10	3.8	1	09/03/14 06:18	
2-Hexanone	2.2 U	25	2.2	1	09/03/14 06:18	
4-Methyl-2-pentanone (MIBK)	1.1 U	25	1.1	1	09/03/14 06:18	
Acetone	5.6 U	50	5.6	1	09/03/14 06:18	
Acrylonitrile	1.5 U	10	1.5	1	09/03/14 06:18	
Benzene	0.21 U	1.0	0.21	1	09/03/14 06:18	
Bromochloromethane	0.27 U	5.0	0.27	1	09/03/14 06:18	
Bromodichloromethane	0.22 U	1.0	0.22	1	09/03/14 06:18	
Bromoform	0.42 U	2.0	0.42	1	09/03/14 06:18	
Bromomethane	0.23 U	5.0	0.23	1	09/03/14 06:18	
Carbon Disulfide	2.4 U	10	2.4	1	09/03/14 06:18	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	09/03/14 06:18	
Chlorobenzene	0.16 U	1.0	0.16	1	09/03/14 06:18	
Chloroethane	0.52 U	5.0	0.52	1	09/03/14 06:18	
Chloroform	0.35 U	1.0	0.35	1	09/03/14 06:18	
Chloromethane	0.36 U	1.0	0.36	1	09/03/14 06:18	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	09/03/14 06:18	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	09/03/14 06:18	
Dibromochloromethane	0.21 U	1.0	0.21	1	09/03/14 06:18	
Dibromomethane	0.36 U	5.0	0.36	1	09/03/14 06:18	
Ethylbenzene	0.21 U	1.0	0.21	1	09/03/14 06:18	
Iodomethane	2.7 U	5.0	2.7	1	09/03/14 06:18	
m,p-Xylenes	0.31 U	2.0	0.31	1	09/03/14 06:18	
Methylene Chloride	0.23 IV	5.0	0.21	1	09/03/14 06:18	
o-Xylene	0.14 U	1.0	0.14	1	09/03/14 06:18	
Styrene	0.29 U	1.0	0.29	1	09/03/14 06:18	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	09/03/14 06:18	
Toluene	0.19 U	1.0	0.19	1	09/03/14 06:18	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	09/03/14 06:18	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	09/03/14 06:18	

ALS Group USA, Corp.
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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14 00:00
Date Received: 08/21/14 09:20

Sample Name: Trip Blank
Lab Code: J1406394-005

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	20	2.2	1	09/03/14 06:18	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	09/03/14 06:18	
Trichlorofluoromethane	0.24 U	20	0.24	1	09/03/14 06:18	
Vinyl Acetate	1.9 U	10	1.9	1	09/03/14 06:18	
Vinyl Chloride	0.36 U	1.0	0.36	1	09/03/14 06:18	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	103	72 - 121	09/03/14 06:18	
4-Bromofluorobenzene	99	86 - 113	09/03/14 06:18	
Dibromofluoromethane	97	86 - 112	09/03/14 06:18	
Toluene-d8	102	88 - 115	09/03/14 06:18	

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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: JQ1406795-03

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	1.0	0.19	1	09/03/14 14:40	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	09/03/14 14:40	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	09/03/14 14:40	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	09/03/14 14:40	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	09/03/14 14:40	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	09/03/14 14:40	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	09/03/14 14:40	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	5.0	2.3	1	09/03/14 14:40	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	09/03/14 14:40	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	09/03/14 14:40	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	09/03/14 14:40	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	09/03/14 14:40	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	09/03/14 14:40	
2-Butanone (MEK)	3.8 U	10	3.8	1	09/03/14 14:40	
2-Hexanone	2.2 U	25	2.2	1	09/03/14 14:40	
4-Methyl-2-pentanone (MIBK)	1.1 U	25	1.1	1	09/03/14 14:40	
Acetone	5.6 U	50	5.6	1	09/03/14 14:40	
Acrylonitrile	1.5 U	10	1.5	1	09/03/14 14:40	
Benzene	0.21 U	1.0	0.21	1	09/03/14 14:40	
Bromochloromethane	0.27 U	5.0	0.27	1	09/03/14 14:40	
Bromodichloromethane	0.22 U	1.0	0.22	1	09/03/14 14:40	
Bromoform	0.42 U	2.0	0.42	1	09/03/14 14:40	
Bromomethane	0.23 U	5.0	0.23	1	09/03/14 14:40	
Carbon Disulfide	2.4 U	10	2.4	1	09/03/14 14:40	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	09/03/14 14:40	
Chlorobenzene	0.16 U	1.0	0.16	1	09/03/14 14:40	
Chloroethane	0.52 U	5.0	0.52	1	09/03/14 14:40	
Chloroform	0.35 U	1.0	0.35	1	09/03/14 14:40	
Chloromethane	0.36 U	1.0	0.36	1	09/03/14 14:40	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	09/03/14 14:40	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	09/03/14 14:40	
Dibromochloromethane	0.21 U	1.0	0.21	1	09/03/14 14:40	
Dibromomethane	0.36 U	5.0	0.36	1	09/03/14 14:40	
Ethylbenzene	0.21 U	1.0	0.21	1	09/03/14 14:40	
Iodomethane	2.7 U	5.0	2.7	1	09/03/14 14:40	
m,p-Xylenes	0.31 U	2.0	0.31	1	09/03/14 14:40	
Methylene Chloride	0.47 I	5.0	0.21	1	09/03/14 14:40	
o-Xylene	0.14 U	1.0	0.14	1	09/03/14 14:40	
Styrene	0.29 U	1.0	0.29	1	09/03/14 14:40	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	09/03/14 14:40	
Toluene	0.19 U	1.0	0.19	1	09/03/14 14:40	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	09/03/14 14:40	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	09/03/14 14:40	

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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: JQ1406795-03

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	20	2.2	1	09/03/14 14:40	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	09/03/14 14:40	
Trichlorofluoromethane	0.24 U	20	0.24	1	09/03/14 14:40	
Vinyl Acetate	1.9 U	10	1.9	1	09/03/14 14:40	
Vinyl Chloride	0.36 U	1.0	0.36	1	09/03/14 14:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	102	72 - 121	09/03/14 14:40	
4-Bromofluorobenzene	98	86 - 113	09/03/14 14:40	
Dibromofluoromethane	97	86 - 112	09/03/14 14:40	
Toluene-d8	102	88 - 115	09/03/14 14:40	

ALS Group USA, Corp.
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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: JQ1406624-01

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	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2-Dibromo-3-chloropropane (DBCP)	0.00700 U	0.0200	0.00700	1	08/27/14 22:51	8/27/14	
1,2-Dibromoethane (EDB)	0.00700 U	0.0200	0.00700	1	08/27/14 22:51	8/27/14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	95	70 - 130	08/27/14 22:51	

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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: JQ1406760-01

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	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2-Dibromo-3-chloropropane (DBCP)	0.00700 U	0.0200	0.00700	1	09/02/14 16:32	9/2/14	
1,2-Dibromoethane (EDB)	0.00700 U	0.0200	0.00700	1	09/02/14 16:32	9/2/14	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	85	70 - 130	09/02/14 16:32	

