Water Quality Monitoring Report

Trail Ridge Landfill
FDEP Permit # 0013493-025-SO-01

Second 2017 Semiannual Event
Sampled August 8-10, 2017

Prepared For:
Trail Ridge Landfill, Inc.

Prepared By:

Carlson Environmental Consultants, PC
305 S Main Street
Monroe, NC 28112
September 2017

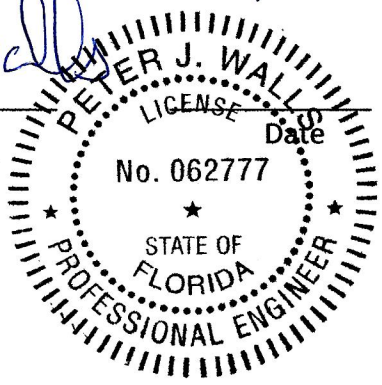
PROFESSIONAL CERTIFICATION - TRAIL RIDGE LANDFILL 2H 2017 REPORT

I certify that I am a certified professional hydrogeologic engineer with knowledge and experience in water quality assessment and hydrogeologic investigations. The field work and document preparation for this project were conducted under my direct supervision, are consistent with FAC Chapter 62-701, and are consistent with generally accepted professional consulting principles and practices. To the best of my knowledge, the information contained herein, including all attachments, are true, accurate, and complete.

9/15/2017

Peter Walls, P.E. Date
Florida License # 62777
Expires 02/28/2018

CEC



Florida Department of Environmental Protection

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

DEP Form #: 62-701.900(31), F.A.C.
Form Title: Water Quality Monitoring Certification
Effective Date: January 6, 2010
Incorporated in Rule 62-701.510(9), F.A.C.

WATER QUALITY MONITORING CERTIFICATION

PART I GENERAL INFORMATION

(1) Facility Name Trail Ridge Landfill, Inc.

Address 5110 U.S. Highway 301

City Baldwin, FL Zip 32234 County Duval

Telephone Number ( )

(2) WACS Facility ID 33628

(3) DEP Permit Number 0013495-025-SO-01

(4) Authorized Representative's Name Eric Parker Title Environmental Manager

Address 5110 U.S. Highway 301

City Baldwin, FL Zip 32234 County Duval

Telephone Number (904) 748-6006

Email address (if available) eparker1@wm.com

CERTIFICATION

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

9-15-17
(Date)

(Owner or Authorized Representative's Signature)

PART II QUALITY ASSURANCE REQUIREMENTS

Sampling Organization Professional Tech Support Service (Pro Tech)

Analytical Lab NELAC / HRS Certification # Florida E87052

Lab Name Advanced Environmental Laboratories, Inc. (AEL)

Address 6681 Southpoint Parkway, Jacksonville, FL 32216

Phone Number (904) 363-9350

Email address (if available) sposton@aellab.com

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1.0 INTRODUCTION

The Trail Ridge Landfill (Site) is owned by the City of Jacksonville and operated by Trail Ridge Landfill, Inc. (a Waste Management Company) in accordance with Florida Department of Environmental Protection (FDEP) Operation Permit Number 0013493-025-SO-01 issued June 16, 2014. The Site is an active municipal solid waste landfill that serves the City of Jacksonville, Duval County, and Northeast Florida.

Carlson Environmental Consultants, PC (CEC) has been retained to report the results of semi-annual groundwater and surface water monitoring at the Site in accordance with the Water Quality Monitoring Plan (Appendix 3) of the referenced permit. This report presents the methods and findings of the second 2017 semi-annual groundwater and surface water monitoring event conducted on August 8-10, 2017. The following sections include general information concerning the Site history and setting, an evaluation of surficial aquifer groundwater flow, and groundwater and surface water quality conditions at the Site. Laboratory analytical data are summarized, evaluated, and compared to historical data where appropriate.

2.0 BACKGROUND

2.1 Site Location and Description

The Site is located in the town of Baldwin approximately five miles southwest of the intersection of US-301 and I-10 in southwestern Duval County along the border with Baker County, Florida (Figure 1). The Facility is an active municipal solid waste landfill with a disposal area of approximately 144 acres that accepts waste from the City of Jacksonville and Duval County. The Facility operates a waste tire processing facility and active gas collection system, and the Facility design includes wetland mitigation, a stormwater management system, and environmental monitoring systems for groundwater, surface water, and methane gas.

2.2 Groundwater and Surface Water Monitoring Systems

Groundwater and surface water monitoring events are conducted concurrently on a semi-annual basis prior to March 30th and September 30th of each year. Figure 2 shows the Site layout and groundwater monitoring well and surface water sampling locations. The current Site groundwater monitoring system consists of twenty-nine (29) groundwater monitoring wells screened at shallow (S) and intermediate (I) depths within the uppermost, surficial aquifer. These include:

- Eighteen (18) shallow wells: MWB-2(S), MWB-3(S), MWB-11(S), MWB-12(S), MWB-13(S), MWB-20(S), MWB-21(S), MWB-22(S), MWB-27(S), MWB-29(S), MWB-32(S), MWB-33(S), MWB-34(S), MWB-35(S), MWB-39(S), MWB-40(S), SGMW-1(S), SGMW-2(S)

- Eleven (11) intermediate wells: MWB-2(I), MWB-3(I), MWB-11(IR), MWB-12(I), MWB-13(I), MWB-27(I), MWB-29(I), MWB-32(I), MWB-34(I), MWB-35(I), MWB-39(I)

In addition, the following wells are used to monitor groundwater levels at the Site:

- Six (6) shallow wells: MWB-7(S), MWB-14(S), MWB-23(S), MWB-24(S), MWB-25(S), MWB-26(S)
- Three (3) intermediate wells: MWB-7(I), MWB-14(I), MWB-25(I)
- Nine (9) deep wells: MWB-7(D), MWB-12(D), MWB-14(D), MWB-25(D), MWB-27(D), MWB-29(D), MWB-31(D), MWB-32(D), and MWB-34(D)

Background wells MWB-2(S), MWB-3(S), MWB-2(I), and MWB-3(I) demonstrate background water quality for the facility due to their location upgradient from landfill waste. The remaining shallow and intermediate wells listed above are utilized for compliance or detection monitoring purposes associated with various phases of landfill development.

Well construction details for wells used to monitor water quality are shown in Table 1.

The Site surface water monitoring system currently consists of three surface water monitoring locations: SW-1, SW-3, and SW-B (Figure 1). SW-B is intended to be a background water quality sampling point. Additional points will be added as the surface water management system construction is completed and the landfill expands.

3.0 DATA COLLECTION METHODS

3.1 Groundwater Elevation Measurements

ProTech field personnel measured water levels in Site monitoring wells on August 8, 2017 prior to purging and sampling activities in accordance with procedures described in the facility permit. Water levels were measured at active groundwater monitoring wells at the Site within a 24-hour period to evaluate static groundwater conditions across the entire Site. Field personnel opened the monitoring wells to allow groundwater levels to equilibrate to atmospheric conditions, and then measured the depth to groundwater to within 0.01 feet relative to the top of the inner PVC well casing using an electronic water level indicator. CEC calculated water table elevations at each well to evaluate the general direction of groundwater flow in the uppermost aquifer underlying the Site. The calculations were performed by taking the difference between the measured depth to groundwater and the top of casing elevation surveyed for each well. Table 2 provides groundwater elevation data collected during the August 2017 monitoring event.

3.2 Sample Collection Analysis

Groundwater and surface water sampling was conducted in accordance with F.A.C. Chapter 62-160 and FDEP's Standard Operating Procedures for Field Activities (DEP-SOP-001/01). ProTech

field personnel collected groundwater samples for laboratory analysis from twenty-eight of the twenty-nine monitoring wells listed in Section 2.2 between August 8 and August 10, 2017. A representative sample could not be collected from SGMW-1(S) due to highly elevated turbidity. It is believed this well is compromised. CEC notified the Department via email of the damaged well on September 6, 2017. TRL intends to replace the well prior to the next semiannual sampling event.

Groundwater monitoring wells that were sampled were purged with dedicated QED bladder pumps with Teflon-lined tubing extending to the top of the well casing. Wells were purged using low-flow sampling methods; a minimum of one well volume was purged prior to stabilization for wells where the water table is located within the well screen. Field parameters including static water level, pH, specific conductance, temperature, turbidity, dissolved oxygen, oxidation-reduction potential and color/sheen (by observation) were recorded during purging and prior to sampling. Once purging was complete, ProTech field personnel collected groundwater samples from the dedicated pumps and tubing in laboratory-provided containers, and laced the samples in coolers with ice. On August 10, 2017, surface water samples were collected from three surface water monitoring points using a laboratory-provided container. Instrument calibration records (FD 9000-8) are included in Appendix A, and completed groundwater sampling logs (FD 9000-24) are provided along with the laboratory report in Appendix B.

Advanced Environmental Laboratories, Inc. (AEL), a Florida-certified laboratory (DOH Certification #E82001[AEL-G] and #E82574[AEL-JAX] [FL NELAC Certification]) analyzed groundwater and surface water samples collected in August 2017 for the parameters identified in Section II and Section III, respectively, of the facility permit Water Quality Monitoring Plan.

4.0 GROUNDWATER ELEVATIONS AND FLOW DIRECTION

CEC calculated groundwater elevations based on water levels measured on August 8, 2017, and top of well casing elevations surveyed relative to the National Geodetic Vertical Datum (NGVD) (Table 2). Figures 3, 4, and 5 show shallow, intermediate, and deep potentiometric contours for the surficial aquifer, respectively. Horizontal groundwater flow beneath the Site in the uppermost aquifer is to the east at shallow, intermediate, and deep depths. The vertical groundwater flow is slightly downward on the western side (high ground) and slightly upward on the east side (low ground). The direction of groundwater flow is consistent with measurements from previous monitoring events.

5.0 WATER QUALITY MONITORING RESULTS

5.1 Quality Assurance and Quality Control (QA/QC) Results

ProTech field personnel collected two field blanks during the August 2017 sampling event and submitted the samples with trip blanks in coolers containing volatile organic compound (VOC) samples to Advanced Environmental Laboratories for analysis. The samples were received in good condition, properly preserved, and at proper temperatures. The laboratory provided

additional QA/QC including analysis of method blanks, surrogates, laboratory control samples/laboratory control sample duplicates (LCS/LCSD), and matrix spike/matrix spike duplicates (MS/MSD). The laboratory did not qualify data based on field detections. The QA/QC results for the laboratory reports associated with groundwater and surface water monitoring points from Advanced Environmental Laboratories Laboratory Reports J1707930, J1707993, and J1708051 are summarized below:

- Several analytes were detected between method detection limits (MDLs) and practical quantitation limits (PQLs); these detections were qualified with an "I."
- The matrix spike (MS) recoveries of zinc for J1708051001 (Batch 2188) were outside control criteria. Recoveries in the Laboratory Control Sample (LCS) and Matrix Spike Duplicate (MSD) were acceptable, which indicates the analytical batch was in control. Results for SW-3 were qualified with a J4.
- The upper control criterion was exceeded for the following surrogates in J1707993001: Bromofluorobenzene. No target analytes were detected in the samples. The error associated with an elevated recovery equates to a high bias. The quality of the sample data is not significantly affected. No further corrective action was required.
- The upper control criterion was exceeded for the following surrogates in J1707993010, J1707998001, 003, 005, G1706606001, 002 and J1707951005, 007: Bromofluorobenzene. No target analytes were detected in the samples. The error associated with an elevated recovery equates to a high bias. The quality of the sample data is not significantly affected. No further corrective action was required.
- The upper control criterion was exceeded for the following surrogate in J1708051001, 002, 003, 005: Bromofluorobenzene. No target analytes associated with the surrogate in question were detected in the samples. The error associated with an elevated recovery equates to a high bias. The quality of the sample data is not significantly affected. No further corrective action was required.
- The upper control criterion was exceeded for the surrogate Bromofluorobenzene in analytical batch 4592. The surrogate in question is not associated to any target analytes for the samples which are only reporting BTEX analytes. No further corrective action was required.

Other QA/QC issues were not identified; therefore, the remaining results from the August 2017 event are considered acceptable without qualification.

5.2 FIELD PARAMETER MEASUREMENT RESULTS

Table 3 summarizes field parameter measurements for select parameters for the groundwater and surface water samples collected during this event. Original field forms with all parameter measurements are included at the end of the laboratory report in Appendix B.

Groundwater field parameter readings and observations are consistent with those from previous semi-annual monitoring events. Historically, the average pH increases with depth between the

shallow and intermediate zones of the aquifer. Turbidity values were lower than 20 nephelometric turbidity units (NTU) with the exception of wells MWB-2(S), MWB-32(S), and SGMW-2(S). Surface water field parameter readings and observations are comparable to historical surface water measurements. SW-B was sampled for the first time. This point is intended to serve as a background water quality monitoring point for the expansion area.

5.3 LABORATORY ANALYSIS RESULTS

Table 4 summarizes laboratory analytical results for shallow and intermediate groundwater samples; Tables 5 and 6 summarize surface water samples. Copies of the laboratory analytical reports are provided in Appendix B.

6.0 COMPARISON TO ESTABLISHED STANDARDS

F.A.C. Chapter 62-701.510 and the facility permit require comparison of water quality monitoring data to water quality standards specified in F.A.C. Chapter 62-520 (Ground Water Classes, Standards, and Exemptions) and F.A.C. Chapter 62-302 (Surface Water Quality Standards). The following sections present a description of the established standards and comparison of results for groundwater and surface water.

6.1 Groundwater

6.1.1 Established Standards

F.A.C. Chapter 62-520 establishes classes and standards for groundwater. The primary maximum contaminant levels (MCLs) and secondary maximum contaminant levels (SMCLs) for parameters included in laboratory analysis are listed on Table 3. The only field parameter with an established drinking water standard under F.A.C. Rule 62-550.310 and 62.550.320 is pH, with an SMCL in the range of 6.5 to 8.5 Standard Units (S.U.). F.A.C. Chapter 62-520.420 indicates that "if the concentration for any constituent listed in subsection (1) above in the natural background quality of the groundwater is greater than the stated maximum, or in the case of pH is also less than the minimum, the representative natural background quality shall be the prevailing standard for Class G-I and Class G-II ground water."

6.1.2 Comparison of Groundwater Data to Established Standards

With one exception, the groundwater monitoring results from the August 2017 event met minimum criteria established under F.A.C. Chapter 62-520.400 and primary MCLs established under F.A.C. Chapter 62-550.310. An initial MCL exceedance for nitrate occurred at MWB-34(s). SMCL exceedances were measured for iron, and pH, and total dissolved solids (TDS) in several wells. These exceedances are identified and discussed below.

Nitrate (MCL 10 mg/L)

- Shallow Wells: MWB-34(S)

Nitrate was detected at 20 mg/L in this well which exceeds the primary MCL of 10 mg/L. TRL notified FDEP of this initial exceedance on September 6, 2017 via email. This detection is thought to be related to a previously reported leachate release that occurred in the vicinity of MWB-34(S). In May 2017, Golder Associates and TRL notified FDEP of an initial exceedance of the chloride secondary drinking water standard and detections of two volatile organic chemicals (VOCs) in this well. The exceedance and detections were attributed to a leachate release that occurred in January 2017 which was quickly repaired. Additional information was provided in the 1H 2017 semiannual monitoring report. There is no evidence this release has affected any other wells at this time, including the intermediate well MWB-34(I) in the same location, and thus the impacts remain contained to a small area. No VOCs were detected in the well during this event, both chlorides and TDS decreased relative the 1H 2017 event. TRL proposes to monitor MWB-34(S) to ensure no other wells are impacted and concentrations continue to decline.

Iron (SMCL 0.3 mg/L)

- Shallow wells: MWB-2(S), MWB-3(S), MWB-11(S), MWB-12(S), MWB-13(S), MWB-32(S), MWB-33(S), MWB-40(S), and SGMW-2(S)

- Intermediate wells: MWB-2(I), MWB-3(I), MWB-11(IR), MWB-12(I), MWB-13(I), MWB-27(I), MWB-29(I), MWB-34(I), and MWB-35(I)

pH (SMCL 6.5 to 8.5 S.U.)

- Shallow wells: All measured background, compliance, and detection well values were below 6.5 S.U.

- Intermediate wells: All background, compliance, and detection well values were below 6.5 S.U.

Total Dissolved Solids (SMCL 500 mg/L)

- Shallow wells: MWB-21(S) and MWB-34(S)

With the exception of MWB-21(S), the above SMCL exceedances for iron, pH, and total dissolved solids (TDS) have been historically detected and reported to FDEP. Iron and pH have also been detected in background wells at concentrations greater than (or, in the case of pH, less than) the associated SMCL. These SMCL exceedances, therefore, appear to be related to natural subsurface conditions rather than landfill impacts.

TRL notified FDEP of the TDS exceedance in MWB-21(S) on September 6, 2017 via email. This detection appears to be an anomaly as no other parameters increased appreciably in the well. Given the historical and somewhat intermittent detections of TDS at other wells, this exceedance does not appear related to landfill activities. TRL proposes to verify the TDS exceedance using samples from the 1H 2018 semiannual event.

6.2 Surface Water

6.2.1 Established Standards

Surface water analytical results were compared to Class I and Class III criteria. Standards for these two classes are provided in Table 5 for laboratory parameters and Table 3 for field parameters. In some cases, F.A.C. Chapter 62-302.530 requires calculations for Class I and III standards based on sample hardness. Table 6 provides equations and calculation results for analytes that require standard calculation, including cadmium, chromium, copper, lead, nickel, and zinc.

6.2.2 Comparison of Surface Water Data to Established Standards

The following detections exceeded Class I/III surface water quality standards (WQS) identified in Table 3 (field parameters), Table 5 (laboratory parameters), or Table 6 (calculated standards):

Iron (Class I/II – 1000 ug/L)

- SW-1 and SW-3

Lead (Calculated)

- SW-1
- SW-3

Mercury (Class I/III – 0.012 ug/L)

- SW-1
- SW-3
- SW-B

Coliform fecal (Class I/III – 800 CFU/100mL)

- SW-1, SW-3, and SW-B

pH (SMCL 6.5 to 8.5 S.U.)

- SW-1 and SW-B

Turbidity (>29 NTU above background)

- SW-1 and SW-3. Note that SW-B, a background surface water sample point, exhibited turbidity of 24.5 NTU. Only SW-3 was greater than 29 NTU above this amount.

All exceedances have been historically detected at surface water locations at comparable concentrations exceeding the applicable WQS, and likely does not represent a landfill impact at SW-1 or SW-B. Ongoing efforts to reduce total suspended solids and metals concentrations have been successful at SW-3. Only iron, lead, and mercury exceeded applicable WQS during the February 2017 event. It is important to note that the pond associated with SW-3 has not discharged and the surface water is not being used for wetland irrigation until a compliant analytical result is attained. The Trail Ridge Landfill developed and submitted standard operating procedures (SOP) under separate cover that addresses remedial action for SW-3 exceedances. The Trail Ridge Landfill developed and submitted standard operating procedures (SOP) under separate cover that addresses remedial action for SW-3 exceedances. The Trail Ridge Landfill has initiated select activities from the SOP (including flocculation to reduce metals concentrations at the surface water location), weekly inspections, and monthly sampling additional flocculation events will be performed as needed based on the sampling results.

7.0 DISCUSSION AND RECOMMENDATIONS

A representative sample could not be collected from SGMW-1(S) due to highly elevated turbidity. It is believed this well is compromised. CEC notified the Department via email of the damaged well on September 6, 2017. TRL intends to replace the well prior to the next semiannual sampling event.

Analyte detections and the majority of exceedances observed during this event for both groundwater and surface water are consistent with historical conditions and/or background water quality.

As stated in Section 6.1.2, nitrate was detected above the MCL in MWB-34(S). TRL notified the Department of this initial exceedance on September 6, 2017 via email. This detection is thought to be related to a previously reported leachate release that occurred in the vicinity of MWB-34(S). In May 2017, Golder Associates and TRL notified FDEP of an initial exceedance of the chloride secondary drinking water standard and detections of two volatile organic chemicals (VOCs) in this well. The exceedance and detections were attributed to a leachate release that occurred in January 2017 which was quickly repaired. Additional information was provided in the 1H 2017 semiannual monitoring report. This nitrate exceedance is likely related to the same leachate release. There is no evidence this release has affected any other wells at this time, including the

intermediate well MWB-34(I) in the same location, and thus the impacts remain contained to a small area. No VOCs were detected in the well during this event and both chlorides and TDS decreased relative the 1H 2017 event. TRL proposes to monitor MWB-34(S) to ensure no other wells are impacted and concentrations continue to decline.

As stated in Section 6.1.2, TDS was detected above the SMCL in MWB-21(S). TRL notified the Department of the TDS exceedance on September 6, 2017 via email. This detection appears to be an anomaly as no other parameters increased appreciably in the well. Given the historical and somewhat intermittent detections of TDS at other wells, this exceedance does not appear related to landfill activities. TRL proposes to verify the MWB-21(S) TDS exceedance using samples from the 1H 2018 semiannual event.

The next sampling event should be conducted prior to March 30, 2018 per the facility's permit and is currently scheduled for February 2018.

The results of the last five semiannual monitoring events will be incorporated into the 2.5 Year Technical Report due March 31, 2018.

8.0 REFERENCES

Florida Administrative Code (F.A.C.) Rules: 62-160, 62-302, 62-520, 62-550, 62-701, and 62-711.

Florida Department of Environmental Protection, DEP-SOP-001/01

Florida Department of Environmental Protection, Notice of Permit, June 16, 2014, Permit Number 0013493-025-SO-01.

Golder Associates, February 2017, Semi-Annual Groundwater and Surface Water Monitoring Report for the First 2017 Monitoring Period, Trail Ridge Landfill, Duval County Florida, Permit No. 0013493-025-SO-01.

TABLES

Table 1 - Existing Monitoring Well Details
Trail Ridge Landfill, Jacksonville, FL

Well ID	Well Designation[1]	Monitored Phase[1]	Approximate State Plane Coordinates (ft)[1]		Well Diameter[1]	Total Well Depth[1]	Top of Casing Elevation (ft TOC)[2]	Well Screen Interval[2]
			Easting (X)	Northing (Y)	(in)	(ft bls)	(ft msl)	(ft below TOC)
MWB-2(S)	Background	Phases 3/4/5	324,826	2,141,385	2	17.5	146.64	10.00 to 20.00
MWB-3(S)	Background	Phases 1/2	324,772	2,143,945	2	18	154.38	10.00 to 20.00
MWB-7(S)	Water Levels Only		327,418	2,144,201	2	16.5	123.29	10.00 to 20.00
MWB-11(S)	Compliance	Phase I	327,704	2,143,755	2	18	120.81	9.50 to 19.50
MWB-12(S)	Compliance	Phase I	327,662	2,143,281	2	25	124.63	14.50 to 24.50
MWB-13(S)	Compliance	Phase 3/4	327,688	2,142,808	2	24.6	126.05	16.56 to 26.56
MWB-14(S)	Water Levels Only		327,667	2,142,295	2	16.5	126.05	
MWB-20(S)	Compliance	Phase I	327,608	2,144,012	2	18	121.01	10.00 to 20.00
MWB-21(S)	Compliance	Phase I	327,621	2,143,556	2	18	122.84	13.00 to 18.00
MWB-22(S)	Compliance	Phase I	327,690	2,143,036	2	25	126.97	16.00 to 26.00
MWB-23(S)	Water Levels Only		327,701	2,142,527	2	25	125.34	
MWB-24(S)	Water Levels Only		327,543	2,141,846	2	16.5	126.04	
MWB-25(S)	Water Levels Only		327,428	2,141,740	2	17.2	125.22	
MWB-26(S)	Water Levels Only		327,201	2,141,623	2	16.5	126.55	
MWB-27(S)	Compliance	Phase 5	326,960	2,141,564	2	16.3	128.42	10.50 to 15.50
MWB-29(S)	Compliance	Phase 5	325,866	2,141,554	2	16.5	138.02	10.00 to 20.00
MWB-32(S)	Detection	Phase 5	327,348	2,141,801	2	22.0	124.64	14.90 to 19.90
MWB-33(S)	Detection	Phase 3/4	327,541	2,142,136	2	22.3	125.90	10.30 to 20.30
MWB-34(S)	Detection	Phase 3/4	327,599	2,142,438	2	20.0	125.78	13.36 to 18.36
MWB-35(S)	Background	Phases 6/7	324,786	2,144,747	2	15	147.79	10.00 to 15.00
MWB-39(S)	Detection	Phase 6	327,321	2,144,202	2	21	126.85	11.00 to 21.00
MWB-40(S)	Detection	Phase 6	327,367	2,144,702	2	21	115.41	11.00 to 21.00
SGMW-1(S)	Temp. Detection	Phase 6	325,783	2,144,798	2	15	138.86	5.00 to 15.00
SGMW-2(S)	Temp. Detection	Phase 6	326,540	2,144,792	2	15	130.55	5.00 to 15.00
MWB-2(I)	Background	Phases 3/4/5	324,812	2,141,383	2	59.8	145.73	51.50 to 61.50
MWB-3(I)	Background	Phases 1/2	324,788	2,143,973	2	60	151.86	52.00 to 62.00
MWB-7(I)	Water Levels Only		327,425	2,144,196	2	63.3	121.53	55.00 to 65.00
MWB-11(I)	Compliance	Phase I	327,687	2,143,758	2	60	120.43	45.00 to 55.00
MWB-12(I)	Compliance	Phase I	327,664	2,143,273	2	69.6	124.62	61.50 to 71.50
MWB-13(I)	Compliance	Phase 3/4	327,687	2,142,802	2	58.6	125.98	50.40 to 60.40
MWB-14(I)	Water Levels Only		327,668	2,142,306	2	60	125.92	
MWB-25(I)	Water Levels Only		327,442	2,141,746	2	58.3	124.03	
MWB-27(I)	Compliance	Phase 5	326,945	2,141,567	2	60.1	128.63	52.50 to 62.50
MWB-29(I)	Compliance	Phase 5	325,871	2,141,554	2	60	138.08	53.50 to 63.50
MWB-32(I)	Detection	Phase 5	327,393	2,141,831	2	62.2	124.79	54.56 to 64.56
MWB-34(I)	Detection	Phase 3/4	327,598	2,142,433	2	60	125.80	43.95 to 53.95
MWB-35(I)	Background	Phases 6/7	324,786	2,144,747	2	60	147.93	50.00 to 60.00
MWB-39(I)	Detection	Phase 6	327,321	2,144,202	2	60	126.76	55.00 to 60.00
MWB-7(D)	Water Levels Only					130.32[3]	121.65	107.00 to 117.00
MWB-12(D)	Water Levels Only						124.56	102.00 to 112.00
MWB-14(D)	Water Levels Only					111.47[3]	125.87	
MWB-25(D)	Water Levels Only						124.64	
MWB-27(D)	Water Levels Only						128.88	110.00 to 110.00
MWB-29(D)	Water Levels Only						138.18	100.50 to 110.50
MWB-31(D)	Water Levels Only						156.15	119.00 to 129.00
MWB-32(D)	Water Levels Only						124.93	98.81 to 108.81
MWB-34(D)	Water Levels Only						125.92	90.78 to 100.78

1. From Appendix G, Water Quality Monitoring Program for the Trail Ridge Landfill, CDM 2014 unless otherwise noted.
2. From February 2017 Event - Semiannual Groundwater and Surface Water Monitoring Report, Golder, 2017.
3. From Pro-Tech, provided August 2017.

Table 2 - Water Level Measurements
Trail Ridge Landfill, Jacksonville, Florida
August 2017

Well ID	TOC Elevation	Depth to Water	Groundwater Elevation
	(ft MSL)	(ft BTOC)	(ft MSL)
Shallow Wells			
MWB-2(S)	146.64	3.91	142.73
MWB-3(S)	154.38	6.21	148.17
MWB-7(S)	123.29	8.32	114.97
MWB-11(S)	120.81	9.31	111.50
MWB-12(S)	124.63	7.86	116.77
MWB-13(S)	126.05	11.81	114.24
MWB-14(S)	126.05	Below pump	
MWB-20(S)	121.01	6.52	114.49
MWB-21(S)	122.84	9.22	113.62
MWB-22(S)	126.97	9.67	117.30
MWB-23(S)	125.34	13.43	111.91
MWB-24(S)	126.04	5.61	120.43
MWB-25(S)	125.22	6.61	118.61
MWB-26(S)	126.55	6.27	120.28
MWB-27(S)	128.42	6.15	122.27
MWB-29(S)	138.02	6.85	131.17
MWB-32(S)	124.64	6.77	117.87
MWB-33(S)	125.90	9.12	116.78
MWB-34(S)	125.78	7.17	118.61
MWB-35(S)	147.79	4.30	143.49
MWB-39(S)	126.85	12.35	114.50
MWB-40(S)	115.41	9.60	105.81
SGMW-1(S)	138.86	15.08	123.78
SGMW-2(S)	130.55	15.49	115.06
Intermediate Wells			
MWB-2(I)	145.73	9.08	136.65
MWB-3(I)	151.86	12.86	139.00
MWB-7(I)	121.53	7.18	114.35
MWB-11(IR)	120.43	14.72	105.71
MWB-12(I)	124.62	8.96	115.66
MWB-13(I)	125.98	16.41	109.57
MWB-14(I)	125.92	10.55	115.37
MWB-25(I)	124.03	6.48	117.55
MWB-27(I)	128.63	7.88	120.75
MWB-29(I)	138.08	6.66	131.42
MWB-32(I)	124.79	8.20	116.59
MWB-34(I)	125.80	9.10	116.70
MWB-35(I)	147.93	7.34	140.59
MWB-39(I)	126.76	11.89	114.87
Deep Wells			
MWB-7(D)	121.65	3.76	117.89
MWB-12(D)	124.56	7.18	117.38
MWB-14(D)	125.87	10.6	115.27
MWB-25(D)	124.64	7.26	117.38
MWB-27(D)	128.88	8.25	120.63
MWB-29(D)	138.18	6.79	131.39
MWB-31(D)	156.15	17.61	138.54
MWB-32(D)	124.93	8.31	116.62
MWB-34(D)	125.92	9.38	116.54

Notes:

TOC - top of casing; ft BTOC - feet below top of casing; ft MSL - feet above mean sea level; NM - Not Measured

Depth to water measurements collected by ProTech on August 8, 2017. Top of casing elevations based on groundwater well survey data provided in August 2017 by Golder, CDM, and Pro-Tech.

TABLE 3 - Groundwater and Surface Water Summary of Select Field Parameters
Trail Ridge Landfill, Jacksonville, Florida
August 2017

Well ID	pH (SU)	Temperature (°C)	Specific Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
Drinking Water SMCL:	6.5 to 8.5	--	--	--	--
Class I/III WQS:	Vary 1 Unit	--	1,275 or 50%	<5.0	29>BG
Shallow Wells					
MWB-2(S)	5.08	27.70	42.00	2.50	87.52
MWB-3(S)	4.34	26.20	77.00	0.80	8.29
MWB-11(S)	4.02	25.80	188.00	0.70	5.55
MWB-12(S)	5.41	26.40	358.00	1.00	9.02
MWB-13(S)	5.67	26.90	650.00	1.10	4.32
MWB-20(S)	4.74	27.90	378.00	0.80	18.01
MWB-21(S)	5.50	28.70	820.00	0.40	4.98
MWB-22(S)	5.83	26.80	436.00	0.20	2.93
MWB-27(S)	5.62	26.00	161.00	0.80	18.99
MWB-29(S)	4.34	28.30	155.00	0.30	3.98
MWB-32(S)	5.73	24.90	253.00	0.10	40.16
MWB-33(S)	4.91	27.00	143.00	0.50	13.72
MWB-34(S)	6.31	25.90	1302.00	0.30	4.37
MWB-35(S)	4.53	26.60	40.00	0.10	5.32
MWB-39(S)	5.48	27.20	242.00	0.10	14.56
MWB-40(S)	4.05	27.60	739.00	0.10	10.77
SGMW-1(S)	*No sample collected*				
SGMW-2(S)	4.93	26.40	52.00	0.00	44.29
Intermediate Wells					
MWB-2(I)	4.17	23.60	40.00	0.40	2.60
MWB-3(I)	4.29	23.40	41.00	0.40	3.05
MWB-11(IR)	4.51	27.20	36.00	0.10	9.08
MWB-12(I)	4.87	26.70	42.00	0.20	2.77
MWB-13(I)	4.72	27.00	38.00	0.10	9.06
MWB-27(I)	5.03	23.70	53.00	0.20	3.25
MWB-29(I)	4.44	25.90	43.00	0.40	8.13
MWB-32(I)	4.89	22.40	43.00	0.30	5.82
MWB-34(I)	4.62	26.00	42.00	0.40	5.98
MWB-35(I)	4.29	22.80	40.00	0.20	4.49
MWB-39(I)	4.71	26.00	42.00	0.20	4.54
Surface Water					
SW-1	6.51	25.90	175.00	3.70	43.13
SW-3	6.72	27.90	426.00	1.80	110.50
SW-B	6.10	38.60	197.00	4.70	24.47

Notes:

SU-standard units; mg/L-milligrams per liter; uS/cm-microSiemens per centimeter;
NTU-nephelometric turbidity unit; BG-background level

SMCL-secondary maximum contaminant level drinking water standard provided in F.A.C. Chapter 62-550

Class I and III surface water quality standards provided in F.A.C. Chapter 62-302

Table 4 - Groundwater Constituent Concentrations
Trail Ridge Landfill, Jacksonville, Florida
August 2017

