April 30, 2013

Mr. 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: Status Report – Soil Vapor Extraction Pilot Test Study
JED Solid Waste Management Facility
Osceola County, Florida
Permit Nos. 0197726-023-SC-MM and SO49-0199726-022

Dear Mr. Lubozynski:

On behalf of Omni Waste of Osceola County, LLC (Omni), HDR is submitting this status report for the Soil Vapor Extraction (SVE) pilot test study at the JED Solid Waste Management Facility (Facility) in accordance with the Pilot Test Work Plan for Soil Vapor Extraction System dated January 27, 2012. Implementation of the work plan was approved by Ms. Kim Rush of the Florida Department of Environmental Protection (FDEP) through e-mail correspondence dated February 6, 2012.

During the course of routine monitoring, the Facility detected elevated levels of methane gas in the headspace of site groundwater wells and nearby methane gas monitoring probes. Water quality samples from select groundwater wells also exhibit low concentrations of volatile organic compounds (VOCs) in groundwater. To proactively address these detections, Omni conducted investigations and completed repairs of the base and closure cap liner terminations in the anchor trench areas and installed enhancements to the Landfill Gas Collection and Control System (GCCS). Additionally, Omni developed the aforementioned work plan to evaluate a SVE Pilot Test to mitigate these detections.

In accordance with the work plan, the SVE Pilot Test system consists of a vertical SVE system located at the Cell 5 sump area near groundwater monitoring wells MW-1A/B/C and a horizontal SVE system located along the west side of Cell 1 near groundwater monitoring wells MW-4A/B/C. The Installation and Progress Report dated October 17, 2012 provided the details of the Pilot SVE system construction and initial monitoring data. As discussed in the October 17, 2012 report, the horizontal SVE system was experiencing subsurface water issues at the perforated pipe section from surface storm water infiltration during wet weather conditions. Omni has since discontinued monitoring of the horizontal SVE system and abandoned that approach altogether. The trench and piping system will be removed by Omni operations.

Gas and groundwater monitoring continued at the vertical SVE pilot system, adjacent gas probes and groundwater wells during the past quarterly period. Updated gas monitoring data is summarized and presented in Attachment A. Data from the latest groundwater sampling event collected on February 12, 2013 is presented in Attachment B. These data indicate operation of the SVE system is contributing to the reduction of methane gas detected at MW-1A, however on

a sporadic basis. The monitoring data also indicates that operation has not yet completely eliminated the detection of methane gas in the well. To provide supplemental gas control in the vicinity of the Cell 5 sump, two additional 2-inch gas extraction wells were installed on April 3, 2013 within the structural fill surrounding the vertical leachate manhole sump risers. The two extraction wells were installed on the west side and adjacent to the vertical manhole sump risers. The wells were installed approximately 15 feet deep and 5 feet above the base grade liner. These two wells are labeled “Cell 5 2” NW” and “Cell 5 2” SW.” Well construction details and photographs are provided in Attachment C.

The two additional gas extraction wells were being connected to the GCCS by Omni at the time this report was written and are expected to be fully operational by the end of this month. Monitoring data for these new wells will be presented in the next status report. It is believed the additional wells will provide a sustained decrease in methane concentration around the sump risers, which may be contributing to methane migration observed at MW-1A.

As indicated in the workplan, supplemental groundwater sampling is conducted at wells MW-1A and MW-4A and leachate sumps LS-4 and LS-5. Initial background groundwater sampling was conducted on May 8, 2012 followed by quarterly sampling conducted in August and November 2012 as well as February 2013. The next sampling event is scheduled to occur in May 2013. Sampling associated with this study for MW-4A and LS-4 will be discontinued since the horizontal SVE system approach was abandoned. Future water quality data for MW-4A will still be available from the routine water quality monitoring performed on a semi-annual basis at the Facility. Benzene concentrations in groundwater samples collected from groundwater well MW-1A have decreased slightly since initiation of the pilot test (see Table 1 below), but slightly increased in the most recent sampling event.

Table 1: Benzene Trend

Benzene (ug/L)	May 2012	Aug. 2012	Nov. 2012	Feb 2013
MW-1A	3.25	2.5	2.1	6.0
MW-4A	Dry	4.04	3.4	4.1

Supplemental groundwater analysis has continued to be conducted to evaluate potential efficacy of the pilot scale SVE system in reducing the low level groundwater impacts and provide supplemental confirmatory source determination. Data from previous groundwater sampling events has previously been submitted to the FDEP. The results from the February 2013 sampling event are provided in Attachment B. The results are summarized in Summary of Pilot SVE System Groundwater Data in Attachment D.

Recommendations

Methane gas concentrations in the headspace at groundwater well MW-1A were still elevated during most monitoring events. However, the recent decrease in methane gas concentrations at MW-1A during March 2013 may in part be attributed to the recent installation and operation of additional gas extraction wells in the Cell 5 sump area. While the methane gas concentration has increased again, the positive pressure at MW-1A is significantly lower than in previous periods. With the recent addition of the two additional gas extraction points in the Cell 5 sump area, the methane concentration may be lowered at MW-1A for a sustained period of time. We

recommend extending the monitoring and evaluation period for an additional 6 to 9 months to determine if additional gas extraction in the sump area will reduce the methane concentration at MW-1A. Status reports will be submitted to FDEP on a quarterly basis with the next report submitted on July 15, 2013 and the following report on October 15, 2013.

Closing

Additional extraction wells were installed near the Cell 5 leachate sump area near MW-1A. This provided a brief reduction in the methane concentration at MW-1A. However, the methane concentration at MW-1A has slightly increased again. We feel the additional extraction wells installed in early April will provide a sustained decrease in the methane concentration at MW-1A. Operation and monitoring of the pilot SVE system will continue for at least the next 180 - 270 days and the next quarterly progress report will be provided by July 15, 2013. In the meantime, please feel free to contact either of the undersigned at (904) 598-8900 or Mr. Mike Kaiser at (904) 673-0446 if should you have any questions.

Sincerely,

Brad M Stone, P.E.
Sr. Project Manager

Cliff Koenig, P.E.
Environmental Engineer

Attachments: A: Gas Monitoring Data
B: November 2012 Groundwater Monitoring Data
C: Well Construction Details and Photographs
D: Summary of Pilot SVE System Groundwater Data

Cc: Caroline Shine, FDEP Division of Air Resource Management

Attachment A

Gas Monitoring Data

JED Solid Waste Management Facility
Monitoring Data - Soil Vapor Extraction System Pilot Test Study

ID Point	5/16/12		5/22/12		6/18/12		6/22/12		6/29/12		7/2/12		7/6/12		7/13/12		7/16/12	
	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	SP (In.)	SP (In.)	CH_4 (%)	SP (In.)
SVE-1	1.3	-12.1	0.8	-25.1	0.8	-10.1	1.3	-10.4	1.2	-9.6	1.6	-11.5	1.4	-10.0	0.0	-14.5	0.1	-14.5
SVE-2	0.0	-26.3	0.0	-0.3	0.0	-10.1	0.1	-11.8	0.1	-12.1	0.1	-9.9	0.1	-10.2	5.8	0.2	0.0	-14.6
SVE-3	0.0	-18.3	0.0	-1.0	0.0	-10.3	0.0	-9.4	0.1	-12.6	0.1	-10.1	0.1	-10.3	17.3	-14.8	0.0	-15.1
SVE-4	4.4	-4.3	0.5	-6.2	0.0	-9.2	0.1	-10.3	0.2	-10.9	0.2	-10.7	0.1	-12.0	0.2	-15.0	0.0	-15.0
VZA	16.6	-43.1			0.0	0.4	0.0	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1
GPR-10					8.7	0.5	15.3	0.3	0.1	0.4	0.1	0.2	0.1	0.3	0.0	0.2	0.1	0.2
TGP-1					0.0	1.0	0.0	0.8	0.1	0.2	0.1	0.3	0.1	1.0	0.1	0.2	0.0	0.2
MW-1A	21.6	0.6	57.6	3.2	0.0	-2.1	0.1	-0.8	0.1	-0.6	0.2	-0.2	0.2	-0.1	24.2	1.3	1.9	-1.3
SVE Main	0	-32.3	0	-43.3	0	-41.3	0.1	-41.1	0.2	-40.3	0.2	-41.1	0.2	-46.7	0.6	-42.2	0.3	-42.1
Cell 5 Sump					21.5	-23.5	56.8	8.1	25.6	-24.5	58.8	-14.5	26.6	-9.7	42.1	-4.7	0.7	-10.7
Cell 5 2” GW	58.0	13.9			57.6	-12.6	59.0	1.3	58.1	-22.1	55.3	-5.5	59.4	-9.0	55.0	-2.2	60.0	-9.1
Flare			54.6	1.4	51.3	3.1	51.5	2.5	50.4	3.0	53.6	2.6	54.1	2.9	57.6	2.9	55.2	2.4