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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Sample Name: Method Blank
Lab Code: J1406394-MB1

Service Request: J1406394
Date Collected: NA
Date Received: NA

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020	0.2 U	ug/L	1.0	0.2	1	08/28/14 01:26	08/22/14	
Arsenic, Total Recoverable	6020	0.5 U	ug/L	1.0	0.5	1	08/28/14 01:26	08/22/14	
Barium, Total Recoverable	6020	0.5 U	ug/L	2.0	0.5	1	08/28/14 01:26	08/22/14	
Beryllium, Total Recoverable	6020	0.04 U	ug/L	0.50	0.04	1	08/28/14 01:26	08/22/14	
Cadmium, Total Recoverable	6020	0.10 U	ug/L	0.40	0.10	1	08/28/14 01:26	08/22/14	
Chromium, Total Recoverable	6020	0.2 U	ug/L	1.0	0.2	1	08/28/14 01:26	08/22/14	
Cobalt, Total Recoverable	6020	0.03 U	ug/L	1.0	0.03	1	08/28/14 01:26	08/22/14	
Copper, Total Recoverable	6020	0.3 U	ug/L	1.0	0.3	1	08/28/14 01:26	08/22/14	
Iron, Total Recoverable	6010B	3 U	ug/L	100	3	1	08/31/14 16:03	08/28/14	
Lead, Total Recoverable	6020	0.12 U	ug/L	0.50	0.12	1	08/28/14 01:26	08/22/14	
Mercury, Total	7470A	0.02 U	ug/L	0.10	0.02	1	09/03/14 13:18	08/27/14	
Nickel, Total Recoverable	6020	0.5 U	ug/L	2.0	0.5	1	08/28/14 01:26	08/22/14	
Selenium, Total Recoverable	6020	1.1 U	ug/L	2.0	1.1	1	08/28/14 19:42	08/22/14	
Silver, Total Recoverable	6020	0.06 U	ug/L	0.50	0.06	1	08/28/14 01:26	08/22/14	
Sodium, Total Recoverable	6010B	0.03 U	mg/L	0.50	0.03	1	08/31/14 16:03	08/28/14	
Thallium, Total Recoverable	6020	0.05 U	ug/L	0.20	0.05	1	08/28/14 01:26	08/22/14	
Vanadium, Total Recoverable	6020	0.3 U	ug/L	2.0	0.3	1	08/28/14 19:42	08/22/14	
Zinc, Total Recoverable	6020	1.6 U	ug/L	5.0	1.6	1	08/28/14 01:26	08/22/14	

ALS Group USA, Corp.
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Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Sample Name: Method Blank
Lab Code: J1406394-MB2

Service Request: J1406394
Date Collected: NA
Date Received: NA

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony, Total Recoverable	6020	0.2 U	ug/L	1.0	0.2	1	09/03/14 18:04	08/27/14	
Arsenic, Total Recoverable	6020	0.5 U	ug/L	1.0	0.5	1	09/03/14 18:04	08/27/14	
Barium, Total Recoverable	6020	0.5 U	ug/L	2.0	0.5	1	09/03/14 18:04	08/27/14	
Beryllium, Total Recoverable	6020	0.04 U	ug/L	0.50	0.04	1	09/03/14 18:04	08/27/14	
Cadmium, Total Recoverable	6020	0.10 U	ug/L	0.40	0.10	1	09/03/14 18:04	08/27/14	
Chromium, Total Recoverable	6020	0.2 U	ug/L	1.0	0.2	1	09/03/14 18:04	08/27/14	
Cobalt, Total Recoverable	6020	0.03 U	ug/L	1.0	0.03	1	09/03/14 18:04	08/27/14	
Copper, Total Recoverable	6020	0.3 U	ug/L	1.0	0.3	1	09/03/14 18:04	08/27/14	
Lead, Total Recoverable	6020	0.12 U	ug/L	0.50	0.12	1	09/03/14 18:04	08/27/14	
Nickel, Total Recoverable	6020	0.5 U	ug/L	2.0	0.5	1	09/03/14 18:04	08/27/14	
Selenium, Total Recoverable	6020	1.1 U	ug/L	2.0	1.1	1	09/03/14 18:04	08/27/14	
Silver, Total Recoverable	6020	0.06 U	ug/L	0.50	0.06	1	09/03/14 18:04	08/27/14	
Thallium, Total Recoverable	6020	0.05 U	ug/L	0.20	0.05	1	09/03/14 18:04	08/27/14	
Vanadium, Total Recoverable	6020	0.3 U	ug/L	2.0	0.3	1	09/03/14 18:04	08/27/14	
Zinc, Total Recoverable	6020	1.6 U	ug/L	5.0	1.6	1	09/03/14 18:04	08/27/14	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: J1406394-MB1

Service Request: J1406394
Date Collected: NA
Date Received: NA
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Q
Ammonia as Nitrogen	350.1	0.007 U	mg/L	0.010	0.007	1	08/25/14 15:19	
Chloride	300.0	0.2 U	mg/L	1.0	0.2	1	08/21/14 14:17	
Nitrate as Nitrogen	300.0	0.03 U	mg/L	0.20	0.03	1	08/21/14 14:17	
Solids, Total Dissolved	SM 2540 C	10 U	mg/L	10	10	1	08/25/14 16:29	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: J1406394-MB2

Service Request: J1406394
Date Collected: NA
Date Received: NA
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	PQL	MDL	Dil.	Date Analyzed	Q
Solids, Total Dissolved	SM 2540 C	10 U	mg/L	10	10	1	08/26/14 12:29	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Sample Name	Lab Code	1,2-Dichloroethane-d4	4-Bromofluorobenzene	Dibromofluoromethane
		72 - 121	86 - 113	86 - 112
CW-1A	J1406394-001	102	99	97
CW-2A	J1406394-002	103	99	95
CW-3A	J1406394-003	102	99	95
Duplicate	J1406394-004	103	99	96
Trip Blank	J1406394-005	103	99	97
Lab Control Sample	JQ1406795-01	99	100	99
Duplicate Lab Control Sample	JQ1406795-02	99	97	100
Method Blank	JQ1406795-03	102	98	97

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Sample Name	Lab Code	Toluene-d8
		88 - 115
CW-1A	J1406394-001	103
CW-2A	J1406394-002	103
CW-3A	J1406394-003	102
Duplicate	J1406394-004	102
Trip Blank	J1406394-005	102
Lab Control Sample	JQ1406795-01	101
Duplicate Lab Control Sample	JQ1406795-02	100
Method Blank	JQ1406795-03	102