Analyte	Units	Standard	MWB-11S		MWB-3S		MWB-2S		MWB-12S		MWB-27S		MWB-29S		MWB-13S		MWB-22S		MWB-20S		MWB-21S		MWB-33S		MWB-34S		MWB-32S		MWB-35S		MWB-39S		MWB-40S		SGMW-1S	SGMW-2S		MWB-34I	MWB-32I	MWB-35I	MWB-39I	MWB-13I	MWB-12I	MWB-2I	MWB-29I	MWB-27I	MWB-3I	MWB-11IR	
ANTIMONY	ug/L	6	0.24	I	0.064	I	0.1	I	0.57	I	0.27	I	0.14	I	0.4	I	0.59	I	0.17	I	0.46	I	0.13	I	1.6		0.19	I	0.046	U	0.046	U	0.1	I	NS	0.046	U													
ARSENIC	ug/L	10	8.5	U	8.5	U	8.5	U	8.5	U	8.5	U	8.5	U	8.5	U	8.5	U	8.5	U	8.5	U	8.5	U	8.5	U	8.5	U	8.5	U	8.5	U	8.5	U	NS	8.5	U													
BARIUM	ug/L	2000	52		14		19		14		8.1		13		5.5		7.5		18		9.7		16		29		18		4.9		6		760		NS	100													
BERYLLIUM	ug/L	4	0.16	I	0.16	I	0.3	I	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	1		NS	0.76													
CADMIUM	ug/L	5	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	NS	0.32	U													
CHROMIUM	ug/L	100	1.1		1.8		2		2.8		3.5		1.2		2.2		1.5		4.8		4.8		1.8		2.9		3		1.4		1.3		4		NS	7													
COBALT	ug/L	140	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.93	I	0.6	U	0.6	U	1.3	I	0.6	U	0.6	U	1.2	I	NS	0.6	U													
COPPER	ug/L	1000	2.5	U	2.5	U	4		2.5	U	5.3		2.5	U	3.8	I	2.5	U	2.7	I	6.5		3.7	I	14		2.7	I	2.5	U	2.5	U	2.5	U	NS	2.5	U													
IRON	ug/L	300	840		360		1600		310		110	I	240		430		150	I	200	I	110	I	400		150	I	540		160	I	230		7900		NS	850		410		140	I	1000		280		380		390		330		400		470		740		360	
LEAD	ug/L	15	1.3	U	1.3	I	3.7	I	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	NS	2.1	I													
MERCURY	ug/L	2	0.011	U	0.011	U	0.06	I	0.011	U	0.012	I	0.011	U	0.02	I	0.011	U	0.013	I	0.011	U	0.02	I	0.011	U	0.014	I	0.011	U	0.011	U	0.011	U	NS	0.06	I													
NICKEL	ug/L	100	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	3.8	I	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	2.4	I	NS	1.1	U													
SELENIUM	ug/L	50	1.6	I	0.58	U	0.82	I	11		0.95	I	0.58	U	3.2	I	0.58	U	1.4	I	1.1	I	1.2	I	2.6	I	0.92	I	0.58	U	0.7	I	1.9	I	NS	2.1	I													
SILVER	ug/L	100	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	NS	0.44	U													
SODIUM	ug/L	160000	11000		5600		6500		18000		9900		13000		18000		13000		85000		74000		6500		74000		5700		2200		11000		74000		NS	3600		2800		2600		1300		2700		2500		2700		3500		3100		2800		2900		2600	
THALLIUM	ug/L	2	0.092	I	0.057	U	0.057	U	0.057	U	0.057	U	0.057	U	0.057	U	0.057	U	0.057	U	0.057	U	0.057	U	0.057	U	0.057	U	0.057	U	0.057	U	0.057	U	NS	0.057	U													
VANADIUM	ug/L	49	5.2		2.2		3.2		58		43		2.9		37		4.2		16		7.7		13		84		3.8		1.9		1.8		20		NS	15													
ZINC	ug/L	5000	7	I	11		19		8	I	9.8	I	7.6	I	9.5	I	7.4	I	11		13		9.5	I	66		12		12		6	I	6	I	NS	11													
1,1,1,2-TETRACHLOROETHANE	ug/L	1.3	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	NS	0.26	U													
1,1,1-TRICHLOROETHANE	ug/L	200	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	NS	0.22	U													
1,1,2,2-TETRACHLOROETHANE	ug/L	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS	0.2	U													
1,1,2-TRICHLOROETHANE	ug/L	5	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	NS	0.3	U													
1,1-DICHLOROETHANE	ug/L	70	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	NS	0.14	U													
1,1-DICHLOROETHENE	ug/L	7	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	NS	0.18	U													
1,2,3-TRICHLOROPROPANE	ug/L	0.02	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	NS	0.3	U													
1,2-DIBROMO-3-CHLOROPROPANE	ug/L	0.2	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	NS	0.11	U													
1,2-DIBROMOETHANE (EDB)	ug/L	0.02	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.18		NS	0.02	U													
1,2-DICHLOROBENZENE	ug/L	600	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	NS	0.18	U													
1,2-DICHLOROETHANE	ug/L	3	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	NS	0.23	U													
1,2-DICHLOROPROPANE	ug/L	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS	0.2	U													
1,4-DICHLOROBENZENE	ug/L	75	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	NS	0.29	I													
2-HEXANONE	ug/L	280	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	NS	0.44	U													
ACETONE	ug/L	6300	2.1	U	2.1	U	2.1	U	2.1	U	2.2	I	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U	NS	2.1	U													
ACRYLONITRILE	ug/L	0.06	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	NS	1.1	U													
BENZENE	ug/L	1	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.34	I	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	NS	0.16	U													
BROMOCHLOROMETHANE	ug/L	91	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	NS	0.17	U													
BROMODICHLOROMETHANE	ug/L	0.6	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	NS	0.25	U													
BROMOFORM	ug/L	4.4	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	NS	0.43	U													
BROMOMETHANE	ug/L	9.8	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	NS	0.24	U													
CARBON DISULFIDE	ug/L	700	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.45	I	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	I	0.21	U	0.21	U	0.21	U	NS	0.54	I													
CARBON TETRACHLORIDE	ug/L	3	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	NS	0.36	U													
CHLOROBENZENE	ug/L	100	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	NS	0.21	U													
CHLOROETHANE	ug/L	12	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	NS	0.33	U													
CHLOROFORM	ug/L	70	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	NS	0.18	U													
CHLOROMETHANE	ug/L	2.7	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	NS	0.21	U													
cis-1,2-DICHLOROETHENE	ug/L	70	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	NS	0.24	U													
cis-1,3-DICHLOROPROPENE	ug/L	0	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	NS	0.16	U													
DIBROMOCHLOROMETHANE	ug/L	0.4	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	NS	0.33	U													
DIBROMOMETHANE	ug/L	70	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	NS	0.26	U													
ETHYLBENZENE	ug/L	30	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	NS	0.24	U													
IODOMETHANE (METHYL IODIDE)	ug/L	N/A	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	NS	0.16	U													
METHYL ETHYL KETONE (2-BUTANO	ug/L	4200	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	NS	0.43	U													
METHYL ISOBUTYL KETONE	ug/L	560	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	NS	0.47	U													
METHYLENE CHLORIDE	ug/L	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	NS	2.5	U													
STYRENE	ug/L	100	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	NS	0.23	U													
TETRACHLOROETHENE	ug/L	3	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	NS	0.36	U													
TOLUENE	ug/L	40	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	NS	0.23	U													
trans-1,2-DICHLOROETHENE	ug/L	100	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS	0.2	U													
trans-1,3-DICHLOROPROPENE	ug/L	0	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	NS	0.18	U													
trans-1,4-DICHLORO-2-BUTENE	ug/L	N/A	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	NS	1.8	U													
TRICHLOROETHYLENE	ug/L	3	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	NS	0.29	U													
TRICHLOROFLUOROMETHANE	ug/L	2100	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	NS	0.32	U													
VINYL ACETATE	ug/L	88	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	NS	0.19	U													
VINYL CHLORIDE	ug/L	1	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS	0.2	U													
XYLENES, TOTAL	ug/L	20	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	NS	0.53	U													
CHLORIDE (AS Cl)	ug/L	250000	25000		14000		1600	I	46000		12000		22000		120000		46000		170000		170000		9600		83000		10000		4000	I	25000		190000		NS	8100		5300		5000		3800	I	5000		5500		5500		7200		6300		5800		6800		5800	
NITRATE (AS N)	ug/L	10000	160	I	50	U	100	I	3000		200	I	50	U	380	I	270	I	440	I	50	U	87	I	20000		50	U	50	U	50	U	50	U	NS	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
NITROGEN, AMMONIA (AS N)	ug/L	2800	140		10	U	100		30		100		980		190		80		3400		1600		570		280		530		80		580		1800		NS	80		60		30		130		40		40		60		30		50		60		10	U	40	
RESIDUES - FILTERABLE (TDS)	ug/L	500000	130000		51000		310000		270000		160000		110000		330000		290000		410000		520000		95000		840000		84000		35000		170000		410000		NS	57000		38000		36000		28000		37000		46000		49000		36000		48000		49000		37000		41000	

U = Result was less than the Method Detection Limit (MDL).
I = Result was greater than or equal to the Method Detection Limit (MDL) but below the Practical Quantitation Limit (PQL).
Exceeds primary drinking water standard, secondary drinking water standard, or GCTL
NS = Not Sampled

Table 5 - Surface Water Constituent Concentrations
Trail Ridge Landfill, Jacksonville, FL
August 2017

Analyte	Units	Class I WQ Standard	Class III WQ Standard	SW-1		SW-3		SW-B	
ANTIMONY	ug/L	14	4300	0.4	I	1.2		0.31	I
ARSENIC	ug/L	10	50	8.5	U	8.5	U	8.5	U
BARIUM	ug/L	1000		44		69		19	
BERYLLIUM	ug/L	0.0077		0.18	I	0.57		0.13	U
CADMIUM	ug/L	See Table 6	See Table 6	0.32	U	0.32	U	0.32	U
CALCIUM	ug/L			21000		51000		30000	
CHROMIUM	ug/L	See Table 6	See Table 6	5.9		7.9		4.8	
COBALT	ug/L			1	I	2	I	0.6	U
COPPER	ug/L	See Table 6	See Table 6	2.5	U	4.2		5.2	
IRON	ug/L	1000	1000	1200		1800		550	
LEAD	ug/L	See Table 6	See Table 6	3.1	I	6.9	I	1.3	U
MAGNESIUM	ug/L			2300		4800		880	
MERCURY	ug/L	0.012	0.012	0.036	I	0.067	I	0.016	I
NICKEL	ug/L	See Table 6	See Table 6	1.2	I	4.2	I	1.1	U
SELENIUM	ug/L	5	5	1	I	1.7	I	0.68	I
SILVER	ug/L	0.07	0.07	0.44	U	0.44	U	0.44	U
THALLIUM	ug/L	1.7	6.3	0.057	U	0.057	U	0.057	U
VANADIUM	ug/L			8.2		16		8.5	
ZINC	ug/L	See Table 6	See Table 6	16		110	J4	30	
1,1,1,2-TETRACHLOROETHANE	ug/L			0.26	U	0.26	U	0.26	U
1,1,1-TRICHLOROETHANE	ug/L			0.22	U	0.22	U	0.22	U
1,1,2,2-TETRACHLOROETHANE	ug/L	0.17	10.8	0.2	U	0.2	U	0.2	U
1,1,2-TRICHLOROETHANE	ug/L			0.3	U	0.3	U	0.3	U
1,1-DICHLOROETHANE	ug/L			0.14	U	0.14	U	0.14	U
1,1-DICHLOROETHENE	ug/L	7	3.2	0.18	U	0.18	U	0.18	U
1,2,3-TRICHLOROPROPANE	ug/L			0.3	U	0.3	U	0.3	U
1,2-DIBROMO-3-CHLOROPROPANE	ug/L			0.11	U	0.11	U	0.11	U
1,2-DIBROMO-3-CHLOROPROPANE	ug/L			0.11	U	0.11	U	0.11	U
1,2-DIBROMOETHANE (EDB)	ug/L			0.02	U	0.02	U	0.02	U
1,2-DICHLOROBENZENE	ug/L			0.18	U	0.18	U	0.18	U
1,2-DICHLOROETHANE	ug/L			0.23	U	0.23	U	0.23	U
1,2-DICHLOROPROPANE	ug/L			0.2	U	0.2	U	0.2	U
1,4-DICHLOROBENZENE	ug/L			0.22	U	0.22	U	0.22	U
2-HEXANONE	ug/L			0.44	U	0.44	U	0.44	U
ACETONE	ug/L			4.8	I	12		2.1	U
ACRYLONITRILE	ug/L			1.1	U	1.1	U	1.1	U
BENZENE	ug/L	1.18	71.28	0.16	U	0.16	U	0.16	U
BROMOCHLOROMETHANE	ug/L			0.17	U	0.17	U	0.17	U
BROMODICHLOROMETHANE	ug/L	0.27	22	0.25	U	0.25	U	0.25	U
BROMOFORM	ug/L	4.3	360	0.43	U	0.43	U	0.43	U
BROMOMETHANE	ug/L			0.24	U	0.24	U	0.24	U
CARBON DISULFIDE	ug/L			0.21	U	0.23	I	0.21	U
CARBON TETRACHLORIDE	ug/L	3	4.42	0.36	U	0.36	U	0.36	U
CHLOROBENZENE	ug/L			0.21	U	0.21	U	0.21	U
CHLOROETHANE	ug/L			0.33	U	0.33	U	0.33	U
CHLOROFORM	ug/L	5.67	470.8	0.18	U	0.18	U	0.18	U
CHLOROMETHANE	ug/L	5.67	470.8	0.21	U	0.21	U	0.21	U

U	= Result was less than the Method Detection Limit (MDL).
I	= Result was greater than or equal to the Method Detection Limit (MDL) but below the Practical Quantitation Limit (PQL).
B	= Result based on colony counts outside normal range
J4	= Estimated Value
	Exceeds Class I or Class III WQS

Table 5 - Surface Water Constituent Concentrations
Trail Ridge Landfill, Jacksonville, FL
August 2017

cis-1,2-DICHLOROETHENE	ug/L			0.24	U	0.24	U	0.24	U
cis-1,3-DICHLOROPROPENE	ug/L			0.16	U	0.16	U	0.16	U
DIBROMOCHLOROMETHANE	ug/L	4.65	1580	0.33	U	0.33	U	0.33	U
DIBROMOMETHANE	ug/L			0.26	U	0.26	U	0.26	U
ETHYLBENZENE	ug/L			0.24	U	0.24	U	0.24	U
IODOMETHANE (METHYL IODIDE)	ug/L			0.16	U	0.16	U	0.16	U
METHYL ETHYL KETONE (2-BUTANONE)	ug/L			0.5	I	7		0.43	U
METHYL ISOBUTYL KETONE	ug/L			0.47	U	0.47	U	0.47	U
METHYLENE CHLORIDE	ug/L			2.5	U	2.5	U	2.5	U
STYRENE	ug/L			0.23	U	0.23	U	0.23	U
TETRACHLOROETHENE	ug/L	3	8.85	0.36	U	0.36	U	0.36	U
TOLUENE	ug/L			0.23	U	0.23	U	0.23	U
trans-1,2-DICHLOROETHENE	ug/L			0.2	U	0.2	U	0.2	U
trans-1,3-DICHLOROPROPENE	ug/L			0.18	U	0.18	U	0.18	U
trans-1,4-DICHLORO-2-BUTENE	ug/L			1.8	U	1.8	U	1.8	U
TRICHLOROETHYLENE	ug/L	3	80.7	0.29	U	0.29	U	0.29	U
TRICHLOROFLUOROMETHANE	ug/L			0.32	U	0.32	U	0.32	U
VINYL ACETATE	ug/L			0.19	U	0.19	U	0.19	U
VINYL CHLORIDE	ug/L			0.2	U	0.2	U	0.2	U
XYLENES, TOTAL	ug/L			0.53	U	0.53	U	0.53	U
BIOCHEMICAL OXYGEN DEMAND (BOD)	ug/L			3800		150000		3400	
CALCIUM HARDNESS (CALC)	ug/L			62000		150000		78000	
CHEMICAL OXYGEN DEMAND (COD)	ug/L			120000		93000		38000	
NITRATE (AS N)	ug/L			100	U	100	U	100	U
NITROGEN, AMMONIA (AS N)	ug/L			360		1100		20	
PHOSPHORUS, TOTAL (AS P)	ug/L			100		270		87	I
RESIDUES - FILTERABLE (TDS)	ug/L			200000		330000		140000	
RESIDUES - NONFILTERABLE (TSS)	ug/L			13000		64000		31000	
TOTAL NITROGEN	ug/L			1900		3700		760	
CHLOROPHYLL-a	mg/m3			6.7		8		17	
FECAL COLIFORM	CFU/100 mL	800	800	13000	B	48000		4200	
UNIONIZED AMMONIA	ug/L	20	20	0.86	I	4.7	I	0.037	I
TOTAL ORGANIC CARBON	ug/L			35000		25000		7300	

U	= Result was less than the Method Detection Limit (MDL).
I	= Result was greater than or equal to the Method Detection Limit (MDL) but below the Practical Quantitation Limit (PQL).
B	= Result based on colony counts outside normal range
J4	= Estimated Value
	Exceeds Class I or Class III WQS

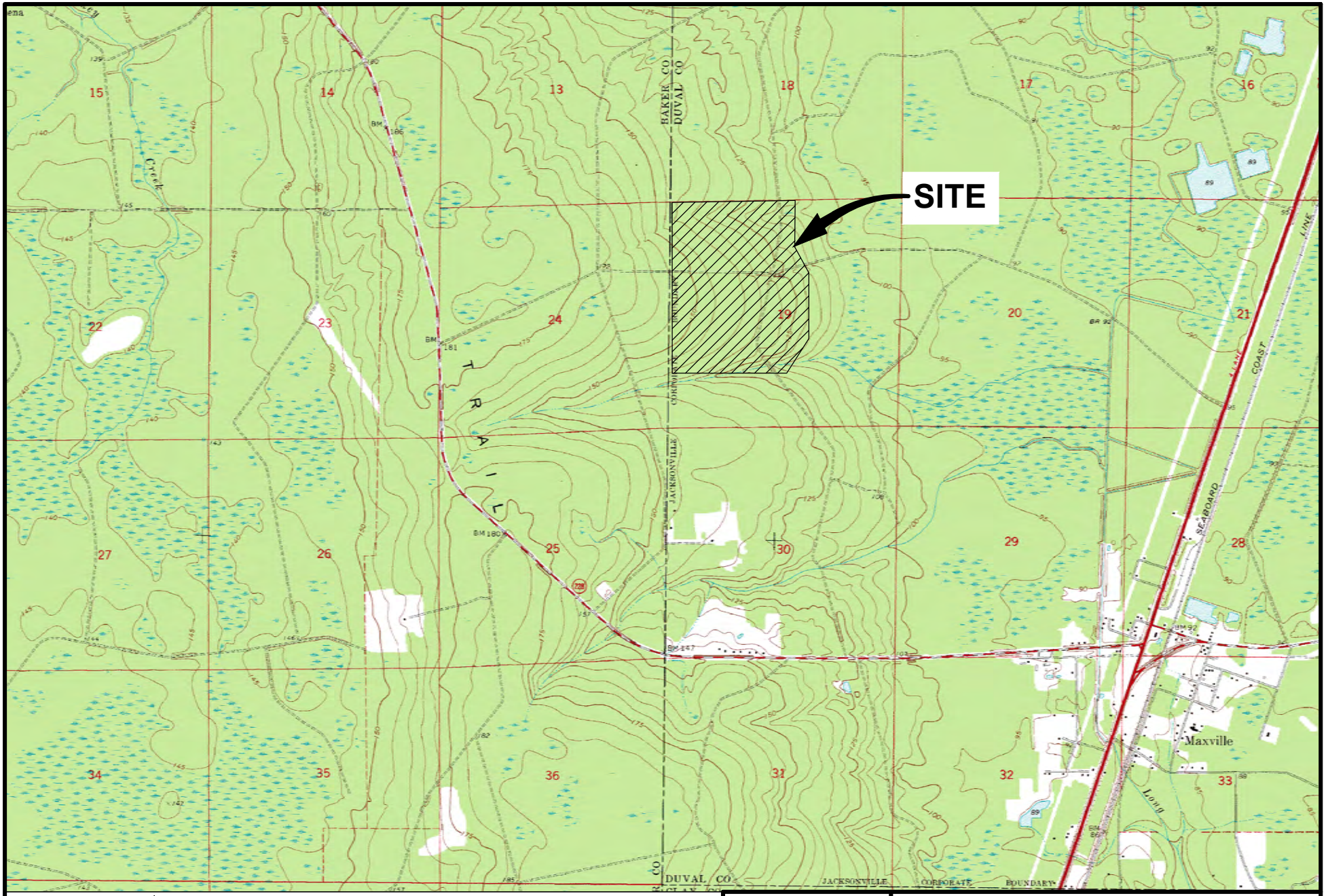
Table 6 - Surface Water Quality Standard Calculations
Trail Ridge Landfill, Jacksonville, Florida
August 2017

Parameter	Units	WQS Class I & Class III	SW-1		SW-3		SW-B		
			62		150		78		Total Hardness [1]
			4.13		5.01		4.36		lnH [2]
			Result (total)	Standard	Result (total)	Standard	Result (total)	Standard	
Cadmium	ug/L	Measured ≤ $e^{(0.7409[lnH]-4.719)}$	<.032	0.2	<.0.32	0.4	<.0.32	0.2	
Chromium	ug/L	Measured ≤ $e^{(0.819[lnH]+0.6848)}$	**5.9**	58	**7.9**	120	**4.8**	70	
Copper	ug/L	Measured ≤ $e^{(0.8545[lnH]-1.702)}$	<2.5	6.2	**4.2**	13	**5.2**	7.5	
Lead	ug/L	Measured ≤ $e^{(1.273[lnH]- 4.705)}$	**3.1I**	1.7	**6.9I**	5	<1.3	2.3	
Nickel	ug/L	Measured ≤ $e^{(0.846[lnH]+0.0584)}$	**1.2I**	35	**4.2I**	74	<1.1	42	
Zinc	ug/L	Measured ≤ $e^{(0.8473[lnH]+0.884)}$	**16**	80	**110J**	169	**30**	97	

Notes:

ug/L - micrograms per liter
WQS - Water Quality Standard, Class I (potable), Class III (freshwater) provided in FDEP Chapter 62-302
*- According to FDEP Rule 62-302.530, if H is less than 25 than 25 shall be used in the calculations
[1]- Total mesured total hardness (H) is reported in mg/L of CaCO3 in the Test America laboratory report
[2]- "ln H" means the natural logarithm of total hardness expressed as mg/L of CaCO3
I - result is qualified because the detection was between method detection limits and practical quantitation limits.
J - Estimated value
Bold values indicate detections above the laboratory detection limit; yellow cells indicate result exceeded WQS.

FIGURES



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NOTES:

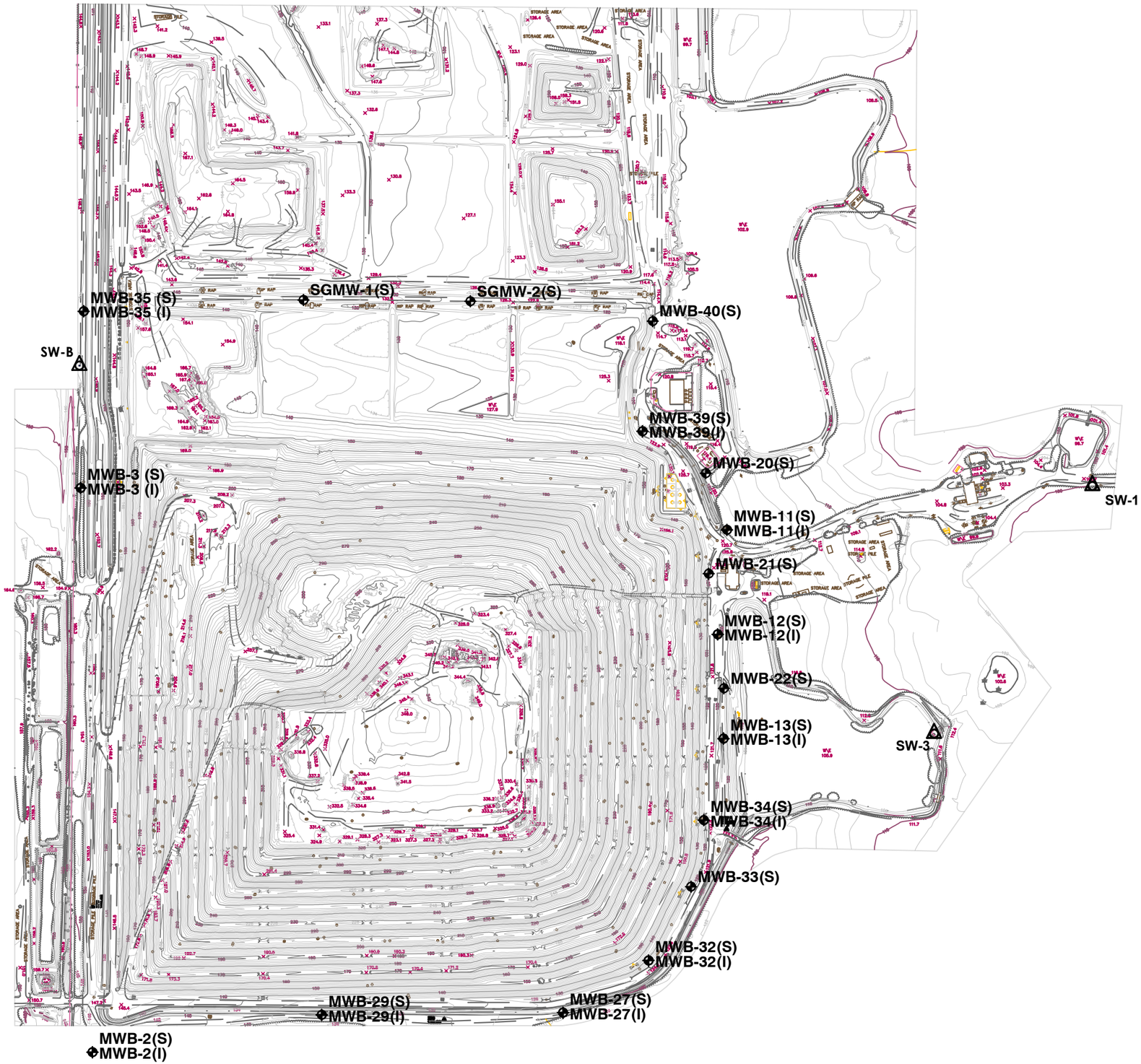
1. BACKGROUND IMAGE FROM USGS 7.5 MINUTE QUADRANGLE; MAXVILLE, FL 1970 (PHOTOINSPECTED 1984.)

0 3000 6000

GRAPHIC SCALE (FEET)

CEC

FIGURE 1:
SITE LOCATION
TRAIL RIDGE LANDFILL
JACKSONVILLE, FL



LEGEND

- 2' CONTOURS
- 10' CONTOURS
- MWB-3 — GROUNDWATER MONITORING WELL
- (S) SHALLOW LEVEL WELL
- (I) INTERMEDIATE LEVEL WELL
- SW-B — SURFACE WATER SAMPLING POINT

NOTES:

1. THE TOPOGRAPHIC MAP WAS PREPARED BY SOUTHERN RESOURCES MAPPING COORPORATION FROM A PHOTOGRAPHIC FLY OVER COMPLETED JANUARY 25, 2017 AND WAS COMPILED IN FEBRUARY 2017.

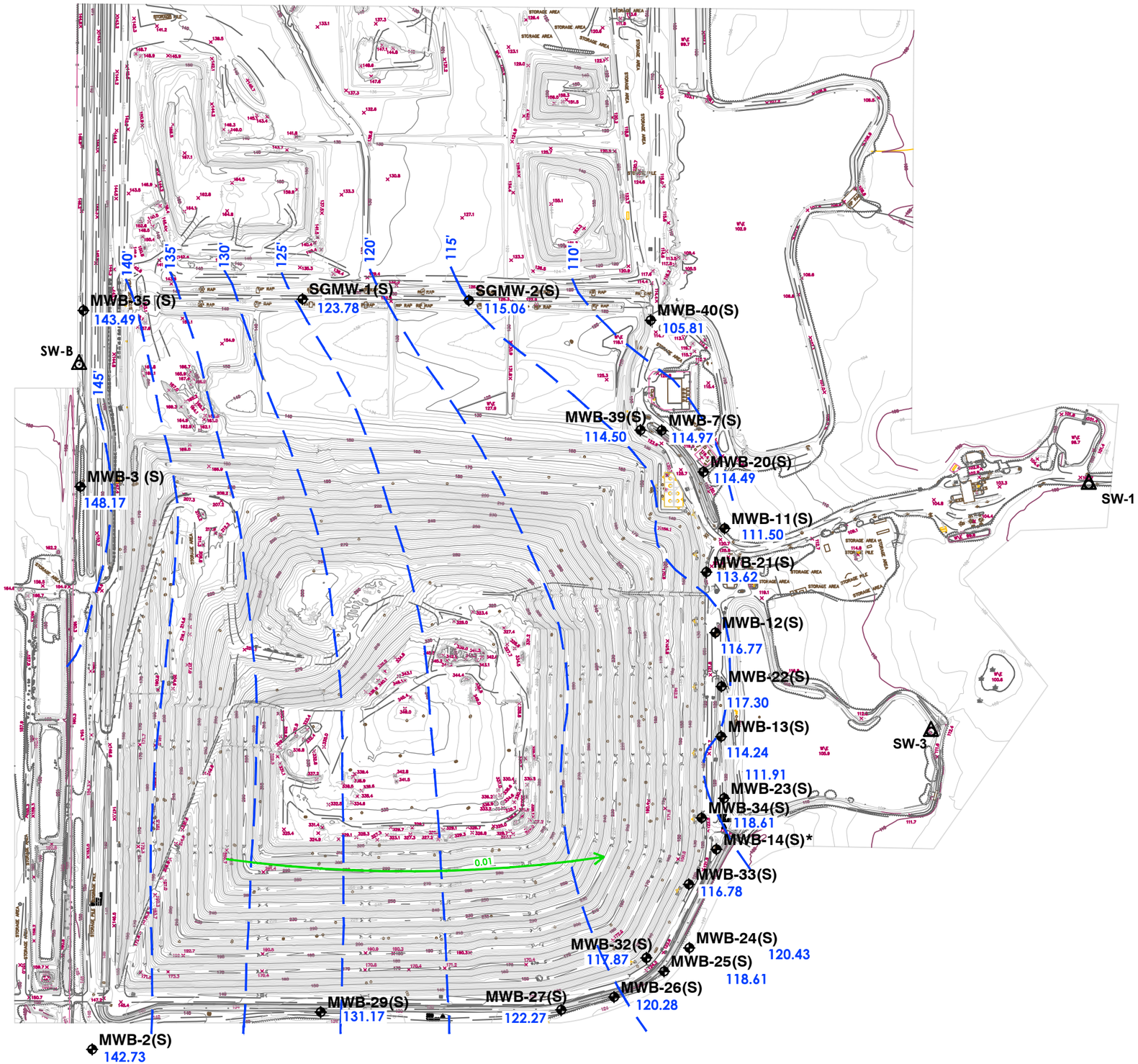
N

0 500 1000

GRAPHIC SCALE (FEET)

CEC

FIGURE 2:
SITE LAYOUT AND SAMPLING LOCATIONS
TRAIL RIDGE LANDFILL
JACKSONVILLE, FL



LEGEND

- 2' CONTOURS
- 10' CONTOURS
- POTENTIOMETRIC CONTOURS AT 5 FOOT ELEVATION INTERVALS
- 0.01 — GROUNDWATER FLOW DIRECTION WITH HORIZONTAL FLOW GRADIENT
- MWB-3(S) — GROUNDWATER MONITORING WELL
- 148.17 — WATERTABLE ELEVATION (IN FEET AMSL) IN GROUNDWATER MONITORING WELL MEASURED ON 08/08/2017.
- SW-B — SURFACE WATER SAMPLING POINT

NOTES:

1. THE TOPOGRAPHIC MAP WAS PREPARED BY SOUTHERN RESOURCES MAPPING COORPORATION FROM A PHOTOGRAPHIC FLY OVER COMPLETED JANUARY 25, 2017 AND WAS COMPILED IN FEBRUARY 2017.

2. MWB-14(S)* WAS UNABLE TO BE READ DUE TO A PUMP IN THE MONITORING WELL AT OR ABOVE THE WATER TABLE.

N

0 500 1000

GRAPHIC SCALE (FEET)

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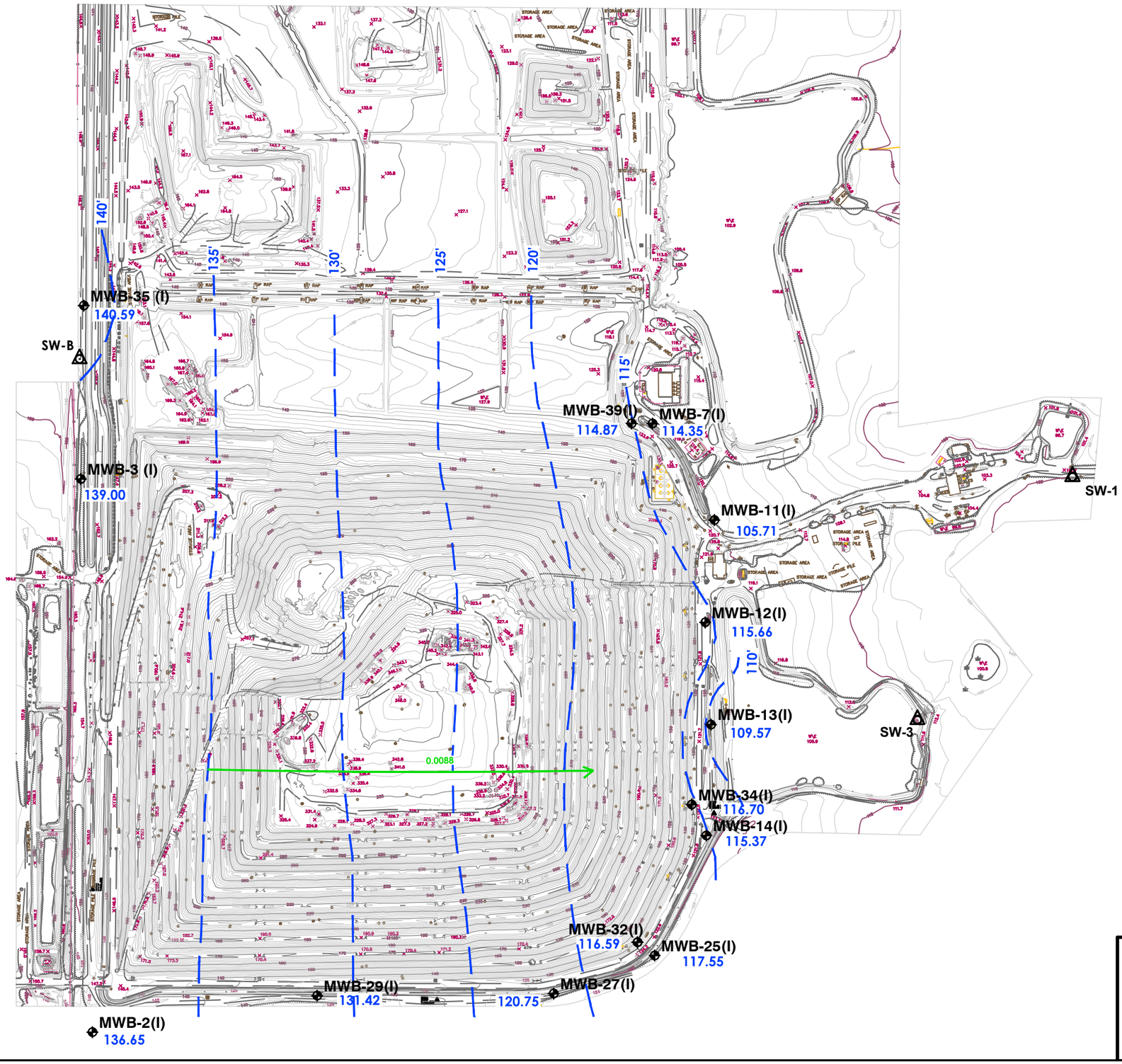
FIGURE 3:
SHALLOW WELLS
POTENTIOMETRIC MAP 08/08/2017
TRAIL RIDGE LANDFILL
JACKSONVILLE, FL



LEGEND

- 2' CONTOURS
- 10' CONTOURS
- POTENTIOMETRIC CONTOURS AT 5 FOOT ELEVATION INTERVALS
- 0.01 — GROUNDWATER FLOW DIRECTION WITH HORIZONTAL FLOW GRADIENT
- MWB-3(I) — GROUNDWATER MONITORING WELL
- 148.17 — WATERTABLE ELEVATION (IN FEET AMSL) IN GROUNDWATER MONITORING WELL MEASURED ON 08/08/2017.
- SW-B — SURFACE WATER SAMPLING POINT

NOTES:

1. THE TOPOGRAPHIC MAP WAS PREPARED BY SOUTHERN RESOURCES MAPPING COORPORATION FROM A PHOTOGRAPHIC FLY OVER COMPLETED JANUARY 25, 2017 AND WAS COMPILED IN FEBRUARY 2017.

N

0 500 1000

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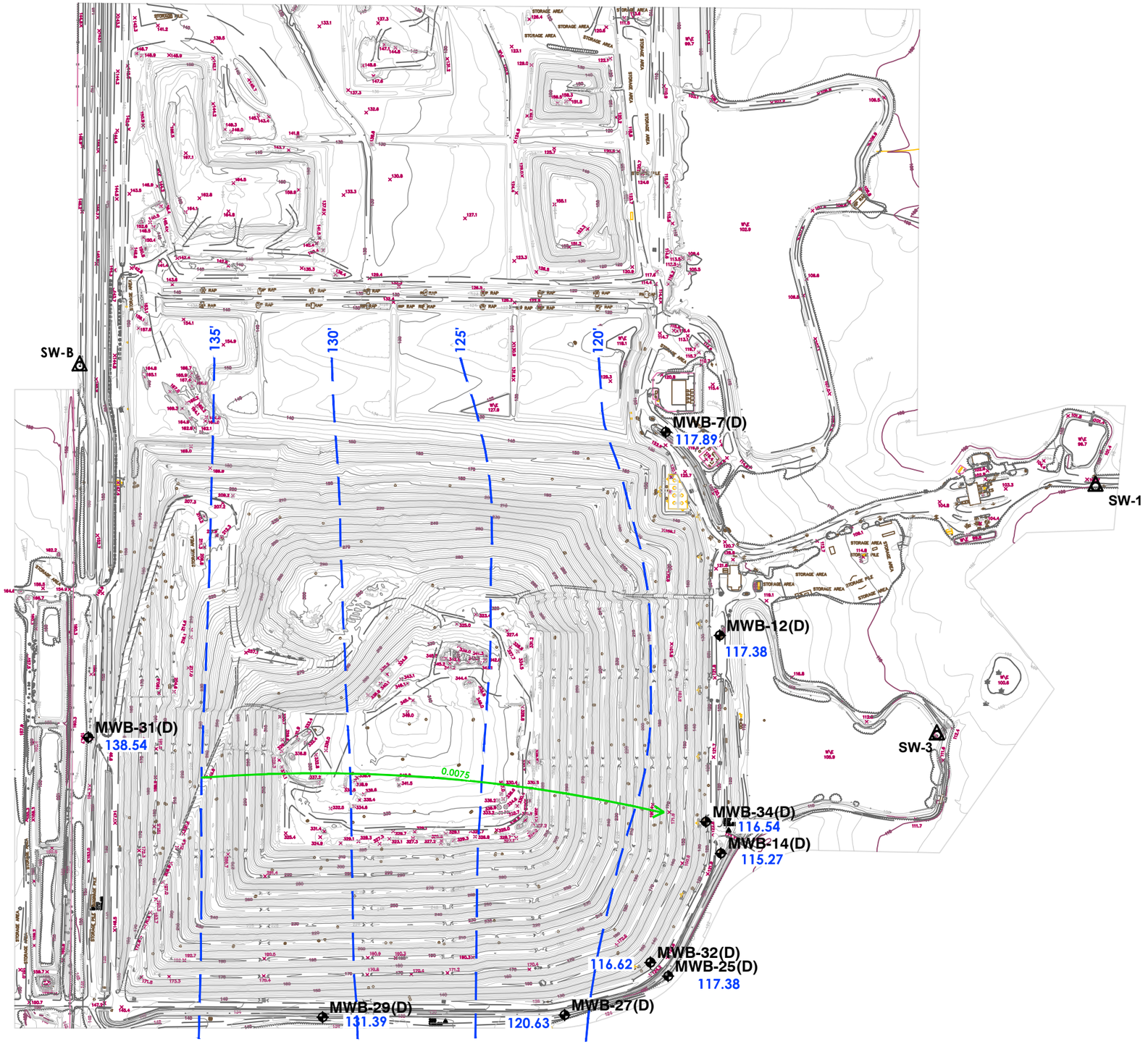
FIGURE 4:
INTERMEDIATE WELLS POTENTIOMETRIC MAP 08/08/2017
TRAIL RIDGE LANDFILL
JACKSONVILLE, FL



LEGEND

- 2' CONTOURS
- 10' CONTOURS
- POTENTIOMETRIC CONTOURS AT 5 FOOT ELEVATION INTERVALS
- 0.01 — GROUNDWATER FLOW DIRECTION WITH HORIZONTAL FLOW GRADIENT
- MWB-7(D) — GROUNDWATER MONITORING WELL
- 148.17 — WATERTABLE ELEVATION (IN FEET AMSL) IN GROUNDWATER MONITORING WELL MEASURED ON 08/08/2017.
- SW-B — SURFACE WATER SAMPLING POINT

NOTES:

1. THE TOPOGRAPHIC MAP WAS PREPARED BY SOUTHERN RESOURCES MAPPING COORPORATION FROM A PHOTOGRAPHIC FLY OVER COMPLETED JANUARY 25, 2017 AND WAS COMPILED IN FEBRUARY 2017.