SVE-1 – Soil Vapor Extraction Well
VZA – Vadose Zone Aeration Well
GPR – Perimeter Gas Monitoring Probe
TGP – Temporary Perimeter Gas Monitoring Probe
MW – Water Quality Monitoring Well
GW – Landfill Gas Extraction Well
SP – Set Pressure

SVE Main – Soil Vapor Extraction System Main Header Pipe Connection at GW-85
Cell 5 Sump – Vacuum Connection at Cell 5 Leachate Sump Manholes
Cell 5 2” GW – 2-inch Dia. Gas Extraction Well at Sump Area

JED Solid Waste Management Facility
Monitoring Data - Soil Vapor Extraction System Pilot Test Study

ID Point	7/20/12		7/27/12		7/30/12		8/3/12		8/6/12		8/10/12		8/13/12		8/27/12		9/3/12	
	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)
SVE-1	0.3	-8.0	0.6	-15.8	0.5	-14.6	0.6	-16.5	0.7	-15.6	0.5	-23.4	3.3	-24.15	1.1	-37.75	0.5	-25.70
SVE-2	0.0	-12.8	0.4	-14.7	0.3	-15.5	0.4	-16.9	0.3	-16.8	0.6	-23.8	0.4	-24.75	0.0	-35.82	0.1	-24.92
SVE-3	0.0	-14.2	0.5	-15.1	0.3	-16.1	0.4	-15.6	0.3	-14.1	0.0	-26.1	0.7	-24.49	0.0	-35.20	0.4	-25.55
SVE-4	0.5	-22.9	2.9	-15.5	1.9	-14.5	0.8	-14.7	2.8	-14.8	3.3	-24.1	2.1	-24.17	41.5	-35.89	12.7	-25.82
VZA	0.0	0.1	1.7	-0.1	0.3	0.1	0.3	0.1	0.3	0.3	0.0	0.0	0.0	0.00	0.0	-0.01	0.0	-0.01
GPR-10	0.3	0.2	3.2	0.0	0.3	0.0	0.6	0.3	0.3	0.3	0.1	0.02	0.8	-0.10	0.0	0.00	0.0	0.00
TGP-1	4.2	0.2	0.5	0.0	0.3	0.0	0.4	0.3	0.3	0.3	0.1	0.02	0.0	-0.10	0.0	0.04	0.0	0.00
MW-1A	21.1	0.5	0.4	-0.3	0.4	-0.2	0.8	-1.1	0.4	0.1	0.4	0.0	0.0	-0.10	25.9	0.56	52.1	2.69
SVE Main	27.2	-41.7	1.1	-14.1	0.4	-39.8	1.9	-40.3	0.4	-39.1	0.4	-39.0	10.6	-38.83	6.3	-42.73	0.9	-40.26
Cell 5 Sump	31.1	-3.6	23.5	-18.2	56.1	-9.9	23.9	-26.0	56.9	-9.3	58.5	-5.0	57.1	-10.50	36.8	-24.56	37.2	-27.82
Cell 5 2” GW	54.7	-3.3	29.4	-14.5	57.6	-2.8	12.4	-21.8	56.6	-3.6	59.9	-0.08	56.3	-2.99	59.2	-20.76	57.4	-24.45
Flare	53.7	2.7	51.0	2.7	51.0	3.1	46.9	3.2			51.3	3.6	55.2	3.00	53.3	3.24	51.6	2.85

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Cell 5 Sump – Vacuum Connection at Cell 5 Leachate Sump Manholes
Cell 5 2” GW – 2-inch Dia. Gas Extraction Well at Sump Area

JED Solid Waste Management Facility
Monitoring Data - Soil Vapor Extraction System Pilot Test Study

ID Point	9/14/12		9/17/12		9/21/12		9/24/12		9/28/12		10/1/12		10/5/12		10/8/12	
	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)
SVE-1	0.5	-36.87	0.0	-33.85	7.9	-33.69	2.4	-30.32	2.7	-34.56	0.1	-30.19	2.6	-30.15	0.0	-43.07
SVE-2	0.0	-34.40	0.0	-34.77	0.6	-37.19	0.4	-35.03	0.0	-34.99	0.1	-31.23	0.3	-27.65	0.0	-42.63
SVE-3	0.0	-34.99	0.0	-34.13	0.3	-37.49	2.1	-34.77	0.0	-34.00	0.4	-33.35	0.1	-29.72	0.0	-41.60
SVE-4	28.7	-35.50	36.4	-35.68	30.2	-39.61	25.9	-34.64	28.0	-38.44	38.2	-35.42	17.3	-29.03	34.6	-42.38
VZA	4.9	0.00	4.4	-0.02	0.1	-0.02	1.3	-0.01	0.0	-0.01	8.8	-0.02	0.3	0.59	0.0	-0.02
GPR-10	0.0	-0.01	0.0	-0.02	0.5	-0.01	2.6	0.00	0.0	0.00	0.4	-0.02	0.1	0.59	0.0	0.00
TGP-1	0.0	0.00	0.0	0.00	0.8	-0.01	1.6	0.00	0.0	-0.01	6.2	-0.01	1.0	0.59	0.0	0.00
MW-1A	50.5	2.81	50.4	5.66	50.2	2.78	49.9	4.79	50.6	3.84	51.6	4.65	52.1	5.87	50.3	6.22
SVE Main	10.5	-39.61	8.5	-36.86	8.0	-41.64	55.4	-37.06	2.2	-42.98	3.9	-40.99	2.8	-41.25	0.4	-42.07
Cell 5 Sump	31.4	-24.28	34.0	-19.20	37.1	-24.79	49.3	-17.80	21.1	-23.24	30.0	-26.48	29.4	-25.92	27.9	-26.70
Cell 5 2” GW	57.3	-19.87	57.6	-21.30	56.8	-20.91	56.0	-15.98	56.2	-23.93	57.8	-22.51	55.7	-21.99	57.5	-25.05
Flare	50.2	2.84	53.3	3.55	49.0	2.94	47.5	3.37	49.3	3.36	51.1	2.79	50.1	3.61	49.9	2.81

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JED Solid Waste Management Facility
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ID Point	10/15/12		10/19/12		10/22/12		10/26/12		10/29/12		11/2/12		11/5/12	
	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)
SVE-1	0.4	-27.43	5.1	-35.77	1.5	-33.67	4.5	-35.12	7.7	-42.86	8.6	-43.89	7.5	-31.92
SVE-2	0.2	-20.77	0.8	-37.41	0.7	-35.12	1.2	-34.9	44.9	0.01	50.0	0	0.8	-37.02
SVE-3	0.0	-18.73	0.3	-34.38	0.3	-34.44	1.2	-34.9	39.2	0	6.0	0	0.4	-30.68
SVE-4	23.2	-22.40	18.8	-37.22	19.4	-33.74	38.4	-35.66	40.5	-41.78	39.7	-37.68	35.5	-31.28
VZA	0.1	-0.16	0.4	0.00	0.4	0.00	3.1	0.01	4.5	0	2.5	0	7.6	0
GPR-10	1.1	-0.14	1.0	0.10	0.4	0.00	1.9	0	1.4	0.01	4.9	0	0.9	0
TGP-1	1.9	-0.14	2.2	0.00	1.6	0.00	5.1	0.02	8.1	0	4.4	0.01	7.7	0
MW-1A	46.8	4.35	51.4	4.91	16.3	2.54	54.4	8.66	58.7	10.19	54.9	5.45	58.3	7.82
SVE Main	0.3	-43.20	2.0	-41.68	5.3	-42.25	4.2	-42.81	31.3	-43.71	5.2	-40.83	8	-43.28
Cell 5 Sump	38.3	-14.51	18.3	-27.74	24.7	-18.25	24.9	-39.44	40.7	-38.53	36.9	-8.89	51.6	-7.08
Cell 5 2” GW	54.1	-17.02	55.2	-28.44	58.0	-23.28	60.4	-35.94	57.3	-36.56	58.8	-8.25	57.7	-5.98
Flare	50.9	2.86	52.8	3.46	50.9	2.98	53.8	2.77	53.6	2.77	53.9	2.38	53.4	2.46