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Analyzed: 09/03/14

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

Analysis Method: 8260B

Units: ug/L
Basis: NA
Analysis Lot: 409567

Analyte Name	Lab Control Sample JQ1406795-01			Duplicate Lab Control Sample JQ1406795-02			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1,2-Tetrachloroethane	50.2	50.0	100	51.1	50.0	102	77-118	2	30
1,1,1-Trichloroethane (TCA)	48.7	50.0	97	51.1	50.0	102	70-122	5	30
1,1,2,2-Tetrachloroethane	48.7	50.0	97	49.5	50.0	99	66-135	2	30
1,1,2-Trichloroethane	49.1	50.0	98	49.3	50.0	99	75-122	<1	30
1,1-Dichloroethane (1,1-DCA)	47.6	50.0	95	50.3	50.0	101	79-117	6	30
1,1-Dichloroethene (1,1-DCE)	49.0	50.0	98	51.7	50.0	103	72-128	5	30
1,2,3-Trichloropropane	48.1	50.0	96	49.0	50.0	98	70-123	2	30
1,2-Dibromo-3-chloropropane (DBCP)	50.6	50.0	101	51.9	50.0	104	60-122	2	30
1,2-Dibromoethane (EDB)	48.6	50.0	97	49.4	50.0	99	76-118	2	30
1,2-Dichlorobenzene	51.0	50.0	102	51.5	50.0	103	81-115	<1	30
1,2-Dichloroethane	47.0	50.0	94	48.3	50.0	97	70-117	3	30
1,2-Dichloropropane	48.2	50.0	96	49.7	50.0	99	79-117	3	30
1,4-Dichlorobenzene	51.3	50.0	103	52.3	50.0	105	82-115	2	30
2-Butanone (MEK)	49.1	50.0	98	50.8	50.0	102	62-138	3	30
2-Hexanone	50.1	50.0	100	52.0	50.0	104	74-127	4	30
4-Methyl-2-pentanone (MIBK)	51.0	50.0	102	51.9	50.0	104	77-120	2	30
Acetone	51.2	50.0	102	53.4	50.0	107	42-161	4	30
Acrylonitrile	49.3	50.0	98	50.6	50.0	101	63-132	3	30
Benzene	50.0	50.0	100	52.0	50.0	104	80-117	4	30
Bromochloromethane	45.2	50.0	90	47.3	50.0	95	78-118	5	30
Bromodichloromethane	47.6	50.0	95	49.0	50.0	98	75-118	3	30
Bromoform	49.5	50.0	99	49.9	50.0	100	63-121	<1	30
Bromomethane	33.0	50.0	66	35.0	50.0	70	31-153	6	30
Carbon Disulfide	45.0	50.0	90	47.5	50.0	95	72-128	5	30
Carbon Tetrachloride	44.1	50.0	88	46.2	50.0	92	67-124	5	30
Chlorobenzene	50.8	50.0	102	52.2	50.0	104	83-118	3	30
Chloroethane	45.6	50.0	91	48.4	50.0	97	68-132	6	30
Chloroform	47.0	50.0	94	49.3	50.0	99	77-116	5	30
Chloromethane	40.6	50.0	81	42.5	50.0	85	60-128	5	30
cis-1,2-Dichloroethene	48.5	50.0	97	50.4	50.0	101	78-117	4	30
cis-1,3-Dichloropropene	48.3	50.0	96	49.1	50.0	98	80-119	2	30
Dibromochloromethane	49.5	50.0	99	50.0	50.0	100	74-121	<1	30
Dibromomethane	46.5	50.0	93	46.7	50.0	93	76-117	<1	30
Ethylbenzene	51.4	50.0	103	53.7	50.0	107	82-119	4	30
Iodomethane	31.6	50.0	63	33.3	50.0	67	51-137	5	30
m,p-Xylenes	107	100	107	112	100	112	79-122	4	30
Methylene Chloride	45.7	50.0	91	47.5	50.0	95	75-123	4	30
o-Xylene	50.6	50.0	101	53.2	50.0	106	80-119	5	30
Styrene	51.2	50.0	102	53.9	50.0	108	80-121	5	30
Tetrachloroethene (PCE)	49.4	50.0	99	51.2	50.0	102	75-126	4	30
Toluene	51.8	50.0	104	53.3	50.0	107	52-152	3	30

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Analyzed: 09/03/14

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

Analysis Method: 8260B

Units: ug/L
Basis: NA
Analysis Lot: 409567

Analyte Name	Lab Control Sample JQ1406795-01			Duplicate Lab Control Sample JQ1406795-02			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
trans-1,2-Dichloroethene	43.7	50.0	87	46.0	50.0	92	75-121	5	30
trans-1,3-Dichloropropene	52.7	50.0	105	52.3	50.0	105	76-118	<1	30
trans-1,4-Dichloro-2-butene	50.1	50.0	100	49.7	50.0	99	10-198	<1	30
Trichloroethene (TCE)	48.6	50.0	97	50.4	50.0	101	78-122	4	30
Trichlorofluoromethane	45.0	50.0	90	47.6	50.0	95	58-134	6	30
Vinyl Acetate	52.4	50.0	105	53.2	50.0	106	36-169	2	30
Vinyl Chloride	44.2	50.0	88	46.2	50.0	92	69-138	4	30

ALS Group USA, Corp.
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QA/QC Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394

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	70 - 130
CW-1A	J1406394-001	112
CW-2A	J1406394-002	88
CW-3A	J1406394-003	107
Duplicate	J1406394-004	93
Method Blank	JQ1406624-01	95
Lab Control Sample	JQ1406624-02	91
CW-2A	JQ1406624-03	90
CW-2A	JQ1406624-04	74
Method Blank	JQ1406760-01	85
Lab Control Sample	JQ1406760-02	96
Duplicate Lab Control Sample	JQ1406760-03	103

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14
Date Received: 08/21/14
Date Analyzed: 08/28/14
Date Extracted: 08/27/14

Duplicate Matrix Spike Summary

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

Sample Name: CW-2A
Lab Code: J1406394-002
Analysis Method: 8011
Prep Method: Method

Units: ug/L
Basis: NA

Analyte Name	Matrix Spike JQ1406624-03				Duplicate Matrix Spike JQ1406624-04					
	Sample		Spike			Spike		% Rec		RPD
	Result	Result	Amount	% Rec	Result	Amount	% Rec	Limits	RPD	Limit
1,2-Dibromo-3-chloropropane (DBCP)	0.00705 U	0.245	0.252	98	0.198	0.252	79	65-135	21	30
1,2-Dibromoethane (EDB)	0.00705 U	0.234	0.252	93	0.178	0.252	70	65-135	27	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.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Analyzed: 08/27/14
Date Extracted: 08/27/14

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: 408910

Lab Control Sample
JQ1406624-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,2-Dibromo-3-chloropropane (DBCP)	0.221	0.250	88	70-130
1,2-Dibromoethane (EDB)	0.238	0.250	95	70-130

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Analyzed: 09/02/14
Date Extracted: 09/02/14

Duplicate 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: 409573

Analyte Name	Lab Control Sample JQ1406760-02			Duplicate Lab Control Sample JQ1406760-03					
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-chloropropane (DBCP)	0.263	0.250	105	0.261	0.250	105	70-130	<1	30
1,2-Dibromoethane (EDB)	0.259	0.250	104	0.262	0.250	105	70-130	1	30

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Analyzed: 08/28/14 - 09/03/14

Lab Control Sample Summary
Inorganic Parameters

Units: ug/L
Basis: NA

Lab Control Sample
J1406394-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Antimony, Total Recoverable	6020	53.3	50.0	107	80-120
Arsenic, Total Recoverable	6020	52.4	50.0	105	80-120
Barium, Total Recoverable	6020	106	100	106	80-120
Beryllium, Total Recoverable	6020	24.9	25.0	100	80-120
Cadmium, Total Recoverable	6020	21.1	20.0	106	80-120
Chromium, Total Recoverable	6020	51.4	50.0	103	80-120
Cobalt, Total Recoverable	6020	52.4	50.0	105	80-120
Copper, Total Recoverable	6020	52.9	50.0	106	80-120
Iron, Total Recoverable	6010B	5190	5000	104	80-120
Lead, Total Recoverable	6020	25.7	25.0	103	80-120
Mercury, Total	7470A	1.25	1.25	100	80-120
Nickel, Total Recoverable	6020	105	100	104	80-120
Selenium, Total Recoverable	6020	103	100	103	80-120
Silver, Total Recoverable	6020	26.6	25.0	106	80-120
Thallium, Total Recoverable	6020	10.4	10.0	104	80-120
Vanadium, Total Recoverable	6020	107	100	106	80-120
Zinc, Total Recoverable	6020	257	250	103	80-120

ALS Group USA, Corp.