N

0 500 1000

GRAPHIC SCALE (FEET)

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY PETER J. WALLS, P.E. ON SEPTEMBER 15, 2017 USING A DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PETER J WALLS LICENSE No 62777 STATE OF FLORIDA PROFESSIONAL ENGINEER

CEC

FIGURE 5:
DEEP WELLS
POTENTIOMETRIC MAP 08/08/2017
TRAIL RIDGE LANDFILL
JACKSONVILLE, FL

APPENDICES

APPENDIX A
Instrument Calibration Field Records

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) YSI PRO SERIES INSTRUMENT # 15D100782

PARAMETER: *[check only one]*

☐ TEMPERATURE ☒ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A 1.413 mS/cm PINE ENVIRONMENTAL EXP: 02/2018

Standard B _____

Standard C _____

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
17/08/08	0600	A	1.413	AUTO CAL	-	YES	INIT	DA
17/08/09	0545	A	1.413	AUTO CAL	-	YES	CONT	DA
17/08/10	0615	A	1.413	AUTO CAL	-	YES	CONT	DA

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HF SCIENTIFIC MICRO TPI INSTRUMENT # 200710329

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A 1000 NTU HF SCIENTIFIC EXP: JAN 2018

Standard B 10.0 NTU HF SCIENTIFIC EXP: JAN 2018

Standard C 0.02 NTU HF SCIENTIFIC EXP: JAN 2018

DATE (y/m/d)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
17/08/08	0600	A	1000	AUTO CAL	-	YES	INIT	DKA
"	"	B	10.0	"	-	YES	INIT	DKA
"	"	C	0.02	"	-	YES	INIT	DKA
17/08/09	0545	A	1000	AUTO CAL	-	YES	CONT	DKA
"	"	B	10.0	"	-	YES	CONT	DKA
"	"	C	0.02	"	-	YES	CONT	DKA
17/08/10	0615	A	1000	AUTO CAL	-	YES	CONT	DKA
"	"	B	10.0	"	-	YES	CONT	DKA
"	"	C	0.02	"	-	YES	CONT	DKA

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) YSI Pro Series INSTRUMENT # 15D100782

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☒ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A 7.00 (std) Ricca Chem Lot# 2607D40 Exp: 07/2018

Standard B 4.00 (std) Ricca Chem Lot# 2511B04 Exp: 11/2017

Standard C 10.00 (std) Ricca Chem Lot# 2608E32 Exp: 02/2018

DATE (y/mm/dd)	TIME (h:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
17/08/08	0600	A	7.00	Auto Cal	-	Yes	Init	DSA
"	"	B	4.00	"	-	Yes	Init	DSA
		C	10.00		-	Yes	Init	DSA
17/08/09	0545	A	7.00	Auto Cal	-	Yes	Cont	DSA
"	"	B	4.00	"	-	Yes	Cont	DSA
		C	10.00		-	Yes	Cont	DSA
17/08/10	0615	A	7.00	Auto Cal	-	Yes	Cont	DSA
"	"	B	4.00	"	-	Yes	Cont	DSA
		C	10.00		-	Yes	Cont	DSA

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) YSI Pro Series INSTRUMENT # 15D100782

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☒ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A SATURATED AIR

Standard B _____

Standard C _____

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CAL/SAMPLER (YES / NO)	TYPE (INIT. CONT.)	SAMPLER INITIALS
17/08/08	0600	A	100% SAT	100%	-	YES	INIT	DCA
17/08/09	0545	A	100% SAT	100%	-	YES	CONT	DCA
17/08/10	0615	A	100% SAT	100%	-	YES	CONT	DCA

Table FS 2200-2
Dissolved Oxygen Saturation

TEMP	D.O.	mg/L	TEMP	D.O.	mg/L	TEMP	D.O.	mg/L	TEMP	D.O.	mg/L
deg C	SAT.	20%	deg C	SAT.	20%	deg C	SAT.	20%	deg C	SAT.	20%
15.0	10.084	2.017	19.0	9.276	1.855	23.0	8.578	1.716	27.0	7.968	1.594
15.1	10.062	2.012	19.1	9.258	1.852	23.1	8.562	1.712	27.1	7.954	1.591
15.2	10.040	2.008	19.2	9.239	1.848	23.2	8.546	1.709	27.2	7.940	1.588
15.3	10.019	2.004	19.3	9.220	1.844	23.3	8.530	1.706	27.3	7.926	1.585
15.4	9.997	1.999	19.4	9.202	1.840	23.4	8.514	1.703	27.4	7.912	1.582
15.5	9.976	1.995	19.5	9.184	1.837	23.5	8.498	1.700	27.5	7.898	1.580
15.6	9.955	1.991	19.6	9.165	1.833	23.6	8.482	1.696	27.6	7.884	1.577
15.7	9.934	1.987	19.7	9.147	1.829	23.7	8.466	1.693	27.7	7.870	1.574
15.8	9.912	1.982	19.8	9.129	1.826	23.8	8.450	1.690	27.8	7.856	1.571
15.9	9.891	1.978	19.9	9.111	1.822	23.9	8.434	1.687	27.9	7.842	1.568
16.0	9.870	1.974	20.0	9.092	1.818	24.0	8.418	1.684	28.0	7.828	1.566
16.1	9.849	1.970	20.1	9.074	1.815	24.1	8.403	1.681	28.1	7.814	1.563
16.2	9.829	1.966	20.2	9.056	1.811	24.2	8.387	1.677	28.2	7.800	1.560
16.3	9.808	1.962	20.3	9.039	1.808	24.3	8.371	1.674	28.3	7.786	1.557
16.4	9.787	1.957	20.4	9.021	1.804	24.4	8.356	1.671	28.4	7.773	1.555
16.5	9.767	1.953	20.5	9.003	1.801	24.5	8.340	1.668	28.5	7.759	1.552
16.6	9.746	1.949	20.6	8.985	1.797	24.6	8.325	1.665	28.6	7.745	1.549
16.7	9.726	1.945	20.7	8.968	1.794	24.7	8.309	1.662	28.7	7.732	1.546
16.8	9.705	1.941	20.8	8.950	1.790	24.8	8.294	1.659	28.8	7.718	1.544
16.9	9.685	1.937	20.9	8.932	1.786	24.9	8.279	1.656	28.9	7.705	1.541
17.0	9.665	1.933	21.0	8.915	1.783	25.0	8.263	1.653	29.0	7.691	1.538
17.1	9.645	1.929	21.1	8.898	1.780	25.1	8.248	1.650	29.1	7.678	1.536
17.2	9.625	1.925	21.2	8.880	1.776	25.2	8.233	1.647	29.2	7.664	1.533
17.3	9.605	1.921	21.3	8.863	1.773	25.3	8.218	1.644	29.3	7.651	1.530
17.4	9.585	1.917	21.4	8.846	1.769	25.4	8.203	1.641	29.4	7.638	1.528
17.5	9.565	1.913	21.5	8.829	1.766	25.5	8.188	1.638	29.5	7.625	1.525
17.6	9.545	1.909	21.6	8.812	1.762	25.6	8.173	1.635	29.6	7.611	1.522
17.7	9.526	1.905	21.7	8.794	1.759	25.7	8.158	1.632	29.7	7.598	1.520
17.8	9.506	1.901	21.8	8.777	1.755	25.8	8.143	1.629	29.8	7.585	1.517
17.9	9.486	1.897	21.9	8.761	1.752	25.9	8.128	1.626	29.9	7.572	1.514
18.0	9.467	1.893	22.0	8.744	1.749	26.0	8.114	1.623	30.0	7.559	1.512
18.1	9.448	1.890	22.1	8.727	1.745	26.1	8.099	1.620	30.1	7.546	1.509
18.2	9.428	1.886	22.2	8.710	1.742	26.2	8.084	1.617	30.2	7.533	1.507
18.3	9.409	1.882	22.3	8.693	1.739	26.3	8.070	1.614	30.3	7.520	1.504
18.4	9.390	1.878	22.4	8.677	1.735	26.4	8.055	1.611	30.4	7.507	1.501
18.5	9.371	1.874	22.5	8.660	1.732	26.5	8.040	1.608	30.5	7.494	1.499
18.6	9.352	1.870	22.6	8.644	1.729	26.6	8.026	1.605	30.6	7.481	1.496
18.7	9.333	1.867	22.7	8.627	1.725	26.7	8.012	1.602	30.7	7.468	1.494
18.8	9.314	1.863	22.8	8.611	1.722	26.8	7.997	1.599	30.8	7.456	1.491
18.9	9.295	1.859	22.9	8.595	1.719	26.9	7.983	1.597	30.9	7.443	1.489

Derived using the formula in Standard Methods for the Examination of Water and Wastewater, Page 4-101, 18th Edition, 1992

APPENDIX B

Laboratory Analytical Reports, Chain of Custody Forms, and Groundwater Collection Forms

Advanced Environmental Laboratories, Inc.

Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

August 16, 2017

Eric B. Fuller
City of Jacksonville
214 North Hogan Street
10th Floor
Jacksonville, FL 32202

RE: Workorder: J1707930 Trail Ridge Landfill

Dear Eric Fuller:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, August 08, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Shane Poston - Project Manager
SPoston@AELLab.com

Enclosures

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

SAMPLE SUMMARY

Workorder: J1707930 Trail Ridge Landfill

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1707930001	Equipment Blank	Water	8/8/2017 14:50	8/8/2017 16:00
J1707930002	MWB-11S	Water	8/8/2017 14:08	8/8/2017 16:00
J1707930003	MWB-3S	Water	8/8/2017 13:05	8/8/2017 16:00
J1707930004	MWB-2S	Water	8/8/2017 12:28	8/8/2017 16:00
J1707930005	MWB-12S	Water	8/8/2017 07:15	8/8/2017 16:00
J1707930006	MWB-27S	Water	8/8/2017 10:20	8/8/2017 16:00
J1707930007	MWB-29S	Water	8/8/2017 11:25	8/8/2017 16:00
J1707930008	MWB-13S	Water	8/8/2017 08:46	8/8/2017 16:00
J1707930009	MWB-22S	Water	8/8/2017 08:15	8/8/2017 16:00
J1707930010	Trip Blank	Water	8/8/2017 00:00	8/8/2017 16:00
J1707930011	MWB-13I	Water	8/8/2017 09:18	8/8/2017 16:00
J1707930012	MWB-12I	Water	8/8/2017 07:45	8/8/2017 16:00
J1707930013	MWB-2I	Water	8/8/2017 11:58	8/8/2017 16:00
J1707930014	MWB-29I	Water	8/8/2017 10:55	8/8/2017 16:00
J1707930015	MWB-27I	Water	8/8/2017 09:50	8/8/2017 16:00
J1707930016	MWB-3I	Water	8/8/2017 13:35	8/8/2017 16:00
J1707930017	MWB-11IR	Water	8/8/2017 14:38	8/8/2017 16:00

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930001** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **Equipment Blank** Date Collected: 08/08/17 14:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/14/2017 13:23	J
Barium	**0.28**	**U**	**ug/L**	**1**	2.0	0.28	8/14/2017 13:23	J
Beryllium	**0.13**	**U**	**ug/L**	**1**	0.30	0.13	8/14/2017 13:23	J
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/14/2017 13:23	J
Chromium	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	8/14/2017 13:23	J
Cobalt	**0.60**	**U**	**ug/L**	**1**	4.0	0.60	8/14/2017 13:23	J
Copper	**2.5**	**U**	**ug/L**	**1**	4.0	2.5	8/14/2017 13:23	J
Iron	**30**	**U**	**ug/L**	**1**	200	30	8/14/2017 13:23	J
Lead	**1.3**	**U**	**ug/L**	**1**	7.0	1.3	8/14/2017 13:23	J
Nickel	**1.1**	**U**	**ug/L**	**1**	6.5	1.1	8/14/2017 13:23	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/14/2017 13:23	J
Sodium	**0.16**	**U**	**mg/L**	**1**	0.20	0.16	8/14/2017 13:23	J
Vanadium	**0.18**	**I**	**ug/L**	**1**	1.5	0.18	8/14/2017 13:23	J
Zinc	**9.4**	**I**	**ug/L**	**1**	10	2.0	8/14/2017 13:23	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.046**	**U**	**ug/L**	**1**	0.70	0.046	8/10/2017 18:13	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/10/2017 18:13	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/10/2017 18:13	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/14/2017 14:00	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 14:33	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 14:33	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 14:33	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 14:33	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/10/2017 14:33	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 14:33	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 14:33	J

CERTIFICATE OF ANALYSIS

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Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930001** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **Equipment Blank** Date Collected: 08/08/17 14:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 14:33	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 14:33	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 14:33	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 14:33	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 14:33	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/10/2017 14:33	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/10/2017 14:33	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/10/2017 14:33	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/10/2017 14:33	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/10/2017 14:33	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 14:33	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/10/2017 14:33	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/10/2017 14:33	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/10/2017 14:33	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 14:33	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2017 00:00	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 14:33	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 14:33	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 14:33	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 14:33	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 14:33	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 14:33	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 14:33	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 14:33	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 14:33	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 14:33	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/10/2017 14:33	J
Styrene	**0.69**	**I**	**ug/L**	**1**	1.0	0.23	8/11/2017 00:00	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 14:33	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 14:33	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/10/2017 14:33	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/10/2017 14:33	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/10/2017 14:33	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 14:33	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/10/2017 14:33	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 14:33	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 14:33	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 14:33	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 14:33	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/10/2017 14:33	J

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Phone: (904)363-9350
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ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930001** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **Equipment Blank** Date Collected: 08/08/17 14:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**86**		**%**	**1**	70-128		8/10/2017 14:33	
Toluene-d8 (S)	**96**		**%**	**1**	77-119		8/10/2017 14:33	
Bromofluorobenzene (S)	**118**		**%**	**1**	86-123		8/10/2017 14:33	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 14:33	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 14:33	J
1,2-Dichloroethane-d4 (S)	**88**		**%**	**1**	77-125		8/10/2017 14:33	
Toluene-d8 (S)	**101**		**%**	**1**	80-121		8/10/2017 14:33	
Bromofluorobenzene (S)	**111**		**%**	**1**	80-129		8/10/2017 14:33	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**0.50**	**U**	**mg/L**	**1**	5.0	0.50	8/9/2017 07:58	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/9/2017 07:58	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.01**	**U**	**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**10**	**U**	**mg/L**	**1**	10	10	8/9/2017 12:51	J

Lab ID: **J1707930002** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-11S** Date Collected: 08/08/17 14:08

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/14/2017 13:43	J
Barium	**52**		**ug/L**	**1**	2.0	0.28	8/14/2017 13:43	J
Beryllium	**0.16**	**I**	**ug/L**	**1**	0.30	0.13	8/14/2017 13:43	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930002** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **MWB-11S** Date Collected: 08/08/17 14:08

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/14/2017 13:43	J
Chromium	**1.1**		**ug/L**	**1**	1.0	0.50	8/14/2017 13:43	J
Cobalt	**0.60**	**U**	**ug/L**	**1**	4.0	0.60	8/14/2017 13:43	J
Copper	**2.5**	**U**	**ug/L**	**1**	4.0	2.5	8/14/2017 13:43	J
Iron	**840**		**ug/L**	**1**	200	30	8/14/2017 13:43	J
Lead	**1.3**	**U**	**ug/L**	**1**	7.0	1.3	8/14/2017 13:43	J
Nickel	**1.1**	**U**	**ug/L**	**1**	6.5	1.1	8/14/2017 13:43	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/14/2017 13:43	J
Sodium	**11**		**mg/L**	**1**	0.20	0.16	8/14/2017 13:43	J
Vanadium	**5.2**		**ug/L**	**1**	1.5	0.18	8/14/2017 13:43	J
Zinc	**7.0**	**I**	**ug/L**	**1**	10	2.0	8/14/2017 13:43	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.24**	**I**	**ug/L**	**1**	0.70	0.046	8/10/2017 18:25	J
Selenium	**1.6**	**I**	**ug/L**	**1**	5.0	0.58	8/10/2017 18:25	J
Thallium	**0.092**	**I**	**ug/L**	**1**	0.20	0.057	8/10/2017 18:25	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/14/2017 14:15	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 15:04	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 15:04	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 15:04	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 15:04	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/10/2017 15:04	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 15:04	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 15:04	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 15:04	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 15:04	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 15:04	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 15:04	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 15:04	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/10/2017 15:04	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/10/2017 15:04	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930002** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **MWB-11S** Date Collected: 08/08/17 14:08

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/10/2017 15:04	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/10/2017 15:04	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/10/2017 15:04	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 15:04	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/10/2017 15:04	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/10/2017 15:04	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/10/2017 15:04	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 15:04	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 15:04	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 15:04	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 15:04	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 15:04	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 15:04	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 15:04	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 15:04	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 15:04	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 15:04	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 15:04	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 15:04	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/10/2017 15:04	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 15:04	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 15:04	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 15:04	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/10/2017 15:04	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/10/2017 15:04	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/10/2017 15:04	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 15:04	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/10/2017 15:04	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 15:04	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 15:04	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 15:04	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 15:04	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/10/2017 15:04	J
1,2-Dichloroethane-d4 (S)	**84**		**%**	**1**	70-128		8/10/2017 15:04	
Toluene-d8 (S)	**96**		**%**	**1**	77-119		8/10/2017 15:04	
Bromofluorobenzene (S)	**117**		**%**	**1**	86-123		8/10/2017 15:04	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 15:04	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930002** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-11S** Date Collected: 08/08/17 14:08

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 15:04	J
1,2-Dichloroethane-d4 (S)	**86**		**%**	**1**	77-125		8/10/2017 15:04	
Toluene-d8 (S)	**101**		**%**	**1**	80-121		8/10/2017 15:04	
Bromofluorobenzene (S)	**110**		**%**	**1**	80-129		8/10/2017 15:04	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**25**		**mg/L**	**1**	5.0	0.50	8/9/2017 08:47	J
Nitrate	**0.16**	**I**	**mg/L**	**1**	0.50	0.050	8/9/2017 08:47	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.14**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**130**		**mg/L**	**1**	10	10	8/9/2017 12:51	J

Lab ID: **J1707930003** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-3S** Date Collected: 08/08/17 13:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/14/2017 14:08	J
Barium	**14**		**ug/L**	**1**	2.0	0.28	8/14/2017 14:08	J
Beryllium	**0.16**	**I**	**ug/L**	**1**	0.30	0.13	8/14/2017 14:08	J
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/14/2017 14:08	J
Chromium	**1.8**		**ug/L**	**1**	1.0	0.50	8/14/2017 14:08	J
Cobalt	**0.60**	**U**	**ug/L**	**1**	4.0	0.60	8/14/2017 14:08	J
Copper	**2.5**	**U**	**ug/L**	**1**	4.0	2.5	8/14/2017 14:08	J
Iron	**360**		**ug/L**	**1**	200	30	8/14/2017 14:08	J
Lead	**1.3**	**I**	**ug/L**	**1**	7.0	1.3	8/14/2017 14:08	J
Nickel	**1.1**	**U**	**ug/L**	**1**	6.5	1.1	8/14/2017 14:08	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/14/2017 14:08	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930003** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **MWB-3S** Date Collected: 08/08/17 13:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Sodium	**5.6**		**mg/L**	**1**	0.20	0.16	8/14/2017 14:08	J
Vanadium	**2.2**		**ug/L**	**1**	1.5	0.18	8/14/2017 14:08	J
Zinc	**11**		**ug/L**	**1**	10	2.0	8/14/2017 14:08	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.064**	**I**	**ug/L**	**1**	0.70	0.046	8/10/2017 18:29	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/10/2017 18:29	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/10/2017 18:29	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/14/2017 14:18	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 15:35	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 15:35	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 15:35	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 15:35	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/10/2017 15:35	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 15:35	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 15:35	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 15:35	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 15:35	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 15:35	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 15:35	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 15:35	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/10/2017 15:35	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/10/2017 15:35	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/10/2017 15:35	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/10/2017 15:35	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/10/2017 15:35	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 15:35	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/10/2017 15:35	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/10/2017 15:35	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/10/2017 15:35	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 15:35	J

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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930003** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **MWB-3S** Date Collected: 08/08/17 13:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 15:35	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 15:35	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 15:35	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 15:35	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 15:35	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 15:35	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 15:35	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 15:35	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 15:35	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 15:35	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 15:35	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/10/2017 15:35	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 15:35	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 15:35	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 15:35	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/10/2017 15:35	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/10/2017 15:35	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/10/2017 15:35	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 15:35	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/10/2017 15:35	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 15:35	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 15:35	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 15:35	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 15:35	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/10/2017 15:35	J
1,2-Dichloroethane-d4 (S)	**83**		**%**	**1**	70-128		8/10/2017 15:35	
Toluene-d8 (S)	**95**		**%**	**1**	77-119		8/10/2017 15:35	
Bromofluorobenzene (S)	**117**		**%**	**1**	86-123		8/10/2017 15:35	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 15:35	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 15:35	J
1,2-Dichloroethane-d4 (S)	**87**		**%**	**1**	77-125		8/10/2017 15:35	
Toluene-d8 (S)	**100**		**%**	**1**	80-121		8/10/2017 15:35	
Bromofluorobenzene (S)	**110**		**%**	**1**	80-129		8/10/2017 15:35	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930003** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-3S** Date Collected: 08/08/17 13:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chloride	**14**		**mg/L**	**1**	5.0	0.50	8/9/2017 09:11	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/9/2017 09:11	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.01**	**U**	**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**51**		**mg/L**	**1**	10	10	8/9/2017 12:51	J

Lab ID: **J1707930004** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-2S** Date Collected: 08/08/17 12:28

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/14/2017 14:12	J
Barium	**19**		**ug/L**	**1**	2.0	0.28	8/14/2017 14:12	J
Beryllium	**0.30**	**I**	**ug/L**	**1**	0.30	0.13	8/14/2017 14:12	J
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/14/2017 14:12	J
Chromium	**2.0**		**ug/L**	**1**	1.0	0.50	8/14/2017 14:12	J
Cobalt	**0.60**	**U**	**ug/L**	**1**	4.0	0.60	8/14/2017 14:12	J
Copper	**4.0**		**ug/L**	**1**	4.0	2.5	8/14/2017 14:12	J
Iron	**1600**		**ug/L**	**1**	200	30	8/14/2017 14:12	J
Lead	**3.7**	**I**	**ug/L**	**1**	7.0	1.3	8/14/2017 14:12	J
Nickel	**1.1**	**U**	**ug/L**	**1**	6.5	1.1	8/14/2017 14:12	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/14/2017 14:12	J
Sodium	**6.5**		**mg/L**	**1**	0.20	0.16	8/14/2017 14:12	J
Vanadium	**3.2**		**ug/L**	**1**	1.5	0.18	8/14/2017 14:12	J
Zinc	**19**		**ug/L**	**1**	10	2.0	8/14/2017 14:12	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.10**	**I**	**ug/L**	**1**	0.70	0.046	8/10/2017 18:33	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930004** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **MWB-2S** Date Collected: 08/08/17 12:28

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Selenium	**0.82**	**I**	**ug/L**	**1**	5.0	0.58	8/10/2017 18:33	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/10/2017 18:33	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.060**	**I**	**ug/L**	**1**	0.10	0.011	8/14/2017 14:21	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 16:06	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 16:06	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 16:06	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 16:06	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/10/2017 16:06	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 16:06	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 16:06	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 16:06	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 16:06	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 16:06	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 16:06	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 16:06	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/10/2017 16:06	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/10/2017 16:06	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/10/2017 16:06	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/10/2017 16:06	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/10/2017 16:06	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 16:06	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/10/2017 16:06	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/10/2017 16:06	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/10/2017 16:06	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 16:06	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 16:06	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 16:06	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 16:06	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 16:06	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 16:06	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 16:06	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 16:06	J

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6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930004** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **MWB-2S** Date Collected: 08/08/17 12:28

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 16:06	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 16:06	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 16:06	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 16:06	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/10/2017 16:06	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 16:06	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 16:06	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 16:06	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/10/2017 16:06	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/10/2017 16:06	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/10/2017 16:06	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 16:06	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/10/2017 16:06	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 16:06	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 16:06	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 16:06	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 16:06	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/10/2017 16:06	J
1,2-Dichloroethane-d4 (S)	**86**		**%**	**1**	70-128		8/10/2017 16:06	
Toluene-d8 (S)	**93**		**%**	**1**	77-119		8/10/2017 16:06	
Bromofluorobenzene (S)	**119**		**%**	**1**	86-123		8/10/2017 16:06	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 16:06	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 16:06	J
1,2-Dichloroethane-d4 (S)	**88**		**%**	**1**	77-125		8/10/2017 16:06	
Toluene-d8 (S)	**98**		**%**	**1**	80-121		8/10/2017 16:06	
Bromofluorobenzene (S)	**112**		**%**	**1**	80-129		8/10/2017 16:06	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**1.6**	**I**	**mg/L**	**1**	5.0	0.50	8/9/2017 09:35	J
Nitrate	**0.10**	**I**	**mg/L**	**1**	0.50	0.050	8/9/2017 09:35	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.10**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							

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Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930004** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-2S** Date Collected: 08/08/17 12:28

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Dissolved Solids	**310**		**mg/L**	**1**	10	10	8/9/2017 12:51	J

Lab ID: **J1707930005** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-12S** Date Collected: 08/08/17 07:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/14/2017 14:16	J
Barium	**14**		**ug/L**	**1**	2.0	0.28	8/14/2017 14:16	J
Beryllium	**0.13**	**U**	**ug/L**	**1**	0.30	0.13	8/14/2017 14:16	J
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/14/2017 14:16	J
Chromium	**2.8**		**ug/L**	**1**	1.0	0.50	8/14/2017 14:16	J
Cobalt	**0.60**	**U**	**ug/L**	**1**	4.0	0.60	8/14/2017 14:16	J
Copper	**2.5**	**U**	**ug/L**	**1**	4.0	2.5	8/14/2017 14:16	J
Iron	**310**		**ug/L**	**1**	200	30	8/14/2017 14:16	J
Lead	**1.3**	**U**	**ug/L**	**1**	7.0	1.3	8/14/2017 14:16	J
Nickel	**1.1**	**U**	**ug/L**	**1**	6.5	1.1	8/14/2017 14:16	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/14/2017 14:16	J
Sodium	**18**		**mg/L**	**1**	0.20	0.16	8/14/2017 14:16	J
Vanadium	**58**		**ug/L**	**1**	1.5	0.18	8/14/2017 14:16	J
Zinc	**8.0**	**I**	**ug/L**	**1**	10	2.0	8/14/2017 14:16	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.57**	**I**	**ug/L**	**1**	0.70	0.046	8/10/2017 18:37	J
Selenium	**11**		**ug/L**	**1**	5.0	0.58	8/10/2017 18:37	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/10/2017 18:37	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/14/2017 14:30	J

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Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930005** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **MWB-12S** Date Collected: 08/08/17 07:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 16:37	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 16:37	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 16:37	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 16:37	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/10/2017 16:37	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 16:37	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 16:37	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 16:37	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 16:37	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 16:37	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 16:37	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 16:37	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/10/2017 16:37	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/10/2017 16:37	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/10/2017 16:37	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/10/2017 16:37	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/10/2017 16:37	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 16:37	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/10/2017 16:37	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/10/2017 16:37	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/10/2017 16:37	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 16:37	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 16:37	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 16:37	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 16:37	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 16:37	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 16:37	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 16:37	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 16:37	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 16:37	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 16:37	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 16:37	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 16:37	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/10/2017 16:37	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 16:37	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 16:37	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930005** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **MWB-12S** Date Collected: 08/08/17 07:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 16:37	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/10/2017 16:37	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/10/2017 16:37	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/10/2017 16:37	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 16:37	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/10/2017 16:37	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 16:37	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 16:37	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 16:37	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 16:37	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/10/2017 16:37	J
1,2-Dichloroethane-d4 (S)	**90**		**%**	**1**	70-128		8/10/2017 16:37	
Toluene-d8 (S)	**94**		**%**	**1**	77-119		8/10/2017 16:37	
Bromofluorobenzene (S)	**116**		**%**	**1**	86-123		8/10/2017 16:37	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 16:37	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 16:37	J
1,2-Dichloroethane-d4 (S)	**92**		**%**	**1**	77-125		8/10/2017 16:37	
Toluene-d8 (S)	**99**		**%**	**1**	80-121		8/10/2017 16:37	
Bromofluorobenzene (S)	**109**		**%**	**1**	80-129		8/10/2017 16:37	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**46**		**mg/L**	**1**	5.0	0.50	8/9/2017 09:59	J
Nitrate	**3.0**		**mg/L**	**1**	0.50	0.050	8/9/2017 09:59	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.03**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**270**		**mg/L**	**1**	10	10	8/9/2017 12:51	J

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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930006** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **MWB-27S** Date Collected: 08/08/17 10:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/14/2017 14:20	J
Barium	**8.1**		**ug/L**	**1**	2.0	0.28	8/14/2017 14:20	J
Beryllium	**0.13**	**U**	**ug/L**	**1**	0.30	0.13	8/14/2017 14:20	J
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/14/2017 14:20	J
Chromium	**3.5**		**ug/L**	**1**	1.0	0.50	8/14/2017 14:20	J
Cobalt	**0.60**	**U**	**ug/L**	**1**	4.0	0.60	8/14/2017 14:20	J
Copper	**5.3**		**ug/L**	**1**	4.0	2.5	8/14/2017 14:20	J
Iron	**110**	**I**	**ug/L**	**1**	200	30	8/14/2017 14:20	J
Lead	**1.3**	**U**	**ug/L**	**1**	7.0	1.3	8/14/2017 14:20	J
Nickel	**1.1**	**U**	**ug/L**	**1**	6.5	1.1	8/14/2017 14:20	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/14/2017 14:20	J
Sodium	**9.9**		**mg/L**	**1**	0.20	0.16	8/14/2017 14:20	J
Vanadium	**43**		**ug/L**	**1**	1.5	0.18	8/14/2017 14:20	J
Zinc	**9.8**	**I**	**ug/L**	**1**	10	2.0	8/14/2017 14:20	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.27**	**I**	**ug/L**	**1**	0.70	0.046	8/10/2017 18:49	J
Selenium	**0.95**	**I**	**ug/L**	**1**	5.0	0.58	8/10/2017 18:49	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/10/2017 18:49	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.012**	**I**	**ug/L**	**1**	0.10	0.011	8/14/2017 14:34	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 17:08	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 17:08	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 17:08	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 17:08	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/10/2017 17:08	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 17:08	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 17:08	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930006** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **MWB-27S** Date Collected: 08/08/17 10:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 17:08	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 17:08	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 17:08	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 17:08	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 17:08	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/10/2017 17:08	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/10/2017 17:08	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/10/2017 17:08	J
Acetone	**2.2**	**I**	**ug/L**	**1**	5.0	2.1	8/10/2017 17:08	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/10/2017 17:08	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 17:08	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/10/2017 17:08	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/10/2017 17:08	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/10/2017 17:08	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 17:08	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 17:08	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 17:08	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 17:08	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 17:08	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 17:08	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 17:08	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 17:08	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 17:08	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 17:08	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 17:08	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 17:08	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/10/2017 17:08	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 17:08	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 17:08	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 17:08	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/10/2017 17:08	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/10/2017 17:08	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/10/2017 17:08	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 17:08	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/10/2017 17:08	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 17:08	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 17:08	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 17:08	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 17:08	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/10/2017 17:08	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930006** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-27S** Date Collected: 08/08/17 10:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**89**		**%**	**1**	70-128		8/10/2017 17:08	
Toluene-d8 (S)	**94**		**%**	**1**	77-119		8/10/2017 17:08	
Bromofluorobenzene (S)	**120**		**%**	**1**	86-123		8/10/2017 17:08	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 17:08	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 17:08	J
1,2-Dichloroethane-d4 (S)	**92**		**%**	**1**	77-125		8/10/2017 17:08	
Toluene-d8 (S)	**98**		**%**	**1**	80-121		8/10/2017 17:08	
Bromofluorobenzene (S)	**113**		**%**	**1**	80-129		8/10/2017 17:08	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**12**		**mg/L**	**1**	5.0	0.50	8/9/2017 10:23	J
Nitrate	**0.20**	**I**	**mg/L**	**1**	0.50	0.050	8/9/2017 10:23	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.10**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**160**		**mg/L**	**1**	10	10	8/9/2017 12:51	J

Lab ID: **J1707930007** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-29S** Date Collected: 08/08/17 11:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/14/2017 14:26	J
Barium	**13**		**ug/L**	**1**	2.0	0.28	8/14/2017 14:26	J
Beryllium	**0.13**	**U**	**ug/L**	**1**	0.30	0.13	8/14/2017 14:26	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930007** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **MWB-29S** Date Collected: 08/08/17 11:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/14/2017 14:26	J
Chromium	**1.2**		**ug/L**	**1**	1.0	0.50	8/14/2017 14:26	J
Cobalt	**0.60**	**U**	**ug/L**	**1**	4.0	0.60	8/14/2017 14:26	J
Copper	**2.5**	**U**	**ug/L**	**1**	4.0	2.5	8/14/2017 14:26	J
Iron	**240**		**ug/L**	**1**	200	30	8/14/2017 14:26	J
Lead	**1.3**	**U**	**ug/L**	**1**	7.0	1.3	8/14/2017 14:26	J
Nickel	**1.1**	**U**	**ug/L**	**1**	6.5	1.1	8/14/2017 14:26	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/14/2017 14:26	J
Sodium	**13**		**mg/L**	**1**	0.20	0.16	8/14/2017 14:26	J
Vanadium	**2.9**		**ug/L**	**1**	1.5	0.18	8/14/2017 14:26	J
Zinc	**7.6**	**I**	**ug/L**	**1**	10	2.0	8/14/2017 14:26	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.14**	**I**	**ug/L**	**1**	0.70	0.046	8/10/2017 18:53	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/10/2017 18:53	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/10/2017 18:53	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/14/2017 14:37	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 17:39	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 17:39	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 17:39	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 17:39	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/10/2017 17:39	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 17:39	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 17:39	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 17:39	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 17:39	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 17:39	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 17:39	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 17:39	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/10/2017 17:39	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/10/2017 17:39	J

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6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930007** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **MWB-29S** Date Collected: 08/08/17 11:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/10/2017 17:39	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/10/2017 17:39	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/10/2017 17:39	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 17:39	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/10/2017 17:39	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/10/2017 17:39	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/10/2017 17:39	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 17:39	J
Carbon Disulfide	**0.45**	**I**	**ug/L**	**1**	1.0	0.21	8/10/2017 17:39	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 17:39	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 17:39	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 17:39	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 17:39	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 17:39	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 17:39	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 17:39	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 17:39	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 17:39	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 17:39	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/10/2017 17:39	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 17:39	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 17:39	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 17:39	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/10/2017 17:39	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/10/2017 17:39	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/10/2017 17:39	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 17:39	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/10/2017 17:39	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 17:39	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 17:39	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 17:39	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 17:39	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/10/2017 17:39	J
1,2-Dichloroethane-d4 (S)	**87**		**%**	**1**	70-128		8/10/2017 17:39	
Toluene-d8 (S)	**95**		**%**	**1**	77-119		8/10/2017 17:39	
Bromofluorobenzene (S)	**115**		**%**	**1**	86-123		8/10/2017 17:39	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 17:39	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930007** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-29S** Date Collected: 08/08/17 11:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 17:39	J
1,2-Dichloroethane-d4 (S)	**89**		**%**	**1**	77-125		8/10/2017 17:39	
Toluene-d8 (S)	**100**		**%**	**1**	80-121		8/10/2017 17:39	
Bromofluorobenzene (S)	**108**		**%**	**1**	80-129		8/10/2017 17:39	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**22**		**mg/L**	**1**	5.0	0.50	8/9/2017 10:46	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/9/2017 10:46	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.98**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**110**		**mg/L**	**1**	10	10	8/9/2017 12:51	J

Lab ID: **J1707930008** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-13S** Date Collected: 08/08/17 08:46

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/14/2017 14:30	J
Barium	**5.5**		**ug/L**	**1**	2.0	0.28	8/14/2017 14:30	J
Beryllium	**0.13**	**U**	**ug/L**	**1**	0.30	0.13	8/14/2017 14:30	J
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/14/2017 14:30	J
Chromium	**2.2**		**ug/L**	**1**	1.0	0.50	8/14/2017 14:30	J
Cobalt	**0.60**	**U**	**ug/L**	**1**	4.0	0.60	8/14/2017 14:30	J
Copper	**3.8**	**I**	**ug/L**	**1**	4.0	2.5	8/14/2017 14:30	J
Iron	**430**		**ug/L**	**1**	200	30	8/14/2017 14:30	J
Lead	**1.3**	**U**	**ug/L**	**1**	7.0	1.3	8/14/2017 14:30	J
Nickel	**1.1**	**U**	**ug/L**	**1**	6.5	1.1	8/14/2017 14:30	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/14/2017 14:30	J

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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930008** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **MWB-13S** Date Collected: 08/08/17 08:46