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ID Point	11/9/12		11/12/12		11/16/12		11/19/12		11/30/12		12/3/12		12/7/12	
	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)
SVE-1	7.9	-37.4	5.9	-30.9	23.5	-38.6	0.0	-38.2	0.4	-42.10	1.3	-0.01	3.6	0.0
SVE-2	1.2	-36.6	0.7	-29.2	0.3	-39.4	0.6	-39.4	0.4	-41.78	0.9	-42.64	1.3	-43.03
SVE-3	1.8	-37.5	1.8	-24.3	10.0	-39.7	0.2	-38.2	3.7	-42.30	0.2	-42.64	58.2	-41.66
SVE-4	56.7	-38.2	62.2	-26.4	53.7	-37.6	51.3	-37.8	31.9	-32.25	59.0	6.42	58.4	4.28
VZA	1.3	0	10.4	0.3	2.2	0.1	6.9	0.0	9.9	0.0	16.3	0.0	12.7	0.0
GPR-10	0.5	0	0	0.3	0.9	0.1	0.2	0.0	0.2	-0.01	0.0	-0.02	0.2	0.0
TGP-1	5	0	0.4	0.3	0.7	0.1	0.0	0.0	0.0	-0.01	0.0	-0.02	0.0	0.0
MW-1A	53.8	7.9	55.3	8.3	62.3	7.7	56.6	7.2	59.5	5.80	50.3	6.14	57.0	4.08
SVE Main	2.4	-42.2	4.1	-42.8	32.6	-42.4	1.3	-41.8	1.8	-42.69	0.9	-43.03	44.6	-42.69
Cell 5 Sump	55.8	-18.5	20.9	-18.3	27.7	-19.0	47.3	-10.0	34.9	-7.59	41.6	-7.98	27.1	-4.45
Cell 5 2” GW	34.3	-19.8	61.3	-16.9	59.0	-17.6	55.2	-8.8	56.8	-7.9	45.2	-7.85	58.2	-4.04
Flare	52.6	2.0	54.9	2.8	54.3	2.3	54.9	2.0	53.1	2.14	53.6	1.73	55.0	1.87

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ID Point	12/10/12		12/14/12		12/17/12		12/21/12		12/31/12		1/4/13	
	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)
SVE-1	3.2	1.56	4.1	2.45	3.0	0.06	3.1	2	7.6	0.2	8.6	0
SVE-2	0.4	-41.62	0.3	-42.60	1.9	-42.30	0	-41.4	2.2	-40.4	3.9	-36.8
SVE-3	56.9	-39.74	9.5	-41.96	0.5	-42.10	0	-41.8	0.4	-38.3	0.2	-36.9
SVE-4	56.8	4.70	58.4	5.82	56.6	11.8	52.9	9.4	57.9	9.8	56.1	7.7
VZA	7.7	0.0	8.9	-0.01	13.4	0.03	3.7	0	18.4	0.2	14.9	0
GPR-10	0.1	0.0	0.2	-0.01	0.1	0.03	0	0	0.1	0.3		
TGP-1	0.0	0.0	0.1	0.0	0.0	0.02	0	0	0	0.1	0	0.1
MW-1A	58.0	5.80	57.5	5.50	57.0	6.40	51.9	4.4	57.9	5.6	56.6	4.1
SVE Main	53.9	-42.69	2.0	-42.30	1.0	-42.6	1.1	-43.4	0.9	0.3		
Cell 5 Sump	42.9	-2.55	36.9	-4.88	41.3	-3.1	33.8	-4.5	37.8	-5.0		
Cell 5 2” GW	57.5	-2.01	57.1	-4.07	56.1	-1.6	50.7	-4.1	57.3	-4.5		
Flare	55.1	1.92	56.5	2.09	53.5	2.1	46.9	2	52.2	2.01	55.2	2.0
Cell 5 2” South												
Cell 5 2” North												

SVE-1 – Soil Vapor Extraction Well
VZA – Vadose Zone Aeration Well
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TGP – Temporary Perimeter Gas Monitoring Probe
MW – Water Quality Monitoring Well
GW – Landfill Gas Extraction Well
SP – Set Pressure

SVE Main – Soil Vapor Extraction System Main Header Pipe Connection at GW-85
Cell 5 Sump – Vacuum Connection at Cell 5 Leachate Sump Manholes
Cell 5 2” GW – 2-inch Dia. Gas Extraction Well at Sump Area

JED Solid Waste Management Facility
Monitoring Data - Soil Vapor Extraction System Pilot Test Study

ID Point	1/7/13		1/14/13		1/18/13		1/21/13		1/25/13		1/28/13	
	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)
SVE-1	4.1	0.2	5.6	0.3	8	15.5	0.1	-35.7	0	0	0.2	-0.6
SVE-2	4.1	-34.3	3.2	-34.8	3.7	-33.1	4.4	-35.7	20.4	0	36.8	0
SVE-3	0	-34.1	.2	-34.7	0.5	-32.9	0.2	-35.6	29.2	0	33.5	0.1
SVE-4	56.6	9.4	57.1	8.2	58.1	-16.8	56.2	-35.9	57.1	5.3	41.5	5.7
VZA	13.4	0.1	22	0.2	6.8	0.1	18.5	0.2	20	0	17.7	0.1
GPR-10	0	0.2	0	0.3	0.3	0.1	0.1	0	0	0	0	0.1
TGP-1	0	0.1	0	0.2	0	0	0	0.1	0	0	0	0.2
MW-1A	56.7	4.5	56.8	3.2	58	2.2	57	3.1	58.3	1.8	58	2.0
SVE Main	0.6	-37.6	1.1	3.8	1.9	-34.9	2.5	35.8	0.1	-34.7	14.5	-35.1
Cell 5 Sump	36.8	-3.7	36.2	-11.6	24.3	-16.8	36.4	-6.5	21.3	-23.3	23.9	-24.1
Cell 5 2” GW	56.2	-2.9	56.5	-10.7	56.9	-15.1	56.9	-6.1	57.6	-19.2	57.1	-21.1
Flare	54.4	3.5	54	3.8	49.1	3.9	51	3.7	50.4	3.6	51.2	3.6
Cell 5 2” South			56.5	-1.9	56.7	-7.1	56.6	-1.6	57.5	-19.8	57	-20
Cell 5 2” North			56.5	-4	57.4	-7.9	56.6	-1.6	57.1	-19.8	56.7	-21.1

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SVE Main – Soil Vapor Extraction System Main Header Pipe Connection at GW-85
Cell 5 Sump – Vacuum Connection at Cell 5 Leachate Sump Manholes
Cell 5 2” GW – 2-inch Dia. Gas Extraction Well at Sump Area

JED Solid Waste Management Facility
Monitoring Data - Soil Vapor Extraction System Pilot Test Study

ID Point	2/4/13		2/8/13		2/11/13		2/15/13		2/19/13		2/22/13	
	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)
SVE-1	36.8	-0.4	41.3	6.6	55.0	6.1	60.3	6.3	59.1	5.1	55.9	1.77
SVE-2	38.3	0.1	43.1	0	40.4	0.2	44.7	-0.1	43.1	0.1	40.7	0.06
SVE-3	58.2	0.1	56.7	0.1	25.9	0.2	56.9	0	39.2	0.1	46.1	0.02
SVE-4	48.2	5.1	44.4	5.5	40.7	4.5	58.0	4.3	31.2	4.2	48.5	2.54
VZA	19.7	0.1	8.8	0	7.7	0.1	18.8	-0.1	4.4	0.1	6.9	0
GPR-10	0	0.1	0	0.1	0	0.1	0	0	0	0.1	0	0
TGP-1	0.1	0.1	0.1	0	0.1	0.1	0.1	-0.1	0.1	0	0	0
MW-1A	58.2	2.2	53.2	1.6	58.1	1.8	57.0	1.6	54.5	1.8	38.9	1.52
SVE Main	11.5	-35.6	14.5	-34.4	17.0	-35.9	15.2	-30.4	3.9	-35.4	2.4	-34.8
Cell 5 Sump	17.4	-22.1	22.2	-30.1	23.5	-31.1	21.5	-26.0	18.7	-29.4	19.3	-30.36
Cell 5 2” GW	57.5	-17.8	57.5	-24.7	57.8	-26.5	59.4	-21.9	57.4	-25.2	54.7	-25.42
Flare	52.4	4.2	53.4	4.0	49.8	3.9	49.7	3.9	51.4	4.0	50.3	3.91
Cell 5 2” South	57.2	-17.9	57.2	-24.3	57.6	-26.1	59.3	-21.8	57.2	-24.4	55.4	-24.95
Cell 5 2” North	57.2	-18	56.7	-24.9	57.3	-26.3	59.1	-21.7	57.4	-24.4	54.7	-25.59

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SVE Main – Soil Vapor Extraction System Main Header Pipe Connection at GW-85
Cell 5 Sump – Vacuum Connection at Cell 5 Leachate Sump Manholes
Cell 5 2” GW – 2-inch Dia. Gas Extraction Well at Sump Area

JED Solid Waste Management Facility
Monitoring Data - Soil Vapor Extraction System Pilot Test Study