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QA/QC Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Analyzed: 8/31/14

Lab Control Sample Summary
Inorganic Parameters

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

J1406394-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Sodium, Total Recoverable	6010B	26.0	25.0	104	80-120

ALS Group USA, Corp.
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QA/QC Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Analyzed: 9/3/14

Lab Control Sample Summary
Inorganic Parameters

Units: ug/L
Basis: NA

Lab Control Sample
J1406394-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Antimony, Total Recoverable	6020	54.1	50.0	108	80-120
Arsenic, Total Recoverable	6020	52.8	50.0	106	80-120
Barium, Total Recoverable	6020	107	100	107	80-120
Beryllium, Total Recoverable	6020	26.7	25.0	107	80-120
Cadmium, Total Recoverable	6020	20.8	20.0	104	80-120
Chromium, Total Recoverable	6020	53.2	50.0	106	80-120
Cobalt, Total Recoverable	6020	51.8	50.0	104	80-120
Copper, Total Recoverable	6020	52.4	50.0	105	80-120
Lead, Total Recoverable	6020	26.3	25.0	105	80-120
Nickel, Total Recoverable	6020	106	100	106	80-120
Selenium, Total Recoverable	6020	99.9	100	100	80-120
Silver, Total Recoverable	6020	26.7	25.0	107	80-120
Thallium, Total Recoverable	6020	10.3	10.0	103	80-120
Vanadium, Total Recoverable	6020	104	100	104	80-120
Zinc, Total Recoverable	6020	259	250	103	80-120

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Waste Services of Florida, Inc.
Project JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394**Date Collected:** 08/20/14**Date Received:** 08/21/14**Date Analyzed:** 08/21/14

Replicate Sample Summary
General Chemistry Parameters

Sample Name: CW-1A
Lab Code: J1406394-001

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

Analyte Name	Analysis Method	PQL	MDL	Sample Result	Duplicate Sample J1406394-001DUP	Average	RPD	RPD Limit
					Result			
Chloride	300.0	1.0	0.2	18.1	18.0	18.1	<1	20
Nitrate as Nitrogen	300.0	0.20	0.03	0.08	0.08	0.0815	1	20

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.

ALS Group USA, Corp.
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QA/QC Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Collected: 08/20/14
Date Received: 08/21/14
Date Analyzed: 8/21/14

Matrix Spike Summary
General Chemistry Parameters

Sample Name: CW-1A
Lab Code: J1406394-001

Units: mg/L
Basis: NA

Matrix Spike
J1406394-001MS

Analyte Name	Method	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Chloride	300.0	18.1	42.0	25.0	96	90-110
Nitrate as Nitrogen	300.0	0.08	2.03	2.00	98	90-110

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.

ALS Group USA, Corp.

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QA/QC Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Analyzed: 08/21/14 - 08/25/14

Lab Control Sample Summary
General Chemistry Parameters

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

J1406394-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Ammonia as Nitrogen	350.1	0.942	1.00	94	90-110
Chloride	300.0	25.5	25.0	102	90-110
Nitrate as Nitrogen	300.0	2.10	2.00	105	90-110
Solids, Total Dissolved	SM 2540 C	308	300	103	85-115

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QA/QC Report

Client: Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1406394
Date Analyzed: 08/26/14

Lab Control Sample Summary
Solids, Total Dissolved

Analysis Method: SM 2540 C

Units: mg/L
Basis: NA
Analysis Lot: 408449

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	J1406394-LCS2	303	300	101	85-115



October 20, 2014

Service Request No:J1407549

Mike Kaiser
Progressive Waste Services of Florida, Inc.
1501 Omni Way
St Cloud, FL 34773

Laboratory Results for: JED Compliance Wells

Dear Mike,

Enclosed are the results of the sample(s) submitted to our laboratory September 30, 2014
For your reference, these analyses have been assigned our service request number **J1407549**.

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 ALS Environmental 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. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 4409. You may also contact me via email at Craig.Myers@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Craig Myers
Project Manager

ADDRESS 9143 Philips Highway, Suite 200, Jacksonville, FL 32256
PHONE +1 904 739 2277 | FAX +1 904 739 2011
ALS Group USA, Corp.
dba ALS Environmental



SAMPLE DETECTION SUMMARY

CLIENT ID: Trip Blank		Lab ID: J1407549-002				
Analyte	Results	Flag	MDL	PQL	Units	Method
Methylene Chloride	1.1	IV	0.21	5.0	ug/L	8260B

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Department of Defense	66206	11/1/2014
Florida Department of Health	E82502	6/30/2015
Georgia Department of Natural Resources	958	6/30/2015
Kentucky Division of Waste Management	63	6/30/2015
Louisiana Department of Environmental Quality	02086	6/30/2015
Maine Department of Health and Human Services	2011006	2/3/2015
North Carolina Department of Environment and Natural Resources	527	12/31/2014
Pennsylvania Department of Environmental Protection	68-04835	8/31/2015
South Carolina Department of Health and Environmental Control	96021001	6/30/2015
Texas Commision on Environmental Quality	T104704197-13-5	5/31/2015
Virginia Environmental Accreditation Program	460191	12/14/2014

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

ALS Laboratory Group

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: Progressive Waste Services of Florida, Inc.
Project: JED Compliance Wells

Service Request:J1407549

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
J1407549-001	CW-2A	9/29/2014	0920
J1407549-002	Trip Blank	9/29/2014	0000

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Progressive Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1407549
Date Collected: 09/29/14 09:20
Date Received: 09/30/14 09:20