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Sodium	**18**		**mg/L**	**1**	0.20	0.16	8/14/2017 14:30	J
Vanadium	**37**		**ug/L**	**1**	1.5	0.18	8/14/2017 14:30	J
Zinc	**9.5**	**I**	**ug/L**	**1**	10	2.0	8/14/2017 14:30	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.40**	**I**	**ug/L**	**1**	0.70	0.046	8/10/2017 18:57	J
Selenium	**3.2**	**I**	**ug/L**	**1**	5.0	0.58	8/10/2017 18:57	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/10/2017 18:57	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.020**	**I**	**ug/L**	**1**	0.10	0.011	8/14/2017 14:40	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 18:10	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 18:10	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 18:10	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 18:10	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/10/2017 18:10	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 18:10	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 18:10	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 18:10	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 18:10	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 18:10	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 18:10	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 18:10	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/10/2017 18:10	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/10/2017 18:10	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/10/2017 18:10	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/10/2017 18:10	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/10/2017 18:10	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 18:10	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/10/2017 18:10	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/10/2017 18:10	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/10/2017 18:10	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 18:10	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930008** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **MWB-13S** Date Collected: 08/08/17 08:46

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 18:10	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 18:10	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 18:10	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 18:10	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 18:10	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 18:10	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 18:10	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 18:10	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 18:10	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 18:10	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 18:10	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/10/2017 18:10	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 18:10	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 18:10	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 18:10	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/10/2017 18:10	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/10/2017 18:10	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/10/2017 18:10	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 18:10	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/10/2017 18:10	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 18:10	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 18:10	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 18:10	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 18:10	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/10/2017 18:10	J
1,2-Dichloroethane-d4 (S)	**87**		**%**	**1**	70-128		8/10/2017 18:10	
Toluene-d8 (S)	**96**		**%**	**1**	77-119		8/10/2017 18:10	
Bromofluorobenzene (S)	**117**		**%**	**1**	86-123		8/10/2017 18:10	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 18:10	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 18:10	J
1,2-Dichloroethane-d4 (S)	**90**		**%**	**1**	77-125		8/10/2017 18:10	
Toluene-d8 (S)	**101**		**%**	**1**	80-121		8/10/2017 18:10	
Bromofluorobenzene (S)	**110**		**%**	**1**	80-129		8/10/2017 18:10	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							

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Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930008** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-13S** Date Collected: 08/08/17 08:46

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chloride	**120**		**mg/L**	**1**	5.0	0.50	8/9/2017 11:11	J
Nitrate	**0.38**	**I**	**mg/L**	**1**	0.50	0.050	8/9/2017 11:11	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.19**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**330**		**mg/L**	**1**	10	10	8/9/2017 12:51	J

Lab ID: **J1707930009** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-22S** Date Collected: 08/08/17 08:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/14/2017 14:34	J
Barium	**7.5**		**ug/L**	**1**	2.0	0.28	8/14/2017 14:34	J
Beryllium	**0.13**	**U**	**ug/L**	**1**	0.30	0.13	8/14/2017 14:34	J
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/14/2017 14:34	J
Chromium	**1.5**		**ug/L**	**1**	1.0	0.50	8/14/2017 14:34	J
Cobalt	**0.60**	**U**	**ug/L**	**1**	4.0	0.60	8/14/2017 14:34	J
Copper	**2.5**	**U**	**ug/L**	**1**	4.0	2.5	8/14/2017 14:34	J
Iron	**150**	**I**	**ug/L**	**1**	200	30	8/14/2017 14:34	J
Lead	**1.3**	**U**	**ug/L**	**1**	7.0	1.3	8/14/2017 14:34	J
Nickel	**1.1**	**U**	**ug/L**	**1**	6.5	1.1	8/14/2017 14:34	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/14/2017 14:34	J
Sodium	**13**		**mg/L**	**1**	0.20	0.16	8/14/2017 14:34	J
Vanadium	**4.2**		**ug/L**	**1**	1.5	0.18	8/14/2017 14:34	J
Zinc	**7.4**	**I**	**ug/L**	**1**	10	2.0	8/14/2017 14:34	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.59**	**I**	**ug/L**	**1**	0.70	0.046	8/10/2017 19:01	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930009** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **MWB-22S** Date Collected: 08/08/17 08:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/10/2017 19:01	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/10/2017 19:01	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/14/2017 14:43	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 18:41	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 18:41	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 18:41	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 18:41	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/10/2017 18:41	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 18:41	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 18:41	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 18:41	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 18:41	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 18:41	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 18:41	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 18:41	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/10/2017 18:41	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/10/2017 18:41	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/10/2017 18:41	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/10/2017 18:41	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/10/2017 18:41	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 18:41	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/10/2017 18:41	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/10/2017 18:41	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/10/2017 18:41	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 18:41	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 18:41	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 18:41	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 18:41	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 18:41	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 18:41	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 18:41	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 18:41	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930009** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **MWB-22S** Date Collected: 08/08/17 08:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 18:41	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 18:41	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 18:41	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 18:41	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/10/2017 18:41	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 18:41	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 18:41	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 18:41	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/10/2017 18:41	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/10/2017 18:41	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/10/2017 18:41	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 18:41	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/10/2017 18:41	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 18:41	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 18:41	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 18:41	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 18:41	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/10/2017 18:41	J
1,2-Dichloroethane-d4 (S)	**87**		**%**	**1**	70-128		8/10/2017 18:41	
Toluene-d8 (S)	**96**		**%**	**1**	77-119		8/10/2017 18:41	
Bromofluorobenzene (S)	**117**		**%**	**1**	86-123		8/10/2017 18:41	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 18:41	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 18:41	J
1,2-Dichloroethane-d4 (S)	**90**		**%**	**1**	77-125		8/10/2017 18:41	
Toluene-d8 (S)	**100**		**%**	**1**	80-121		8/10/2017 18:41	
Bromofluorobenzene (S)	**110**		**%**	**1**	80-129		8/10/2017 18:41	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**46**		**mg/L**	**1**	5.0	0.50	8/9/2017 11:35	J
Nitrate	**0.27**	**I**	**mg/L**	**1**	0.50	0.050	8/9/2017 11:35	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.08**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930009** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-22S** Date Collected: 08/08/17 08:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Dissolved Solids	**290**		**mg/L**	**1**	10	10	8/9/2017 12:51	J

Lab ID: **J1707930010** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **Trip Blank** Date Collected: 08/08/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 19:12	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 19:12	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 19:12	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 19:12	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/10/2017 19:12	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 19:12	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 19:12	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 19:12	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 19:12	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 19:12	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 19:12	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 19:12	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/10/2017 19:12	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/10/2017 19:12	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/10/2017 19:12	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/10/2017 19:12	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/10/2017 19:12	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 19:12	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/10/2017 19:12	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/10/2017 19:12	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/10/2017 19:12	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 19:12	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 19:12	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 19:12	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 19:12	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 19:12	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930010** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **Trip Blank** Date Collected: 08/08/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 19:12	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 19:12	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 19:12	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 19:12	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 19:12	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 19:12	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 19:12	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/10/2017 19:12	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 19:12	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 19:12	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 19:12	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/10/2017 19:12	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/10/2017 19:12	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/10/2017 19:12	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 19:12	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/10/2017 19:12	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 19:12	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 19:12	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 19:12	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 19:12	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/10/2017 19:12	J
1,2-Dichloroethane-d4 (S)	**85**		**%**	**1**	70-128		8/10/2017 19:12	
Toluene-d8 (S)	**96**		**%**	**1**	77-119		8/10/2017 19:12	
Bromofluorobenzene (S)	**120**		**%**	**1**	86-123		8/10/2017 19:12	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 19:12	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/11/2017 21:11	J
1,2-Dichloroethane-d4 (S)	**88**		**%**	**1**	77-125		8/10/2017 19:12	
Toluene-d8 (S)	**101**		**%**	**1**	80-121		8/10/2017 19:12	
Bromofluorobenzene (S)	**113**		**%**	**1**	80-129		8/10/2017 19:12	

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930011** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-13I** Date Collected: 08/08/17 09:18

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**380**		**ug/L**	**1**	200	30	8/14/2017 14:43	J
Sodium	**2.5**		**mg/L**	**1**	0.20	0.16	8/14/2017 14:43	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.5**		**mg/L**	**1**	5.0	0.50	8/9/2017 12:47	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/9/2017 12:47	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.04**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**46**		**mg/L**	**1**	10	10	8/10/2017 12:32	J

Lab ID: **J1707930012** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-12I** Date Collected: 08/08/17 07:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**390**		**ug/L**	**1**	200	30	8/14/2017 14:47	J
Sodium	**2.7**		**mg/L**	**1**	0.20	0.16	8/14/2017 14:47	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.5**		**mg/L**	**1**	5.0	0.50	8/9/2017 13:35	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/9/2017 13:35	J

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ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930012** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-12I** Date Collected: 08/08/17 07:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.06**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**49**		**mg/L**	**1**	10	10	8/10/2017 12:32	J

Lab ID: **J1707930013** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-2I** Date Collected: 08/08/17 11:58

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**330**		**ug/L**	**1**	200	30	8/14/2017 15:07	J
Sodium	**3.5**		**mg/L**	**1**	0.20	0.16	8/14/2017 15:07	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**7.2**		**mg/L**	**1**	5.0	0.50	8/9/2017 13:59	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/9/2017 13:59	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.03**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**36**		**mg/L**	**1**	10	10	8/10/2017 12:32	J

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ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930014** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-29I** Date Collected: 08/08/17 10:55

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**400**		**ug/L**	**1**	200	30	8/14/2017 15:11	J
Sodium	**3.1**		**mg/L**	**1**	0.20	0.16	8/14/2017 15:11	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**6.3**		**mg/L**	**1**	5.0	0.50	8/9/2017 14:45	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/9/2017 14:45	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.05**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**48**		**mg/L**	**1**	10	10	8/10/2017 12:32	J

Lab ID: **J1707930015** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-27I** Date Collected: 08/08/17 09:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**470**		**ug/L**	**1**	200	30	8/14/2017 15:15	J
Sodium	**2.8**		**mg/L**	**1**	0.20	0.16	8/14/2017 15:15	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.8**		**mg/L**	**1**	5.0	0.50	8/9/2017 15:10	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/9/2017 15:10	J

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ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930015** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-27I** Date Collected: 08/08/17 09:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.06**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**49**		**mg/L**	**1**	10	10	8/10/2017 12:32	J

Lab ID: **J1707930016** Date Received: 08/08/17 16:00 Matrix: Water
Sample ID: **MWB-3I** Date Collected: 08/08/17 13:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**740**		**ug/L**	**1**	200	30	8/14/2017 15:20	J
Sodium	**2.9**		**mg/L**	**1**	0.20	0.16	8/14/2017 15:20	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**6.8**		**mg/L**	**1**	5.0	0.50	8/9/2017 15:58	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/9/2017 15:58	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.01**	**U**	**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**37**		**mg/L**	**1**	10	10	8/10/2017 12:32	J

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ANALYTICAL RESULTS

Workorder: J1707930 Trail Ridge Landfill

Lab ID: **J1707930017** Date Received: 08/08/17 16:00 Matrix: Water

Sample ID: **MWB-11IR** Date Collected: 08/08/17 14:38

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**360**		**ug/L**	**1**	200	30	8/14/2017 15:24	J
Sodium	**2.6**		**mg/L**	**1**	0.20	0.16	8/14/2017 15:24	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.8**		**mg/L**	**1**	5.0	0.50	8/9/2017 16:22	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/9/2017 16:22	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.04**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**41**		**mg/L**	**1**	10	10	8/10/2017 12:32	J

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Fax: (904)363-9354

ANALYTICAL RESULTS QUALIFIERS

Workorder: J1707930 Trail Ridge Landfill

PARAMETER QUALIFIERS

U	The compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

LAB QUALIFIERS

G	DOH Certification #E82001(AEL-G)(FL NELAC Certification)
J	DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)

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Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1707930 Trail Ridge Landfill

QC Batch: WCAj/4775 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: J1707930001, J1707930002, J1707930003, J1707930004, J1707930005, J1707930006, J1707930007, J1707930008,

METHOD BLANK: 2430952

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Dissolved Solids	mg/L	10	10	U

LABORATORY CONTROL SAMPLE: 2430953

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	300	290	96	75-125	

SAMPLE DUPLICATE: 2430954 Original: J1707930002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	130	130	0	5	

QC Batch: DGMj/3360 Analysis Method: SW-846 6010

QC Batch Method: SW-846 3010A Prepared: 08/10/2017 03:30

Associated Lab Samples: J1707930001, J1707930002, J1707930003, J1707930004, J1707930005, J1707930006, J1707930007, J1707930008,

METHOD BLANK: 2431159

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Silver	ug/L	0.44	0.44	U
Arsenic	ug/L	8.5	8.5	U
Barium	ug/L	0.28	0.28	U
Beryllium	ug/L	0.13	0.13	U
Cadmium	ug/L	0.32	0.32	U
Cobalt	ug/L	0.60	0.60	U
Chromium	ug/L	0.50	0.50	U
Copper	ug/L	2.5	2.5	U
Iron	ug/L	30	30	U

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QUALITY CONTROL DATA

Workorder: J1707930 Trail Ridge Landfill

METHOD BLANK: 2431159

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Sodium	mg/L	0.16	0.16	U
Nickel	ug/L	1.1	1.1	U
Zinc	ug/L	2.0	2.0	U

LABORATORY CONTROL SAMPLE: 2431160

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Silver	ug/L	400	420	105	80-120	
Arsenic	ug/L	400	400	99	80-120	
Barium	ug/L	400	400	99	80-120	
Beryllium	ug/L	400	420	104	80-120	
Cadmium	ug/L	400	390	98	80-120	
Cobalt	ug/L	400	370	93	80-120	
Chromium	ug/L	400	410	101	80-120	
Copper	ug/L	400	390	97	80-120	
Iron	ug/L	26000	25000	98	80-120	
Sodium	mg/L	50	47	93	80-120	
Nickel	ug/L	400	350	88	80-120	
Lead	ug/L	400	380	95	80-120	
Vanadium	ug/L	400	420	104	80-120	
Zinc	ug/L	400	360	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2431161 2431162 Original: J1707930001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Silver	ug/L	0	400	410	400	102	99	75-125	2	20	
Arsenic	ug/L	0	400	400	400	99	99	75-125	0	20	
Barium	ug/L	0	400	400	390	100	98	75-125	1	20	
Beryllium	ug/L	0	400	410	410	103	103	75-125	0	20	
Cadmium	ug/L	0.009	400	390	380	96	94	75-125	2	20	
Cobalt	ug/L	0	400	370	370	93	91	75-125	1	20	
Chromium	ug/L	0.43	400	400	400	101	99	75-125	2	20	
Copper	ug/L	0.82	400	380	380	96	95	75-125	1	20	
Iron	ug/L	5.2	26000	25000	25000	99	96	75-125	3	20	
Sodium	mg/L	0.029	50	47	46	92	90	75-125	2	20	

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QUALITY CONTROL DATA

Workorder: J1707930 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2431161 2431162 Original: J1707930001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Nickel	ug/L	0	400	350	350	88	87	75-125	1	20	
Lead	ug/L	0	400	370	370	93	92	75-125	2	20	
Vanadium	ug/L	0.18	400	410	410	104	102	75-125	2	20	
Zinc	ug/L	9.4	400	370	370	91	89	75-125	2	20	

QC Batch: DGMj/3362 Analysis Method: SW-846 6020

QC Batch Method: SW-846 3010A Prepared: 08/10/2017 03:30

Associated Lab Samples: J1707930001, J1707930002, J1707930003, J1707930004, J1707930005, J1707930006, J1707930007, J1707930008,

METHOD BLANK: 2431265

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Selenium	ug/L	0.58	0.58	U
Antimony	ug/L	0.046	0.046	U
Thallium	ug/L	0.057	0.057	U

LABORATORY CONTROL SAMPLE: 2431266

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Selenium	ug/L	100	110	107	80-120	
Antimony	ug/L	100	98	98	80-120	
Thallium	ug/L	100	86	86	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2431267 2431268 Original: J1707930001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Selenium	ug/L	0	100	120	120	119	117	75-125	2	20	
Antimony	ug/L	0.026	100	110	110	109	108	75-125	1	20	
Thallium	ug/L	0.0014	100	94	94	94	94	75-125	1	20	

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QUALITY CONTROL DATA

Workorder: J1707930 Trail Ridge Landfill

QC Batch: WCAj/4780 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Prepared:

Associated Lab Samples: J1707930001, J1707930002, J1707930003, J1707930004, J1707930005, J1707930006, J1707930007, J1707930008,

METHOD BLANK: 2432438

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Chloride	mg/L	0.50	0.50	U
Nitrate	mg/L	0.050	0.050	U

LABORATORY CONTROL SAMPLE & LCSD: 2432439 2432440

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY										
Chloride	mg/L	25	27	27	109	108	90-110	1	10	
Nitrate	mg/L	1	0.96	0.98	96	98	90-110	1	10	

MATRIX SPIKE SAMPLE: 2432442 Original: J1707930001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY							
Chloride	mg/L	0	20	22	109	90-110	
Nitrate	mg/L	0.01	2	2.2	109	90-110	

MATRIX SPIKE SAMPLE: 2432443 Original: J1707930011

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY							
Chloride	mg/L	5.5	20	27	109	90-110	
Nitrate	mg/L	0	2	2.1	103	90-110	

QC Batch: WCAj/4781 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: J1707930011, J1707930012, J1707930013, J1707930014, J1707930015, J1707930016, J1707930017

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QUALITY CONTROL DATA

Workorder: J1707930 Trail Ridge Landfill

METHOD BLANK: 2432551

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Dissolved Solids	mg/L	10	10	U

LABORATORY CONTROL SAMPLE: 2432552

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	300	310	103	75-125	

SAMPLE DUPLICATE: 2432553 Original: J1707930011

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	46	46	0	5	

QC Batch: MSVj/4565 Analysis Method: SW-846 8260B (SIM)

QC Batch Method: SW-846 5030B Prepared: 08/10/2017 11:28

Associated Lab Samples: J1707930001, J1707930002, J1707930003, J1707930004, J1707930005, J1707930006, J1707930007, J1707930008,

METHOD BLANK: 2434704

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Ethylene Dibromide (EDB)	ug/L	0.020	0.020	U
1,2-Dibromo-3-Chloropropane	ug/L	0.11	0.11	U
1,2-Dichloroethane-d4 (S)	%	88	77-125	
Toluene-d8 (S)	%	98	80-121	
Bromofluorobenzene (S)	%	112	80-129	

LABORATORY CONTROL SAMPLE & LCSD: 2434705 2434706

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										

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QUALITY CONTROL DATA

Workorder: J1707930 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE & LCSD: 2434705 2434706

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Ethylene Dibromide (EDB)	ug/L	0.8	0.72	0.66	90	83	70-130	9	30	
1,2-Dichloroethane-d4 (S)	%				87	88	77-125	1		
Toluene-d8 (S)	%				102	101	80-121	1		
Bromofluorobenzene (S)	%				110	114	80-129	4		

LABORATORY CONTROL SAMPLE & LCSD: 2434705 2434706

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
1,2-Dibromo-3-Chloropropane	ug/L	0.8	0.75	0.64	94	80	70-130	16	30	

MATRIX SPIKE SAMPLE: 2434707 Original: J1707930002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Ethylene Dibromide (EDB)	ug/L	0	0.8	0.58	73	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	0.8	0.32	40	70-130	
1,2-Dichloroethane-d4 (S)	%	86			88	77-125	
Toluene-d8 (S)	%	101			98	80-121	
Bromofluorobenzene (S)	%	110			116	80-129	

QC Batch: MSVj/4569 Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B Prepared: 08/10/2017 11:28

Associated Lab Samples: J1707930001, J1707930002, J1707930003, J1707930004, J1707930005, J1707930006, J1707930007, J1707930008,

METHOD BLANK: 2434719

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Chloromethane	ug/L	0.21	0.21	U
Vinyl Chloride	ug/L	0.20	0.20	U
Bromomethane	ug/L	0.24	0.24	U
Chloroethane	ug/L	0.33	0.33	U
Trichlorofluoromethane	ug/L	0.32	0.32	U
Acetone	ug/L	2.1	2.1	U

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Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1707930 Trail Ridge Landfill

METHOD BLANK: 2434719

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1-Dichloroethylene	ug/L	0.18	0.18	U
Iodomethane (Methyl Iodide)	ug/L	0.16	0.16	U
Acrylonitrile	ug/L	1.1	1.1	U
Methylene Chloride	ug/L	2.5	2.5	U
Carbon Disulfide	ug/L	0.21	0.21	U
trans-1,2-Dichloroethylene	ug/L	0.20	0.20	U
1,1-Dichloroethane	ug/L	0.14	0.14	U
Vinyl Acetate	ug/L	0.19	0.19	U
2-Butanone (MEK)	ug/L	0.43	0.43	U
cis-1,2-Dichloroethylene	ug/L	0.24	0.24	U
Bromochloromethane	ug/L	0.17	0.17	U
Chloroform	ug/L	0.18	0.18	U
1,2-Dichloroethane	ug/L	0.23	0.23	U
1,1,1-Trichloroethane	ug/L	0.22	0.22	U
Carbon Tetrachloride	ug/L	0.36	0.36	U
Benzene	ug/L	0.16	0.16	U
Dibromomethane	ug/L	0.26	0.26	U
1,2-Dichloropropane	ug/L	0.20	0.20	U
Trichloroethene	ug/L	0.29	0.29	U
Bromodichloromethane	ug/L	0.25	0.25	U
cis-1,3-Dichloropropene	ug/L	0.16	0.16	U
4-Methyl-2-pentanone (MIBK)	ug/L	0.47	0.47	U
trans-1,3-Dichloropropylene	ug/L	0.18	0.18	U
1,1,2-Trichloroethane	ug/L	0.30	0.30	U
Toluene	ug/L	0.23	0.23	U
2-Hexanone	ug/L	0.44	0.44	U
Dibromochloromethane	ug/L	0.33	0.33	U
Ethylene Dibromide (EDB)	ug/L	0.020	0.020	U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36	U
1,1,1,2-Tetrachloroethane	ug/L	0.26	0.26	U
Chlorobenzene	ug/L	0.21	0.21	U
Ethylbenzene	ug/L	0.24	0.24	U
Bromoform	ug/L	0.43	0.43	U
Styrene	ug/L	0.23	0.23	U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20	U
1,2,3-Trichloropropane	ug/L	0.30	0.30	U
1,4-Dichlorobenzene	ug/L	0.22	0.22	U
1,2-Dichlorobenzene	ug/L	0.18	0.18	U
1,2-Dibromo-3-Chloropropane	ug/L	0.11	0.11	U
trans-1,4-Dichloro-2-butene	ug/L	1.8	1.8	U
Xylene (Total)	ug/L	0.53	0.53	U
1,2-Dichloroethane-d4 (S)	%	86	70-128	
Toluene-d8 (S)	%	94	77-119	
Bromofluorobenzene (S)	%	119	86-123	

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1707930 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE & LCSD: 2434720 2434721

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Vinyl Chloride	ug/L	20	20	20	100	101	70-130	1	30	
1,1-Dichloroethylene	ug/L	20	19	20	96	99	70-130	3	30	
cis-1,2-Dichloroethylene	ug/L	20	20	19	100	97	70-130	3	30	
Chloroform	ug/L	20	19	19	97	96	70-130	1	30	
Benzene	ug/L	20	20	20	99	98	70-130	1	30	
Trichloroethene	ug/L	20	19	19	97	95	70-130	2	30	
Toluene	ug/L	20	20	20	102	100	70-130	3	30	
Tetrachloroethylene (PCE)	ug/L	20	20	19	98	94	70-130	4	30	
Chlorobenzene	ug/L	20	20	19	100	95	70-130	6	30	
Ethylbenzene	ug/L	20	20	19	101	96	70-130	5	30	
1,2-Dichlorobenzene	ug/L	20	20	18	102	92	70-130	10	30	
Xylene (Total)	ug/L	60	61	58	102	97	70-130	4	30	
1,2-Dichloroethane-d4 (S)	%				82	85	70-128	4		
Toluene-d8 (S)	%				105	104	77-119	1		
Bromofluorobenzene (S)	%				97	101	86-123	4		

MATRIX SPIKE SAMPLE: 2434722 Original: J1707931005

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Vinyl Chloride	ug/L	0	20	21	107	70-130	
1,1-Dichloroethylene	ug/L	0	20	21	107	70-130	
cis-1,2-Dichloroethylene	ug/L	0	20	22	108	70-130	
Chloroform	ug/L	0	20	20	102	70-130	
Benzene	ug/L	0.09	20	21	106	70-130	
Trichloroethene	ug/L	0	20	21	104	70-130	
Toluene	ug/L	0.1	20	22	109	70-130	
Tetrachloroethylene (PCE)	ug/L	0	20	20	98	70-130	
Chlorobenzene	ug/L	0	20	21	103	70-130	
Ethylbenzene	ug/L	0.16	20	21	106	70-130	
1,2-Dichlorobenzene	ug/L	0	20	20	101	70-130	
Xylene (Total)	ug/L	0.98	60	63	103	70-130	
1,2-Dichloroethane-d4 (S)	%	87			83	70-128	
Toluene-d8 (S)	%	100			106	77-119	
Bromofluorobenzene (S)	%	111			107	86-123	

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6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1707930 Trail Ridge Landfill

QC Batch: DGMj/3383 Analysis Method: SW-846 7470A

QC Batch Method: SW-846 7470A Prepared: 08/14/2017 10:35

Associated Lab Samples: J1707930001, J1707930002, J1707930003, J1707930004, J1707930005, J1707930006, J1707930007, J1707930008,

METHOD BLANK: 2435421

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Mercury	ug/L	0.011	0.011	U

LABORATORY CONTROL SAMPLE: 2435422

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Mercury	ug/L	2	2.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2435423 2435424 Original: J1707930001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Mercury	ug/L	0	2	2.0	2.0	100	101	80-120	1	20	

QC Batch: WCAg/5637 Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1 Prepared:

Associated Lab Samples: J1707930001, J1707930002, J1707930003, J1707930004, J1707930005, J1707930006, J1707930007, J1707930008,

METHOD BLANK: 2437546

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	8.00	8.00	U

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Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1707930 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 2437547

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.55	110	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2437548 2437549 Original: J1707930002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Ammonia (N)	mg/L	0.14	0.4	0.52	0.52	96	95	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2437550 2437551 Original: J1707930011

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Ammonia (N)	mg/L	0.04	0.4	0.42	0.42	96	96	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2437552 2437553 Original: J1707993011

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Ammonia (N)	mg/L	0.06	0.4	0.44	0.44	94	94	90-110	0	10	

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6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1707930 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1707930001	Equipment Blank			SM 2540 C	WCAj/4775
J1707930002	MWB-11S			SM 2540 C	WCAj/4775
J1707930003	MWB-3S			SM 2540 C	WCAj/4775
J1707930004	MWB-2S			SM 2540 C	WCAj/4775
J1707930005	MWB-12S			SM 2540 C	WCAj/4775
J1707930006	MWB-27S			SM 2540 C	WCAj/4775
J1707930007	MWB-29S			SM 2540 C	WCAj/4775
J1707930008	MWB-13S			SM 2540 C	WCAj/4775
J1707930009	MWB-22S			SM 2540 C	WCAj/4775
J1707930001	Equipment Blank	SW-846 3010A	DGMj/3360	SW-846 6010	ICPj/2176
J1707930002	MWB-11S	SW-846 3010A	DGMj/3360	SW-846 6010	ICPj/2176
J1707930003	MWB-3S	SW-846 3010A	DGMj/3360	SW-846 6010	ICPj/2176
J1707930004	MWB-2S	SW-846 3010A	DGMj/3360	SW-846 6010	ICPj/2176
J1707930005	MWB-12S	SW-846 3010A	DGMj/3360	SW-846 6010	ICPj/2176
J1707930006	MWB-27S	SW-846 3010A	DGMj/3360	SW-846 6010	ICPj/2176
J1707930007	MWB-29S	SW-846 3010A	DGMj/3360	SW-846 6010	ICPj/2176
J1707930008	MWB-13S	SW-846 3010A	DGMj/3360	SW-846 6010	ICPj/2176
J1707930009	MWB-22S	SW-846 3010A	DGMj/3360	SW-846 6010	ICPj/2176
J1707930011	MWB-13I	SW-846 3010A	DGMj/3360	SW-846 6010	ICPj/2176
J1707930012	MWB-12I	SW-846 3010A	DGMj/3360	SW-846 6010	ICPj/2176
J1707930013	MWB-2I	SW-846 3010A	DGMj/3360	SW-846 6010	ICPj/2176
J1707930014	MWB-29I	SW-846 3010A	DGMj/3360	SW-846 6010	ICPj/2176
J1707930015	MWB-27I	SW-846 3010A	DGMj/3360	SW-846 6010	ICPj/2176
J1707930016	MWB-3I	SW-846 3010A	DGMj/3360	SW-846 6010	ICPj/2176
J1707930017	MWB-11IR	SW-846 3010A	DGMj/3360	SW-846 6010	ICPj/2176
J1707930001	Equipment Blank	SW-846 3010A	DGMj/3362	SW-846 6020	ICMj/1652
J1707930002	MWB-11S	SW-846 3010A	DGMj/3362	SW-846 6020	ICMj/1652
J1707930003	MWB-3S	SW-846 3010A	DGMj/3362	SW-846 6020	ICMj/1652
J1707930004	MWB-2S	SW-846 3010A	DGMj/3362	SW-846 6020	ICMj/1652
J1707930005	MWB-12S	SW-846 3010A	DGMj/3362	SW-846 6020	ICMj/1652
J1707930006	MWB-27S	SW-846 3010A	DGMj/3362	SW-846 6020	ICMj/1652
J1707930007	MWB-29S	SW-846 3010A	DGMj/3362	SW-846 6020	ICMj/1652

Advanced Environmental Laboratories, Inc.

Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1707930 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1707930008	MWB-13S	SW-846 3010A	DGMj/3362	SW-846 6020	ICMj/1652
J1707930009	MWB-22S	SW-846 3010A	DGMj/3362	SW-846 6020	ICMj/1652
J1707930001	Equipment Blank			EPA 300.0	WCAj/4780
J1707930002	MWB-11S			EPA 300.0	WCAj/4780
J1707930003	MWB-3S			EPA 300.0	WCAj/4780
J1707930004	MWB-2S			EPA 300.0	WCAj/4780
J1707930005	MWB-12S			EPA 300.0	WCAj/4780
J1707930006	MWB-27S			EPA 300.0	WCAj/4780
J1707930007	MWB-29S			EPA 300.0	WCAj/4780
J1707930008	MWB-13S			EPA 300.0	WCAj/4780
J1707930009	MWB-22S			EPA 300.0	WCAj/4780
J1707930011	MWB-13I			EPA 300.0	WCAj/4780
J1707930012	MWB-12I			EPA 300.0	WCAj/4780
J1707930013	MWB-2I			EPA 300.0	WCAj/4780
J1707930014	MWB-29I			EPA 300.0	WCAj/4780
J1707930015	MWB-27I			EPA 300.0	WCAj/4780
J1707930016	MWB-3I			EPA 300.0	WCAj/4780
J1707930017	MWB-11IR			EPA 300.0	WCAj/4780
J1707930011	MWB-13I			SM 2540 C	WCAj/4781
J1707930012	MWB-12I			SM 2540 C	WCAj/4781
J1707930013	MWB-2I			SM 2540 C	WCAj/4781
J1707930014	MWB-29I			SM 2540 C	WCAj/4781
J1707930015	MWB-27I			SM 2540 C	WCAj/4781
J1707930016	MWB-3I			SM 2540 C	WCAj/4781
J1707930017	MWB-11IR			SM 2540 C	WCAj/4781
J1707930001	Equipment Blank	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707930002	MWB-11S	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707930003	MWB-3S	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707930004	MWB-2S	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707930005	MWB-12S	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707930006	MWB-27S	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566

Advanced Environmental Laboratories, Inc.
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1707930 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1707930007	MWB-29S	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707930008	MWB-13S	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707930009	MWB-22S	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707930010	Trip Blank	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707930001	Equipment Blank	SW-846 5030B	MSVj/4569	SW-846 8260B	MSVj/4570
J1707930002	MWB-11S	SW-846 5030B	MSVj/4569	SW-846 8260B	MSVj/4570
J1707930003	MWB-3S	SW-846 5030B	MSVj/4569	SW-846 8260B	MSVj/4570
J1707930004	MWB-2S	SW-846 5030B	MSVj/4569	SW-846 8260B	MSVj/4570
J1707930005	MWB-12S	SW-846 5030B	MSVj/4569	SW-846 8260B	MSVj/4570
J1707930006	MWB-27S	SW-846 5030B	MSVj/4569	SW-846 8260B	MSVj/4570
J1707930007	MWB-29S	SW-846 5030B	MSVj/4569	SW-846 8260B	MSVj/4570
J1707930008	MWB-13S	SW-846 5030B	MSVj/4569	SW-846 8260B	MSVj/4570
J1707930009	MWB-22S	SW-846 5030B	MSVj/4569	SW-846 8260B	MSVj/4570
J1707930010	Trip Blank	SW-846 5030B	MSVj/4569	SW-846 8260B	MSVj/4570
J1707930001	Equipment Blank	SW-846 7470A	DGMj/3383	SW-846 7470A	CVAj/1536
J1707930002	MWB-11S	SW-846 7470A	DGMj/3383	SW-846 7470A	CVAj/1536
J1707930003	MWB-3S	SW-846 7470A	DGMj/3383	SW-846 7470A	CVAj/1536
J1707930004	MWB-2S	SW-846 7470A	DGMj/3383	SW-846 7470A	CVAj/1536
J1707930005	MWB-12S	SW-846 7470A	DGMj/3383	SW-846 7470A	CVAj/1536
J1707930006	MWB-27S	SW-846 7470A	DGMj/3383	SW-846 7470A	CVAj/1536
J1707930007	MWB-29S	SW-846 7470A	DGMj/3383	SW-846 7470A	CVAj/1536
J1707930008	MWB-13S	SW-846 7470A	DGMj/3383	SW-846 7470A	CVAj/1536
J1707930009	MWB-22S	SW-846 7470A	DGMj/3383	SW-846 7470A	CVAj/1536
J1707930001	Equipment Blank			EPA 350.1	WCAg/5637
J1707930002	MWB-11S			EPA 350.1	WCAg/5637
J1707930003	MWB-3S			EPA 350.1	WCAg/5637
J1707930004	MWB-2S			EPA 350.1	WCAg/5637
J1707930005	MWB-12S			EPA 350.1	WCAg/5637
J1707930006	MWB-27S			EPA 350.1	WCAg/5637
J1707930007	MWB-29S			EPA 350.1	WCAg/5637
J1707930008	MWB-13S			EPA 350.1	WCAg/5637

Advanced Environmental Laboratories, Inc.
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1707930 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1707930009	MWB-22S			EPA 350.1	WCAg/5637
J1707930011	MWB-13I			EPA 350.1	WCAg/5637
J1707930012	MWB-12I			EPA 350.1	WCAg/5637
J1707930013	MWB-2I			EPA 350.1	WCAg/5637
J1707930014	MWB-29I			EPA 350.1	WCAg/5637
J1707930015	MWB-27I			EPA 350.1	WCAg/5637
J1707930016	MWB-3I			EPA 350.1	WCAg/5637
J1707930017	MWB-11IR			EPA 350.1	WCAg/5637

J1707930

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☒ 6601 Southpoint Pkwy. • Jacksonville, FL 32216 • 904.363.9350 • Fax 904.363.9354 • E82574
☐ 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.9616 • Fax 813.630.4327 • E84589
☐ 6815 SW Archer Road • Gainesville, FL 32608 • 352.377.2349 • Fax 352.395.6639 • E82001
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CLIENT NAME:	CITY OF JACKSONVILLE	PROJECT NAME:	Trail Ridge Landfill
ADDRESS:	214 North Hogan Street, 10th Floor	P.O. NUMBER/PROJECT NUMBER:	608372:4
	Jacksonville, FL 32202	PROJECT LOCATION:	
PHONE:	(904)-255-7513	REMARKS/SPECIAL INSTRUCTIONS:	Ground Water Shallow Wells
FAX:			Golder Contact: Dawn Prell
CONTACT:	Eric B. Fuller		
SAMPLED BY:	DAN ARMOUR / BLAINE GRIMM		33628,TRAIL RIDGE LANDFILL, INC. (ADaPT)
TURN AROUND TIME:	☐ STANDARD _____ ☐ RUSH _____		AEL Jax Profile: 30178, Line 4

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	ANALYSIS REQUIRED: App I + EDB 8260/8260SIM (BOTTLE SIZE & TYPE: 3X40mL VOA vials; PRESERVATION: HCl / DI)	App I + Na,Fe,Hg 6010/6020/7470 (500mL poly; HNO3)	nitrate/chloride 300.0 (125mL poly; None)	TDS SM2540C (500mL poly; None)	ammonia-N 350.1 (250mL poly; H2SO4)	LABORATORY I.D. NUMBER
	EQUIPMENT BLANK	G	8-8	1450	W	7		3	1	1	1	1	001
	MWB-11S	G	8-8	1408	W	7		3	1	1	1	1	002
	MWB-3S	G	8-8	1305	W	7		3	1	1	1	1	003
	MWB-2S	G	8-8	1228	W	7		3	1	1	1	1	004
	MWB-12S	G	8-8	0715	W	7		3	1	1	1	1	005
	MWB-27S	G	8-8	1020	W	7		3	1	1	1	1	006
	MWB-29S	G	8-8	1125	W	7		3	1	1	1	1	007
	MWB-13S	G	8-8	0846	W	7		3	1	1	1	1	008
	MWB-22S	G	8-8	0815	W	7		3	1	1	1	1	009
	TRIP	G	8-8	—	W	BK 3		3					010

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice ☐ Yes ☐ No ☐ Temp taken from sample ☐ Temp from temp blank ☐ Where required, pH checked

Temperature when received 4 (in degrees celcius)

Device used for measuring Temp by unique identifier (circle IR temp gun used) J : 9A G: LT-1 LT-2 T: 10A A: 3A

Form revised 2/8/08

	Relinquished by:	Date	Time	Received by:	Date	Time
1		8.8.17	1500		8/8/17	1500
2		8/8/17	1600		8-8-17	1600
3						
4						

FOR DRINKING WATER USE:
(When PWS Information not otherwise supplied) PWS ID:_____
Contact Person:_____ Phone :_____
Supplier of Water:_____
Site-Address:_____

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☐ 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.9616 • Fax 813.630.4327 • E84589
☐ 6815 SW Archer Road • Gainesville, FL 32608 • 352.377.2349 • Fax 352.395.6639 • E82001
☐ 528 S. North Lake Blvd., Ste. 1016 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597• E53076

J1707930

CLIENT NAME:	CITY OF JACKSONVILLE	PROJECT NAME:	Trail Ridge Landfill
ADDRESS:	214 North Hogan Street, 10th Floor	P.O. NUMBER/PROJECT NUMBER:	608372:4
	Jacksonville, FL 32202	PROJECT LOCATION:	
PHONE:	(904)-255-7513	REMARKS/SPECIAL INSTRUCTIONS:	Ground Water Intermediate Wells
FAX:			Golder Contact: Dawn Prell
CONTACT:	Eric B. Fuller		
SAMPLED BY:	DAN ARMOUR / BLAINE GRISSOM		33628,TRAIL RIDGE LANDFILL, INC. (ADaPT)
TURN AROUND TIME:	☐ STANDARD X ☐ RUSH		AEL Jax Profile: 30178, Line 4

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	BOTTLE SIZE & TYPE	ANALYSIS REQUIRED								LABORATORY I.D. NUMBER
									250mL poly	125mL poly	500ml poly	250ml poly					
									Fe,Na by 6010	nitrate/chloride 300.0	TDS SM2540C	ammonia-N 350.1					
									HNO3	None	None	H2SO4					
	MWB-13I	G	8-8	0910	W	4			1	1	1	1					011
	MWB-12I	G	8-8	0745	W	4			1	1	1	1					012
	MWB-2I	G	8-8	1158	W	4			1	1	1	1					013
	MWB-29I	G	8-8	1055	W	4			1	1	1	1					014
	MWB-27I	G	8-8	0950	W	4			1	1	1	1					015
	~~MWB-2I~~	~~G~~	~~8-8~~	~~1158~~	~~W~~	~~4~~			~~1~~	~~1~~	~~1~~	~~1~~					
	MWB-3I	G	8-8	1335	W	4			1	1	1	1					016
	MWB-11IR	G	8-8	1438	W	4			1	1	1	1					017

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice ☑ Yes ☐ No ☐ Temp taken from sample ☐ Temp from temp blank ☐ Where required, pH checked

Temperature when received 4 (in degrees celcius)

Form revised 2/8/08

Device used for measuring Temp by unique identifier (circle IR temp gun used) J; 9A G: LT-1 LT-2 T: 10A A: 3A

	Relinquished by:	Date	Time	Received by:	Date	Time
1		8-8-17	1500		8/8/17	1500
2		8/8/17	1600		8-8-17	1600
3						
4						

FOR DRINKING WATER USE:

(When PWS Information not otherwise supplied) PWS ID:

Contact Person: Phone :

Supplier of Water:

Site-Address:

Advanced Environmental Labs Inc

Client: City of Jax
Project name: Trail Ridge Landfill
Date/Time Rcvd: 8-8-17 1600
Log-In request number: J1707930
Received by: BJ
Completed by: BJ

Cooler/Shipping Information:

Courier: ☑ AEL ☐ Client ☐ UPS ☐ Blue Streak ☐ FedEx ☐ AES ☐ ASAP ☐ Other (describe):_____

Type: ☐ Cooler ☐ Box ☐ Other (describe) _____

Cooler temperature: Identify the cooler and document the temperature blank or ice water measurement

Cooler ID					
Temp (°C)	4				
Temp taken from	☐ Sample Bottle ☐ Cooler	☐ Sample Bottle ☐ Cooler	☐ Sample Bottle ☐ Cooler	☐ Sample Bottle ☐ Cooler	☐ Sample Bottle ☐ Cooler
Temp measured with	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):

Other Information:

Any discrepancies should be explained in the "Comments" section below.