ID Point	2/25/13		3/1/13		3/4/13		3/8/13		3/11/13		3/15/13	
	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)
SVE-1	57.6	3.83	36.8	-14.03	21.2	-14.33	40.5	-15.99	47.6	-36.16	38.2	-35.22
SVE-2	44.1	0.11	3.9	-14.71	4.0	-14.37	4.1	-14.67	4.2	-35.52	2.7	-35.18
SVE-3	38.2	0	0.7	-15.39	0.7	-15.01	0.4	-15.69	1.4	-35.51	0	-34.54
SVE-4	46.8	3.85	41.6	-14.67	31.8	-15.39	21.7	-14.93	45.3	-35.7	24.5	-34.51
VZA	8.7	0	11.6	0.01	0	0.02	0	-0.01	3.3	-0.03	0.6	0.01
GPR-10	0	-0.04	0.1	0.01	0	-0.01	0	-0.02	0	-0.01	0	0
TGP-1	0	0	0.1	0.01	0	0.02	0.1	0	0	-0.02	0	0
MW-1A	51.6	1.38	52.5	1.11	55.4	0.47	58.9	0.53	54.9	0	11.5	0.15
SVE Main	4.7	-35.52	5.4	-32.79	4.6	-34.84	5.1	-36.46	4.8	-35.86	4.6	-35.82
Cell 5 Sump	25.1	-31.51	21.3	-30.49	23.3	-30.53	20.2	-30.66	18.9	-36.16	24.3	-32.45
Cell 5 2” GW	59.6	-26.57	58.3	-25.93	58.3	-25.84	56.8	-25.25	58.1	-26.97	58.8	-28.4
Flare	50.4	4.15	51.9	3.13	49.6	3.72	49.2	3.76	53.5	4.44	48.4	3.44
Cell 5 2” South	56.6	-26.18	58.2	-25.59	59.5	-24.95	58.1	-24.78	55.4	-27.14	58.9	-28.04
Cell 5 2” North	57.2	-26.82	56.5	-25.59	56.5	-25.59	53.7	-25.46	54	-26.93	55.9	-28.4

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SVE Main – Soil Vapor Extraction System Main Header Pipe Connection at GW-85
Cell 5 Sump – Vacuum Connection at Cell 5 Leachate Sump Manholes
Cell 5 2” GW – 2-inch Dia. Gas Extraction Well at Sump Area

JED Solid Waste Management Facility
Monitoring Data - Soil Vapor Extraction System Pilot Test Study

ID Point	3/18/13		3/22/13		3/25/13		3/29/13		4/1/13		4/5/13	
	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)
SVE-1	48.6	-14.88	42.2	-35.48	45.1	-38.21	49.8	-35.44	50.7	-36.55	49.1	-36.2
SVE-2	3.3	-33.9	3.8	-35.82	3.6	-37.91	4.1	-35.14	4.3	-36.5	4.6	-36.5
SVE-3	0.3	-33.48	0	-34.8	0	-37.23	0.9	-35.14	1.1	-36.16	0.3	-36.2
SVE-4	31.6	-34.33	23.6	-35.86	21.9	-37.91	30.7	-35.48	29.4	-36.55	35.5	-36.2
VZA	5.9	0	0.5	0	0.3	0.03	2.8	-0.02	8.8	0.02	15.4	0.01
GPR-10	0	0.01	0	-0.02	0	-0.04	0	-0.05	0	0	0.1	0.01
TGP-1	0	0	0	0	0	0	0	0	0	0	0.1	0.02
MW-1A	40	0.3	0	0.41	6.1	0.04	57.1	0.03	57	0.82	57.7	0.34
SVE Main	6.9	-34.46	5.9	-35.52	6.1	-38.55	7.2	-35.27	8.3	-36.84	8.6	-36.5
Cell 5 Sump	21.4	-31.17	27.2	-33.09	22.3	-34.16	24.3	-32.67	22.7	-32.11	24.5	-32.79
Cell 5 2” GW	57	-27.63	58.1	-29.94	57.9	-30.7	55.2	-29	57.7	-22.29	57.5	-28.32
Flare	51.7	3.71	49.6	3.22	48.5	3.06	47.4	3.9	49.5	3.57	49.4	3.99
Cell 5 2” South	58	-27.04	57.6	-28.66	57.2	-29.72	56.7	-28.44	56.7	-26.91	58	-28.32
Cell 5 2” North	54.8	-27.93	55.6	-29.38	54.9	-31.04	55	-28.96	55.4	-27.25	56.8	-28.32

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SVE Main – Soil Vapor Extraction System Main Header Pipe Connection at GW-85
Cell 5 Sump – Vacuum Connection at Cell 5 Leachate Sump Manholes
Cell 5 2” GW – 2-inch Dia. Gas Extraction Well at Sump Area

JED Solid Waste Management Facility
Monitoring Data - Soil Vapor Extraction System Pilot Test Study

ID Point	4/8/13		4/12/13									
	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)	CH_4 (%)	SP (In.)
SVE-1	57.9	-34.6	54	-35.2								
SVE-2	6	-34.4	6.6	-35.2								
SVE-3	0.2	-34.5	0.2	-35.5								
SVE-4	33	-34.5	32.8	-35.9								
VZA	6.3	0.2	0.5	0.2								
GPR-10	0.1	0.3	0	0.3								
TGP-1	0.1	0.1	0.1	0.2								
MW-1A	6.2	0.9	45.5	0.8								
SVE Main	8.2	-34.6	7.3	-35.4								
Cell 5 Sump	26.2	-32.2	33.4	-33.2								
Cell 5 2” GW	57.2	-26.2	58.6	-30.5								
Flare	46.5	3.5	48.3	4								
Cell 5 2” South	57	-27	57.6	-30								
Cell 5 2” North	56.7	-26.7	57.5	-30.4								

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Cell 5 Sump – Vacuum Connection at Cell 5 Leachate Sump Manholes
Cell 5 2” GW – 2-inch Dia. Gas Extraction Well at Sump Area

Attachment B

February 2013 Groundwater Monitoring Data

February 27, 2013 Service Request No:J1300774

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

Laboratory Results for: JED SVE Pilot

Dear Kirk,

Enclosed are the results of the sample(s) submitted to our laboratory February 13, 2013
For your reference, these analyses have been assigned our service request number **J1300774.**

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. 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,

Columbia Analytical Services, Inc. dba ALS Enviromental

Craig Myers
Project Manager

ADDRESS 9143 Philips Highway, Suite 200, Jacksonville, FL 32256
PHONE +1 904 739 2277 | FAX +1 904 739 2011
Columbia Analytical Services, Inc.
Part of the ALS Group A Campbell Brothers Limited Company

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Florida Department of Health	E82502	6/30/2013
Louisiana Department of Environmental Quality	02086	6/30/2013
Georgia Department of Natural Resources	958	6/30/2013
Kentucky Division of Waste Management	63	7/5/2013
South Carolina Department of Health and Environmental Control	96021001	6/30/2013
Texas Commision on Environmental Quality	T104704197-09-TX	5/31/2013
Department of Defense	66206	5/31/2013

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

Acronyms

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

Client: Waste Services of Florida, Inc. **Service Request:**J1300774
Project: JED SVE Pilot

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
J1300774-001	MW-1A	2/12/2013	1125
J1300774-002	MW-4A	2/12/2013	1025
J1300774-003	Trip Blank	2/12/2013	0000

Analytical Report

Client:	Waste Services of Florida, Inc.	**Service Request:**	J1300774
Project:	JED SVE Pilot	**Date Collected:**	02/12/13 11:25
Sample Matrix:	Water	**Date Received:**	02/13/13 09:22
Sample Name:	MW-1A	**Units:**	ug/L
Lab Code:	J1300774-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	**6.0**	1.0	0.21	1	02/21/13 19:25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	97	72 - 121	02/21/13 19:25	
4-Bromofluorobenzene	102	86 - 113	02/21/13 19:25	
Dibromofluoromethane	94	86 - 112	02/21/13 19:25	
Toluene-d8	99	88 - 115	02/21/13 19:25	

Analytical Report

Client:	Waste Services of Florida, Inc.	**Service Request:**	J1300774
Project:	JED SVE Pilot	**Date Collected:**	02/12/13 11:25
Sample Matrix:	Water	**Date Received:**	02/13/13 09:22
Sample Name:	MW-1A	**Basis:**	NA
Lab Code:	J1300774-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Total Recoverable	6010B	**10100**	ug/L	100	3	1	02/15/13 16:49	2/14/13	

Analytical Report

Client:	Waste Services of Florida, Inc.	**Service Request:**	J1300774
Project:	JED SVE Pilot	**Date Collected:**	02/12/13 11:25
Sample Matrix:	Water	**Date Received:**	02/13/13 09:22
Sample Name:	MW-1A	**Basis:**	NA
Lab Code:	J1300774-001		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity as CaCO3, Total	SM 2320 B	**13.5**	mg/L	5.0	5.0	1	02/21/13 14:06	
Ammonia as Nitrogen	350.1	**9.23**	mg/L	0.010	0.007	1	02/14/13 16:47	
Bicarbonate Alkalinity as CaCO3	SM 2320 B	**13.5**	mg/L	5.0	5.0	1	02/21/13 14:06	
Carbonate Alkalinity as CaCO3	SM 2320 B	5.0 U	mg/L	5.0	5.0	1	02/21/13 14:06	