Sample Name: CW-2A
Lab Code: J1407549-001

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	1.0	0.19	1	10/04/14 03:54	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	10/04/14 03:54	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	10/04/14 03:54	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	10/04/14 03:54	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	10/04/14 03:54	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	10/04/14 03:54	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	10/04/14 03:54	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	5.0	2.3	1	10/04/14 03:54	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	10/04/14 03:54	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	10/04/14 03:54	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	10/04/14 03:54	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	10/04/14 03:54	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	10/04/14 03:54	
2-Butanone (MEK)	3.8 U	10	3.8	1	10/04/14 03:54	
2-Hexanone	2.2 U	25	2.2	1	10/04/14 03:54	
4-Methyl-2-pentanone (MIBK)	1.1 U	25	1.1	1	10/04/14 03:54	
Acetone	5.6 U	50	5.6	1	10/04/14 03:54	
Acrylonitrile	1.5 U	10	1.5	1	10/04/14 03:54	
Benzene	0.21 U	1.0	0.21	1	10/04/14 03:54	
Bromochloromethane	0.27 U	5.0	0.27	1	10/04/14 03:54	
Bromodichloromethane	0.22 U	1.0	0.22	1	10/04/14 03:54	
Bromoform	0.42 U	2.0	0.42	1	10/04/14 03:54	
Bromomethane	0.23 U	5.0	0.23	1	10/04/14 03:54	
Carbon Disulfide	2.4 U	10	2.4	1	10/04/14 03:54	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	10/04/14 03:54	
Chlorobenzene	0.16 U	1.0	0.16	1	10/04/14 03:54	
Chloroethane	0.52 U	5.0	0.52	1	10/04/14 03:54	
Chloroform	0.35 U	1.0	0.35	1	10/04/14 03:54	
Chloromethane	0.36 U	1.0	0.36	1	10/04/14 03:54	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	10/04/14 03:54	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	10/04/14 03:54	
Dibromochloromethane	0.21 U	1.0	0.21	1	10/04/14 03:54	
Dibromomethane	0.36 U	5.0	0.36	1	10/04/14 03:54	
Ethylbenzene	0.21 U	1.0	0.21	1	10/04/14 03:54	
Iodomethane	2.7 U	5.0	2.7	1	10/04/14 03:54	
m,p-Xylenes	0.31 U	2.0	0.31	1	10/04/14 03:54	
Methylene Chloride	0.21 U	5.0	0.21	1	10/04/14 03:54	
o-Xylene	0.14 U	1.0	0.14	1	10/04/14 03:54	
Styrene	0.29 U	1.0	0.29	1	10/04/14 03:54	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	10/04/14 03:54	
Toluene	0.19 U	1.0	0.19	1	10/04/14 03:54	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	10/04/14 03:54	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	10/04/14 03:54	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Progressive Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1407549
Date Collected: 09/29/14 09:20
Date Received: 09/30/14 09:20

Sample Name: CW-2A
Lab Code: J1407549-001

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	20	2.2	1	10/04/14 03:54	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	10/04/14 03:54	
Trichlorofluoromethane	0.24 U	20	0.24	1	10/04/14 03:54	
Vinyl Acetate	1.9 U	10	1.9	1	10/04/14 03:54	
Vinyl Chloride	0.36 U	1.0	0.36	1	10/04/14 03:54	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	120	72 - 121	10/04/14 03:54	
4-Bromofluorobenzene	98	86 - 113	10/04/14 03:54	
Dibromofluoromethane	107	86 - 112	10/04/14 03:54	
Toluene-d8	94	88 - 115	10/04/14 03:54	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Progressive Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1407549
Date Collected: 09/29/14 00:00
Date Received: 09/30/14 09:20

Sample Name: Trip Blank
Lab Code: J1407549-002

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	1.0	0.19	1	10/04/14 03:28	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	10/04/14 03:28	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	10/04/14 03:28	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	10/04/14 03:28	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	10/04/14 03:28	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	10/04/14 03:28	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	10/04/14 03:28	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	5.0	2.3	1	10/04/14 03:28	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	10/04/14 03:28	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	10/04/14 03:28	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	10/04/14 03:28	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	10/04/14 03:28	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	10/04/14 03:28	
2-Butanone (MEK)	3.8 U	10	3.8	1	10/04/14 03:28	
2-Hexanone	2.2 U	25	2.2	1	10/04/14 03:28	
4-Methyl-2-pentanone (MIBK)	1.1 U	25	1.1	1	10/04/14 03:28	
Acetone	5.6 U	50	5.6	1	10/04/14 03:28	
Acrylonitrile	1.5 U	10	1.5	1	10/04/14 03:28	
Benzene	0.21 U	1.0	0.21	1	10/04/14 03:28	
Bromochloromethane	0.27 U	5.0	0.27	1	10/04/14 03:28	
Bromodichloromethane	0.22 U	1.0	0.22	1	10/04/14 03:28	
Bromoform	0.42 U	2.0	0.42	1	10/04/14 03:28	
Bromomethane	0.23 U	5.0	0.23	1	10/04/14 03:28	
Carbon Disulfide	2.4 U	10	2.4	1	10/04/14 03:28	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	10/04/14 03:28	
Chlorobenzene	0.16 U	1.0	0.16	1	10/04/14 03:28	
Chloroethane	0.52 U	5.0	0.52	1	10/04/14 03:28	
Chloroform	0.35 U	1.0	0.35	1	10/04/14 03:28	
Chloromethane	0.36 U	1.0	0.36	1	10/04/14 03:28	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	10/04/14 03:28	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	10/04/14 03:28	
Dibromochloromethane	0.21 U	1.0	0.21	1	10/04/14 03:28	
Dibromomethane	0.36 U	5.0	0.36	1	10/04/14 03:28	
Ethylbenzene	0.21 U	1.0	0.21	1	10/04/14 03:28	
Iodomethane	2.7 U	5.0	2.7	1	10/04/14 03:28	
m,p-Xylenes	0.31 U	2.0	0.31	1	10/04/14 03:28	
Methylene Chloride	1.1 IV	5.0	0.21	1	10/04/14 03:28	
o-Xylene	0.14 U	1.0	0.14	1	10/04/14 03:28	
Styrene	0.29 U	1.0	0.29	1	10/04/14 03:28	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	10/04/14 03:28	
Toluene	0.19 U	1.0	0.19	1	10/04/14 03:28	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	10/04/14 03:28	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	10/04/14 03:28	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Progressive Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1407549
Date Collected: 09/29/14 00:00
Date Received: 09/30/14 09:20

Sample Name: Trip Blank
Lab Code: J1407549-002

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	20	2.2	1	10/04/14 03:28	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	10/04/14 03:28	
Trichlorofluoromethane	0.24 U	20	0.24	1	10/04/14 03:28	
Vinyl Acetate	1.9 U	10	1.9	1	10/04/14 03:28	
Vinyl Chloride	0.36 U	1.0	0.36	1	10/04/14 03:28	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	119	72 - 121	10/04/14 03:28	
4-Bromofluorobenzene	99	86 - 113	10/04/14 03:28	
Dibromofluoromethane	104	86 - 112	10/04/14 03:28	
Toluene-d8	95	88 - 115	10/04/14 03:28	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Progressive Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1407549
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: JQ1407814-03