CHECKLIST	YES	NO	NA
1. Were custody seals on shipping container(s) intact?			✓
2. Were custody papers properly included with samples?	✓		
3. Were custody papers properly filled out (ink, signed, match labels)?	✓		
4. Did all bottles arrive in good condition (unbroken)?	✓		
5. Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?	✓		
6. Did the sample labels agree with the chain of custody?	✓		
7. Were correct bottles used for the tests indicated?	✓		
8. Were proper sample preservation techniques indicated on the label?	✓		
9. Were samples received within holding times?	✓		8-8-17 4
10. Were all VOA vials free of the presence of air bubbles?	(✓)		✓
11. Have all Soil VOA Vials and Encores been placed in a freezer within 48 hours of collection?			
12. Were samples in direct contact with wet ice? If "No," check one: ☐ NO ICE ☐ BLUE ICE	✓		
13. Was the cooler temperature less than 6°C?	✓		
14. Where pH preservation is required, are sample pHs checked and any anomalies recorded by Sample control? Are all <2 or >10? Note: VOA samples are checked by laboratory analysts.	(✓)		8-8-17 4
15. Was sufficient sample volume provided to perform all tests?	✓		
16. If for Bacteriological testing, were containers supplied by AEL? (See QA officer if answer is no)			✓
17. Were all sample containers provided by AEL? (Other than Bacteriological)	✓		
18. Were samples accepted into the laboratory?	✓		
19. When necessary to split samples into other bottles, is it noted in the comments?	✓		

Comments: (Note all sample(s) and container (s)" with a "No" checklist response in this comment section)

DCN: AD-D048
Eff date 2/3/10, Last rev 9/6/16

Advanced Environmental Laboratories, Inc.

Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

August 18, 2017

Eric B. Fuller
City of Jacksonville
214 North Hogan Street
10th Floor
Jacksonville, FL 32202

RE: Workorder: J1707993 Trail Ridge Landfill

Dear Eric Fuller:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, August 09, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Shane Poston - Project Manager
SPoston@AELLab.com

Enclosures

Advanced Environmental Laboratories, Inc.
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

SAMPLE SUMMARY

Workorder: J1707993 Trail Ridge Landfill

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1707993001	MWB-20S	Water	8/8/2017 13:25	8/9/2017 15:35
J1707993002	MWB-21S	Water	8/8/2017 16:50	8/9/2017 15:35
J1707993003	MWB-33S	Water	8/8/2017 17:25	8/9/2017 15:35
J1707993004	MWB-34S	Water	8/9/2017 07:06	8/9/2017 15:35
J1707993005	MWB-32S	Water	8/9/2017 08:35	8/9/2017 15:35
J1707993006	MWB-35S	Water	8/9/2017 10:20	8/9/2017 15:35
J1707993007	MWB-39S	Water	8/9/2017 11:35	8/9/2017 15:35
J1707993008	MWB-40S	Water	8/9/2017 12:10	8/9/2017 15:35
J1707993009	SGMW-2S	Water	8/9/2017 13:15	8/9/2017 15:35
J1707993010	Trip Blank 2	Water	8/9/2017 00:00	8/9/2017 15:35
J1707993011	MWB-34I	Water	8/9/2017 06:35	8/9/2017 15:35
J1707993012	MWB-32I	Water	8/9/2017 07:40	8/9/2017 15:35
J1707993013	MWB-35I	Water	8/9/2017 09:50	8/9/2017 15:35
J1707993014	MWB-39I	Water	8/9/2017 11:05	8/9/2017 15:35
J1707993015	Equipment Blank 2	Water	8/9/2017 14:40	8/9/2017 15:35

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993001** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **MWB-20S** Date Collected: 08/08/17 13:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/11/2017 15:06	J
Barium	**18**		**ug/L**	**1**	2.0	0.28	8/11/2017 15:06	J
Beryllium	**0.13**	**U**	**ug/L**	**1**	0.30	0.13	8/11/2017 15:06	J
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/11/2017 15:06	J
Chromium	**4.8**		**ug/L**	**1**	1.0	0.50	8/11/2017 15:06	J
Cobalt	**0.60**	**U**	**ug/L**	**1**	4.0	0.60	8/11/2017 15:06	J
Copper	**2.7**	**I**	**ug/L**	**1**	4.0	2.5	8/11/2017 15:06	J
Iron	**200**	**I**	**ug/L**	**1**	200	30	8/11/2017 15:06	J
Lead	**1.3**	**U**	**ug/L**	**1**	7.0	1.3	8/11/2017 15:06	J
Nickel	**1.1**	**U**	**ug/L**	**1**	6.5	1.1	8/11/2017 15:06	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/11/2017 15:06	J
Sodium	**85**		**mg/L**	**1**	0.20	0.16	8/11/2017 15:06	J
Vanadium	**16**		**ug/L**	**1**	1.5	0.18	8/11/2017 15:06	J
Zinc	**11**		**ug/L**	**1**	10	2.0	8/11/2017 15:06	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.17**	**I**	**ug/L**	**1**	0.70	0.046	8/18/2017 13:37	J
Selenium	**1.4**	**I**	**ug/L**	**1**	5.0	0.58	8/18/2017 13:37	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/18/2017 13:37	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.013**	**I**	**ug/L**	**1**	0.10	0.011	8/17/2017 12:25	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 21:16	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 21:16	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 21:16	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 21:16	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/10/2017 21:16	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 21:16	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 21:16	J

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6681 Southpoint Pkwy Jacksonville, FL 32216
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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993001** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **MWB-20S** Date Collected: 08/08/17 13:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 21:16	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 21:16	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 21:16	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 21:16	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 21:16	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/10/2017 21:16	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/10/2017 21:16	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/10/2017 21:16	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/10/2017 21:16	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/10/2017 21:16	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 21:16	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/10/2017 21:16	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/10/2017 21:16	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/10/2017 21:16	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 21:16	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 21:16	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 21:16	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 21:16	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 21:16	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 21:16	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 21:16	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 21:16	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 21:16	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 21:16	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 21:16	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 21:16	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/10/2017 21:16	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 21:16	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 21:16	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 21:16	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/10/2017 21:16	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/10/2017 21:16	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/10/2017 21:16	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 21:16	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/10/2017 21:16	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 21:16	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 21:16	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 21:16	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 21:16	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/10/2017 21:16	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993001** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-20S** Date Collected: 08/08/17 13:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**84**		**%**	**1**	70-128		8/10/2017 21:16	
Toluene-d8 (S)	**98**		**%**	**1**	77-119		8/10/2017 21:16	
Bromofluorobenzene (S)	**124**	**J4**	**%**	**1**	86-123		8/10/2017 21:16	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 21:16	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 21:16	J
1,2-Dichloroethane-d4 (S)	**87**		**%**	**1**	77-125		8/10/2017 21:16	
Toluene-d8 (S)	**102**		**%**	**1**	80-121		8/10/2017 21:16	
Bromofluorobenzene (S)	**117**		**%**	**1**	80-129		8/10/2017 21:16	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**170**		**mg/L**	**1**	5.0	0.50	8/10/2017 09:03	J
Nitrate	**0.44**	**I**	**mg/L**	**1**	0.50	0.050	8/10/2017 09:03	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**3.4**		**mg/L**	**5**	0.05	0.04	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**410**		**mg/L**	**1**	10	10	8/11/2017 15:21	J

Lab ID: **J1707993002** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-21S** Date Collected: 08/08/17 16:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/11/2017 13:59	J
Barium	**9.7**		**ug/L**	**1**	2.0	0.28	8/11/2017 13:59	J
Beryllium	**0.13**	**U**	**ug/L**	**1**	0.30	0.13	8/11/2017 13:59	J

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Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993002** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **MWB-21S** Date Collected: 08/08/17 16:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/11/2017 13:59	J
Chromium	**4.8**		**ug/L**	**1**	1.0	0.50	8/11/2017 13:59	J
Cobalt	**0.93**	**I**	**ug/L**	**1**	4.0	0.60	8/11/2017 13:59	J
Copper	**6.5**		**ug/L**	**1**	4.0	2.5	8/11/2017 13:59	J
Iron	**110**	**I**	**ug/L**	**1**	200	30	8/11/2017 13:59	J
Lead	**1.3**	**U**	**ug/L**	**1**	7.0	1.3	8/11/2017 13:59	J
Nickel	**3.8**	**I**	**ug/L**	**1**	6.5	1.1	8/11/2017 13:59	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/11/2017 13:59	J
Sodium	**74**		**mg/L**	**1**	0.20	0.16	8/11/2017 13:59	J
Vanadium	**7.7**		**ug/L**	**1**	1.5	0.18	8/11/2017 13:59	J
Zinc	**13**		**ug/L**	**1**	10	2.0	8/11/2017 13:59	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.46**	**I**	**ug/L**	**1**	0.70	0.046	8/18/2017 13:49	J
Selenium	**1.1**	**I**	**ug/L**	**1**	5.0	0.58	8/18/2017 13:49	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/18/2017 13:49	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/17/2017 12:40	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 21:47	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 21:47	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 21:47	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 21:47	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/10/2017 21:47	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 21:47	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 21:47	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 21:47	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 21:47	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 21:47	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 21:47	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 21:47	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/10/2017 21:47	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/10/2017 21:47	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993002** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **MWB-21S** Date Collected: 08/08/17 16:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/10/2017 21:47	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/10/2017 21:47	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/10/2017 21:47	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 21:47	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/10/2017 21:47	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/10/2017 21:47	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/10/2017 21:47	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 21:47	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 21:47	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 21:47	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 21:47	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 21:47	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 21:47	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 21:47	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 21:47	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 21:47	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 21:47	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 21:47	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 21:47	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/10/2017 21:47	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 21:47	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 21:47	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 21:47	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/10/2017 21:47	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/10/2017 21:47	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/10/2017 21:47	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 21:47	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/10/2017 21:47	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 21:47	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 21:47	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 21:47	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 21:47	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/10/2017 21:47	J
1,2-Dichloroethane-d4 (S)	**88**		**%**	**1**	70-128		8/10/2017 21:47	
Toluene-d8 (S)	**92**		**%**	**1**	77-119		8/10/2017 21:47	
Bromofluorobenzene (S)	**117**		**%**	**1**	86-123		8/10/2017 21:47	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 21:47	J

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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993002** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-21S** Date Collected: 08/08/17 16:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 21:47	J
1,2-Dichloroethane-d4 (S)	**90**		**%**	**1**	77-125		8/10/2017 21:47	
Toluene-d8 (S)	**97**		**%**	**1**	80-121		8/10/2017 21:47	
Bromofluorobenzene (S)	**110**		**%**	**1**	80-129		8/10/2017 21:47	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**170**		**mg/L**	**1**	5.0	0.50	8/10/2017 09:27	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/10/2017 09:27	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**1.6**		**mg/L**	**5**	0.05	0.04	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**520**		**mg/L**	**1**	10	10	8/11/2017 15:21	J

Lab ID: **J1707993003** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-33S** Date Collected: 08/08/17 17:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/11/2017 15:14	J
Barium	**16**		**ug/L**	**1**	2.0	0.28	8/11/2017 15:14	J
Beryllium	**0.13**	**U**	**ug/L**	**1**	0.30	0.13	8/11/2017 15:14	J
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/11/2017 15:14	J
Chromium	**1.8**		**ug/L**	**1**	1.0	0.50	8/11/2017 15:14	J
Cobalt	**0.60**	**U**	**ug/L**	**1**	4.0	0.60	8/11/2017 15:14	J
Copper	**3.7**	**I**	**ug/L**	**1**	4.0	2.5	8/11/2017 15:14	J
Iron	**400**		**ug/L**	**1**	200	30	8/11/2017 15:14	J
Lead	**1.3**	**U**	**ug/L**	**1**	7.0	1.3	8/11/2017 15:14	J
Nickel	**1.1**	**U**	**ug/L**	**1**	6.5	1.1	8/11/2017 15:14	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/11/2017 15:14	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993003** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-33S** Date Collected: 08/08/17 17:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Sodium	**6.5**		**mg/L**	**1**	0.20	0.16	8/11/2017 15:14	J
Vanadium	**13**		**ug/L**	**1**	1.5	0.18	8/11/2017 15:14	J
Zinc	**9.5**	**I**	**ug/L**	**1**	10	2.0	8/11/2017 15:14	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.13**	**I**	**ug/L**	**1**	0.70	0.046	8/18/2017 13:53	J
Selenium	**1.2**	**I**	**ug/L**	**1**	5.0	0.58	8/18/2017 13:53	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/18/2017 13:53	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.020**	**I**	**ug/L**	**1**	0.10	0.011	8/17/2017 12:50	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**9.6**		**mg/L**	**1**	5.0	0.50	8/10/2017 09:51	J
Nitrate	**0.087**	**I**	**mg/L**	**1**	0.50	0.050	8/10/2017 09:51	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.57**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**95**		**mg/L**	**1**	10	10	8/11/2017 15:21	J

Lab ID: **J1707993004** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-34S** Date Collected: 08/09/17 07:06

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/11/2017 15:21	J

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Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993004** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **MWB-34S** Date Collected: 08/09/17 07:06

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Barium	**29**		**ug/L**	**1**	2.0	0.28	8/11/2017 15:21	J
Beryllium	**0.13**	**U**	**ug/L**	**1**	0.30	0.13	8/11/2017 15:21	J
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/11/2017 15:21	J
Chromium	**2.9**		**ug/L**	**1**	1.0	0.50	8/11/2017 15:21	J
Cobalt	**0.60**	**U**	**ug/L**	**1**	4.0	0.60	8/11/2017 15:21	J
Copper	**14**		**ug/L**	**1**	4.0	2.5	8/11/2017 15:21	J
Iron	**150**	**I**	**ug/L**	**1**	200	30	8/11/2017 15:21	J
Lead	**1.3**	**U**	**ug/L**	**1**	7.0	1.3	8/11/2017 15:21	J
Nickel	**1.1**	**U**	**ug/L**	**1**	6.5	1.1	8/11/2017 15:21	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/11/2017 15:21	J
Sodium	**74**		**mg/L**	**1**	0.20	0.16	8/11/2017 15:21	J
Vanadium	**84**		**ug/L**	**1**	1.5	0.18	8/11/2017 15:21	J
Zinc	**66**		**ug/L**	**1**	10	2.0	8/11/2017 15:21	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**1.6**		**ug/L**	**1**	0.70	0.046	8/18/2017 13:57	J
Selenium	**2.6**	**I**	**ug/L**	**1**	5.0	0.58	8/18/2017 13:57	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/18/2017 13:57	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/17/2017 12:53	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 22:18	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 22:18	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 22:18	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 22:18	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/10/2017 22:18	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 22:18	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 22:18	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 22:18	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 22:18	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 22:18	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 22:18	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 22:18	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993004** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **MWB-34S** Date Collected: 08/09/17 07:06

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/10/2017 22:18	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/10/2017 22:18	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/10/2017 22:18	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/10/2017 22:18	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/10/2017 22:18	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 22:18	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/10/2017 22:18	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/10/2017 22:18	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/10/2017 22:18	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 22:18	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 22:18	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 22:18	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 22:18	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 22:18	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 22:18	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 22:18	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 22:18	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 22:18	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 22:18	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 22:18	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 22:18	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/10/2017 22:18	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 22:18	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 22:18	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 22:18	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/10/2017 22:18	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/10/2017 22:18	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/10/2017 22:18	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 22:18	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/10/2017 22:18	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 22:18	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 22:18	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 22:18	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 22:18	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/10/2017 22:18	J
1,2-Dichloroethane-d4 (S)	**85**		**%**	**1**	70-128		8/10/2017 22:18	
Toluene-d8 (S)	**96**		**%**	**1**	77-119		8/10/2017 22:18	
Bromofluorobenzene (S)	**123**		**%**	**1**	86-123		8/10/2017 22:18	

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ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993004** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-34S** Date Collected: 08/09/17 07:06

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 22:18	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 22:18	J
1,2-Dichloroethane-d4 (S)	**87**		**%**	**1**	77-125		8/10/2017 22:18	
Toluene-d8 (S)	**100**		**%**	**1**	80-121		8/10/2017 22:18	
Bromofluorobenzene (S)	**116**		**%**	**1**	80-129		8/10/2017 22:18	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**83**		**mg/L**	**2**	10	1.0	8/10/2017 10:15	J
Nitrate	**20**		**mg/L**	**2**	1.0	0.10	8/10/2017 10:15	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.28**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**840**		**mg/L**	**1**	10	10	8/11/2017 15:21	J

Lab ID: **J1707993005** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-32S** Date Collected: 08/09/17 08:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/11/2017 15:46	J
Barium	**18**		**ug/L**	**1**	2.0	0.28	8/11/2017 15:46	J
Beryllium	**0.13**	**U**	**ug/L**	**1**	0.30	0.13	8/11/2017 15:46	J
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/11/2017 15:46	J
Chromium	**3.0**		**ug/L**	**1**	1.0	0.50	8/11/2017 15:46	J
Cobalt	**1.3**	**I**	**ug/L**	**1**	4.0	0.60	8/11/2017 15:46	J
Copper	**2.7**	**I**	**ug/L**	**1**	4.0	2.5	8/11/2017 15:46	J

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ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993005** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **MWB-32S** Date Collected: 08/09/17 08:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Iron	**540**		**ug/L**	**1**	200	30	8/11/2017 15:46	J
Lead	**1.3**	**U**	**ug/L**	**1**	7.0	1.3	8/11/2017 15:46	J
Nickel	**1.1**	**U**	**ug/L**	**1**	6.5	1.1	8/11/2017 15:46	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/11/2017 15:46	J
Sodium	**5.7**		**mg/L**	**1**	0.20	0.16	8/11/2017 15:46	J
Vanadium	**3.8**		**ug/L**	**1**	1.5	0.18	8/11/2017 15:46	J
Zinc	**12**		**ug/L**	**1**	10	2.0	8/11/2017 15:46	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.19**	**I**	**ug/L**	**1**	0.70	0.046	8/18/2017 14:01	J
Selenium	**0.92**	**I**	**ug/L**	**1**	5.0	0.58	8/18/2017 14:01	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/18/2017 14:01	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.014**	**I**	**ug/L**	**1**	0.10	0.011	8/17/2017 12:56	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 22:49	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 22:49	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 22:49	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 22:49	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/10/2017 22:49	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 22:49	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 22:49	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 22:49	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 22:49	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 22:49	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 22:49	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 22:49	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/10/2017 22:49	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/10/2017 22:49	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/10/2017 22:49	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/10/2017 22:49	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/10/2017 22:49	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 22:49	J

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ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993005** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **MWB-32S** Date Collected: 08/09/17 08:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/10/2017 22:49	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/10/2017 22:49	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/10/2017 22:49	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 22:49	J
Carbon Disulfide	**0.21**	**I**	**ug/L**	**1**	1.0	0.21	8/10/2017 22:49	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 22:49	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 22:49	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 22:49	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 22:49	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 22:49	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 22:49	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 22:49	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 22:49	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 22:49	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 22:49	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/10/2017 22:49	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 22:49	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 22:49	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 22:49	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/10/2017 22:49	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/10/2017 22:49	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/10/2017 22:49	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 22:49	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/10/2017 22:49	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 22:49	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 22:49	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 22:49	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 22:49	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/10/2017 22:49	J
1,2-Dichloroethane-d4 (S)	**85**		**%**	**1**	70-128		8/10/2017 22:49	
Toluene-d8 (S)	**96**		**%**	**1**	77-119		8/10/2017 22:49	
Bromofluorobenzene (S)	**118**		**%**	**1**	86-123		8/10/2017 22:49	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 22:49	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 22:49	J
1,2-Dichloroethane-d4 (S)	**89**		**%**	**1**	77-125		8/10/2017 22:49	
Toluene-d8 (S)	**101**		**%**	**1**	80-121		8/10/2017 22:49	
Bromofluorobenzene (S)	**111**		**%**	**1**	80-129		8/10/2017 22:49	

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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993005** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-32S** Date Collected: 08/09/17 08:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**10**		**mg/L**	**1**	5.0	0.50	8/10/2017 10:39	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/10/2017 10:39	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.53**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**84**		**mg/L**	**1**	10	10	8/11/2017 15:21	J

Lab ID: **J1707993006** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-35S** Date Collected: 08/09/17 10:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/11/2017 15:50	J
Barium	**4.9**		**ug/L**	**1**	2.0	0.28	8/11/2017 15:50	J
Beryllium	**0.13**	**U**	**ug/L**	**1**	0.30	0.13	8/11/2017 15:50	J
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/11/2017 15:50	J
Chromium	**1.4**		**ug/L**	**1**	1.0	0.50	8/11/2017 15:50	J
Cobalt	**0.60**	**U**	**ug/L**	**1**	4.0	0.60	8/11/2017 15:50	J
Copper	**2.5**	**U**	**ug/L**	**1**	4.0	2.5	8/11/2017 15:50	J
Iron	**160**	**I**	**ug/L**	**1**	200	30	8/11/2017 15:50	J
Lead	**1.3**	**U**	**ug/L**	**1**	7.0	1.3	8/11/2017 15:50	J
Nickel	**1.1**	**U**	**ug/L**	**1**	6.5	1.1	8/11/2017 15:50	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/11/2017 15:50	J
Sodium	**2.2**		**mg/L**	**1**	0.20	0.16	8/11/2017 15:50	J
Vanadium	**1.9**		**ug/L**	**1**	1.5	0.18	8/11/2017 15:50	J
Zinc	**12**		**ug/L**	**1**	10	2.0	8/11/2017 15:50	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993006** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **MWB-35S** Date Collected: 08/09/17 10:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.046**	**U**	**ug/L**	**1**	0.70	0.046	8/18/2017 14:13	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/18/2017 14:13	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/18/2017 14:13	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/17/2017 12:59	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 23:20	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 23:20	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 23:20	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 23:20	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/10/2017 23:20	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 23:20	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 23:20	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 23:20	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 23:20	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 23:20	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 23:20	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 23:20	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/10/2017 23:20	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/10/2017 23:20	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/10/2017 23:20	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/10/2017 23:20	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/10/2017 23:20	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 23:20	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/10/2017 23:20	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/10/2017 23:20	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/10/2017 23:20	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 23:20	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 23:20	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 23:20	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 23:20	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 23:20	J

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ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993006** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **MWB-35S** Date Collected: 08/09/17 10:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 23:20	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 23:20	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 23:20	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 23:20	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 23:20	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 23:20	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 23:20	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/10/2017 23:20	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 23:20	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 23:20	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 23:20	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/10/2017 23:20	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/10/2017 23:20	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/10/2017 23:20	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 23:20	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/10/2017 23:20	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 23:20	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 23:20	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 23:20	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 23:20	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/10/2017 23:20	J
1,2-Dichloroethane-d4 (S)	**85**		**%**	**1**	70-128		8/10/2017 23:20	
Toluene-d8 (S)	**95**		**%**	**1**	77-119		8/10/2017 23:20	
Bromofluorobenzene (S)	**123**		**%**	**1**	86-123		8/10/2017 23:20	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 23:20	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 23:20	J
1,2-Dichloroethane-d4 (S)	**88**		**%**	**1**	77-125		8/10/2017 23:20	
Toluene-d8 (S)	**100**		**%**	**1**	80-121		8/10/2017 23:20	
Bromofluorobenzene (S)	**116**		**%**	**1**	80-129		8/10/2017 23:20	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4.0**	**I**	**mg/L**	**1**	5.0	0.50	8/10/2017 08:15	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/10/2017 08:15	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							

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ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993006** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-35S** Date Collected: 08/09/17 10:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Ammonia (N)	**0.08**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**35**		**mg/L**	**1**	10	10	8/11/2017 15:21	J

Lab ID: **J1707993007** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-39S** Date Collected: 08/09/17 11:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/11/2017 16:05	J
Barium	**6.0**		**ug/L**	**1**	2.0	0.28	8/11/2017 16:05	J
Beryllium	**0.13**	**U**	**ug/L**	**1**	0.30	0.13	8/11/2017 16:05	J
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/11/2017 16:05	J
Chromium	**1.3**		**ug/L**	**1**	1.0	0.50	8/11/2017 16:05	J
Cobalt	**0.60**	**U**	**ug/L**	**1**	4.0	0.60	8/11/2017 16:05	J
Copper	**2.5**	**U**	**ug/L**	**1**	4.0	2.5	8/11/2017 16:05	J
Iron	**230**		**ug/L**	**1**	200	30	8/11/2017 16:05	J
Lead	**1.3**	**U**	**ug/L**	**1**	7.0	1.3	8/11/2017 16:05	J
Nickel	**1.1**	**U**	**ug/L**	**1**	6.5	1.1	8/11/2017 16:05	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/11/2017 16:05	J
Sodium	**11**		**mg/L**	**1**	0.20	0.16	8/11/2017 16:05	J
Vanadium	**1.8**		**ug/L**	**1**	1.5	0.18	8/11/2017 16:05	J
Zinc	**6.0**	**I**	**ug/L**	**1**	10	2.0	8/11/2017 16:05	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.046**	**U**	**ug/L**	**1**	0.70	0.046	8/18/2017 14:17	J
Selenium	**0.70**	**I**	**ug/L**	**1**	5.0	0.58	8/18/2017 14:17	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/18/2017 14:17	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993007** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **MWB-39S** Date Collected: 08/09/17 11:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/17/2017 13:02	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 23:50	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 23:50	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 23:50	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 23:50	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/10/2017 23:50	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 23:50	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/10/2017 23:50	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 23:50	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 23:50	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 23:50	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 23:50	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/10/2017 23:50	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/10/2017 23:50	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/10/2017 23:50	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/10/2017 23:50	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/10/2017 23:50	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/10/2017 23:50	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 23:50	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/10/2017 23:50	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/10/2017 23:50	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/10/2017 23:50	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 23:50	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 23:50	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 23:50	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 23:50	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 23:50	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 23:50	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/10/2017 23:50	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/10/2017 23:50	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/10/2017 23:50	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 23:50	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 23:50	J

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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993007** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **MWB-39S** Date Collected: 08/09/17 11:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 23:50	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/10/2017 23:50	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 23:50	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/10/2017 23:50	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/10/2017 23:50	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/10/2017 23:50	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/10/2017 23:50	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/10/2017 23:50	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 23:50	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/10/2017 23:50	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/10/2017 23:50	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/10/2017 23:50	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/10/2017 23:50	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/10/2017 23:50	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/10/2017 23:50	J
1,2-Dichloroethane-d4 (S)	**87**		**%**	**1**	70-128		8/10/2017 23:50	
Toluene-d8 (S)	**97**		**%**	**1**	77-119		8/10/2017 23:50	
Bromofluorobenzene (S)	**122**		**%**	**1**	86-123		8/10/2017 23:50	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/10/2017 23:50	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/10/2017 23:50	J
1,2-Dichloroethane-d4 (S)	**90**		**%**	**1**	77-125		8/10/2017 23:50	
Toluene-d8 (S)	**101**		**%**	**1**	80-121		8/10/2017 23:50	
Bromofluorobenzene (S)	**115**		**%**	**1**	80-129		8/10/2017 23:50	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**25**		**mg/L**	**1**	5.0	0.50	8/10/2017 11:03	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/10/2017 11:03	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.58**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**170**		**mg/L**	**1**	10	10	8/11/2017 15:21	J

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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993008** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **MWB-40S** Date Collected: 08/09/17 12:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/11/2017 16:11	J
Barium	**760**		**ug/L**	**1**	2.0	0.28	8/11/2017 16:11	J
Beryllium	**1.0**		**ug/L**	**1**	0.30	0.13	8/11/2017 16:11	J
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/11/2017 16:11	J
Chromium	**4.0**		**ug/L**	**1**	1.0	0.50	8/11/2017 16:11	J
Cobalt	**1.2**	**I**	**ug/L**	**1**	4.0	0.60	8/11/2017 16:11	J
Copper	**2.5**	**U**	**ug/L**	**1**	4.0	2.5	8/11/2017 16:11	J
Iron	**7900**		**ug/L**	**1**	200	30	8/11/2017 16:11	J
Lead	**1.3**	**U**	**ug/L**	**1**	7.0	1.3	8/11/2017 16:11	J
Nickel	**2.4**	**I**	**ug/L**	**1**	6.5	1.1	8/11/2017 16:11	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/11/2017 16:11	J
Sodium	**74**		**mg/L**	**1**	0.20	0.16	8/11/2017 16:11	J
Vanadium	**20**		**ug/L**	**1**	1.5	0.18	8/11/2017 16:11	J
Zinc	**6.0**	**I**	**ug/L**	**1**	10	2.0	8/11/2017 16:11	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.10**	**I**	**ug/L**	**1**	0.70	0.046	8/18/2017 14:21	J
Selenium	**1.9**	**I**	**ug/L**	**1**	5.0	0.58	8/18/2017 14:21	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/18/2017 14:21	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/17/2017 13:05	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/11/2017 03:56	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2017 03:56	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2017 03:56	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/11/2017 03:56	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/11/2017 03:56	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2017 03:56	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/11/2017 03:56	J

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Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993008** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **MWB-40S** Date Collected: 08/09/17 12:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/11/2017 03:56	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2017 03:56	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2017 03:56	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2017 03:56	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2017 03:56	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/11/2017 03:56	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/11/2017 03:56	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/11/2017 03:56	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/11/2017 03:56	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/11/2017 03:56	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2017 03:56	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/11/2017 03:56	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/11/2017 03:56	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/11/2017 03:56	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2017 03:56	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2017 03:56	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/11/2017 03:56	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2017 03:56	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2017 03:56	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2017 03:56	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2017 03:56	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2017 03:56	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/11/2017 03:56	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2017 03:56	J
Ethylene Dibromide (EDB)	**0.020**	**I**	**ug/L**	**1**	0.10	0.020	8/11/2017 03:56	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2017 03:56	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/11/2017 03:56	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2017 03:56	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/11/2017 03:56	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2017 03:56	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2017 03:56	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/11/2017 03:56	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/11/2017 03:56	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2017 03:56	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/11/2017 03:56	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2017 03:56	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2017 03:56	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2017 03:56	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2017 03:56	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/11/2017 03:56	J

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Advanced Environmental Laboratories, Inc.
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993008** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-40S** Date Collected: 08/09/17 12:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**87**		**%**	**1**	70-128		8/11/2017 03:56	
Toluene-d8 (S)	**97**		**%**	**1**	77-119		8/11/2017 03:56	
Bromofluorobenzene (S)	**117**		**%**	**1**	86-123		8/11/2017 03:56	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/14/2017 23:15	J
Ethylene Dibromide (EDB)	**0.18**		**ug/L**	**1**	0.10	0.020	8/11/2017 03:56	J
1,2-Dichloroethane-d4 (S)	**89**		**%**	**1**	77-125		8/11/2017 03:56	
Toluene-d8 (S)	**102**		**%**	**1**	80-121		8/11/2017 03:56	
Bromofluorobenzene (S)	**110**		**%**	**1**	80-129		8/11/2017 03:56	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**190**		**mg/L**	**1**	5.0	0.50	8/10/2017 11:27	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/10/2017 11:27	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**1.8**		**mg/L**	**5**	0.05	0.04	8/15/2017 15:15	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**410**		**mg/L**	**1**	10	10	8/11/2017 15:21	J

Lab ID: **J1707993009** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **SGMW-2S** Date Collected: 08/09/17 13:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/11/2017 16:14	J
Barium	**100**		**ug/L**	**1**	2.0	0.28	8/11/2017 16:14	J
Beryllium	**0.76**		**ug/L**	**1**	0.30	0.13	8/11/2017 16:14	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993009** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **SGMW-2S** Date Collected: 08/09/17 13:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/11/2017 16:14	J
Chromium	**7.0**		**ug/L**	**1**	1.0	0.50	8/11/2017 16:14	J
Cobalt	**0.60**	**U**	**ug/L**	**1**	4.0	0.60	8/11/2017 16:14	J
Copper	**2.5**	**U**	**ug/L**	**1**	4.0	2.5	8/11/2017 16:14	J
Iron	**850**		**ug/L**	**1**	200	30	8/11/2017 16:14	J
Lead	**2.1**	**I**	**ug/L**	**1**	7.0	1.3	8/11/2017 16:14	J
Nickel	**1.1**	**U**	**ug/L**	**1**	6.5	1.1	8/11/2017 16:14	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/11/2017 16:14	J
Sodium	**3.6**		**mg/L**	**1**	0.20	0.16	8/11/2017 16:14	J
Vanadium	**15**		**ug/L**	**1**	1.5	0.18	8/11/2017 16:14	J
Zinc	**11**		**ug/L**	**1**	10	2.0	8/11/2017 16:14	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.046**	**U**	**ug/L**	**1**	0.70	0.046	8/18/2017 14:25	J
Selenium	**2.1**	**I**	**ug/L**	**1**	5.0	0.58	8/18/2017 14:25	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/18/2017 14:25	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.060**	**I**	**ug/L**	**1**	0.10	0.011	8/17/2017 13:08	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/11/2017 04:25	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2017 04:25	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2017 04:25	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/11/2017 04:25	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/11/2017 04:25	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2017 04:25	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/11/2017 04:25	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/11/2017 04:25	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2017 04:25	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2017 04:25	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2017 04:25	J
1,4-Dichlorobenzene	**0.29**	**I**	**ug/L**	**1**	1.0	0.22	8/11/2017 04:25	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/11/2017 04:25	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/11/2017 04:25	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993009** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **SGMW-2S** Date Collected: 08/09/17 13:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/11/2017 04:25	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/11/2017 04:25	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/11/2017 04:25	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2017 04:25	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/11/2017 04:25	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/11/2017 04:25	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/11/2017 04:25	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2017 04:25	J
Carbon Disulfide	**0.54**	**I**	**ug/L**	**1**	1.0	0.21	8/11/2017 04:25	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/11/2017 04:25	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2017 04:25	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2017 04:25	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2017 04:25	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2017 04:25	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2017 04:25	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/11/2017 04:25	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2017 04:25	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/11/2017 04:25	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2017 04:25	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/11/2017 04:25	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2017 04:25	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/11/2017 04:25	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2017 04:25	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2017 04:25	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/11/2017 04:25	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/11/2017 04:25	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2017 04:25	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/11/2017 04:25	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2017 04:25	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2017 04:25	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2017 04:25	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2017 04:25	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/11/2017 04:25	J
1,2-Dichloroethane-d4 (S)	**84**		**%**	**1**	70-128		8/11/2017 04:25	
Toluene-d8 (S)	**94**		**%**	**1**	77-119		8/11/2017 04:25	
Bromofluorobenzene (S)	**123**		**%**	**1**	86-123		8/11/2017 04:25	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/14/2017 23:44	J