Analytical Report

Client:	Waste Services of Florida, Inc.	**Service Request:**	J1300774
Project:	JED SVE Pilot	**Date Collected:**	02/12/13 10:25
Sample Matrix:	Water	**Date Received:**	02/13/13 09:22
Sample Name:	MW-4A	**Units:**	ug/L
Lab Code:	J1300774-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	**4.1**	1.0	0.21	1	02/21/13 19:55	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	96	72 - 121	02/21/13 19:55	
4-Bromofluorobenzene	107	86 - 113	02/21/13 19:55	
Dibromofluoromethane	95	86 - 112	02/21/13 19:55	
Toluene-d8	101	88 - 115	02/21/13 19:55	

Analytical Report

Client:	Waste Services of Florida, Inc.	**Service Request:**	J1300774
Project:	JED SVE Pilot	**Date Collected:**	02/12/13 10:25
Sample Matrix:	Water	**Date Received:**	02/13/13 09:22
Sample Name:	MW-4A	**Basis:**	NA
Lab Code:	J1300774-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Total Recoverable	6010B	**2980**	ug/L	100	3	1	02/15/13 16:58	2/14/13	

Analytical Report

Client:	Waste Services of Florida, Inc.	**Service Request:**	J1300774
Project:	JED SVE Pilot	**Date Collected:**	02/12/13 10:25
Sample Matrix:	Water	**Date Received:**	02/13/13 09:22
Sample Name:	MW-4A	**Basis:**	NA
Lab Code:	J1300774-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity as CaCO3, Total	SM 2320 B	**7.6**	mg/L	5.0	5.0	1	02/21/13 14:12	
Ammonia as Nitrogen	350.1	**12.1**	mg/L	0.020	0.014	2	02/14/13 16:53	
Bicarbonate Alkalinity as CaCO3	SM 2320 B	**7.6**	mg/L	5.0	5.0	1	02/21/13 14:12	
Carbonate Alkalinity as CaCO3	SM 2320 B	5.0 U	mg/L	5.0	5.0	1	02/21/13 14:12	

Analytical Report

Client:	Waste Services of Florida, Inc.	**Service Request:**	J1300774
Project:	JED SVE Pilot	**Date Collected:**	02/12/13 00:00
Sample Matrix:	Water	**Date Received:**	02/13/13 09:22
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	J1300774-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	0.21 U	1.0	0.21	1	02/21/13 20:24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	98	72 - 121	02/21/13 20:24	
4-Bromofluorobenzene	110	86 - 113	02/21/13 20:24	
Dibromofluoromethane	95	86 - 112	02/21/13 20:24	
Toluene-d8	100	88 - 115	02/21/13 20:24	

Analytical Report

Client:	Waste Services of Florida, Inc.	**Service Request:**	J1300774
Project:	JED SVE Pilot	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	JQ1301278-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	0.21 U	1.0	0.21	1	02/21/13 13:30	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	95	72 - 121	02/21/13 13:30	
4-Bromofluorobenzene	105	86 - 113	02/21/13 13:30	
Dibromofluoromethane	94	86 - 112	02/21/13 13:30	
Toluene-d8	102	88 - 115	02/21/13 13:30	

Analytical Report

Client:	Waste Services of Florida, Inc.	**Service Request:**	J1300774
Project:	JED SVE Pilot	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	J1300774-MB		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Total Recoverable	6010B	**3 I**	ug/L	100	3	1	02/15/13 15:18	2/14/13	

Analytical Report

Client:	Waste Services of Florida, Inc.	**Service Request:**	J1300774
Project:	JED SVE Pilot	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	J1300774-MB		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Alkalinity as CaCO3, Total	SM 2320 B	5.0 U	mg/L	5.0	5.0	1	02/21/13 13:52	
Ammonia as Nitrogen	350.1	0.007 U	mg/L	0.010	0.007	1	02/14/13 16:34	
Bicarbonate Alkalinity as CaCO3	SM 2320 B	5.0 U	mg/L	5.0	5.0	1	02/21/13 13:52	
Carbonate Alkalinity as CaCO3	SM 2320 B	5.0 U	mg/L	5.0	5.0	1	02/21/13 13:52	

Client: Waste Services of Florida, Inc. **Service Request:** J1300774
Project: JED SVE Pilot
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Sample Name	Lab Code	1,2-Dichloroethane-d4 72 - 121	4-Bromofluorobenzene 86 - 113	Dibromofluoromethane 86 - 112
MW-1A	J1300774-001	97	102	94
MW-4A	J1300774-002	96	107	95
Trip Blank	J1300774-003	98	110	95
Lab Control Sample	JQ1301278-03	90	98	96
Method Blank	JQ1301278-04	95	105	94

Client: Waste Services of Florida, Inc. **Service Request:** J1300774
Project: JED SVE Pilot
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Sample Name	Lab Code	Toluene-d8 88 - 115
MW-1A	J1300774-001	99
MW-4A	J1300774-002	101
Trip Blank	J1300774-003	100
Lab Control Sample	JQ1301278-03	97
Method Blank	JQ1301278-04	102

Client: Waste Services of Florida, Inc.
Project: JED SVE Pilot
Sample Matrix: Water

Service Request:J1300774
Date Analyzed:02/21/13

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260B

Units:ug/L
Basis:NA
Analysis Lot:330028

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	JQ1301278-03	18.4	20.0	92	80-117

Client: Waste Services of Florida, Inc.
Project: JED SVE Pilot
Sample Matrix: Water

Service Request:J1300774
Date Analyzed:02/15/13
Date Extracted:02/14/13

Lab Control Sample Summary
Iron, Total Recoverable

Analysis Method: 6010B
Prep Method: EPA 3005A

Units:ug/L
Basis:NA
Analysis Lot:329308

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	J1300774-LCS	5250	5000	105	80-120

QA/QC Report

Client: Waste Services of Florida, Inc.
Project: JED SVE Pilot
Sample Matrix: Water

Service Request:J1300774
Date Analyzed:02/14/13 - 02/21/13

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
J1300774-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity as CaCO3, Total	SM 2320 B	236	250	94	85-115
Ammonia as Nitrogen	350.1	0.968	1.00	97	90-110

ALS Environmental

Cooler Receipt Form

Client: WSI Service Request #: 513000724

Project: JED SVE Pilot

Cooler received on 2/13/13 and opened on 2/13/13 by SC

COURIER: ALS UPS FEDEX Client Other ____ Airbill # 8010 0611 6410

1	Were custody seals on outside of cooler?	(Yes)	No					
	If yes, how many and where?	#: 1	(on lid)	other				
2	Were seals intact and signature and date correct?	(Yes)	No	N/A				
3	Were custody papers properly filled out?	(Yes)	No	N/A				
4	Temperature of cooler(s) upon receipt (Should be > 0°C and < 6°C)	1.2°C						
5	Thermometer ID	IR1						
6	Temperature Blank Present?	(Yes)	No					
7	Were Ice or Ice Packs present	(Ice)	Ice Packs	No				
8	Did all bottles arrive in good condition (unbroken, etc....)?	(Yes)	No	N/A				
9	Type of packing material present	Netting	Vial Holder	(Bubble Wrap)				
		Paper	Styrofoam	Other	N/A			
10	Were all bottle labels complete (sample ID, preservation, etc....)?	(Yes)	No	N/A				
11	Did all bottle labels and tags agree with custody papers?	(Yes)	No	N/A				
12	Were the correct bottles used for the tests indicated?	(Yes)	No	N/A				
13	Were all of the preserved bottles received with the appropriate preservative?	(Yes)	No	N/A				
	(HNO3 pH<2) (H2SO4 pH<2) ZnAc2/NaOH pH>9 NaOH pH>12 HCl pH<2							
	Preservative additions noted below							
14	Were all samples received within analysis holding times?	(Yes)	No	N/A				
15	Were all VOA vials free of air bubbles? If present, note below	(Yes)	No	N/A				
16	Where did the bottles originate?	(ALS)	Client					

Sample ID	Reagent	Lot #	ml added	Initials Date/Time

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

Client approval to run samples if discrepancies noted: Date:

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

ALS Environmental

9143 Philips Highway, Ste 200 • Jacksonville, FL 32256 (904) 739-2277 • 800-695-7222 x06 • FAX (904) 739-2011

PAGE 1 OF 1

SR# J1300774
CAS Contract

Project Name: JED SVE Pilot	Project Number:
Project Manager: Joe Terry	Email Address: jterry@wsiinc.us
Company/Address: WSI 11500 43rd St. N. Clearwater FL 33762	
Phone #: 813-943-8633	FAX #
Sampler's Signature: Joe Terry	Sampler's Printed Name: Joe Terry

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

J1300774
Waste Services of Florida, Inc.
JED SVE Pilot
5

PRESERVATIVE: 1 3 2 0

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	Benzene	NH3	Iron	Diss-Alk
MW-1A		2.12.13	1125	GW	6	X	X	X	X
MW-4A		2.12.13	1025	GW	6	X	X	X	X
Trip Blank		2.8.13		DI H2O	2	X			

Preservative Key: NE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

REMARKS/ ALTERNATE DESCRIPTION

JT

SPECIAL INSTRUCTIONS/COMMENTS

See QAPP ☐

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
X STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE