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.19 U	1.0	0.19	1	10/03/14 15:23	
1,1,1-Trichloroethane (TCA)	0.17 U	1.0	0.17	1	10/03/14 15:23	
1,1,2,2-Tetrachloroethane	0.29 U	1.0	0.29	1	10/03/14 15:23	
1,1,2-Trichloroethane	0.40 U	1.0	0.40	1	10/03/14 15:23	
1,1-Dichloroethane (1,1-DCA)	0.30 U	1.0	0.30	1	10/03/14 15:23	
1,1-Dichloroethene (1,1-DCE)	0.16 U	1.0	0.16	1	10/03/14 15:23	
1,2,3-Trichloropropane	0.42 U	2.0	0.42	1	10/03/14 15:23	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	5.0	2.3	1	10/03/14 15:23	
1,2-Dibromoethane (EDB)	0.46 U	1.0	0.46	1	10/03/14 15:23	
1,2-Dichlorobenzene	0.48 U	1.0	0.48	1	10/03/14 15:23	
1,2-Dichloroethane	0.22 U	1.0	0.22	1	10/03/14 15:23	
1,2-Dichloropropane	0.19 U	1.0	0.19	1	10/03/14 15:23	
1,4-Dichlorobenzene	0.16 U	1.0	0.16	1	10/03/14 15:23	
2-Butanone (MEK)	3.8 U	10	3.8	1	10/03/14 15:23	
2-Hexanone	2.2 U	25	2.2	1	10/03/14 15:23	
4-Methyl-2-pentanone (MIBK)	1.1 U	25	1.1	1	10/03/14 15:23	
Acetone	5.6 U	50	5.6	1	10/03/14 15:23	
Acrylonitrile	1.5 U	10	1.5	1	10/03/14 15:23	
Benzene	0.21 U	1.0	0.21	1	10/03/14 15:23	
Bromochloromethane	0.27 U	5.0	0.27	1	10/03/14 15:23	
Bromodichloromethane	0.22 U	1.0	0.22	1	10/03/14 15:23	
Bromoform	0.42 U	2.0	0.42	1	10/03/14 15:23	
Bromomethane	0.23 U	5.0	0.23	1	10/03/14 15:23	
Carbon Disulfide	2.4 U	10	2.4	1	10/03/14 15:23	
Carbon Tetrachloride	0.34 U	1.0	0.34	1	10/03/14 15:23	
Chlorobenzene	0.16 U	1.0	0.16	1	10/03/14 15:23	
Chloroethane	0.52 U	5.0	0.52	1	10/03/14 15:23	
Chloroform	0.35 U	1.0	0.35	1	10/03/14 15:23	
Chloromethane	0.36 U	1.0	0.36	1	10/03/14 15:23	
cis-1,2-Dichloroethene	0.36 U	1.0	0.36	1	10/03/14 15:23	
cis-1,3-Dichloropropene	0.20 U	1.0	0.20	1	10/03/14 15:23	
Dibromochloromethane	0.21 U	1.0	0.21	1	10/03/14 15:23	
Dibromomethane	0.36 U	5.0	0.36	1	10/03/14 15:23	
Ethylbenzene	0.21 U	1.0	0.21	1	10/03/14 15:23	
Iodomethane	2.7 U	5.0	2.7	1	10/03/14 15:23	
m,p-Xylenes	0.31 U	2.0	0.31	1	10/03/14 15:23	
Methylene Chloride	1.5 I	5.0	0.21	1	10/03/14 15:23	
o-Xylene	0.14 U	1.0	0.14	1	10/03/14 15:23	
Styrene	0.29 U	1.0	0.29	1	10/03/14 15:23	
Tetrachloroethene (PCE)	0.22 U	1.0	0.22	1	10/03/14 15:23	
Toluene	0.19 U	1.0	0.19	1	10/03/14 15:23	
trans-1,2-Dichloroethene	0.19 U	1.0	0.19	1	10/03/14 15:23	
trans-1,3-Dichloropropene	0.23 U	1.0	0.23	1	10/03/14 15:23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Progressive Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1407549
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: JQ1407814-03

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	PQL	MDL	Dil.	Date Analyzed	Q
trans-1,4-Dichloro-2-butene	2.2 U	20	2.2	1	10/03/14 15:23	
Trichloroethene (TCE)	0.36 U	1.0	0.36	1	10/03/14 15:23	
Trichlorofluoromethane	0.24 U	20	0.24	1	10/03/14 15:23	
Vinyl Acetate	1.9 U	10	1.9	1	10/03/14 15:23	
Vinyl Chloride	0.36 U	1.0	0.36	1	10/03/14 15:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	118	72 - 121	10/03/14 15:23	
4-Bromofluorobenzene	97	86 - 113	10/03/14 15:23	
Dibromofluoromethane	102	86 - 112	10/03/14 15:23	
Toluene-d8	95	88 - 115	10/03/14 15:23	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Progressive Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1407549

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Sample Name	Lab Code	1,2-Dichloroethane-d4	4-Bromofluorobenzene	Dibromofluoromethane
		72 - 121	86 - 113	86 - 112
CW-2A	J1407549-001	120	98	107
Trip Blank	J1407549-002	119	99	104
Lab Control Sample	JQ1407814-01	114	102	105
Duplicate Lab Control Sample	JQ1407814-02	115	100	106
Method Blank	JQ1407814-03	118	97	102

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Progressive Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1407549

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Sample Name	Lab Code	Toluene-d8
		88 - 115
CW-2A	J1407549-001	94
Trip Blank	J1407549-002	95
Lab Control Sample	JQ1407814-01	97
Duplicate Lab Control Sample	JQ1407814-02	95
Method Blank	JQ1407814-03	95

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Progressive Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1407549
Date Analyzed: 10/03/14