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Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993009** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **SGMW-2S** Date Collected: 08/09/17 13:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/11/2017 04:25	J
1,2-Dichloroethane-d4 (S)	**88**		**%**	**1**	77-125		8/11/2017 04:25	
Toluene-d8 (S)	**99**		**%**	**1**	80-121		8/11/2017 04:25	
Bromofluorobenzene (S)	**116**		**%**	**1**	80-129		8/11/2017 04:25	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**8.1**		**mg/L**	**1**	5.0	0.50	8/10/2017 11:51	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/10/2017 11:51	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.08**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**57**		**mg/L**	**1**	10	10	8/11/2017 15:21	J

Lab ID: **J1707993010** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **Trip Blank 2** Date Collected: 08/09/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/11/2017 04:54	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2017 04:54	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2017 04:54	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/11/2017 04:54	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/11/2017 04:54	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2017 04:54	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/11/2017 04:54	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/11/2017 04:54	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2017 04:54	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2017 04:54	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2017 04:54	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993010** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **Trip Blank 2** Date Collected: 08/09/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2017 04:54	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/11/2017 04:54	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/11/2017 04:54	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/11/2017 04:54	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/11/2017 04:54	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/11/2017 04:54	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2017 04:54	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/11/2017 04:54	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/11/2017 04:54	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/11/2017 04:54	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2017 04:54	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/15/2017 00:13	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/11/2017 04:54	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2017 04:54	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2017 04:54	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2017 04:54	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2017 04:54	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2017 04:54	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/11/2017 04:54	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2017 04:54	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/11/2017 04:54	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2017 04:54	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/11/2017 04:54	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2017 04:54	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/11/2017 04:54	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2017 04:54	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2017 04:54	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/11/2017 04:54	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/11/2017 04:54	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2017 04:54	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/11/2017 04:54	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2017 04:54	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2017 04:54	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2017 04:54	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2017 04:54	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/11/2017 04:54	J
1,2-Dichloroethane-d4 (S)	**84**		**%**	**1**	70-128		8/11/2017 04:54	
Toluene-d8 (S)	**96**		**%**	**1**	77-119		8/11/2017 04:54	
Bromofluorobenzene (S)	**128**	**J4**	**%**	**1**	86-123		8/11/2017 04:54	

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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993010** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **Trip Blank 2** Date Collected: 08/09/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/15/2017 00:13	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/11/2017 04:54	J
1,2-Dichloroethane-d4 (S)	**86**		**%**	**1**	77-125		8/11/2017 04:54	
Toluene-d8 (S)	**101**		**%**	**1**	80-121		8/11/2017 04:54	
Bromofluorobenzene (S)	**120**		**%**	**1**	80-129		8/11/2017 04:54	

Lab ID: **J1707993011** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-34I** Date Collected: 08/09/17 06:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**410**		**ug/L**	**1**	200	30	8/11/2017 16:23	J
Sodium	**2.8**		**mg/L**	**1**	0.20	0.16	8/11/2017 16:23	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.3**		**mg/L**	**1**	5.0	0.50	8/10/2017 13:03	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/10/2017 13:03	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.06**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**38**		**mg/L**	**1**	10	10	8/11/2017 15:21	J

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ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993012** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-32I** Date Collected: 08/09/17 07:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**140**	**I**	**ug/L**	**1**	200	30	8/11/2017 16:26	J
Sodium	**2.6**		**mg/L**	**1**	0.20	0.16	8/11/2017 16:26	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.0**		**mg/L**	**1**	5.0	0.50	8/10/2017 13:51	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/10/2017 13:51	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.03**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**36**		**mg/L**	**1**	10	10	8/11/2017 15:21	J

Lab ID: **J1707993013** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-35I** Date Collected: 08/09/17 09:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**1000**		**ug/L**	**1**	200	30	8/11/2017 16:31	J
Sodium	**1.3**		**mg/L**	**1**	0.20	0.16	8/11/2017 16:31	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**3.8**	**I**	**mg/L**	**1**	5.0	0.50	8/10/2017 14:15	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/10/2017 14:15	J

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ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993013** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-35I** Date Collected: 08/09/17 09:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.13**		**mg/L**	**1**	0.01	0.01	8/15/2017 12:03	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**28**		**mg/L**	**1**	10	10	8/11/2017 15:21	J

Lab ID: **J1707993014** Date Received: 08/09/17 15:35 Matrix: Water
Sample ID: **MWB-39I** Date Collected: 08/09/17 11:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**280**		**ug/L**	**1**	200	30	8/11/2017 16:55	J
Sodium	**2.7**		**mg/L**	**1**	0.20	0.16	8/11/2017 16:55	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.0**		**mg/L**	**1**	5.0	0.50	8/10/2017 14:39	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/10/2017 14:39	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.04**		**mg/L**	**1**	0.01	0.01	8/15/2017 15:15	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**37**		**mg/L**	**1**	10	10	8/11/2017 15:21	J

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ANALYTICAL RESULTS

Workorder: J1707993 Trail Ridge Landfill

Lab ID: **J1707993015** Date Received: 08/09/17 15:35 Matrix: Water

Sample ID: **Equipment Blank 2** Date Collected: 08/09/17 14:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**30**	**U**	**ug/L**	**1**	200	30	8/11/2017 16:59	J
Sodium	**0.16**	**U**	**mg/L**	**1**	0.20	0.16	8/11/2017 16:59	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**0.50**	**U**	**mg/L**	**1**	5.0	0.50	8/10/2017 15:03	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	8/10/2017 15:03	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.01**	**U**	**mg/L**	**1**	0.01	0.01	8/15/2017 15:15	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**10**	**U**	**mg/L**	**1**	10	10	8/11/2017 15:21	J

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ANALYTICAL RESULTS QUALIFIERS

Workorder: J1707993 Trail Ridge Landfill

PARAMETER QUALIFIERS

U	The compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J4	Estimated Result

LAB QUALIFIERS

G	DOH Certification #E82001(AEL-G)(FL NELAC Certification)
J	DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)

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QUALITY CONTROL DATA

Workorder: J1707993 Trail Ridge Landfill

QC Batch: DGMj/3371 Analysis Method: SW-846 6010

QC Batch Method: SW-846 3010A Prepared: 08/11/2017 03:30

Associated Lab Samples: J1707993001, J1707993002, J1707993003, J1707993004, J1707993005, J1707993006, J1707993007, J1707993008,

METHOD BLANK: 2432673

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Silver	ug/L	0.44	0.44	U
Arsenic	ug/L	8.5	8.5	U
Barium	ug/L	0.28	0.28	U
Beryllium	ug/L	0.13	0.13	U
Cadmium	ug/L	0.32	0.32	U
Cobalt	ug/L	0.60	0.60	U
Chromium	ug/L	0.50	0.50	U
Copper	ug/L	2.5	2.5	U
Iron	ug/L	30	30	U
Sodium	mg/L	0.16	0.16	U
Nickel	ug/L	1.1	1.1	U
Lead	ug/L	1.3	1.3	U
Vanadium	ug/L	0.18	0.18	U
Zinc	ug/L	2.0	2.0	U

LABORATORY CONTROL SAMPLE: 2432674

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Silver	ug/L	400	400	100	80-120	
Arsenic	ug/L	400	410	102	80-120	
Barium	ug/L	400	420	104	80-120	
Beryllium	ug/L	400	430	106	80-120	
Cadmium	ug/L	400	400	101	80-120	
Cobalt	ug/L	400	380	94	80-120	
Chromium	ug/L	400	420	105	80-120	
Copper	ug/L	400	390	98	80-120	
Iron	ug/L	26000	25000	98	80-120	
Sodium	mg/L	50	48	95	80-120	
Nickel	ug/L	400	360	90	80-120	
Lead	ug/L	400	380	94	80-120	
Vanadium	ug/L	400	430	107	80-120	
Zinc	ug/L	400	380	96	80-120	

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Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1707993 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2432675 2432676 Original: J1707993002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Silver	ug/L	0.089	400	390	400	96	99	75-125	3	20	
Arsenic	ug/L	0	400	410	420	103	105	75-125	2	20	
Barium	ug/L	9.7	400	400	410	98	101	75-125	3	20	
Beryllium	ug/L	0	400	420	430	105	107	75-125	1	20	
Cadmium	ug/L	0.011	400	390	400	97	100	75-125	3	20	
Cobalt	ug/L	0.93	400	370	380	92	94	75-125	2	20	
Chromium	ug/L	4.8	400	400	420	100	103	75-125	3	20	
Copper	ug/L	6.5	400	390	400	95	99	75-125	4	20	
Iron	ug/L	110	26000	25000	26000	98	101	75-125	3	20	
Sodium	mg/L	74	50	120	120	90	95	75-125	2	20	
Nickel	ug/L	3.8	400	360	370	90	92	75-125	2	20	
Lead	ug/L	0	400	360	360	89	91	75-125	2	20	
Vanadium	ug/L	7.7	400	420	440	104	107	75-125	3	20	
Zinc	ug/L	13	400	390	400	94	97	75-125	4	20	

QC Batch: DGMj/3375 Analysis Method: SW-846 6020

QC Batch Method: SW-846 3010A Prepared: 08/11/2017 03:30

Associated Lab Samples: J1707993001, J1707993002, J1707993003, J1707993004, J1707993005, J1707993006, J1707993007, J1707993008,

METHOD BLANK: 2433098

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Selenium	ug/L	0.58	0.58	U
Antimony	ug/L	0.046	0.046	U
Thallium	ug/L	0.057	0.057	U

LABORATORY CONTROL SAMPLE: 2433099

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Selenium	ug/L	100	100	100	80-120	
Antimony	ug/L	100	93	93	80-120	
Thallium	ug/L	100	96	96	80-120	

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QUALITY CONTROL DATA

Workorder: J1707993 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2433100 2433101 Original: J1707993001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Selenium	ug/L	1.4	100	91	92	90	90	75-125	1	20	
Antimony	ug/L	0.17	100	93	91	92	91	75-125	2	20	
Thallium	ug/L	0.0079	100	99	99	99	99	75-125	0	20	

QC Batch: WCAj/4791 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Prepared:

Associated Lab Samples: J1707993001, J1707993002, J1707993003, J1707993004, J1707993005, J1707993006, J1707993007, J1707993008,

METHOD BLANK: 2434180

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Chloride	mg/L	0.50	0.50	U
Nitrate	mg/L	0.050	0.050	U

LABORATORY CONTROL SAMPLE & LCSD: 2434181 2434182

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY										
Chloride	mg/L	25	28	27	110	110	90-110	1	10	
Nitrate	mg/L	1	0.91	0.92	91	92	90-110	2	10	

MATRIX SPIKE SAMPLE: 2434183 Original: J1707993006

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY							
Chloride	mg/L	4	20	26	109	90-110	
Nitrate	mg/L	0	2	2.0	100	90-110	

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QUALITY CONTROL DATA

Workorder: J1707993 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 2434184 Original: J1707993011

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY							
Chloride	mg/L	5.3	20	26	102	90-110	
Nitrate	mg/L	0	2	2.0	100	90-110	

QC Batch: WCAj/4796 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: J1707993001, J1707993002, J1707993003, J1707993004, J1707993005, J1707993006, J1707993007, J1707993008,

METHOD BLANK: 2434596

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Dissolved Solids	mg/L	10	10	U

LABORATORY CONTROL SAMPLE: 2434597

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	300	310	104	75-125	

SAMPLE DUPLICATE: 2434598 Original: J1707993001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	410	410	1	5	

SAMPLE DUPLICATE: 2434599 Original: J1707993013

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	28	27	4	5	

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Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1707993 Trail Ridge Landfill

QC Batch: MSVj/4565 Analysis Method: SW-846 8260B (SIM)

QC Batch Method: SW-846 5030B Prepared: 08/10/2017 11:28

Associated Lab Samples: J1707993001, J1707993002, J1707993004, J1707993005, J1707993006, J1707993007, J1707993008, J1707993009,

METHOD BLANK: 2434704

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Ethylene Dibromide (EDB)	ug/L	0.020	0.020	U
1,2-Dibromo-3-Chloropropane	ug/L	0.11	0.11	U
1,2-Dichloroethane-d4 (S)	%	88	77-125	
Toluene-d8 (S)	%	98	80-121	
Bromofluorobenzene (S)	%	112	80-129	

LABORATORY CONTROL SAMPLE & LCSD: 2434705 2434706

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Ethylene Dibromide (EDB)	ug/L	0.8	0.72	0.66	90	83	70-130	9	30	
1,2-Dichloroethane-d4 (S)	%				87	88	77-125	1		
Toluene-d8 (S)	%				102	101	80-121	1		
Bromofluorobenzene (S)	%				110	114	80-129	4		

LABORATORY CONTROL SAMPLE & LCSD: 2434705 2434706

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
1,2-Dibromo-3-Chloropropane	ug/L	0.8	0.75	0.64	94	80	70-130	16	30	

MATRIX SPIKE SAMPLE: 2434707 Original: J1707930002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Ethylene Dibromide (EDB)	ug/L	0	0.8	0.58	73	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	0.8	0.32	40	70-130	
1,2-Dichloroethane-d4 (S)	%	86			88	77-125	
Toluene-d8 (S)	%	101			98	80-121	

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Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1707993 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 2434707 Original: J1707930002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromofluorobenzene (S)	%	110			116	80-129	

QC Batch: MSVj/4569 Analysis Method: SW-846 8260B
QC Batch Method: SW-846 5030B Prepared: 08/10/2017 11:28
Associated Lab Samples: J1707993001, J1707993002, J1707993004, J1707993005, J1707993006, J1707993007, J1707993008

METHOD BLANK: 2434719

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Chloromethane	ug/L	0.21	0.21	U
Vinyl Chloride	ug/L	0.20	0.20	U
Bromomethane	ug/L	0.24	0.24	U
Chloroethane	ug/L	0.33	0.33	U
Trichlorofluoromethane	ug/L	0.32	0.32	U
Acetone	ug/L	2.1	2.1	U
1,1-Dichloroethylene	ug/L	0.18	0.18	U
Iodomethane (Methyl Iodide)	ug/L	0.16	0.16	U
Acrylonitrile	ug/L	1.1	1.1	U
Methylene Chloride	ug/L	2.5	2.5	U
Carbon Disulfide	ug/L	0.21	0.21	U
trans-1,2-Dichloroethylene	ug/L	0.20	0.20	U
1,1-Dichloroethane	ug/L	0.14	0.14	U
Vinyl Acetate	ug/L	0.19	0.19	U
2-Butanone (MEK)	ug/L	0.43	0.43	U
cis-1,2-Dichloroethylene	ug/L	0.24	0.24	U
Bromochloromethane	ug/L	0.17	0.17	U
Chloroform	ug/L	0.18	0.18	U
1,2-Dichloroethane	ug/L	0.23	0.23	U
1,1,1-Trichloroethane	ug/L	0.22	0.22	U
Carbon Tetrachloride	ug/L	0.36	0.36	U
Benzene	ug/L	0.16	0.16	U
Dibromomethane	ug/L	0.26	0.26	U
1,2-Dichloropropane	ug/L	0.20	0.20	U
Trichloroethene	ug/L	0.29	0.29	U
Bromodichloromethane	ug/L	0.25	0.25	U
cis-1,3-Dichloropropene	ug/L	0.16	0.16	U
4-Methyl-2-pentanone (MIBK)	ug/L	0.47	0.47	U
trans-1,3-Dichloropropylene	ug/L	0.18	0.18	U
1,1,2-Trichloroethane	ug/L	0.30	0.30	U
Toluene	ug/L	0.23	0.23	U

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Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1707993 Trail Ridge Landfill

METHOD BLANK: 2434719

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
2-Hexanone	ug/L	0.44	0.44	U
Dibromochloromethane	ug/L	0.33	0.33	U
Ethylene Dibromide (EDB)	ug/L	0.020	0.020	U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36	U
1,1,1,2-Tetrachloroethane	ug/L	0.26	0.26	U
Chlorobenzene	ug/L	0.21	0.21	U
Ethylbenzene	ug/L	0.24	0.24	U
Bromoform	ug/L	0.43	0.43	U
Styrene	ug/L	0.23	0.23	U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20	U
1,2,3-Trichloropropane	ug/L	0.30	0.30	U
1,4-Dichlorobenzene	ug/L	0.22	0.22	U
1,2-Dichlorobenzene	ug/L	0.18	0.18	U
1,2-Dibromo-3-Chloropropane	ug/L	0.11	0.11	U
trans-1,4-Dichloro-2-butene	ug/L	1.8	1.8	U
Xylene (Total)	ug/L	0.53	0.53	U
1,2-Dichloroethane-d4 (S)	%	86	70-128	
Toluene-d8 (S)	%	94	77-119	
Bromofluorobenzene (S)	%	119	86-123	

LABORATORY CONTROL SAMPLE & LCSD: 2434720 2434721

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Vinyl Chloride	ug/L	20	20	20	100	101	70-130	1	30	
1,1-Dichloroethylene	ug/L	20	19	20	96	99	70-130	3	30	
cis-1,2-Dichloroethylene	ug/L	20	20	19	100	97	70-130	3	30	
Chloroform	ug/L	20	19	19	97	96	70-130	1	30	
Benzene	ug/L	20	20	20	99	98	70-130	1	30	
Trichloroethene	ug/L	20	19	19	97	95	70-130	2	30	
Toluene	ug/L	20	20	20	102	100	70-130	3	30	
Tetrachloroethylene (PCE)	ug/L	20	20	19	98	94	70-130	4	30	
Chlorobenzene	ug/L	20	20	19	100	95	70-130	6	30	
Ethylbenzene	ug/L	20	20	19	101	96	70-130	5	30	
1,2-Dichlorobenzene	ug/L	20	20	18	102	92	70-130	10	30	
Xylene (Total)	ug/L	60	61	58	102	97	70-130	4	30	
1,2-Dichloroethane-d4 (S)	%				82	85	70-128	4		
Toluene-d8 (S)	%				105	104	77-119	1		
Bromofluorobenzene (S)	%				97	101	86-123	4		

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Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1707993 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 2434722 Original: J1707931005

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Vinyl Chloride	ug/L	0	20	21	107	70-130	
1,1-Dichloroethylene	ug/L	0	20	21	107	70-130	
cis-1,2-Dichloroethylene	ug/L	0	20	22	108	70-130	
Chloroform	ug/L	0	20	20	102	70-130	
Benzene	ug/L	0.09	20	21	106	70-130	
Trichloroethene	ug/L	0	20	21	104	70-130	
Toluene	ug/L	0.1	20	22	109	70-130	
Tetrachloroethylene (PCE)	ug/L	0	20	20	98	70-130	
Chlorobenzene	ug/L	0	20	21	103	70-130	
Ethylbenzene	ug/L	0.16	20	21	106	70-130	
1,2-Dichlorobenzene	ug/L	0	20	20	101	70-130	
Xylene (Total)	ug/L	0.98	60	63	103	70-130	
1,2-Dichloroethane-d4 (S)	%	87			83	70-128	
Toluene-d8 (S)	%	100			106	77-119	
Bromofluorobenzene (S)	%	111			107	86-123	

QC Batch: MSVj/4571 Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B Prepared: 08/10/2017 11:28

Associated Lab Samples: J1707993009, J1707993010

METHOD BLANK: 2434729

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Chloromethane	ug/L	0.21	0.21	U
Vinyl Chloride	ug/L	0.20	0.20	U
Bromomethane	ug/L	0.24	0.24	U
Chloroethane	ug/L	0.33	0.33	U
Trichlorofluoromethane	ug/L	0.32	0.32	U
Acetone	ug/L	2.1	2.1	U
1,1-Dichloroethylene	ug/L	0.18	0.18	U
Iodomethane (Methyl Iodide)	ug/L	0.16	0.16	U
Acrylonitrile	ug/L	1.1	1.1	U
Methylene Chloride	ug/L	2.5	2.5	U
Carbon Disulfide	ug/L	0.21	0.21	U
trans-1,2-Dichloroethylene	ug/L	0.20	0.20	U
1,1-Dichloroethane	ug/L	0.14	0.14	U
Vinyl Acetate	ug/L	0.19	0.19	U
2-Butanone (MEK)	ug/L	0.43	0.43	U

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QUALITY CONTROL DATA

Workorder: J1707993 Trail Ridge Landfill

METHOD BLANK: 2434729

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
cis-1,2-Dichloroethylene	ug/L	0.24	0.24	U
Bromochloromethane	ug/L	0.17	0.17	U
Chloroform	ug/L	0.18	0.18	U
1,2-Dichloroethane	ug/L	0.23	0.23	U
1,1,1-Trichloroethane	ug/L	0.22	0.22	U
Carbon Tetrachloride	ug/L	0.36	0.36	U
Benzene	ug/L	0.16	0.16	U
Dibromomethane	ug/L	0.26	0.26	U
1,2-Dichloropropane	ug/L	0.20	0.20	U
Trichloroethene	ug/L	0.29	0.29	U
Bromodichloromethane	ug/L	0.25	0.25	U
cis-1,3-Dichloropropene	ug/L	0.16	0.16	U
4-Methyl-2-pentanone (MIBK)	ug/L	0.47	0.47	U
trans-1,3-Dichloropropylene	ug/L	0.18	0.18	U
1,1,2-Trichloroethane	ug/L	0.30	0.30	U
Toluene	ug/L	0.23	0.23	U
2-Hexanone	ug/L	0.44	0.44	U
Dibromochloromethane	ug/L	0.33	0.33	U
Ethylene Dibromide (EDB)	ug/L	0.020	0.020	U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36	U
1,1,1,2-Tetrachloroethane	ug/L	0.26	0.26	U
Chlorobenzene	ug/L	0.21	0.21	U
Ethylbenzene	ug/L	0.24	0.24	U
Bromoform	ug/L	0.43	0.43	U
Styrene	ug/L	0.23	0.23	U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20	U
1,2,3-Trichloropropane	ug/L	0.30	0.30	U
1,4-Dichlorobenzene	ug/L	0.22	0.22	U
1,2-Dichlorobenzene	ug/L	0.18	0.18	U
1,2-Dibromo-3-Chloropropane	ug/L	0.11	0.11	U
trans-1,4-Dichloro-2-butene	ug/L	1.8	1.8	U
Xylene (Total)	ug/L	0.53	0.53	U
1,2-Dichloroethane-d4 (S)	%	83	70-128	
Toluene-d8 (S)	%	97	77-119	
Bromofluorobenzene (S)	%	123	86-123	

LABORATORY CONTROL SAMPLE & LCSD: 2434730 2434731

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Vinyl Chloride	ug/L	20	20	21	101	105	70-130	4	30	

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Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1707993 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE & LCSD: 2434730 2434731

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
1,1-Dichloroethylene	ug/L	20	20	20	99	102	70-130	3	30	
cis-1,2-Dichloroethylene	ug/L	20	19	21	97	104	70-130	7	30	
Chloroform	ug/L	20	19	20	96	99	70-130	3	30	
Benzene	ug/L	20	20	21	98	103	70-130	5	30	
Trichloroethene	ug/L	20	19	20	95	100	70-130	5	30	
Toluene	ug/L	20	20	21	100	103	70-130	4	30	
Tetrachloroethylene (PCE)	ug/L	20	19	19	94	97	70-130	3	30	
Chlorobenzene	ug/L	20	19	20	95	99	70-130	4	30	
Ethylbenzene	ug/L	20	19	20	96	102	70-130	6	30	
1,2-Dichlorobenzene	ug/L	20	18	19	92	97	70-130	5	30	
Xylene (Total)	ug/L	60	58	61	97	101	70-130	4	30	
1,2-Dichloroethane-d4 (S)	%				85	88	70-128	4		
Toluene-d8 (S)	%				104	105	77-119	1		
Bromofluorobenzene (S)	%				101	98	86-123	3		

MATRIX SPIKE SAMPLE: 2434732 Original: G1706606001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Vinyl Chloride	ug/L			21			
1,1-Dichloroethylene	ug/L			26			
cis-1,2-Dichloroethylene	ug/L			21			
Chloroform	ug/L			20			
Benzene	ug/L	0.14	20	20	102	70-130	
Trichloroethene	ug/L			31			
Toluene	ug/L	0.19	20	21	103	70-130	
Tetrachloroethylene (PCE)	ug/L			32			
Chlorobenzene	ug/L			19			
Ethylbenzene	ug/L	0	20	20	100	70-130	
1,2-Dichlorobenzene	ug/L			18			
Xylene (Total)	ug/L	0.4	60	61	101	70-130	
1,2-Dichloroethane-d4 (S)	%	83			82	70-128	
Toluene-d8 (S)	%	94			102	77-119	
Bromofluorobenzene (S)	%	130			107	86-123	

QC Batch: DGMj/3384 Analysis Method: SW-846 7470A

QC Batch Method: SW-846 7470A Prepared: 08/17/2017 09:29

Associated Lab Samples: J1707993001, J1707993002, J1707993003, J1707993004, J1707993005, J1707993006, J1707993007, J1707993008,

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Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
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QUALITY CONTROL DATA

Workorder: J1707993 Trail Ridge Landfill

METHOD BLANK: 2435446

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Mercury	ug/L	0.011	0.011	U

LABORATORY CONTROL SAMPLE: 2435447

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Mercury	ug/L	2	2.1	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2435448 2435449 Original: J1707993001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Mercury	ug/L	0.013	2	1.9	1.9	96	96	80-120	0	20	

QC Batch: WCAg/5637 Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1 Prepared:

Associated Lab Samples: J1707993001, J1707993002, J1707993003, J1707993004, J1707993005, J1707993006, J1707993007, J1707993009,

METHOD BLANK: 2437546

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	8.00	8.00	U

LABORATORY CONTROL SAMPLE: 2437547

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.55	110	90-110	

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QUALITY CONTROL DATA

Workorder: J1707993 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2437550 2437551 Original: J1707930011

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Ammonia (N)	mg/L	0.04	0.4	0.42	0.42	96	96	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2437552 2437553 Original: J1707993011

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Ammonia (N)	mg/L	0.06	0.4	0.44	0.44	94	94	90-110	0	10	

QC Batch: WCAg/5639 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Prepared:
Associated Lab Samples: J1707993008, J1707993014, J1707993015

METHOD BLANK: 2438026

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	0.01	0.01	U

LABORATORY CONTROL SAMPLE: 2438027

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.53	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2438028 2438029 Original: J1708051004

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											

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QUALITY CONTROL DATA

Workorder: J1707993 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2438028 2438029 Original: J1708051004

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Ammonia (N)	mg/L	0.02	0.4	0.40	0.40	96	96	90-110	1	10	

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Fax: (904)363-9354

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1707993 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1707993001	MWB-20S	SW-846 3010A	DGMj/3371	SW-846 6010	ICPj/2178
J1707993002	MWB-21S	SW-846 3010A	DGMj/3371	SW-846 6010	ICPj/2178
J1707993003	MWB-33S	SW-846 3010A	DGMj/3371	SW-846 6010	ICPj/2178
J1707993004	MWB-34S	SW-846 3010A	DGMj/3371	SW-846 6010	ICPj/2178
J1707993005	MWB-32S	SW-846 3010A	DGMj/3371	SW-846 6010	ICPj/2178
J1707993006	MWB-35S	SW-846 3010A	DGMj/3371	SW-846 6010	ICPj/2178
J1707993007	MWB-39S	SW-846 3010A	DGMj/3371	SW-846 6010	ICPj/2178
J1707993008	MWB-40S	SW-846 3010A	DGMj/3371	SW-846 6010	ICPj/2178
J1707993009	SGMW-2S	SW-846 3010A	DGMj/3371	SW-846 6010	ICPj/2178
J1707993011	MWB-34I	SW-846 3010A	DGMj/3371	SW-846 6010	ICPj/2178
J1707993012	MWB-32I	SW-846 3010A	DGMj/3371	SW-846 6010	ICPj/2178
J1707993013	MWB-35I	SW-846 3010A	DGMj/3371	SW-846 6010	ICPj/2178
J1707993014	MWB-39I	SW-846 3010A	DGMj/3371	SW-846 6010	ICPj/2178
J1707993015	Equipment Blank 2	SW-846 3010A	DGMj/3371	SW-846 6010	ICPj/2178
J1707993001	MWB-20S	SW-846 3010A	DGMj/3375	SW-846 6020	ICMj/1655
J1707993002	MWB-21S	SW-846 3010A	DGMj/3375	SW-846 6020	ICMj/1655
J1707993003	MWB-33S	SW-846 3010A	DGMj/3375	SW-846 6020	ICMj/1655
J1707993004	MWB-34S	SW-846 3010A	DGMj/3375	SW-846 6020	ICMj/1655
J1707993005	MWB-32S	SW-846 3010A	DGMj/3375	SW-846 6020	ICMj/1655
J1707993006	MWB-35S	SW-846 3010A	DGMj/3375	SW-846 6020	ICMj/1655
J1707993007	MWB-39S	SW-846 3010A	DGMj/3375	SW-846 6020	ICMj/1655
J1707993008	MWB-40S	SW-846 3010A	DGMj/3375	SW-846 6020	ICMj/1655
J1707993009	SGMW-2S	SW-846 3010A	DGMj/3375	SW-846 6020	ICMj/1655
J1707993001	MWB-20S			EPA 300.0	WCAj/4791
J1707993002	MWB-21S			EPA 300.0	WCAj/4791
J1707993003	MWB-33S			EPA 300.0	WCAj/4791
J1707993004	MWB-34S			EPA 300.0	WCAj/4791
J1707993005	MWB-32S			EPA 300.0	WCAj/4791
J1707993006	MWB-35S			EPA 300.0	WCAj/4791
J1707993007	MWB-39S			EPA 300.0	WCAj/4791
J1707993008	MWB-40S			EPA 300.0	WCAj/4791
J1707993009	SGMW-2S			EPA 300.0	WCAj/4791

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Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1707993 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1707993011	MWB-34I			EPA 300.0	WCAj/4791
J1707993012	MWB-32I			EPA 300.0	WCAj/4791
J1707993013	MWB-35I			EPA 300.0	WCAj/4791
J1707993014	MWB-39I			EPA 300.0	WCAj/4791
J1707993015	Equipment Blank 2			EPA 300.0	WCAj/4791
J1707993001	MWB-20S			SM 2540 C	WCAj/4796
J1707993002	MWB-21S			SM 2540 C	WCAj/4796
J1707993003	MWB-33S			SM 2540 C	WCAj/4796
J1707993004	MWB-34S			SM 2540 C	WCAj/4796
J1707993005	MWB-32S			SM 2540 C	WCAj/4796
J1707993006	MWB-35S			SM 2540 C	WCAj/4796
J1707993007	MWB-39S			SM 2540 C	WCAj/4796
J1707993008	MWB-40S			SM 2540 C	WCAj/4796
J1707993009	SGMW-2S			SM 2540 C	WCAj/4796
J1707993011	MWB-34I			SM 2540 C	WCAj/4796
J1707993012	MWB-32I			SM 2540 C	WCAj/4796
J1707993013	MWB-35I			SM 2540 C	WCAj/4796
J1707993014	MWB-39I			SM 2540 C	WCAj/4796
J1707993015	Equipment Blank 2			SM 2540 C	WCAj/4796
J1707993001	MWB-20S	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707993002	MWB-21S	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707993004	MWB-34S	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707993005	MWB-32S	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707993006	MWB-35S	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707993007	MWB-39S	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707993008	MWB-40S	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707993009	SGMW-2S	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707993010	Trip Blank 2	SW-846 5030B	MSVj/4565	SW-846 8260B (SIM)	MSVj/4566
J1707993001	MWB-20S	SW-846 5030B	MSVj/4569	SW-846 8260B	MSVj/4570
J1707993002	MWB-21S	SW-846 5030B	MSVj/4569	SW-846 8260B	MSVj/4570
J1707993004	MWB-34S	SW-846 5030B	MSVj/4569	SW-846 8260B	MSVj/4570

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Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1707993 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1707993005	MWB-32S	SW-846 5030B	MSVj/4569	SW-846 8260B	MSVj/4570
J1707993006	MWB-35S	SW-846 5030B	MSVj/4569	SW-846 8260B	MSVj/4570
J1707993007	MWB-39S	SW-846 5030B	MSVj/4569	SW-846 8260B	MSVj/4570
J1707993008	MWB-40S	SW-846 5030B	MSVj/4569	SW-846 8260B	MSVj/4570
J1707993009	SGMW-2S	SW-846 5030B	MSVj/4571	SW-846 8260B	MSVj/4572
J1707993010	Trip Blank 2	SW-846 5030B	MSVj/4571	SW-846 8260B	MSVj/4572
J1707993001	MWB-20S	SW-846 7470A	DGMj/3384	SW-846 7470A	CVAj/1540
J1707993002	MWB-21S	SW-846 7470A	DGMj/3384	SW-846 7470A	CVAj/1540
J1707993003	MWB-33S	SW-846 7470A	DGMj/3384	SW-846 7470A	CVAj/1540
J1707993004	MWB-34S	SW-846 7470A	DGMj/3384	SW-846 7470A	CVAj/1540
J1707993005	MWB-32S	SW-846 7470A	DGMj/3384	SW-846 7470A	CVAj/1540
J1707993006	MWB-35S	SW-846 7470A	DGMj/3384	SW-846 7470A	CVAj/1540
J1707993007	MWB-39S	SW-846 7470A	DGMj/3384	SW-846 7470A	CVAj/1540
J1707993008	MWB-40S	SW-846 7470A	DGMj/3384	SW-846 7470A	CVAj/1540
J1707993009	SGMW-2S	SW-846 7470A	DGMj/3384	SW-846 7470A	CVAj/1540
J1707993001	MWB-20S			EPA 350.1	WCAg/5637
J1707993002	MWB-21S			EPA 350.1	WCAg/5637
J1707993003	MWB-33S			EPA 350.1	WCAg/5637
J1707993004	MWB-34S			EPA 350.1	WCAg/5637
J1707993005	MWB-32S			EPA 350.1	WCAg/5637
J1707993006	MWB-35S			EPA 350.1	WCAg/5637
J1707993007	MWB-39S			EPA 350.1	WCAg/5637
J1707993009	SGMW-2S			EPA 350.1	WCAg/5637
J1707993011	MWB-34I			EPA 350.1	WCAg/5637
J1707993012	MWB-32I			EPA 350.1	WCAg/5637
J1707993013	MWB-35I			EPA 350.1	WCAg/5637
J1707993008	MWB-40S			EPA 350.1	WCAg/5639
J1707993014	MWB-39I			EPA 350.1	WCAg/5639
J1707993015	Equipment Blank 2			EPA 350.1	WCAg/5639

Advanced Environmental Laboratories, Inc.

6681 Southpoint Parkway
Jacksonville, Florida 32216
Office (904) 363-9350
Fax (904) 363-9354

Queue: MSVj

Batch Number: 4570

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: SW-846 8260B

Preparation: SW-846 5030B

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: The upper control criterion was exceeded for the following surrogates in J1707993001: Bromofluorobenzene. No target analytes were detected in the samples. The error associated with an elevated recovery equates to a high bias. The quality of the sample data is not significantly affected. No further corrective action was required.

D. Spikes: All acceptance criteria were met.

E. Internal Standard: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Advanced Environmental Laboratories, Inc. and by the client, both technically and for completeness, except for the conditions detailed above. The Quality Assurance Officer, or designee, as verified by the following signature, has authorized release of the data contained in this data package:

Advanced Environmental Laboratories, Inc.

6681 Southpoint Parkway
Jacksonville, Florida 32216
Office (904) 363-9350
Fax (904) 363-9354

Queue: MSVj

Batch Number: 4572

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: SW-846 8260B

Preparation: SW-846 5030B

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: The upper control criterion was exceeded for the following surrogates in J1707993010, J1707998001, 003, 005, G1706606001, 002 and J1707951005, 007: Bromofluorobenzene. No target analytes were detected in the samples. The error associated with an elevated recovery equates to a high bias. The quality of the sample data is not significantly affected. No further corrective action was required.

D. Spikes: All acceptance criteria were met.

E. Internal Standard: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Advanced Environmental Laboratories, Inc. and by the client, both technically and for completeness, except for the conditions detailed above. The Quality Assurance Officer, or designee, as verified by the following signature, has authorized release of the data contained in this data package:

Advanced Environmental Laboratories, Inc.