REPORT REQUIREMENTS
_____ I. Results Only
X II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
_____ III. Results + QC and Calibration Summaries
_____ IV. Data Validation Report with Raw Data
_____ V. Specialized Forms / Custom Report
Edata _____ Yes _____ No

INVOICE INFORMATION
PO #
BILL TO:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: 1.2°C CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Joe Terry	Signature: Shawn Lightsey	Signature	Signature	Signature	Signature
Printed Name: Joe Terry	Printed Name: ALS	Printed Name	Printed Name	Printed Name	Printed Name
Firm: WSI	Firm: 2/13/13 0922	Firm	Firm	Firm	Firm
Date/Time: 2-12-13/1300	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Retained by Client

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Attachment C

Well Construction Details and Photographs

Gas Extraction Wells
Cell 5 2” NW and Cell 5 2” SW (foreground)

STRUCTURAL SOIL FILL EXTRACTION WELL CONSTRUCTION DETAIL

SITE: J.E.D. Solid Waste Management Facility PROJECT Soil Vapor Extraction

LOCATION: 1501 Omni Way, St. Cloud, FL 34773 DATE: 04 mo 03 day 2013 year

DRILLING COMPANY: National Environmental Technology, Inc. TECHNICIAN: Joe Terry

WELL ID NO.: **Cell 5 Sump Pad (North Well)**

LOCATION AND ELEVATION: ☐ SURVEYED ☐ ESTIMATED

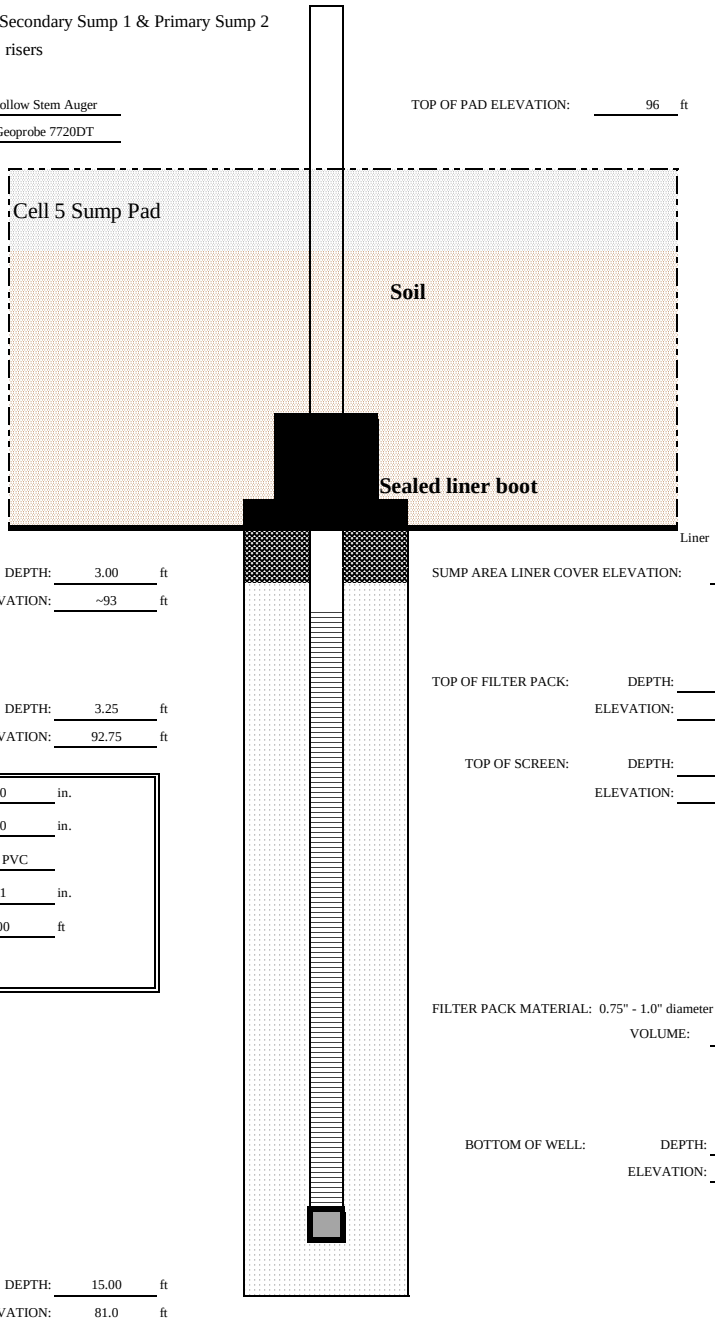
NORTHING: _____ EASTING: _____ GROUND ELEVATION: 96.13 to 96.15

LOCATION: In-between Cell 5 Secondary Sump 1 & Primary Sump 2 approximately 1-ft west of sump risers

DRILLING METHOD: Hollow Stem Auger

DRILL RIG: Geoprobe 7720DT

TOP OF PAD ELEVATION: 96 ft



TOP OF BENTONITE PLUG (below pad): DEPTH: 3.00 ft

ELEVATION: ~93 ft

BOTTOM OF BENTONITE PLUG: DEPTH: 3.25 ft

ELEVATION: 92.75 ft

SUMP AREA LINER COVER ELEVATION: 92.75 ft

TOP OF FILTER PACK: DEPTH: 3.25 ft

ELEVATION: 92.75 ft

TOP OF SCREEN: DEPTH: 5.00 ft

ELEVATION: 91.0 ft

DIAMETER OF BOREHOLE: 6.50 in.

DIAMETER OF CASING: 2.00 in.

CASING MATERIAL: Sch 80 PVC

WIDTH OF SCREEN SLOT: 0.01 in.

TOTAL PROBE DEPTH : 15.00 ft
(below pad surface)

FILTER PACK MATERIAL: 0.75" - 1.0" diameter GRAVEL

VOLUME: ~7 cu.ft

All Joints flush thread

BOTTOM OF WELL: DEPTH: 15.00 ft

ELEVATION: 81.0 ft

BOTTOM OF BOREHOLE: DEPTH: 15.00 ft

ELEVATION: 81.0 ft

NOTES: Depths mean below top of concrete sump pad (elevation 96.13 to 96.15-ft)

STRUCTURAL SOIL FILL EXTRACTION WELL CONSTRUCTION DETAIL

SITE: J.E.D. Solid Waste Management Facility PROJECT Soil Vapor Extraction

LOCATION: 1501 Omni Way, St. Cloud, FL 34773 DATE: 04 mo 03 day 2013 year

DRILLING COMPANY: National Environmental Technology, Inc. TECHNICIAN: Joe Terry

WELL ID NO.: **Cell 5 Sump Pad (South Well)**

LOCATION AND ELEVATION: ☐ SURVEYED ☐ ESTIMATED

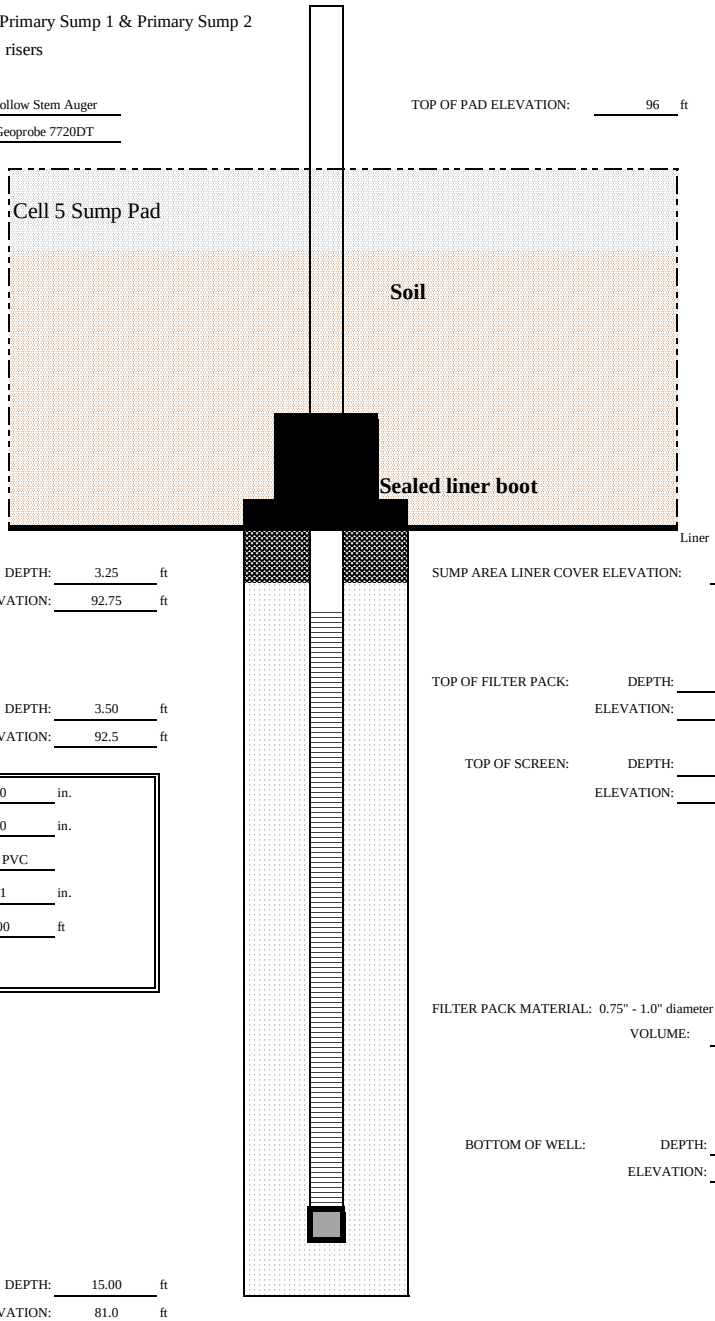
NORTHING: _____ EASTING: _____ GROUND ELEVATION: 96.13 to 96.15