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

Analysis Method: 8260B

Units: ug/L
Basis: NA
Analysis Lot: 414532

Analyte Name	Lab Control Sample JQ1407814-01			Duplicate Lab Control Sample JQ1407814-02			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
1,1,1,2-Tetrachloroethane	46.3	50.0	93	44.3	50.0	89	77-118	4	30
1,1,1-Trichloroethane (TCA)	52.6	50.0	105	52.1	50.0	104	70-122	<1	30
1,1,2,2-Tetrachloroethane	50.2	50.0	100	47.4	50.0	95	66-135	6	30
1,1,2-Trichloroethane	51.0	50.0	102	48.3	50.0	97	75-122	5	30
1,1-Dichloroethane (1,1-DCA)	54.5	50.0	109	54.4	50.0	109	79-117	<1	30
1,1-Dichloroethene (1,1-DCE)	54.6	50.0	109	55.0	50.0	110	72-128	<1	30
1,2,3-Trichloropropane	51.5	50.0	103	48.3	50.0	97	70-123	6	30
1,2-Dibromo-3-chloropropane (DBCP)	46.2	50.0	92	44.2	50.0	88	60-122	4	30
1,2-Dibromoethane (EDB)	49.8	50.0	100	46.5	50.0	93	76-118	7	30
1,2-Dichlorobenzene	50.9	50.0	102	47.7	50.0	95	81-115	7	30
1,2-Dichloroethane	57.7	50.0	115	57.3	50.0	115	70-117	<1	30
1,2-Dichloropropane	55.8	50.0	112	54.3	50.0	108	79-117	3	30
1,4-Dichlorobenzene	51.5	50.0	103	48.1	50.0	96	82-115	7	30
2-Butanone (MEK)	61.6	50.0	123	59.8	50.0	120	62-138	3	30
2-Hexanone	57.2	50.0	114	52.9	50.0	106	74-127	8	30
4-Methyl-2-pentanone (MIBK)	57.8	50.0	116	55.0	50.0	110	77-120	5	30
Acetone	60.6	50.0	121	60.0	50.0	120	42-161	<1	30
Acrylonitrile	59.8	50.0	120	58.0	50.0	116	63-132	3	30
Benzene	52.3	50.0	105	52.1	50.0	104	80-117	<1	30
Bromochloromethane	47.7	50.0	95	47.2	50.0	94	78-118	1	30
Bromodichloromethane	53.4	50.0	107	52.3	50.0	105	75-118	2	30
Bromoform	42.6	50.0	85	40.3	50.0	81	63-121	5	30
Bromomethane	44.3	50.0	88	42.7	50.0	85	31-153	3	30
Carbon Disulfide	47.5	50.0	95	47.5	50.0	95	72-128	<1	30
Carbon Tetrachloride	51.3	50.0	102	51.3	50.0	103	67-124	<1	30
Chlorobenzene	48.8	50.0	98	46.5	50.0	93	83-118	5	30
Chloroethane	48.8	50.0	98	48.0	50.0	96	68-132	2	30
Chloroform	54.9	50.0	110	54.0	50.0	108	77-116	2	30
Chloromethane	50.0	50.0	100	50.1	50.0	100	60-128	<1	30
cis-1,2-Dichloroethene	56.0	50.0	112	54.8	50.0	110	78-117	2	30
cis-1,3-Dichloropropene	48.9	50.0	98	46.5	50.0	93	80-119	5	30
Dibromochloromethane	45.7	50.0	91	43.3	50.0	87	74-121	5	30
Dibromomethane	52.9	50.0	106	52.0	50.0	104	76-117	2	30
Ethylbenzene	47.6	50.0	95	45.7	50.0	91	82-119	4	30
Iodomethane	30.9	50.0	62	30.7	50.0	61	51-137	<1	30
m,p-Xylenes	97.2	100	97	92.5	100	93	79-122	5	30
Methylene Chloride	49.4	50.0	99	49.0	50.0	98	75-123	<1	30
o-Xylene	48.2	50.0	96	46.5	50.0	93	80-119	4	30
Styrene	47.1	50.0	94	45.6	50.0	91	80-121	3	30
Tetrachloroethene (PCE)	47.7	50.0	95	45.7	50.0	91	75-126	4	30
Toluene	48.3	50.0	97	46.5	50.0	93	52-152	4	30

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Progressive Waste Services of Florida, Inc.
Project: JED Compliance Wells
Sample Matrix: Water

Service Request: J1407549
Date Analyzed: 10/03/14

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

Analysis Method: 8260B

Units: ug/L
Basis: NA
Analysis Lot: 414532

Analyte Name	Lab Control Sample JQ1407814-01			Duplicate Lab Control Sample JQ1407814-02			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
trans-1,2-Dichloroethene	54.8	50.0	110	54.1	50.0	108	75-121	1	30
trans-1,3-Dichloropropene	49.0	50.0	98	46.5	50.0	93	76-118	5	30
trans-1,4-Dichloro-2-butene	55.0	50.0	110	49.0	50.0	98	10-198	12	30
Trichloroethene (TCE)	48.7	50.0	97	49.0	50.0	98	78-122	<1	30
Trichlorofluoromethane	58.6	50.0	117	58.4	50.0	117	58-134	<1	30
Vinyl Acetate	49.9	50.0	100	48.9	50.0	98	36-169	2	30
Vinyl Chloride	54.0	50.0	108	53.5	50.0	107	69-138	<1	30

Form FD 9000-24

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)		SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773	
WELL NO: CW-1A	SAMPLE ID: CW-1A	DATE: August 20, 2014	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry / PWSFL				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: <i>0940</i>		SAMPLING ENDED AT: <i>1009</i>	
PUMP OR TUBING DEPTH IN WELL (feet): <i>13</i>				TUBING MATERIAL CODE: PE			FIELD-FILTERED: Y ☒ N ☐		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No				TUBING No (replaced)			DUPLICATE or EQUIPMENT BLANK: ☒ Y ☐ N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
<i>CW-1A</i>	3	CG	40mL	HCL	Prefilled by lab		8260	RFPP	<100	
<i>J</i>	3	CG	40mL	None	None		8011	RFPP	<100	
<i>J</i>	1	PE	500mL	HNO ₃	Prefilled by lab		Metals	APP	<i>225</i>	
<i>J</i>	1	PE	125mL	H ₂ SO ₄	Prefilled by lab		NH ₃	APP	<i>225</i>	
<i>CW-1A</i>	1	PE	250mL	None	None		TDS, Cl, NO ₃	APP	<i>225</i>	
REMARKS: weather: <i>Clear, 86°F</i> odor: <i>none</i>										
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 = Bailor; 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:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (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

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)		SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773	
WELL NO: CW-2A	SAMPLE ID: CW-2A	DATE: August 20, 2014	

PURGING DATA

WELL	TUBING	WELL SCREEN INTERVAL						STATIC DEPTH		PURGE PUMP TYPE	
DIAMETER (inches): 2.0	DIAMETER (inches): 0.25	DEPTH: B feet to 18 feet						TO WATER (feet): 3.87		OR BAILER: peristaltic	
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (19.48 feet - 3.87 feet) X 0.16 gallons/foot = 2.3 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 + (0.0026 gallons/foot X 35 feet) + 0.12 gallons = 0.2 gallons											
INITIAL PUMP OR TUBING			FINAL PUMP OR TUBING			PURGING INITIATED AT:		PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):	
DEPTH IN WELL (feet): 13			DEPTH IN WELL (feet): 13			1030		1055		2.4	
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1037	0.6	0.6	0.09	3.92	4.46	26.63	1372	2.71	0.7	clear	-4.8
1040	0.3	0.9	0.09	3.92	4.42	26.47	1389	1.99	0.7	clear	-9.4
1045	0.5	1.4	0.09	3.92	4.38	26.43	1406	0.62	0.6	clear	-11.2
1050	0.5	1.9	0.09	3.92	4.37	26.43	1412	0.54	0.6	clear	-12.3
1055	0.5	2.4	0.09	3.92	4.36	26.39	1414	0.43	0.6	clear	-12.7
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 = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry / PWSFL				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: <i>1/100</i>		SAMPLING ENDED AT: <i>1/111</i>	
PUMP OR TUBING DEPTH IN WELL (feet): <i>13</i>				TUBING MATERIAL CODE: PE			FIELD-FILTERED: Y <i>(N)</i>		FILTER SIZE: _____ μ m	
FIELD DECONTAMINATION: PUMP No				TUBING No (replaced)			DUPLICATE or EQUIPMENT BLANK: Y <i>(N)</i>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
<i>CW 2A</i>	3	CG	40mL	HCL	Prefilled by lab		8260	RFPP	<100	
<i>↓</i>	3	CG	40mL	None	None		8011	RFPP	<100	
	1	PE	500mL	HNO ₃	Prefilled by lab		Metals	APP	<i>350</i>	
	1	PE	125mL	H ₂ SO ₄	Prefilled by lab		NH ₃	APP	<i>350</i>	
<i>CW 2A</i>	1	PE	250mL	None	None		TDS, Cl, NO ₃	APP	<i>350</i>	
REMARKS: weather: <i>Clear, light breeze, 88°F</i> odor: <i>none</i>										
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:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)		SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773	
WELL NO: CW-34	SAMPLE ID: CW-34	DATE: August 20, 2014	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry / PWSFL				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: <i>11/40</i>		SAMPLING ENDED AT: <i>11:55</i>	
PUMP OR TUBING DEPTH IN WELL (feet): <i>13</i>				TUBING MATERIAL CODE: PE			FIELD-FILTERED: Y <i>(N)</i>		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No				TUBING No (replaced)			DUPLICATE or EQUIPMENT BLANK: Y <i>(N)</i>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
<i>CW-3A</i>	3	CG	40mL	HCL	Prefilled by lab		8260		RFPP	
<i>↓</i>	3	CG	40mL	None	None		8011		RFPP	
	1	PE	500mL	HNO ₃	Prefilled by lab		Metals		APP	
	1	PE	125mL	H ₂ SO ₄	Prefilled by lab		NH ₃		APP	
	<i>CW-3A</i>	1	PE	250mL	None	None		TDS, Cl, NO ₃		APP
REMARKS: weather: <i>misunny, light breeze, 80°F</i> odor: <i>none</i>										
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 = Bailor; 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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings < 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Field Instrument Calibration Record