☒ 6601 Southpoint Pkwy. • Jacksonville, FL 32216 • 904.363.9350 • Fax 904.363.9354 • E82574
☐ 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.9616 • Fax 813.630.4327 • E84589
☐ 6815 SW Archer Road • Gainesville, FL 32608 • 352.377.2349 • Fax 352.395.6639 • E82001
☐ 528 S. North Lake Blvd., Ste. 1016 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597• E53076

J1707993

CLIENT NAME:	CITY OF JACKSONVILLE	PROJECT NAME:	Trail Ridge Landfill
ADDRESS:	214 North Hogan Street, 10th Floor	P.O. NUMBER/PROJECT NUMBER:	608372:4
	Jacksonville, FL 32202	PROJECT LOCATION:	
PHONE:	(904)-255-7513	REMARKS/SPECIAL INSTRUCTIONS:	Ground Water Shallow Wells
FAX:			Golder Contact: Dawn Prell
CONTACT:	Eric B. Fuller		
SAMPLED BY:	DAN ARMOUR / BLAINE GRISSOM		33628,TRAIL RIDGE LANDFILL, INC. (ADaPT)
TURN AROUND TIME:			AEL Jax Profile: 30178, Line 4
☒ STANDARD _____	☐ RUSH _____		

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	BOTTLE SIZE & TYPE	3X40mL VOA vials	500mL poly	125mL poly	500mL poly	250mL poly						LABORATORY I.D. NUMBER
								ANALYSIS REQUIRED	App I + EDB 8260/8260SIM	App I + Na,Fe,Hg 6010/6020/7470	nitrate/chloride 300.0	TDS SM2540C	ammonia-N 350.1						
									HCl / DI	HNO3	None	None	H2SO4						
	MWB-20S	G	8-8	1325	W	7			3	1	1	1	1						001
	MWB-21S	G	8-8	1650	W	7			3	1	1	1	1						002
	MWB-33S	G	8-8	1725	W	7			3	1	1	1	1						003
	MWB-34S	G	8-9	0706	W	7			3	1	1	1	1						004
	MWB-32S	G	8-9	0835	W	7			3	1	1	1	1						005
	MWB-35S	G	8-9	1020	W	7			3	1	1	1	1						006
	MWB-39S	G	8-9	1135	W	7			3	1	1	1	1						007
	MWB-40S	G	8-9	1210	W	7			3	1	1	1	1						008
	SGMW-2S	G	8-9	1315	W	7			3	1	1	1	1						009
	SGMW-1S	G	8-9		W	7			3	+	1	+	+	NO	SAMPLE	COLLECTED			

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice ☑ Yes ☐ No ☑ Temp taken from sample ☐ Temp from temp blank ☐ Where required, pH checked

Temperature when received 4 (in degrees celcius)

Form revised 2/8/08

Device used for measuring Temp by unique identifier (circle IR temp gun used) J : 9A G: LT-1 LT-2 T: 10A A: 3A

	Relinquished by:	Date	Time	Received by:	Date	Time
1		8-9-17	1500		8/9/17	1500
2		8/9/17	1535		8/9/17	1535
3						
4						

FOR DRINKING WATER USE:
(When PWS Information not otherwise supplied) PWS ID:_____
Contact Person:_____ Phone :_____
Supplier of Water:_____
Site-Address:_____

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J1707993

CLIENT NAME:	CITY OF JACKSONVILLE
ADDRESS:	214 North Hogan Street, 10th Floor
	Jacksonville, FL 32202
PHONE:	(904)-255-7513
FAX:	
CONTACT:	Eric B. Fuller
SAMPLED BY:	DAN ARMOUR / BLAINE GRIGSON
TURN AROUND TIME:	☐ STANDARD _____ ☐ RUSH _____
PROJECT NAME:	Trail Ridge Landfill
P.O. NUMBER/PROJECT NUMBER:	608372:4
PROJECT LOCATION:	
REMARKS/SPECIAL INSTRUCTIONS:	Ground Water Shallow Wells Golder Contact: Dawn Prell 33628,TRAIL RIDGE LANDFILL, INC. (ADaPT) AEL Jax Profile: 30178, Line 4

ANALYSIS REQUIRED

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	BOTTLE SIZE & TYPE: 3X40mL VOA vials — App I + EDB 8260/8260SIM (HCl / DI)	500mL poly — App I + Na,Fe,Hg 6010/6020/7470 (HNO3)	125mL poly — nitrate/chloride 300.0 (None)	500mL poly — TDS SM2540C (None)	250mL poly — ammonia-N 350.1 (H2SO4)	LABORATORY I.D. NUMBER
	TRIP	G	8-9	-	W	3		3					010

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice ☑ Yes ☐ No ☐ Temp taken from sample ☐ Temp from temp blank ☐ Where required, pH checked

Temperature when received 4 (in degrees celcius)

Device used for measuring Temp by unique identifier (circle IR temp gun used) J : 9A G: LT-1 LT-2 T: 10A A: 3A

Form revised 2/8/08

	Relinquished by:	Date	Time	Received by:	Date	Time
1		8-9-17	1500		8/9/17	1500
2		8/9/17	1535		8/9/17	1535
3						
4						

FOR DRINKING WATER USE:
(When PWS Information not otherwise supplied) PWS ID:_____
Contact Person:_____ Phone :_____
Supplier of Water:_____
Site-Address:_____

Advanced Environmental Laboratories, Inc.

Page 1 of 1 LAB NUMBER: J709193

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☐ 528 S. North Lake Blvd., Ste. 1016 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597• E53076

CLIENT NAME:	CITY OF JACKSONVILLE	PROJECT NAME:	Trail Ridge Landfill
ADDRESS:	214 North Hogan Street, 10th Floor	P.O. NUMBER/PROJECT NUMBER:	608372:4
	Jacksonville, FL 32202	PROJECT LOCATION:	
PHONE:	(904)-255-7513	REMARKS/SPECIAL INSTRUCTIONS:	Ground Water Intermediate Wells
FAX:			Golder Contact: Dawn Prell
CONTACT:	Eric B. Fuller		
SAMPLED BY:	DAN ARMOUR / BLAINE GRISSOM		33628,TRAIL RIDGE LANDFILL, INC. (ADaPT)
TURN AROUND TIME:			AEL Jax Profile: 30178, Line 4
☒ STANDARD _____	☐ RUSH _____		

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	BOTTLE SIZE & TYPE	250mL poly	125mL poly	500mL poly	250mL poly						LABORATORY I.D. NUMBER
								ANALYSIS REQUIRED	Fe,Na by 6010	nitrate/chloride 300.0	TDS SM2540C	ammonia-N 350.1						
	MWB-34I	G	8-9	0635	W	4			1	1	1	1						011 D10
	MWB-32I	G	8-9	0740	W	4			1	1	1	1						012 011
	MWB-35I	G	8-9	0950	W	4			1	1	1	1						013
	MWB-39I	G	8-9	1105	W	4			1	1	1	1						014 D13
	EQUIPMENT BLANK	G	8-9	1440	W	4			1	1	1	1						015 014

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice ☑ Yes ☐ No ☐ Temp taken from sample ☐ Temp from temp blank ☐ Where required, pH checked

Temperature when received 4 (in degrees celcius)

Form revised 2/8/08

Device used for measuring Temp by unique identifier (circle IR temp gun used) J : 9A G: LT-1 LT-2 T: 10A A: 3A

	Relinquished by:	Date	Time	Received by:	Date	Time
1		8-9-17	1500		8-9-17	1500
2		8-9-17	1535		8-9-17	1535
3						
4						

FOR DRINKING WATER USE:

(When PWS Information not otherwise supplied) PWS ID:_____

Contact Person:_____ Phone :_____

Supplier of Water:_____

Site-Address:_____

Advanced Environmental Labs Inc

Client: City of Jax
Project name: Trail Ridge Landfill
Date/Time Rcvd: 8-9-17 1535
Log-In request number: J1707993
Received by: BJ
Completed by: BJ

Cooler/Shipping Information:

Courier: ☑ AEL ☐ Client ☐ UPS ☐ Blue Streak ☐ FedEx ☐ AES ☐ ASAP ☐ Other (describe):_____

Type: ☐ Cooler ☐ Box ☐ Other (describe) _____

Cooler temperature: Identify the cooler and document the temperature blank or ice water measurement

Cooler ID					
Temp (°C)	4				
Temp taken from	☐ Sample Bottle ☐ Cooler	☐ Sample Bottle ☐ Cooler	☐ Sample Bottle ☐ Cooler	☐ Sample Bottle ☐ Cooler	☐ Sample Bottle ☐ Cooler
Temp measured with	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):

Other Information:

Any discrepancies should be explained in the "Comments" section below.

CHECKLIST	YES	NO	NA
1. Were custody seals on shipping container(s) intact?			✓
2. Were custody papers properly included with samples?	✓		
3. Were custody papers properly filled out (ink, signed, match labels)?	✓		
4. Did all bottles arrive in good condition (unbroken)?	✓		
5. Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?	✓		
6. Did the sample labels agree with the chain of custody?	✓		
7. Were correct bottles used for the tests indicated?	✓		
8. Were proper sample preservation techniques indicated on the label?	✓		
9. Were samples received within holding times?	✓		
10. Were all VOA vials free of the presence of air bubbles?	✓		
11. Have all Soil VOA Vials and Encores been placed in a freezer within 48 hours of collection?			✓
12. Were samples in direct contact with wet ice? If "No," check one: ☐ NO ICE ☐ BLUE ICE	✓		
13. Was the cooler temperature less than 6°C?	✓		
14. Where pH preservation is required, are sample pHs checked and any anomalies recorded by Sample control? Are all <2 or >10? Note: VOA samples are checked by laboratory analysts.	✓		
15. Was sufficient sample volume provided to perform all tests?	✓		
16. If for Bacteriological testing, were containers supplied by AEL? (See QA officer if answer is no)			✓
17. Were all sample containers provided by AEL? (Other than Bacteriological)	✓		
18. Were samples accepted into the laboratory?	✓		
19. When necessary to split samples into other bottles, is it noted in the comments?	✓		

Comments: (Note all sample(s) and container (s)" with a "No" checklist response in this comment section)

We received VOA vials unfilled for sample -003 (MWB-33s).
Client will resample 8-10-2017 SSP (8-10-2017)

DCN: AD-D048
Eff date 2/3/10, Last rev 9/6/16

Advanced Environmental Laboratories, Inc.

Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

August 22, 2017

Eric B. Fuller
City of Jacksonville
214 North Hogan Street
10th Floor
Jacksonville, FL 32202

RE: Workorder: J1708051 Trail Ridge Landfill

Dear Eric Fuller:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday, August 10, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Shane Poston - Project Manager
SPoston@AELLab.com

Enclosures

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.

Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

SAMPLE SUMMARY

Workorder: J1708051 Trail Ridge Landfill

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1708051001	SW-3	Water	8/10/2017 11:00	8/10/2017 15:15
J1708051002	SW-1	Water	8/10/2017 11:50	8/10/2017 15:15
J1708051003	Trip Blank 3	Water	8/10/2017 00:00	8/10/2017 15:15
J1708051004	SW-B	Water	8/10/2017 12:40	8/10/2017 15:15
J1708051005	MWB-33S	Water	8/10/2017 10:45	8/10/2017 15:15

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Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1708051 Trail Ridge Landfill

Lab ID: **J1708051001** Date Received: 08/10/17 15:15 Matrix: Water

Sample ID: **SW-3** Date Collected: 08/10/17 11:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**426**		**umhos/cm @ 25.0°C**	**1**			8/10/2017 11:00	J^
Dissolved Oxygen	**1.8**		**mg/L**	**1**			8/10/2017 11:00	J^
Salinity	**0**	**U**	**ppt**	**1**			8/10/2017 11:00	J^
Temperature	**27.9**		**°C**	**1**			8/10/2017 11:00	J^
Turbidity	**110.5**		**NTU**	**1**			8/10/2017 11:00	J^
pH	**6.72**		**SU**	**1**			8/10/2017 11:00	J^
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/15/2017 15:36	J
Barium	**69**		**ug/L**	**1**	2.0	0.28	8/15/2017 15:36	J
Beryllium	**0.57**		**ug/L**	**1**	0.30	0.13	8/15/2017 15:36	J
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/15/2017 15:36	J
Calcium	**51**		**mg/L**	**1**	0.20	0.16	8/15/2017 15:36	J
Chromium	**7.9**		**ug/L**	**1**	1.0	0.50	8/15/2017 15:36	J
Cobalt	**2.0**	**I**	**ug/L**	**1**	4.0	0.60	8/15/2017 15:36	J
Copper	**4.2**		**ug/L**	**1**	4.0	2.5	8/15/2017 15:36	J
Iron	**1800**		**ug/L**	**1**	200	30	8/15/2017 15:36	J
Lead	**6.9**	**I**	**ug/L**	**1**	7.0	1.3	8/15/2017 15:36	J
Magnesium	**4.8**		**mg/L**	**1**	0.20	0.021	8/15/2017 15:36	J
Nickel	**4.2**	**I**	**ug/L**	**1**	6.5	1.1	8/15/2017 15:36	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/15/2017 15:36	J
Total Hardness (as CaCO3)	**150**		**mg/L**	**1**	0.16	0.10	8/15/2017 15:36	J
Vanadium	**16**		**ug/L**	**1**	1.5	0.18	8/15/2017 15:36	J
Zinc	**110**	**J4**	**ug/L**	**1**	10	2.0	8/15/2017 15:36	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**1.2**		**ug/L**	**1**	0.70	0.046	8/17/2017 14:17	J
Selenium	**1.7**	**I**	**ug/L**	**1**	5.0	0.58	8/17/2017 14:17	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/17/2017 14:17	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							

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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1708051 Trail Ridge Landfill

Lab ID: **J1708051001** Date Received: 08/10/17 15:15 Matrix: Water

Sample ID: **SW-3** Date Collected: 08/10/17 11:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Mercury	**0.067**	**I**	**ug/L**	**1**	0.10	0.011	8/17/2017 13:11	J
Microbiology								
Analysis Desc: Fecal Coliform MF,SM9222D,Water	Analytical Method: SM 9222D							
Coliform Fecal	**48000**		**#/100 mL**	**1000**	1000	1000	8/10/2017 14:50	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/15/2017 00:42	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/15/2017 00:42	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 00:42	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/15/2017 00:42	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/15/2017 00:42	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 00:42	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/15/2017 00:42	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/15/2017 00:42	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 00:42	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/15/2017 00:42	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 00:42	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/15/2017 00:42	J
2-Butanone (MEK)	**7.0**		**ug/L**	**1**	5.0	0.43	8/15/2017 00:42	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/15/2017 00:42	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/15/2017 00:42	J
Acetone	**12**		**ug/L**	**1**	5.0	2.1	8/15/2017 00:42	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/15/2017 00:42	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/15/2017 00:42	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/15/2017 00:42	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/15/2017 00:42	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/15/2017 00:42	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/15/2017 00:42	J
Carbon Disulfide	**0.23**	**I**	**ug/L**	**1**	1.0	0.21	8/15/2017 00:42	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/15/2017 00:42	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/15/2017 00:42	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/15/2017 00:42	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 00:42	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/15/2017 00:42	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/15/2017 00:42	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1708051 Trail Ridge Landfill

Lab ID: **J1708051001** Date Received: 08/10/17 15:15 Matrix: Water

Sample ID: **SW-3** Date Collected: 08/10/17 11:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/15/2017 00:42	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/15/2017 00:42	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/15/2017 00:42	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/15/2017 00:42	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/15/2017 00:42	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/15/2017 00:42	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/15/2017 00:42	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/15/2017 00:42	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/15/2017 00:42	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/15/2017 00:42	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/15/2017 00:42	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 00:42	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/15/2017 00:42	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/15/2017 00:42	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/15/2017 00:42	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 00:42	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 00:42	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/15/2017 00:42	J
1,2-Dichloroethane-d4 (S)	**94**		**%**	**1**	70-128		8/15/2017 00:42	
Toluene-d8 (S)	**93**		**%**	**1**	77-119		8/15/2017 00:42	
Bromofluorobenzene (S)	**125**	**J4**	**%**	**1**	86-123		8/15/2017 00:42	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/15/2017 00:42	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/15/2017 00:42	J
1,2-Dichloroethane-d4 (S)	**101**		**%**	**1**	77-125		8/15/2017 00:42	
Toluene-d8 (S)	**98**		**%**	**1**	80-121		8/15/2017 00:42	
Bromofluorobenzene (S)	**107**		**%**	**1**	80-129		8/15/2017 00:42	
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**3.7**		**mg/L**	**1**	0.10	0.10	8/17/2017 14:05	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.0047**	**I**	**mg/L**	**1**	0.010	0.000071	8/15/2017 15:15	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1708051 Trail Ridge Landfill

Lab ID: **J1708051001** Date Received: 08/10/17 15:15 Matrix: Water

Sample ID: **SW-3** Date Collected: 08/10/17 11:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Nitrate	**0.10**	**U**	**mg/L**	**2**	1.0	0.10	8/11/2017 13:44	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**1.1**		**mg/L**	**2**	0.02	0.02	8/15/2017 15:15	G
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**3.6**		**mg/L**	**1**	0.10	0.050	8/16/2017 12:11	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.27**		**mg/L**	**1**	0.10	0.050	8/16/2017 12:11	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**93**		**mg/L**	**1**	20	7.3	8/14/2017 14:30	J
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Chlorophyll A	**8.0**		**mg/m3**	**1**	1.0	1.0	8/21/2017 15:00	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**330**		**mg/L**	**1**	10	10	8/11/2017 15:21	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**64**		**mg/L**	**1**	2.0	1.0	8/16/2017 14:45	J
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**150**		**mg/L**	**1**	2.0	2.0	8/11/2017 12:33	J
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**25**		**mg/L**	**1**	1.0	0.25	8/16/2017 10:00	G

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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1708051 Trail Ridge Landfill

Lab ID: **J1708051002** Date Received: 08/10/17 15:15 Matrix: Water

Sample ID: **SW-1** Date Collected: 08/10/17 11:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**175**		**umhos/cm @ 25.0°C**	**1**			8/10/2017 11:50	J^
Dissolved Oxygen	**3.7**		**mg/L**	**1**			8/10/2017 11:50	J^
Salinity	**0**	**U**	**ppt**	**1**			8/10/2017 11:50	J^
Temperature	**25.9**		**°C**	**1**			8/10/2017 11:50	J^
Turbidity	**43.13**		**NTU**	**1**			8/10/2017 11:50	J^
pH	**6.51**		**SU**	**1**			8/10/2017 11:50	J^
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/15/2017 16:33	J
Barium	**44**		**ug/L**	**1**	2.0	0.28	8/15/2017 16:33	J
Beryllium	**0.18**	**I**	**ug/L**	**1**	0.30	0.13	8/15/2017 16:33	J
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/15/2017 16:33	J
Calcium	**21**		**mg/L**	**1**	0.20	0.16	8/15/2017 16:33	J
Chromium	**5.9**		**ug/L**	**1**	1.0	0.50	8/15/2017 16:33	J
Cobalt	**1.0**	**I**	**ug/L**	**1**	4.0	0.60	8/15/2017 16:33	J
Copper	**2.5**	**U**	**ug/L**	**1**	4.0	2.5	8/15/2017 16:33	J
Iron	**1200**		**ug/L**	**1**	200	30	8/15/2017 16:33	J
Lead	**3.1**	**I**	**ug/L**	**1**	7.0	1.3	8/15/2017 16:33	J
Magnesium	**2.3**		**mg/L**	**1**	0.20	0.021	8/15/2017 16:33	J
Nickel	**1.2**	**I**	**ug/L**	**1**	6.5	1.1	8/15/2017 16:33	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/15/2017 16:33	J
Total Hardness (as CaCO3)	**62**		**mg/L**	**1**	0.16	0.10	8/15/2017 16:33	J
Vanadium	**8.2**		**ug/L**	**1**	1.5	0.18	8/15/2017 16:33	J
Zinc	**16**		**ug/L**	**1**	10	2.0	8/15/2017 16:33	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.40**	**I**	**ug/L**	**1**	0.70	0.046	8/17/2017 14:21	J
Selenium	**1.0**	**I**	**ug/L**	**1**	5.0	0.58	8/17/2017 14:21	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/17/2017 14:21	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							

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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1708051 Trail Ridge Landfill

Lab ID: **J1708051002** Date Received: 08/10/17 15:15 Matrix: Water

Sample ID: **SW-1** Date Collected: 08/10/17 11:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Mercury	**0.036**	**I**	**ug/L**	**1**	0.10	0.011	8/17/2017 13:14	J
Microbiology								
Analysis Desc: Fecal Coliform MF,SM9222D,Water	Analytical Method: SM 9222D							
Coliform Fecal	**13000**	**B**	**#/100 mL**	**1000**	1000	1000	8/10/2017 14:50	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/15/2017 01:11	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/15/2017 01:11	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 01:11	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/15/2017 01:11	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/15/2017 01:11	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 01:11	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/15/2017 01:11	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/15/2017 01:11	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 01:11	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/15/2017 01:11	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 01:11	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/15/2017 01:11	J
2-Butanone (MEK)	**0.50**	**I**	**ug/L**	**1**	5.0	0.43	8/15/2017 01:11	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/15/2017 01:11	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/15/2017 01:11	J
Acetone	**4.8**	**I**	**ug/L**	**1**	5.0	2.1	8/15/2017 01:11	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/15/2017 01:11	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/15/2017 01:11	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/15/2017 01:11	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/15/2017 01:11	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/15/2017 01:11	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/15/2017 01:11	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/15/2017 01:11	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/15/2017 01:11	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/15/2017 01:11	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/15/2017 01:11	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 01:11	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/15/2017 01:11	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/15/2017 01:11	J

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6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1708051 Trail Ridge Landfill

Lab ID: **J1708051002** Date Received: 08/10/17 15:15 Matrix: Water

Sample ID: **SW-1** Date Collected: 08/10/17 11:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/15/2017 01:11	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/15/2017 01:11	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/15/2017 01:11	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/15/2017 01:11	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/15/2017 01:11	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/15/2017 01:11	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/15/2017 01:11	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/15/2017 01:11	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/15/2017 01:11	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/15/2017 01:11	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/15/2017 01:11	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 01:11	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/15/2017 01:11	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/15/2017 01:11	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/15/2017 01:11	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 01:11	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 01:11	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/15/2017 01:11	J
1,2-Dichloroethane-d4 (S)	**89**		**%**	**1**	70-128		8/15/2017 01:11	
Toluene-d8 (S)	**94**		**%**	**1**	77-119		8/15/2017 01:11	
Bromofluorobenzene (S)	**127**		**%**	**1**	86-123		8/15/2017 01:11	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/15/2017 01:11	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/15/2017 01:11	J
1,2-Dichloroethane-d4 (S)	**96**		**%**	**1**	77-125		8/15/2017 01:11	
Toluene-d8 (S)	**99**		**%**	**1**	80-121		8/15/2017 01:11	
Bromofluorobenzene (S)	**109**		**%**	**1**	80-129		8/15/2017 01:11	
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**1.9**		**mg/L**	**1**	0.10	0.10	8/17/2017 14:06	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.00086**	**I**	**mg/L**	**1**	0.010	0.000019	8/15/2017 15:15	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1708051 Trail Ridge Landfill

Lab ID: **J1708051002** Date Received: 08/10/17 15:15 Matrix: Water

Sample ID: **SW-1** Date Collected: 08/10/17 11:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Nitrate	**0.10**	**U**	**mg/L**	**2**	1.0	0.10	8/11/2017 14:08	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.36**		**mg/L**	**1**	0.01	0.01	8/15/2017 15:15	G
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**1.9**		**mg/L**	**1**	0.10	0.050	8/16/2017 12:11	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.10**		**mg/L**	**1**	0.10	0.050	8/16/2017 12:11	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**120**		**mg/L**	**1**	20	7.3	8/14/2017 14:30	J
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Chlorophyll A	**6.7**		**mg/m3**	**1**	1.0	1.0	8/21/2017 15:00	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**200**		**mg/L**	**1**	10	10	8/11/2017 15:21	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**13**		**mg/L**	**1**	2.0	1.0	8/16/2017 14:45	J
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**3.8**		**mg/L**	**1**	2.0	2.0	8/11/2017 12:33	J
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**35**		**mg/L**	**1**	1.0	0.25	8/16/2017 10:00	G

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1708051 Trail Ridge Landfill

Lab ID: **J1708051003** Date Received: 08/10/17 15:15 Matrix: Water

Sample ID: **Trip Blank 3** Date Collected: 08/10/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/15/2017 01:40	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/15/2017 01:40	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 01:40	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/15/2017 01:40	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/15/2017 01:40	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 01:40	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/15/2017 01:40	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/15/2017 01:40	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 01:40	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/15/2017 01:40	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 01:40	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/15/2017 01:40	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/15/2017 01:40	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/15/2017 01:40	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/15/2017 01:40	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/15/2017 01:40	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/15/2017 01:40	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/15/2017 01:40	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/15/2017 01:40	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/15/2017 01:40	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/15/2017 01:40	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/15/2017 01:40	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/15/2017 01:40	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/15/2017 01:40	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/15/2017 01:40	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/15/2017 01:40	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 01:40	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/15/2017 01:40	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/15/2017 01:40	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/15/2017 01:40	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/15/2017 01:40	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/15/2017 01:40	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/15/2017 01:40	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/15/2017 01:40	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/15/2017 01:40	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/15/2017 01:40	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1708051 Trail Ridge Landfill

Lab ID: **J1708051003** Date Received: 08/10/17 15:15 Matrix: Water
Sample ID: **Trip Blank 3** Date Collected: 08/10/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/15/2017 01:40	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/15/2017 01:40	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/15/2017 01:40	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/15/2017 01:40	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 01:40	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/15/2017 01:40	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/15/2017 01:40	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/15/2017 01:40	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 01:40	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 01:40	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/15/2017 01:40	J
1,2-Dichloroethane-d4 (S)	**91**		**%**	**1**	70-128		8/15/2017 01:40	
Toluene-d8 (S)	**94**		**%**	**1**	77-119		8/15/2017 01:40	
Bromofluorobenzene (S)	**126**	**J4**	**%**	**1**	86-123		8/15/2017 01:40	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/15/2017 01:40	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/15/2017 01:40	J
1,2-Dichloroethane-d4 (S)	**98**		**%**	**1**	77-125		8/15/2017 01:40	
Toluene-d8 (S)	**99**		**%**	**1**	80-121		8/15/2017 01:40	
Bromofluorobenzene (S)	**109**		**%**	**1**	80-129		8/15/2017 01:40	

Lab ID: **J1708051004** Date Received: 08/10/17 15:15 Matrix: Water
Sample ID: **SW-B** Date Collected: 08/10/17 12:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**197**		**umhos/cm @ 25.0°C**	**1**			8/10/2017 12:40	J^
Dissolved Oxygen	**4.7**		**mg/L**	**1**			8/10/2017 12:40	J^
Salinity	**0**	**U**	**ppt**	**1**			8/10/2017 12:40	J^
Temperature	**38.6**		**°C**	**1**			8/10/2017 12:40	J^

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1708051 Trail Ridge Landfill

Lab ID: **J1708051004** Date Received: 08/10/17 15:15 Matrix: Water

Sample ID: **SW-B** Date Collected: 08/10/17 12:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Turbidity	**24.47**		**NTU**	**1**			8/10/2017 12:40	J^
pH	**6.1**		**SU**	**1**			8/10/2017 12:40	J^
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.5**	**U**	**ug/L**	**1**	10	8.5	8/15/2017 16:37	J
Barium	**19**		**ug/L**	**1**	2.0	0.28	8/15/2017 16:37	J
Beryllium	**0.13**	**U**	**ug/L**	**1**	0.30	0.13	8/15/2017 16:37	J
Cadmium	**0.32**	**U**	**ug/L**	**1**	0.60	0.32	8/15/2017 16:37	J
Calcium	**30**		**mg/L**	**1**	0.20	0.16	8/15/2017 16:37	J
Chromium	**4.8**		**ug/L**	**1**	1.0	0.50	8/15/2017 16:37	J
Cobalt	**0.60**	**U**	**ug/L**	**1**	4.0	0.60	8/15/2017 16:37	J
Copper	**5.2**		**ug/L**	**1**	4.0	2.5	8/15/2017 16:37	J
Iron	**550**		**ug/L**	**1**	200	30	8/15/2017 16:37	J
Lead	**1.3**	**U**	**ug/L**	**1**	7.0	1.3	8/15/2017 16:37	J
Magnesium	**0.88**		**mg/L**	**1**	0.20	0.021	8/15/2017 16:37	J
Nickel	**1.1**	**U**	**ug/L**	**1**	6.5	1.1	8/15/2017 16:37	J
Silver	**0.44**	**U**	**ug/L**	**1**	4.0	0.44	8/15/2017 16:37	J
Total Hardness (as CaCO3)	**78**		**mg/L**	**1**	0.16	0.10	8/15/2017 16:37	J
Vanadium	**8.5**		**ug/L**	**1**	1.5	0.18	8/15/2017 16:37	J
Zinc	**30**		**ug/L**	**1**	10	2.0	8/15/2017 16:37	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.31**	**I**	**ug/L**	**1**	0.70	0.046	8/17/2017 14:25	J
Selenium	**0.68**	**I**	**ug/L**	**1**	5.0	0.58	8/17/2017 14:25	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/17/2017 14:25	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.016**	**I**	**ug/L**	**1**	0.10	0.011	8/17/2017 13:17	J
Microbiology								
Analysis Desc: Fecal Coliform MF,SM9222D,Water	Analytical Method: SM 9222D							
Coliform Fecal	**4200**		**#/100 mL**	**100**	100	100	8/10/2017 14:50	J
VOLATILES								

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1708051 Trail Ridge Landfill

Lab ID: **J1708051004** Date Received: 08/10/17 15:15 Matrix: Water

Sample ID: **SW-B** Date Collected: 08/10/17 12:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/15/2017 02:09	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/15/2017 02:09	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 02:09	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/15/2017 02:09	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/15/2017 02:09	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 02:09	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/15/2017 02:09	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/15/2017 02:09	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 02:09	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/15/2017 02:09	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 02:09	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/15/2017 02:09	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/15/2017 02:09	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/15/2017 02:09	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/15/2017 02:09	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/15/2017 02:09	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/15/2017 02:09	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/15/2017 02:09	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/15/2017 02:09	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/15/2017 02:09	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/15/2017 02:09	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/15/2017 02:09	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/15/2017 02:09	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/15/2017 02:09	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/15/2017 02:09	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/15/2017 02:09	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 02:09	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/15/2017 02:09	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/15/2017 02:09	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/15/2017 02:09	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/15/2017 02:09	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/15/2017 02:09	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/15/2017 02:09	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/15/2017 02:09	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/15/2017 02:09	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/15/2017 02:09	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/15/2017 02:09	J

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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1708051 Trail Ridge Landfill

Lab ID: **J1708051004** Date Received: 08/10/17 15:15 Matrix: Water

Sample ID: **SW-B** Date Collected: 08/10/17 12:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/15/2017 02:09	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/15/2017 02:09	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/15/2017 02:09	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 02:09	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/15/2017 02:09	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/15/2017 02:09	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/15/2017 02:09	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 02:09	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 02:09	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/15/2017 02:09	J
1,2-Dichloroethane-d4 (S)	**89**		**%**	**1**	70-128		8/15/2017 02:09	
Toluene-d8 (S)	**92**		**%**	**1**	77-119		8/15/2017 02:09	
Bromofluorobenzene (S)	**123**		**%**	**1**	86-123		8/15/2017 02:09	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/15/2017 02:09	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/15/2017 02:09	J
1,2-Dichloroethane-d4 (S)	**96**		**%**	**1**	77-125		8/15/2017 02:09	
Toluene-d8 (S)	**97**		**%**	**1**	80-121		8/15/2017 02:09	
Bromofluorobenzene (S)	**106**		**%**	**1**	80-129		8/15/2017 02:09	
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**0.76**		**mg/L**	**1**	0.10	0.10	8/17/2017 14:10	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.000037**	**I**	**mg/L**	**1**	0.010	0.000017	8/15/2017 15:15	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate	**0.10**	**U**	**mg/L**	**2**	1.0	0.10	8/11/2017 14:32	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.02**		**mg/L**	**1**	0.01	0.01	8/15/2017 15:15	G
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**0.69**		**mg/L**	**1**	0.10	0.050	8/16/2017 12:11	G

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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1708051 Trail Ridge Landfill

Lab ID: **J1708051004** Date Received: 08/10/17 15:15 Matrix: Water
Sample ID: **SW-B** Date Collected: 08/10/17 12:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.087**	**I**	**mg/L**	**1**	0.10	0.050	8/16/2017 12:11	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**38**		**mg/L**	**1**	20	7.3	8/14/2017 14:30	J
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Chlorophyll A	**17**		**mg/m3**	**1**	1.0	1.0	8/21/2017 15:00	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**140**		**mg/L**	**1**	10	10	8/11/2017 15:21	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**31**		**mg/L**	**1**	2.0	1.0	8/16/2017 14:45	J
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**3.4**		**mg/L**	**1**	2.0	2.0	8/11/2017 12:33	J
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**7.3**		**mg/L**	**1**	1.0	0.25	8/16/2017 10:00	G

Lab ID: **J1708051005** Date Received: 08/10/17 15:15 Matrix: Water
Sample ID: **MWB-33S** Date Collected: 08/10/17 10:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/15/2017 02:38	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/15/2017 02:38	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 02:38	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/15/2017 02:38	J

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Phone: (904)363-9350
Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1708051 Trail Ridge Landfill

Lab ID: **J1708051005** Date Received: 08/10/17 15:15 Matrix: Water

Sample ID: **MWB-33S** Date Collected: 08/10/17 10:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/15/2017 02:38	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 02:38	J
1,2,3-Trichloropropane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/15/2017 02:38	J
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/15/2017 02:38	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 02:38	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/15/2017 02:38	J
1,2-Dichloropropane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 02:38	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/15/2017 02:38	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/15/2017 02:38	J
2-Hexanone	**0.44**	**U**	**ug/L**	**1**	5.0	0.44	8/15/2017 02:38	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/15/2017 02:38	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/15/2017 02:38	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/15/2017 02:38	J
Benzene	**0.34**	**I**	**ug/L**	**1**	1.0	0.16	8/15/2017 02:38	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/15/2017 02:38	J
Bromodichloromethane	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	8/15/2017 02:38	J
Bromoform	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	8/15/2017 02:38	J
Bromomethane	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/15/2017 02:38	J
Carbon Disulfide	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/15/2017 02:38	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/15/2017 02:38	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/15/2017 02:38	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/15/2017 02:38	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 02:38	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/15/2017 02:38	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/15/2017 02:38	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/15/2017 02:38	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/15/2017 02:38	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/15/2017 02:38	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/15/2017 02:38	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/15/2017 02:38	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/15/2017 02:38	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/15/2017 02:38	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/15/2017 02:38	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/15/2017 02:38	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/15/2017 02:38	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/15/2017 02:38	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 02:38	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/15/2017 02:38	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/15/2017 02:38	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/15/2017 02:38	J

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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1708051 Trail Ridge Landfill

Lab ID: **J1708051005** Date Received: 08/10/17 15:15 Matrix: Water

Sample ID: **MWB-33S** Date Collected: 08/10/17 10:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/15/2017 02:38	J
trans-1,3-Dichloropropylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/15/2017 02:38	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/15/2017 02:38	J
1,2-Dichloroethane-d4 (S)	**89**		**%**	**1**	70-128		8/15/2017 02:38	
Toluene-d8 (S)	**94**		**%**	**1**	77-119		8/15/2017 02:38	
Bromofluorobenzene (S)	**127**	**J4**	**%**	**1**	86-123		8/15/2017 02:38	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/15/2017 02:38	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/15/2017 02:38	J
1,2-Dichloroethane-d4 (S)	**97**		**%**	**1**	77-125		8/15/2017 02:38	
Toluene-d8 (S)	**99**		**%**	**1**	80-121		8/15/2017 02:38	
Bromofluorobenzene (S)	**109**		**%**	**1**	80-129		8/15/2017 02:38	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: J1708051 Trail Ridge Landfill

PARAMETER QUALIFIERS

U	The compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
B	Results based upon colony counts outside the acceptable range.
J4	Estimated Result

LAB QUALIFIERS

G	DOH Certification #E82001(AEL-G)(FL NELAC Certification)
J	DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)
J^	Not Certified

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Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1708051 Trail Ridge Landfill

QC Batch: WCAj/4795 Analysis Method: SM 5210B
QC Batch Method: SM 5210B Prepared:
Associated Lab Samples: J1708051001, J1708051002, J1708051004

METHOD BLANK: 2434368

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Biochemical Oxygen Demand	mg/L	2.0	2.0	U

LABORATORY CONTROL SAMPLE: 2434369

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Biochemical Oxygen Demand	mg/L	200	220	113	84.6-115.4	

SAMPLE DUPLICATE: 2434779 Original: J1708051001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Biochemical Oxygen Demand	mg/L	150	150	4	20	

QC Batch: WCAj/4796 Analysis Method: SM 2540 C
QC Batch Method: SM 2540 C Prepared:
Associated Lab Samples: J1708051001, J1708051002, J1708051004

METHOD BLANK: 2434596

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Dissolved Solids	mg/L	10	10	U

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Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1708051 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 2434597

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	300	310	104	75-125	

SAMPLE DUPLICATE: 2434599 Original: J1707993013

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	28	27	4	5	

QC Batch: DGMj/3384 Analysis Method: SW-846 7470A

QC Batch Method: SW-846 7470A Prepared: 08/17/2017 09:29

Associated Lab Samples: J1708051001, J1708051002, J1708051004

METHOD BLANK: 2435446

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Mercury	ug/L	0.011	0.011	U

LABORATORY CONTROL SAMPLE: 2435447

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Mercury	ug/L	2	2.1	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2435448 2435449 Original: J1707993001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Mercury	ug/L	0.013	2	1.9	1.9	96	96	80-120	0	20	