LOCATION: In-between Cell 5 Primary Sump 1 & Primary Sump 2 approximately 1-ft west of sump risers

DRILLING METHOD: Hollow Stem Auger

DRILL RIG: Geoprobe 7720DT

TOP OF PAD ELEVATION: 96 ft



TOP OF BENTONITE PLUG (below pad): DEPTH: 3.25 ft

ELEVATION: 92.75 ft

SUMP AREA LINER COVER ELEVATION: 92.75 ft

TOP OF FILTER PACK: DEPTH: 3.50 ft

ELEVATION: 92.5 ft

BOTTOM OF BENTONITE PLUG: DEPTH: 3.50 ft

ELEVATION: 92.5 ft

TOP OF SCREEN: DEPTH: 5.00 ft

ELEVATION: 91.0 ft

DIAMETER OF BOREHOLE: 6.50 in.

DIAMETER OF CASING: 2.00 in.

CASING MATERIAL: Sch 80 PVC

WIDTH OF SCREEN SLOT: 0.01 in.

TOTAL PROBE DEPTH : 15.00 ft
(below pad surface)

FILTER PACK MATERIAL: 0.75" - 1.0" diameter GRAVEL

VOLUME: ~7 cu.ft

All Joints flush thread

BOTTOM OF WELL: DEPTH: 15.00 ft

ELEVATION: 81.0 ft

BOTTOM OF BOREHOLE: DEPTH: 15.00 ft

ELEVATION: 81.0 ft

NOTES: Depths mean below top of concrete sump pad (elevation 96.13 to 96.15-ft)

Attachment D

Summary of Pilot SVE System Groundwater Data

Summary of Pilot SVE System Groundwater Data

Sample Name	Date Collected	Analyte Name	Analysis Method	Result	Lab Qualifier	Unit	MRL	MDL	Dil.	Date Analyzed
MW-1A	5/8/2012	Calcium, Total Recoverable	6010B	2.73		mg/L	0.1	0.02	1	5/11/2012
MW-1A	5/8/2012	Iron, Total Recoverable	6010B	2050		ug/L	100	3	1	5/11/2012
MW-1A	5/8/2012	Magnesium, Total Recoverable	6010B	2.02		mg/L	0.1	0.02	1	5/11/2012
MW-1A	5/8/2012	Manganese, Total Recoverable	6010B	5	I	ug/L	10	3	1	5/11/2012
MW-1A	5/8/2012	Potassium, Total Recoverable	6010B	3		mg/L	2	0.09	1	5/11/2012
MW-1A	5/8/2012	Sodium, Total Recoverable	6010B	12		mg/L	0.5	0.03	1	5/11/2012
MW-1A	5/8/2012	Alkalinity as CaCO3, Total	SM2320B	15.7		mg/L	5	5	1	5/16/2012
MW-1A	5/8/2012	Ammonia as Nitrogen	350.1	4.45		mg/L	0.01	0.007	1	5/14/2012
MW-1A	5/8/2012	Bicarbonate Alkalinity as CaCO3	SM2320B	15.7		mg/L	5	5	1	5/16/2012
MW-1A	5/8/2012	Carbon, Total Organic (TOC)	SM5310B	9.9		mg/L	1	0.09	1	5/16/2012
MW-1A	5/8/2012	Carbonate Alkalinity as CaCO3	SM2320B	5	U	mg/L	5	5	1	5/16/2012
MW-1A	5/8/2012	Chloride	300.0	30.7		mg/L	0.5	0.11	1	5/10/2012
MW-1A	5/8/2012	Sulfate	300.0	0.68		mg/L	0.5	0.18	1	5/10/2012
LS-5	5/8/2012	Calcium, Total Recoverable	6010B	145		mg/L	0.1	0.02	1	5/11/2012
LS-5	5/8/2012	Iron, Total Recoverable	6010B	4070		ug/L	100	3	1	5/11/2012
LS-5	5/8/2012	Magnesium, Total Recoverable	6010B	36.2		mg/L	0.1	0.02	1	5/11/2012
LS-5	5/8/2012	Manganese, Total Recoverable	6010B	304		ug/L	10	3	1	5/11/2012
LS-5	5/8/2012	Potassium, Total Recoverable	6010B	586		mg/L	2	0.09	1	5/11/2012
LS-5	5/8/2012	Sodium, Total Recoverable	6010B	1750		mg/L	10	0.6	20	5/14/2012
LS-5	5/8/2012	Alkalinity as CaCO3, Total	SM2320B	3370		mg/L	500	500	100	5/16/2012
LS-5	5/8/2012	Ammonia as Nitrogen	350.1	927		mg/L	1	0.8	100	5/14/2012
LS-5	5/8/2012	Bicarbonate Alkalinity as CaCO3	SM2320B	3370		mg/L	500	500	100	5/16/2012
LS-5	5/8/2012	Carbon, Total Organic (TOC)	SM5310B	2460		mg/L	100	9	100	5/16/2012
LS-5	5/8/2012	Carbonate Alkalinity as CaCO3	SM2320B	500	U	mg/L	500	500	100	5/16/2012
LS-5	5/8/2012	Chloride	300.0	3150		mg/L	25	6	50	5/10/2012
LS-5	5/8/2012	Sulfate	300.0	24	I	mg/L	25	9	50	5/10/2012
LS-4	5/8/2012	Calcium, Total Recoverable	6010B	138		mg/L	0.1	0.02	1	5/11/2012
LS-4	5/8/2012	Iron, Total Recoverable	6010B	3400		ug/L	100	3	1	5/11/2012
LS-4	5/8/2012	Magnesium, Total Recoverable	6010B	26		mg/L	0.1	0.02	1	5/11/2012
LS-4	5/8/2012	Manganese, Total Recoverable	6010B	238		ug/L	10	3	1	5/11/2012
LS-4	5/8/2012	Potassium, Total Recoverable	6010B	886		mg/L	2	0.09	1	5/11/2012