Site: JED SWMF Date: August 19, 2014

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 06A2173AL

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME12953

Time: 1835

Calibration Standard			Instrument Response	Percent Deviation ⁽¹⁾ or Difference	Allowable Deviation ⁽²⁾	Calibrated? Yes or No	Type of Calibration ⁽³⁾	Calibration Performed By:
Lot No.	Expiration Date	Standard Value						
3AH355	Aug 2015	pH = 4.00	4.05	0.05	0.2	y	C	DT
C358930	Feb 7, 2015	pH = 7.00	7.00	0	0.2	y	C	DT
C256078	Oct 2014	pH = 10.00			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
C364881	June 2015	Turbidity = 10 NTU	9.9	1.0	10%	y	I	DT
3AJ929	Oct 2014	Conductivity = 84 µS/cm			5%			
4AA137	Jan 2015	Conductivity = 500 µS/cm	506	1.2	5%	y	C	DT
4AA941	Jan 2015	Conductivity = 1,000 µS/cm	1011	1.1	5%	y	C	DT
	Per Table →	D.O. = 8.37 mg/L @ 24.3°C	8.38	0.01	0.2 mg/l	y	I	DT

Date: August 20, 2014 Time: 1930

Calibration Standard			Instrument Response	Percent Deviation ⁽¹⁾ or Difference	Allowable Deviation ⁽²⁾	Calibrated? Yes or No	Type of Calibration ⁽³⁾	Calibration Performed By:
Lot No.	Expiration Date	Standard Value						
C359207	Feb 15, 2015	pH = 4.00	4.10	0.1	0.2	y	C	DT
C358930	Feb 7, 2015	pH = 7.00	7.06	0.06	0.2	y	C	DT
C256078	Oct 2014	pH = 10.00			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
C364881	June 2015	Turbidity = 10 NTU	10.02	0.2	10%	y	C	DT
3AJ929	Oct 2014	Conductivity = 84 µS/cm			5%			
4AA137	Jan 2015	Conductivity = 500 µS/cm	512	2.4	5%	y	C	DT
4AA941	Jan 2015	Conductivity = 1,000 µS/cm	1015	1.5	5%	y	C	DT
	Per Table →	D.O. = 7.57 mg/L @ 24.9°C	7.62	0.05	0.2 mg/l	y	I	DT

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

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)		SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773	
WELL NO: CW-2A		DATE: September 29, 2014	
SAMPLE ID: CW-2A			

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: 8 feet to 18 feet	STATIC DEPTH TO WATER (feet): 2.89	PURGE PUMP TYPE OR BAILER: PP
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WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

(only fill out if applicable)

= (feet - feet) X 0.16 gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY	X	TUBING LENGTH) + FLOW CELL VOLUME
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$$= 0 \text{ gallons} + (0.0026 \text{ gallons/foot} \times 25 \text{ feet}) + 0.12 \text{ gallons} = 0.2 \text{ gallons}$$

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13	PURGING INITIATED AT: 0940	PURGING ENDED AT: 0920	TOTAL VOLUME PURGED (gallons): 3.6
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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)

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry / PWSFL	SAMPLER(S) SIGNATURE(S): 	SAMPLING INITIATED AT: 0927	SAMPLING ENDED AT: 0925
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PUMP OR TUBING DEPTH IN WELL (feet): 13	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: 0.125 μm
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FIELD DECONTAMINATION:	PUMP	No	TUBING	No (replaced)	DUPLICATE:	Y	(N)
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REMARKS: Weather: Mc cloudy, humid, 86°f

Odor: none

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; Q = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After (Through) 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:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Field Instrument Calibration Record

Site: SED Confluence Well CW-2A Resample Date: Sept. 28, 2014

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 06A2173AL

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME12953

Time: 1930

Calibration Standard			Instrument Response	Percent Deviation ⁽¹⁾ or Difference	Allowable Deviation ⁽²⁾	Calibrated? Yes or No	Type of Calibration ⁽³⁾	Calibration Performed By:
Lot No.	Expiration Date	Standard Value						
3AH355	Aug 2015	pH = 4.00	4.07	0.07	0.2	Y	C	DT
C358930	Feb 7, 2015	pH = 7.00	7.02	0.02	0.2	Y	C	DT
C256078	Oct 2014	pH = 10.00			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
C364881	June 2015	Turbidity = 10 NTU	9.89	1.1	10%	Y	C	DT
3AJ929	Oct 2014	Conductivity = 84 µS/cm			5%			
4AA137	Jan 2015	Conductivity = 500 µS/cm			5%			
4AA941	Jan 2015	Conductivity = 1,000 µS/cm	995	0.5	5%	Y	C	DT
	Per Table →	D.O. = 8.42 mg/L @ 24 °C	8.14	0.02	0.2 mg/l	Y	F	DT

Date: Sept. 29, 2014 Time: 1530

Calibration Standard			Instrument Response	Percent Deviation ⁽¹⁾ or Difference	Allowable Deviation ⁽²⁾	Calibrated? Yes or No	Type of Calibration ⁽³⁾	Calibration Performed By:
Lot No.	Expiration Date	Standard Value						
C359207	Feb 15, 2015	pH = 4.00	4.05	0.05	0.2	Y	C	DT
C358930	Feb 7, 2015	pH = 7.00	7.09	0.09	0.2	Y	C	DT
C256078	Oct 2014	pH = 10.00			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
C364881	June 2015	Turbidity = 10 NTU	9.82	1.8	10%	Y	C	DT
3AJ929	Oct 2014	Conductivity = 84 µS/cm			5%			
4AA137	Jan 2015	Conductivity = 500 µS/cm			5%			
4AA941	Jan 2015	Conductivity = 1,000 µS/cm	994	0.6	5%	Y	C	DT
	Per Table →	D.O. = 8.10 mg/L @ 26.1 °C	8.15	0.05	0.2 mg/l	Y	C	DT

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