Summary of Pilot SVE System Groundwater Data

Sample Name	Date Collected	Analyte Name	Analysis Method	Result	Lab Qualifier	Unit	MRL	MDL	Dil.	Date Analyzed
LS-4	5/8/2012	Sodium, Total Recoverable	6010B	2290		mg/L	10	0.6	20	5/14/2012
LS-4	5/8/2012	Alkalinity as CaCO3, Total	SM2320B	4660		mg/L	500	500	100	5/16/2012
LS-4	5/8/2012	Ammonia as Nitrogen	350.1	1490		mg/L	2	1.5	200	5/14/2012
LS-4	5/8/2012	Bicarbonate Alkalinity as CaCO3	SM2320B	4660		mg/L	500	500	100	5/16/2012
LS-4	5/8/2012	Carbon, Total Organic (TOC)	SM5310B	5790		mg/L	100	9	100	5/16/2012
LS-4	5/8/2012	Carbonate Alkalinity as CaCO3	SM2320B	500	U	mg/L	500	500	100	5/16/2012
LS-4	5/8/2012	Chloride	300.0	4070		mg/L	25	6	50	5/10/2012
LS-4	5/8/2012	Sulfate	300.0	27		mg/L	25	9	50	5/10/2012
MW-1A	8/6/2012	Iron, Total Recoverable	6010B	1790		ug/L	100	3	1	8/8/2012
MW-1A	8/6/2012	Alkalinity as CaCO3, Total	SM2320B	5	U	mg/L	5	5	1	8/13/2012
MW-1A	8/6/2012	Ammonia as Nitrogen	350.1	12.5		mg/L	0.02	0.014	2	8/8/2012
MW-1A	8/6/2012	Bicarbonate Alkalinity as CaCO3	SM2320B	5	U	mg/L	5	5	1	8/13/2012
MW-1A	8/6/2012	Carbonate Alkalinity as CaCO3	SM2320B	5	U	mg/L	5	5	1	8/13/2012
MW-4A	8/6/2012	Iron, Total Recoverable	6010B	3090		ug/L	100	3	1	8/8/2012
MW-4A	8/6/2012	Alkalinity as CaCO3, Total	SM2320B	15.4		mg/L	5	5	1	8/13/2012
MW-4A	8/6/2012	Ammonia as Nitrogen	350.1	4.56		mg/L	0.01	0.007	1	8/8/2012
MW-4A	8/6/2012	Bicarbonate Alkalinity as CaCO3	SM2320B	15.4		mg/L	5	5	1	8/13/2012
MW-4A	8/6/2012	Carbonate Alkalinity as CaCO3	SM2320B	5	U	mg/L	5	5	1	8/13/2012
LS-4	11/5/2012	Calcium, Total Recoverable	6010B	157		mg/L	0.1	0.02	1	11/8/2012
LS-4	11/5/2012	Iron, Total Recoverable	6010B	3010		ug/L	100	3	1	11/8/2012
LS-4	11/5/2012	Magnesium, Total Recoverable	6010B	43.5		mg/L	0.1	0.02	1	11/8/2012
LS-4	11/5/2012	Manganese, Total Recoverable	6010B	266		ug/L	10	3	1	11/8/2012
LS-4	11/5/2012	Potassium, Total Recoverable	6010B	721		mg/L	2	0.09	1	11/8/2012
LS-4	11/5/2012	Sodium, Total Recoverable	6010B	1780		mg/L	10	0.6	20	11/12/2012
LS-4	11/5/2012	Alkalinity as CaCO3, Total	SM2320B	4540		mg/L	38	38	7.5	11/6/2012
LS-4	11/5/2012	Ammonia as Nitrogen	350.1	1220		mg/L	2	1.5	200	11/6/2012
LS-4	11/5/2012	Bicarbonate Alkalinity as CaCO3	SM2320B	4540		mg/L	38	38	7.5	11/6/2012
LS-4	11/5/2012	Carbon, Total Organic (TOC)	SM5310B	2990		mg/L	100	9	100	11/7/2012
LS-4	11/5/2012	Carbonate Alkalinity as CaCO3	SM2320B	38	U	mg/L	38	38	7.5	11/6/2012
LS-4	11/5/2012	Chloride	300.0	2790		mg/L	25	6	50	11/6/2012
LS-4	11/5/2012	Sulfate	300.0	30		mg/L	25	9	50	11/6/2012

Summary of Pilot SVE System Groundwater Data

Sample Name	Date Collected	Analyte Name	Analysis Method	Result	Lab Qualifier	Unit	MRL	MDL	Dil.	Date Analyzed
LS-5	11/5/2012	Calcium, Total Recoverable	6010B	164		mg/L	0.1	0.02	1	11/8/2012
LS-5	11/5/2012	Iron, Total Recoverable	6010B	6920		ug/L	100	3	1	11/8/2012
LS-5	11/5/2012	Magnesium, Total Recoverable	6010B	49.3		mg/L	0.1	0.02	1	11/8/2012
LS-5	11/5/2012	Manganese, Total Recoverable	6010B	471		ug/L	10	3	1	11/8/2012
LS-5	11/5/2012	Potassium, Total Recoverable	6010B	766		mg/L	2	0.09	1	11/8/2012
LS-5	11/5/2012	Sodium, Total Recoverable	6010B	2130		mg/L	10	0.6	20	11/12/2012
LS-5	11/5/2012	Alkalinity as CaCO3, Total	SM2320B	4210		mg/L	38	38	7.5	11/6/2012
LS-5	11/5/2012	Ammonia as Nitrogen	350.1	1110		mg/L	2	1.5	200	11/6/2012
LS-5	11/5/2012	Bicarbonate Alkalinity as CaCO3	SM2320B	4210		mg/L	38	38	7.5	11/6/2012
LS-5	11/5/2012	Carbon, Total Organic (TOC)	SM5310B	2810		mg/L	100	9	100	11/7/2012
LS-5	11/5/2012	Carbonate Alkalinity as CaCO3	SM2320B	38	U	mg/L	38	38	7.5	11/6/2012
LS-5	11/5/2012	Chloride	300.0	3460		mg/L	25	6	50	11/7/2012
LS-5	11/5/2012	Sulfate	300.0	40		mg/L	25	9	50	11/7/2012
MW-1A	11/5/2012	Calcium, Total Recoverable	6010B	120		mg/L	0.1	0.02	1	11/8/2012
MW-1A	11/5/2012	Iron, Total Recoverable	6010B	8300		ug/L	100	3	1	11/8/2012
MW-1A	11/5/2012	Magnesium, Total Recoverable	6010B	10		mg/L	0.1	0.02	1	11/8/2012
MW-1A	11/5/2012	Manganese, Total Recoverable	6010B	112		ug/L	10	3	1	11/8/2012
MW-1A	11/5/2012	Potassium, Total Recoverable	6010B	28		mg/L	2	0.09	1	11/8/2012
MW-1A	11/5/2012	Sodium, Total Recoverable	6010B	176		mg/L	0.5	0.03	1	11/8/2012
MW-1A	11/5/2012	Alkalinity as CaCO3, Total	SM2320B	11.2		mg/L	5	5	1	11/6/2012
MW-1A	11/5/2012	Ammonia as Nitrogen	350.1	8.65		mg/L	0.05	0.035	5	11/6/2012
MW-1A	11/5/2012	Bicarbonate Alkalinity as CaCO3	SM2320B	11.2		mg/L	5	5	1	11/6/2012
MW-1A	11/5/2012	Carbon, Total Organic (TOC)	SM5310B	65.8		mg/L	2	0.2	2	11/14/2012
MW-1A	11/5/2012	Carbonate Alkalinity as CaCO3	SM2320B	5	U	mg/L	5	5	1	11/6/2012
MW-1A	11/5/2012	Chloride	300.0	317		mg/L	2.5	0.6	5	11/7/2012
MW-1A	11/5/2012	Sulfate	300.0	325		mg/L	2.5	0.9	5	11/7/2012
MW-4A	11/5/2012	Calcium, Total Recoverable	6010B	7.36		mg/L	0.1	0.02	1	11/8/2012
MW-4A	11/5/2012	Iron, Total Recoverable	6010B	2800		ug/L	100	3	1	11/8/2012
MW-4A	11/5/2012	Magnesium, Total Recoverable	6010B	3.49		mg/L	0.1	0.02	1	11/8/2012
MW-4A	11/5/2012	Manganese, Total Recoverable	6010B	11		ug/L	10	3	1	11/8/2012
MW-4A	11/5/2012	Potassium, Total Recoverable	6010B	10.2		mg/L	2	0.09	1	11/8/2012

Summary of Pilot SVE System Groundwater Data

Sample Name	Date Collected	Analyte Name	Analysis Method	Result	Lab Qualifier	Unit	MRL	MDL	Dil.	Date Analyzed
MW-4A	11/5/2012	Sodium, Total Recoverable	6010B	22.2		mg/L	0.5	0.03	1	11/8/2012
MW-4A	11/5/2012	Alkalinity as CaCO3, Total	SM2320B	20.1		mg/L	5	5	1	11/6/2012
MW-4A	11/5/2012	Ammonia as Nitrogen	350.1	9		mg/L	0.05	0.035	5	11/6/2012
MW-4A	11/5/2012	Bicarbonate Alkalinity as CaCO3	SM2320B	20.1		mg/L	5	5	1	11/6/2012
MW-4A	11/5/2012	Carbon, Total Organic (TOC)	SM5310B	60.9		mg/L	2	0.2	2	11/14/2012
MW-4A	11/5/2012	Carbonate Alkalinity as CaCO3	SM2320B	5	U	mg/L	5	5	1	11/6/2012
MW-1A	2/12/2013	Iron, Total Recoverable	6010B	10100		ug/L	100	3	1	2/15/2013
MW-1A	2/12/2013	Alkalinity as CaCO3, Total	SM2320B	13.5		mg/L	5	5	1	2/21/2013
MW-1A	2/12/2013	Ammonia as Nitrogen	350.1	9.23		mg/L	0.05	0.035	5	2/14/2013
MW-1A	2/12/2013	Bicarbonate Alkalinity as CaCO3	SM2320B	13.5		mg/L	5	5	1	2/21/2013
MW-1A	2/12/2013	Carbonate Alkalinity as CaCO3	SM2320B	5	U	mg/L	5	5	1	2/21/2013
MW-4A	2/12/2013	Iron, Total Recoverable	6010B	2980		ug/L	100	3	1	2/15/2013
MW-4A	2/12/2013	Alkalinity as CaCO3, Total	SM2320B	7.6		mg/L	5	5	1	2/21/2013
MW-4A	2/12/2013	Ammonia as Nitrogen	350.1	12.1		mg/L	0.05	0.035	5	2/14/2013
MW-4A	2/12/2013	Bicarbonate Alkalinity as CaCO3	SM2320B	7.6		mg/L	5	5	1	2/21/2013
MW-4A	2/12/2013	Carbonate Alkalinity as CaCO3	SM2320B	5	U	mg/L	5	5	1	2/21/2013