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Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1708051 Trail Ridge Landfill

QC Batch: WCAj/4804 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Prepared:
Associated Lab Samples: J1708051001, J1708051002, J1708051004

METHOD BLANK: 2435767

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Nitrate	mg/L	0.050	0.050	U

LABORATORY CONTROL SAMPLE & LCSD: 2435768 2435769

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY										
Nitrate	mg/L	1	0.90	0.92	90	92	90-110	2	10	

MATRIX SPIKE SAMPLE: 2435770 Original: J1708047002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY							
Nitrate	mg/L	0.055	2	2.1	100	90-110	

QC Batch: MICj/2329 Analysis Method: SM 9222D
QC Batch Method: SM 9222D Prepared:
Associated Lab Samples: J1708051001, J1708051002, J1708051004

METHOD BLANK: 2435868

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Microbiology				
Coliform Fecal	#/100 mL	1	1	U

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QUALITY CONTROL DATA

Workorder: J1708051 Trail Ridge Landfill

SAMPLE DUPLICATE: 2435869 Original: J1708038002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
Microbiology						
Coliform Fecal	#/100 mL	2U	2	0		

QC Batch: DGMj/3390 Analysis Method: SW-846 6020
QC Batch Method: SW-846 3010A Prepared: 08/15/2017 03:30
Associated Lab Samples: J1708051001, J1708051002, J1708051004

METHOD BLANK: 2436072

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Selenium	ug/L	0.58	0.58	U
Antimony	ug/L	0.046	0.046	U
Thallium	ug/L	0.057	0.057	U

LABORATORY CONTROL SAMPLE: 2436073

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Selenium	ug/L	100	110	114	80-120	
Antimony	ug/L	100	92	92	80-120	
Thallium	ug/L	100	95	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2436074 2436075 Original: T1713315019

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Selenium	ug/L	0.61	100	100	110	102	105	75-125	3	20	
Antimony	ug/L	0.1	100	93	94	93	94	75-125	1	20	
Thallium	ug/L	0.016	100	99	99	99	99	75-125	1	20	

QC Batch: DGMj/3392 Analysis Method: SW-846 6010
QC Batch Method: SW-846 3010A Prepared: 08/15/2017 03:30
Associated Lab Samples: J1708051001, J1708051002, J1708051004

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QUALITY CONTROL DATA

Workorder: J1708051 Trail Ridge Landfill

METHOD BLANK: 2436086

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Silver	ug/L	0.44	0.44	U
Arsenic	ug/L	8.5	8.5	U
Barium	ug/L	0.28	0.28	U
Beryllium	ug/L	0.13	0.13	U
Calcium	mg/L	0.16	0.16	U
Cadmium	ug/L	0.32	0.32	U
Cobalt	ug/L	0.60	0.60	U
Copper	ug/L	2.5	2.5	U
Iron	ug/L	30	30	U
Magnesium	mg/L	0.021	0.021	U
Nickel	ug/L	1.1	1.1	U
Lead	ug/L	1.3	1.3	U
Vanadium	ug/L	0.18	0.18	U

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Chromium	ug/L	0.50	0.50	U
Zinc	ug/L	2.0	2.0	U

LABORATORY CONTROL SAMPLE: 2436087

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Silver	ug/L	400	400	100	80-120	
Arsenic	ug/L	400	390	97	80-120	
Barium	ug/L	400	410	103	80-120	
Beryllium	ug/L	400	410	104	80-120	
Calcium	mg/L	25	25	98	80-120	
Cadmium	ug/L	400	380	95	80-120	
Cobalt	ug/L	400	360	90	80-120	
Chromium	ug/L	400	410	102	80-120	
Copper	ug/L	400	390	98	80-120	
Iron	ug/L	26000	25000	97	80-120	
Magnesium	mg/L	25	25	98	80-120	
Nickel	ug/L	400	350	88	80-120	
Lead	ug/L	400	360	91	80-120	
Vanadium	ug/L	400	420	105	80-120	
Zinc	ug/L	400	360	91	80-120	

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QUALITY CONTROL DATA

Workorder: J1708051 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2436088 2436089 Original: J1708051001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Silver	ug/L	0	400	410	400	102	101	75-125	1	20	
Arsenic	ug/L	0	400	390	380	97	95	75-125	2	20	
Barium	ug/L	69	400	470	470	101	101	75-125	1	20	
Beryllium	ug/L	0.57	400	420	420	104	104	75-125	0	20	
Calcium	mg/L	51	25	78	76	106	98	75-125	2	20	
Cadmium	ug/L	0.17	400	370	370	93	93	75-125	1	20	
Cobalt	ug/L	2	400	370	370	92	91	75-125	2	20	
Chromium	ug/L	7.9	400	420	420	103	102	75-125	1	20	
Copper	ug/L	4.2	400	400	400	100	99	75-125	1	20	
Iron	ug/L	1800	26000	28000	27000	100	99	75-125	1	20	
Magnesium	mg/L	4.8	25	30	29	99	97	75-125	2	20	
Nickel	ug/L	4.2	400	370	380	92	95	75-125	3	20	
Lead	ug/L	6.9	400	370	370	91	90	75-125	2	20	
Vanadium	ug/L	16	400	440	440	107	106	75-125	1	20	
Zinc	ug/L	110	400	390	380	68	67	75-125	1	20	

QC Batch: WCAj/4817 Analysis Method: EPA 410.4

QC Batch Method: EPA 410.4 Prepared:

Associated Lab Samples: J1708051001, J1708051002, J1708051004

METHOD BLANK: 2437088

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Chemical Oxygen Demand	mg/L	7.3	7.3	U

LABORATORY CONTROL SAMPLE: 2437089

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Chemical Oxygen Demand	mg/L	500	510	101	90-110	

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Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1708051 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2437090 2437091 Original: J1707982001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Chemical Oxygen Demand	mg/L	400	500	900	900	100	100	90-110	0	10	

QC Batch: MSVj/4589 Analysis Method: SW-846 8260B (SIM)

QC Batch Method: SW-846 5030B Prepared: 08/14/2017 13:30

Associated Lab Samples: J1708051001, J1708051002, J1708051003, J1708051004, J1708051005

METHOD BLANK: 2437159

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Ethylene Dibromide (EDB)	ug/L	0.020	0.020	U
1,2-Dibromo-3-Chloropropane	ug/L	0.11	0.11	U
1,2-Dichloroethane-d4 (S)	%	95	77-125	
Toluene-d8 (S)	%	98	80-121	
Bromofluorobenzene (S)	%	99	80-129	

LABORATORY CONTROL SAMPLE & LCSD: 2437160 2437161

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Ethylene Dibromide (EDB)	ug/L	0.8	0.74	0.82	93	103	70-130	10	30	
1,2-Dibromo-3-Chloropropane	ug/L	0.8	0.75	0.94	94	118	70-130	22	30	
1,2-Dichloroethane-d4 (S)	%				101	101	77-125	0		
Toluene-d8 (S)	%				98	100	80-121	2		
Bromofluorobenzene (S)	%				98	100	80-129	2		

MATRIX SPIKE SAMPLE: 2437162 Original: J1708040002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Ethylene Dibromide (EDB)	ug/L	0	0.8	0.59	74	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	0.8	0.52	65	70-130	

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Workorder: J1708051 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 2437162 Original: J1708040002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%	96			99	77-125	
Toluene-d8 (S)	%	99			98	80-121	
Bromofluorobenzene (S)	%	108			107	80-129	

QC Batch: MSVj/4591 Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B Prepared: 08/14/2017 18:10

Associated Lab Samples: J1708051001, J1708051002, J1708051003, J1708051004, J1708051005

METHOD BLANK: 2437164

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Chloromethane	ug/L	0.21	0.21	U
Vinyl Chloride	ug/L	0.20	0.20	U
Bromomethane	ug/L	0.24	0.24	U
Chloroethane	ug/L	0.33	0.33	U
Trichlorofluoromethane	ug/L	0.32	0.32	U
Acetone	ug/L	2.1	2.1	U
1,1-Dichloroethylene	ug/L	0.18	0.18	U
Iodomethane (Methyl Iodide)	ug/L	0.16	0.16	U
Acrylonitrile	ug/L	1.1	1.1	U
Methylene Chloride	ug/L	2.5	2.5	U
Carbon Disulfide	ug/L	0.21	0.21	U
trans-1,2-Dichloroethylene	ug/L	0.20	0.20	U
1,1-Dichloroethane	ug/L	0.14	0.14	U
Vinyl Acetate	ug/L	0.19	0.19	U
2-Butanone (MEK)	ug/L	0.43	0.43	U
cis-1,2-Dichloroethylene	ug/L	0.24	0.24	U
Bromochloromethane	ug/L	0.17	0.17	U
Chloroform	ug/L	0.18	0.18	U
1,2-Dichloroethane	ug/L	0.23	0.23	U
1,1,1-Trichloroethane	ug/L	0.22	0.22	U
Carbon Tetrachloride	ug/L	0.36	0.36	U
Benzene	ug/L	0.16	0.16	U
Dibromomethane	ug/L	0.26	0.26	U
1,2-Dichloropropane	ug/L	0.20	0.20	U
Trichloroethene	ug/L	0.29	0.29	U
Bromodichloromethane	ug/L	0.25	0.25	U
cis-1,3-Dichloropropene	ug/L	0.16	0.16	U
4-Methyl-2-pentanone (MIBK)	ug/L	0.47	0.47	U
trans-1,3-Dichloropropylene	ug/L	0.18	0.18	U

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QUALITY CONTROL DATA

Workorder: J1708051 Trail Ridge Landfill

METHOD BLANK: 2437164

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1,2-Trichloroethane	ug/L	0.30	0.30	U
Toluene	ug/L	0.23	0.23	U
2-Hexanone	ug/L	0.44	0.44	U
Dibromochloromethane	ug/L	0.33	0.33	U
Ethylene Dibromide (EDB)	ug/L	0.020	0.020	U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36	U
1,1,1,2-Tetrachloroethane	ug/L	0.26	0.26	U
Chlorobenzene	ug/L	0.21	0.21	U
Ethylbenzene	ug/L	0.24	0.24	U
Bromoform	ug/L	0.43	0.43	U
Styrene	ug/L	0.23	0.23	U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20	U
1,2,3-Trichloropropane	ug/L	0.30	0.30	U
1,4-Dichlorobenzene	ug/L	0.22	0.22	U
1,2-Dichlorobenzene	ug/L	0.18	0.18	U
1,2-Dibromo-3-Chloropropane	ug/L	0.11	0.11	U
trans-1,4-Dichloro-2-butene	ug/L	1.8	1.8	U
Xylene (Total)	ug/L	0.53	0.53	U
1,2-Dichloroethane-d4 (S)	%	94	70-128	
Toluene-d8 (S)	%	95	77-119	
Bromofluorobenzene (S)	%	112	86-123	

LABORATORY CONTROL SAMPLE & LCSD: 2437165 2437166

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Vinyl Chloride	ug/L	20	20	24	99	122	70-130	21	30	
1,1-Dichloroethylene	ug/L	20	20	24	98	122	70-130	21	30	
cis-1,2-Dichloroethylene	ug/L	20	19	24	96	120	70-130	22	30	
Chloroform	ug/L	20	19	24	95	118	70-130	22	30	
Benzene	ug/L	20	19	24	97	120	70-130	21	30	
Trichloroethene	ug/L	20	19	23	94	117	70-130	22	30	
Toluene	ug/L	20	20	24	98	122	70-130	22	30	
Tetrachloroethylene (PCE)	ug/L	20	19	23	93	115	70-130	21	30	
Chlorobenzene	ug/L	20	18	24	92	118	70-130	24	30	
Ethylbenzene	ug/L	20	19	24	96	121	70-130	23	30	
1,2-Dichlorobenzene	ug/L	20	20	25	98	126	70-130	25	30	
Xylene (Total)	ug/L	60	57	71	95	119	70-130	22	30	
1,2-Dichloroethane-d4 (S)	%				92	91	70-128	1		
Toluene-d8 (S)	%				102	101	77-119	1		
Bromofluorobenzene (S)	%				99	98	86-123	1		

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QUALITY CONTROL DATA

Workorder: J1708051 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 2437167 Original: J1708051004

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Vinyl Chloride	ug/L	0	20	24	119	70-130	
1,1-Dichloroethylene	ug/L	0	20	23	115	70-130	
cis-1,2-Dichloroethylene	ug/L	0	20	24	121	70-130	
Chloroform	ug/L	0	20	24	120	70-130	
Benzene	ug/L	0	20	24	119	70-130	
Trichloroethene	ug/L	0	20	22	109	70-130	
Toluene	ug/L	0	20	23	117	70-130	
Tetrachloroethylene (PCE)	ug/L	0	20	23	113	70-130	
Chlorobenzene	ug/L	0	20	22	111	70-130	
Ethylbenzene	ug/L	0	20	23	115	70-130	
1,2-Dichlorobenzene	ug/L	0	20	21	107	70-130	
Xylene (Total)	ug/L	0	60	70	116	70-130	
1,2-Dichloroethane-d4 (S)	%	89			92	70-128	
Toluene-d8 (S)	%	92			101	77-119	
Bromofluorobenzene (S)	%	123			102	86-123	

QC Batch: WCAg/5639 Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1 Prepared:

Associated Lab Samples: J1708051001, J1708051002, J1708051004

METHOD BLANK: 2438026

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	0.01	0.01	U

LABORATORY CONTROL SAMPLE: 2438027

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.53	106	90-110	

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QUALITY CONTROL DATA

Workorder: J1708051 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2438028 2438029 Original: J1708051004

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Ammonia (N)	mg/L	0.02	0.4	0.40	0.40	96	96	90-110	1	10	

QC Batch: WCAj/4827 Analysis Method: SM 2540D
QC Batch Method: SM 2540D Prepared:
Associated Lab Samples: J1708051001, J1708051002, J1708051004

METHOD BLANK: 2438605

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Suspended Solids	mg/L	1.0	1.0	U

LABORATORY CONTROL SAMPLE: 2438606

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	100	110	109	75-125	

SAMPLE DUPLICATE: 2438608 Original: J1708049001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	1400	1400	0	10	

QC Batch: WCAg/5653 Analysis Method: EPA 351.2
QC Batch Method: Copper Sulfate Digestion Prepared: 08/15/2017 17:30
Associated Lab Samples: J1708051001, J1708051002, J1708051004

METHOD BLANK: 2439458

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				

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QUALITY CONTROL DATA

Workorder: J1708051 Trail Ridge Landfill

METHOD BLANK: 2439458

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Total Kjeldahl Nitrogen	mg/L	0.050	0.050	U

METHOD BLANK: 2439459

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Phosphorus (as P)	mg/L	0.050	0.050	U

LABORATORY CONTROL SAMPLE: 2439460

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Kjeldahl Nitrogen	mg/L	1	0.97	97	90-110	

LABORATORY CONTROL SAMPLE: 2439461

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Phosphorus (as P)	mg/L	1	0.97	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2439462 2439464 Original: J1707838001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Kjeldahl Nitrogen	mg/L	0.86	1	1.9	1.9	106	107	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2439463 2439465 Original: J1707838001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Phosphorus (as P)	mg/L	0.42	1	1.3	1.4	90	98	80-120	6	20	

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QUALITY CONTROL DATA

Workorder: J1708051 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2439466 2439468 Original: J1708051002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Kjeldahl Nitrogen	mg/L	1.9	1	2.9	2.9	103	100	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2439467 2439469 Original: J1708051002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Phosphorus (as P)	mg/L	0.1	1	1.0	1.0	93	95	80-120	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2439470 2439472 Original: J1707888002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Kjeldahl Nitrogen	mg/L	0.43	1	1.4	1.3	101	90	90-110	8	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2439471 2439473 Original: J1707888002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Phosphorus (as P)	mg/L	0.36	1	1.3	1.3	93	95	80-120	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2439474 2439475 Original: G1706717001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Kjeldahl Nitrogen	mg/L	0.73	1	1.7	1.7	97	93	90-110	2	20	

QC Batch: WCAg/5653 Analysis Method: EPA 365.4

QC Batch Method: Copper Sulfate Digestion Prepared: 08/15/2017 17:30

Associated Lab Samples: J1708051001, J1708051002, J1708051004

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1708051 Trail Ridge Landfill

METHOD BLANK: 2439458

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Kjeldahl Nitrogen	mg/L	0.050	0.050	U

METHOD BLANK: 2439459

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Phosphorus (as P)	mg/L	0.050	0.050	U

LABORATORY CONTROL SAMPLE: 2439460

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Kjeldahl Nitrogen	mg/L	1	0.97	97	90-110	

LABORATORY CONTROL SAMPLE: 2439461

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Phosphorus (as P)	mg/L	1	0.97	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2439462 2439464 Original: J1707838001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Kjeldahl Nitrogen	mg/L	0.86	1	1.9	1.9	106	107	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2439463 2439465 Original: J1707838001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Phosphorus (as P)	mg/L	0.42	1	1.3	1.4	90	98	80-120	6	20	

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
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Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1708051 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2439466 2439468 Original: J1708051002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Kjeldahl Nitrogen	mg/L	1.9	1	2.9	2.9	103	100	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2439467 2439469 Original: J1708051002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Phosphorus (as P)	mg/L	0.1	1	1.0	1.0	93	95	80-120	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2439470 2439472 Original: J1707888002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Kjeldahl Nitrogen	mg/L	0.43	1	1.4	1.3	101	90	90-110	8	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2439471 2439473 Original: J1707888002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Phosphorus (as P)	mg/L	0.36	1	1.3	1.3	93	95	80-120	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2439474 2439475 Original: G1706717001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Kjeldahl Nitrogen	mg/L	0.73	1	1.7	1.7	97	93	90-110	2	20	

QC Batch: WCAg/5663 Analysis Method: SM 5310B
QC Batch Method: SM 5310B Prepared:
Associated Lab Samples: J1708051001, J1708051002, J1708051004

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1708051 Trail Ridge Landfill

METHOD BLANK: 2440106

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Organic Carbon	mg/L	0.25	0.25	U

METHOD BLANK: 2440210

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Organic Carbon	mg/L	0.25	0.25	U

LABORATORY CONTROL SAMPLE: 2440104

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Organic Carbon	mg/L	10	9.5	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2440107 2440108 Original: J1708051004

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Organic Carbon	mg/L	7.3	26	32	32	96	95	90-110	1	10	

QC Batch: WCAg/5696 Analysis Method: SM 10200 H
QC Batch Method: SM 10200 H Prepared:
Associated Lab Samples: J1708051001, J1708051002, J1708051004

METHOD BLANK: 2443352

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Chlorophyll A	mg/m3	1.0	1.0	U

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J1708051 Trail Ridge Landfill

METHOD BLANK: 2443357

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Chlorophyll A	mg/m3	1.0	1.0	U

SAMPLE DUPLICATE: 2443354 Original: J1708051001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Chlorophyll A	mg/m3	8.0	8.0	0	20	

SAMPLE DUPLICATE: 2443355 Original: T1713315030

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Chlorophyll A	mg/m3	34	19	56	20	

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Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1708051 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1708051001	SW-3			SM 5210B	WCAj/4795
J1708051002	SW-1			SM 5210B	WCAj/4795
J1708051004	SW-B			SM 5210B	WCAj/4795
J1708051001	SW-3			SM 2540 C	WCAj/4796
J1708051002	SW-1			SM 2540 C	WCAj/4796
J1708051004	SW-B			SM 2540 C	WCAj/4796
J1708051001	SW-3	SW-846 7470A	DGMj/3384	SW-846 7470A	CVAj/1540
J1708051002	SW-1	SW-846 7470A	DGMj/3384	SW-846 7470A	CVAj/1540
J1708051004	SW-B	SW-846 7470A	DGMj/3384	SW-846 7470A	CVAj/1540
J1708051001	SW-3			EPA 300.0	WCAj/4804
J1708051002	SW-1			EPA 300.0	WCAj/4804
J1708051004	SW-B			EPA 300.0	WCAj/4804
J1708051001	SW-3			SM 9222D	MICj/2329
J1708051002	SW-1			SM 9222D	MICj/2329
J1708051004	SW-B			SM 9222D	MICj/2329
J1708051001	SW-3	SW-846 3010A	DGMj/3390	SW-846 6020	ICMj/1660
J1708051002	SW-1	SW-846 3010A	DGMj/3390	SW-846 6020	ICMj/1660
J1708051004	SW-B	SW-846 3010A	DGMj/3390	SW-846 6020	ICMj/1660
J1708051001	SW-3	SW-846 3010A	DGMj/3392	SW-846 6010	ICPj/2188
J1708051002	SW-1	SW-846 3010A	DGMj/3392	SW-846 6010	ICPj/2188
J1708051004	SW-B	SW-846 3010A	DGMj/3392	SW-846 6010	ICPj/2188
J1708051001	SW-3			EPA 410.4	WCAj/4817
J1708051002	SW-1			EPA 410.4	WCAj/4817
J1708051004	SW-B			EPA 410.4	WCAj/4817

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6681 Southpoint Pkwy Jacksonville, FL 32216
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Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1708051 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1708051001	SW-3	SW-846 5030B	MSVj/4589	SW-846 8260B (SIM)	MSVj/4590
J1708051002	SW-1	SW-846 5030B	MSVj/4589	SW-846 8260B (SIM)	MSVj/4590
J1708051003	Trip Blank 3	SW-846 5030B	MSVj/4589	SW-846 8260B (SIM)	MSVj/4590
J1708051004	SW-B	SW-846 5030B	MSVj/4589	SW-846 8260B (SIM)	MSVj/4590
J1708051005	MWB-33S	SW-846 5030B	MSVj/4589	SW-846 8260B (SIM)	MSVj/4590
J1708051001	SW-3	SW-846 5030B	MSVj/4591	SW-846 8260B	MSVj/4592
J1708051002	SW-1	SW-846 5030B	MSVj/4591	SW-846 8260B	MSVj/4592
J1708051003	Trip Blank 3	SW-846 5030B	MSVj/4591	SW-846 8260B	MSVj/4592
J1708051004	SW-B	SW-846 5030B	MSVj/4591	SW-846 8260B	MSVj/4592
J1708051005	MWB-33S	SW-846 5030B	MSVj/4591	SW-846 8260B	MSVj/4592
J1708051001	SW-3			EPA 350.1	WCAg/5639
J1708051002	SW-1			EPA 350.1	WCAg/5639
J1708051004	SW-B			EPA 350.1	WCAg/5639
J1708051001	SW-3			SM 2540D	WCAj/4827
J1708051002	SW-1			SM 2540D	WCAj/4827
J1708051004	SW-B			SM 2540D	WCAj/4827
J1708051001	SW-3	Copper Sulfate Digestion	WCAg/5653	EPA 351.2	WCAg/5654
J1708051002	SW-1	Copper Sulfate Digestion	WCAg/5653	EPA 351.2	WCAg/5654
J1708051004	SW-B	Copper Sulfate Digestion	WCAg/5653	EPA 351.2	WCAg/5654
J1708051001	SW-3	Copper Sulfate Digestion	WCAg/5653	EPA 365.4	WCAg/5656
J1708051002	SW-1	Copper Sulfate Digestion	WCAg/5653	EPA 365.4	WCAg/5656
J1708051004	SW-B	Copper Sulfate Digestion	WCAg/5653	EPA 365.4	WCAg/5656
J1708051001	SW-3			SM 5310B	WCAg/5663
J1708051002	SW-1			SM 5310B	WCAg/5663
J1708051004	SW-B			SM 5310B	WCAg/5663
J1708051001	SW-3			SM 10200 H	WCAg/5696
J1708051002	SW-1			SM 10200 H	WCAg/5696

Advanced Environmental Laboratories, Inc.
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904)363-9350
Fax: (904)363-9354

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1708051 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1708051004	SW-B			SM 10200 H	WCAg/5696
J1708051001	SW-3	Calculation	CLCg/	Calculation	CLCg/
J1708051001	SW-3	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J1708051001	SW-3	Field Measurements	FLDj/	Field Measurements	FLDj/
J1708051002	SW-1	Calculation	CLCg/	Calculation	CLCg/
J1708051002	SW-1	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J1708051002	SW-1	Field Measurements	FLDj/	Field Measurements	FLDj/
J1708051004	SW-B	Calculation	CLCg/	Calculation	CLCg/
J1708051004	SW-B	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J1708051004	SW-B	Field Measurements	FLDj/	Field Measurements	FLDj/

Advanced Environmental Laboratories, Inc.

6681 Southpoint Parkway
Jacksonville, Florida 32216
Office (904) 363-9350
Fax (904) 363-9354

Queue: ICPj

Batch Number: 2188

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: SW-846 6010

Preparation: SW-846 3010A

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Duplicates: All acceptance criteria were met.

D. Spikes: The matrix spike (MS) recoveries of zinc for J1708051001 were outside control criteria. Recoveries in the Laboratory Control Sample (LCS) and Matrix Spike Duplicate (MSD) were acceptable, which indicates the analytical batch was in control. Results were qualified.

E. Serial Diluion: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Advanced Environmental Laboratories, Inc. and by the client, both technically and for completeness, except for the conditions detailed above. The Quality Assurance Officer, or designee, as verified by the following signature, has authorized release of the data contained in this data package:

Advanced Environmental Laboratories, Inc.

6681 Southpoint Parkway
Jacksonville, Florida 32216
Office (904) 363-9350
Fax (904) 363-9354

Queue: MSVj

Batch Number: 4592

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: SW-846 8260B

Preparation: SW-846 5030B

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: The upper control criterion was exceeded for the following surrogate in J1708051001, 002, 003, 005: Bromofluorobenzene. No target analytes associated with the surrogate in question were detected in the samples. The error associated with an elevated recovery equates to a high bias. The quality of the sample data is not significantly affected. No further corrective action was required.

The upper control criterion was exceeded the surrogate Bromofluorobenzene in analytical batch 4592. The surrogate in question is not assoicated to any target analytes for the samples which are only reporting BTEX analytes. No further corrective action was required.

D. Spikes: All acceptance criteria were met.

E. Internal Standard: All acceptance criteria were met.

F. Samples: J1708073001 required a dilution due to the presence of a foamy sample matrix (surfactants). The dilution was necessary to prevent foam over during the purge cycle, resulting in instrument damage.

G. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Advanced Environmental Laboratories, Inc. and by the client, both technically and for completeness, except for the conditions detailed above. The Quality Assurance Officer, or designee, as verified by the following signature, has authorized release of the data contained in this data package:

Advanced Environmental Laboratories, Inc.

☒ 6601 Southpoint Pkwy. • Jacksonville, FL 32216 • 904.363.9350 • Fax 904.363.9354 • E82574
☐ 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.9616 • Fax 813.630.4327 • E84589
☐ 6815 SW Archer Road • Gainesville, FL 32608 • 352.377.2349 • Fax 352.395.6639 • E82001
☐ 528 S. North Lake Blvd., Ste. 1016 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597• E53076

J1708051

CLIENT NAME: **CITY OF JACKSONVILLE**
ADDRESS: 214 North Hogan Street, 10th Floor
Jacksonville, FL 32202
PHONE: (904)-255-7513
FAX:
CONTACT: Eric B. Fuller
SAMPLED BY: DAN ARMOUR / BLAINE GRISSOM

TURN AROUND TIME:
☒ STANDARD _____ ☐ RUSH _____

PROJECT NAME: **Trail Ridge Landfill**
P.O. NUMBER/PROJECT NUMBER: 608372:4
PROJECT LOCATION:

REMARKS/SPECIAL INSTRUCTIONS:
Surface Water
Golder Contact: Dawn Prell

33628,TRAIL RIDGE LANDFILL, INC. (ADaPT)
AEL Jax Profile: 30178, Line 5

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	BOTTLE SIZE & TYPE / ANALYSIS REQUIRED	3X40mL VOA vials	500mL poly	500mL poly	1L poly	250mL poly	2X40m VOA vials	125mL poly	1 L pol	1 L amber	100mL Cup	LABORATORY I.D. NUMBER
									App I + EDB 8260/8260SIM	App I + Fe,Hg,hardness	nitrate 300.0 / TDS 2540C	TSS SM2540D	Nox/TKN/TN/TP/NH3/ un-NH3	TOC 5310B	COD 410.4	BOD 5210B	chlorophyll-a 10200H	Fecal 9222D	
									HCl / DI	HNO3	None	None	H2SO4	HCl	H2SO4	None	None 24 hr HT	NaThio 6 hr HT	
	SW-3	G	8-10	1100	W	13			3	1	1	1	1	2	1	1	1	1	001
	SW-1	G	8-10	1150	W	13			3	1	1	1	1	2	1	1	1	1	002
	TRIP	G	8-10	—	W	3			3										003
	SW-B	G	8-10	1240	W	3			3	1	1	1	1	2	1	1	1	1	004

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice ☑ Yes ☐ No ☑ Temp taken from sample ☐ Temp from temp blank ☐ Where required, pH checked

Temperature when received 4 (in degrees celcius)

Device used for measuring Temp by unique identifier (circle IR temp gun used) J : 9A G: LT-1 LT-2 T: 10A A: 3A

Form revised 2/8/08

	Relinquished by:	Date	Time	Received by:	Date	Time
1		8-10-17	1300		8/10/17	1305
2		8/10/17	1515		8-10-17	1515
3						
4						

FOR DRINKING WATER USE:
(When PWS Information not otherwise supplied) PWS ID:_____
Contact Person:_____ Phone :_____
Supplier of Water:_____
Site-Address:_____

Advanced Environmental Laboratories, Inc.

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☐ 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.9616 • Fax 813.630.4327 • E84589
☐ 6815 SW Archer Road • Gainesville, FL 32608 • 352.377.2349 • Fax 352.395.6639 • E82001
☐ 528 S. North Lake Blvd., Ste. 1016 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597• E53076

J1708051

CLIENT NAME:	CITY OF JACKSONVILLE	PROJECT NAME:	Trail Ridge Landfill
ADDRESS:	214 North Hogan Street, 10th Floor	P.O. NUMBER/PROJECT NUMBER:	608372:4
	Jacksonville, FL 32202	PROJECT LOCATION:	
PHONE:	(904)-255-7513	REMARKS/SPECIAL INSTRUCTIONS:	Ground Water Intermediate Wells
FAX:			Golder Contact: Dawn Prell
CONTACT:	Eric B. Fuller		
SAMPLED BY:	DAN ARMOUR / BLAINE GRISSOM		33628,TRAIL RIDGE LANDFILL, INC. (ADaPT)
TURN AROUND TIME:			AEL Jax Profile: 30178, Line 4
☒ STANDARD	☐ RUSH		

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	ANALYSIS REQUIRED: BOTTLE SIZE & TYPE	3x40ml VoA VIALS	250mL poly	125mL poly	500mL poly	250mL poly					LABORATORY I.D. NUMBER
									APP I + 608 8260 / 8260 SIM	Fe,Na by 6010/6020/7470 +Hg	nitrate/chloride 300.0	TDS SM2540C	ammonia-N 350.1					
									HCl pH	HNO3	None	None	H2SO4					
	MWB-33S	G	8-10	1045	W	3			3									001
	TRIP	G	8-10	—	W	3			3									002

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice ☑ Yes ☐ No ☐ Temp taken from sample ☐ Temp from temp blank ☐ Where required, pH checked

Temperature when received 4 (in degrees celcius)

Form revised 2/8/08

Device used for measuring Temp by unique identifier (circle IR temp gun used) J : 9A G: LT-1 LT-2 T: 10A A: 3A

	Relinquished by:	Date	Time	Received by:	Date	Time
1		8-10-17	1300		8/10/17	1305
2		8/10/17	1515	Bybta	8-10-17	1515
3						
4						

FOR DRINKING WATER USE:

(When PWS Information not otherwise supplied) PWS ID:

Contact Person: Phone :

Supplier of Water:

Site-Address:

Advanced Environmental Labs Inc

Client: City of Jax Project name: Trail Ridge Landfill

Date/Time Rcvd: 8/10/17 1515 Log-In request number: J1708851

Received by: BJ Completed by: BJ

Cooler/Shipping Information:

Courier: ☐ AEL ☐ Client ☐ UPS ☐ Blue Streak ☐ FedEx ☐ AES ☐ ASAP ☐ Other (describe):_____

Type: ☑ Cooler ☐ Box ☐ Other (describe) _____

Cooler temperature: Identify the cooler and document the temperature blank or ice water measurement

Cooler ID					
Temp (°C)	4				
Temp taken from	☐ Sample Bottle ☑ Cooler	☐ Sample Bottle ☐ Cooler	☐ Sample Bottle ☐ Cooler	☐ Sample Bottle ☐ Cooler	☐ Sample Bottle ☐ Cooler
Temp measured with	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):	☐ IR gun S/N 9333779 ☐ Thermometer (enter ID):

Other Information:

Any discrepancies should be explained in the "Comments" section below.

CHECKLIST	YES	NO	NA
1. Were custody seals on shipping container(s) intact?			✓
2. Were custody papers properly included with samples?	✓		
3. Were custody papers properly filled out (ink, signed, match labels)?	✓		
4. Did all bottles arrive in good condition (unbroken)?	✓		
5. Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?	✓		
6. Did the sample labels agree with the chain of custody?	✓		
7. Were correct bottles used for the tests indicated?	✓		
8. Were proper sample preservation techniques indicated on the label?	✓		
9. Were samples received within holding times?	✓		
10. Were all VOA vials free of the presence of air bubbles?	✓		
11. Have all Soil VOA Vials and Encores been placed in a freezer within 48 hours of collection?			✓
12. Were samples in direct contact with wet ice? If "No," check one: ☐ NO ICE ☐ BLUE ICE	✓		
13. Was the cooler temperature less than 6°C?	✓		
14. Where pH preservation is required, are sample pHs checked and any anomalies recorded by Sample control? Are all <2 or >10? Note: VOA samples are checked by laboratory analysts.	✓		
15. Was sufficient sample volume provided to perform all tests?	✓		
16. If for Bacteriological testing, were containers supplied by AEL? (See QA officer if answer is no)	✓		BJ 8-10-17
17. Were all sample containers provided by AEL? (Other than Bacteriological)	✓		
18. Were samples accepted into the laboratory?	✓		
19. When necessary to split samples into other bottles, is it noted in the comments?	✓		

Comments: (Note all sample(s) and container (s)" with a "No" checklist response in this comment section)

DCN: AD-D048
Eff date 2/3/10, Last rev 9/6/16

FORM FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB33S | SAMPLE ID: | DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 10.3 feet to 20.3 feet | STATIC DEPTH TO WATER (feet): 9.12 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 125.90 | GROUNDWATER ELEVATION (ft NGVD): 116.78

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (20.30 feet - 9.12 feet) X 0.163 gallons/foot = 1.82 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 20.30 feet) + 0.05 gallons = 0.47 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15.30 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.30 | PURGING INITIATED AT: 1705 | PURGING ENDED AT: 1725 | TOTAL VOLUME PURGED (gallons): 3.80

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm & µS/cm	DISSOLVED OXYGEN (circle units) mg/L & % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1715	1.90	1.90	0.19	9.32	5.03	26.7	127	0.4	18.11	131		
1718	0.57	2.47	0.19	9.32	5.04	26.7	128	0.4	17.98	132		
1721	0.57	3.04	0.19	9.32	5.04	26.7	129	0.4	17.54	132		
1724	0.57	3.61	0.19	9.32	5.05	26.7	130	0.4	17.04	133	SLT. YELLOW TINT	

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./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1725 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 15.30 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MW225 | SAMPLE ID: | DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 16 feet to 26 feet | STATIC DEPTH TO WATER (feet): 9.67 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 126.97 | GROUNDWATER ELEVATION (ft NGVD): 117.30

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

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

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 26.00 feet) + 0.05 gallons = 0.51 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 21.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 21.00 | PURGING INITIATED AT: 0755 | PURGING ENDED AT: 0815 | TOTAL VOLUME PURGED (gallons): 4.00

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0805	2.00	2.00	0.20	10.37	5.81	26.8	430	0.2	5.27	-14		
0808	0.60	2.60	0.20	10.37	5.82	26.8	433	0.2	4.80	-15		
0811	0.60	3.20	0.20	10.37	5.82	26.8	433	0.2	3.21	-16		
0814	0.60	3.80	0.20	10.37	5.83	26.8	436	0.2	2.93	-16	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0815 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 21.00 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE ID CODE	SAMPLE CONTAINER SPECIFICATION: # CONTAINERS	MATERIAL CODE	VOLUME	SAMPLE PRESERVATION: PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
* - SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET									

REMARKS:

Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

FORM FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB13S | SAMPLE ID: | DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 11.56 feet to 26.56 feet | STATIC DEPTH TO WATER (feet): 11.81 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): +26.05 126.05 | GROUNDWATER ELEVATION (ft NGVD): 114.24

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

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

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 26.56 feet) + 0.05 gallons = 0.51 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 21.56 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 21.56 | PURGING INITIATED AT: 0827 | PURGING ENDED AT: 0846 | TOTAL VOLUME PURGED (gallons): 3.23

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm & µS/cm	DISSOLVED OXYGEN (circle units) mg/L & % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0836	1.53	1.53	0.17	13.28	5.73	26.9	668	1.1	14.41	24		
0839	0.51	2.04	0.17	13.28	5.65	26.9	667	1.1	8.02	24		
0842	0.51	2.55	0.17	13.28	5.67	26.9	652	1.1	5.13	25		
0845	0.51	3.06	0.17	13.28	5.67	26.9	650	1.1	4.32	26	LIGHT TAN	

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; 6" = 1.02; 8" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0846 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 21.56 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB29S | SAMPLE ID: | DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet | STATIC DEPTH TO WATER (feet): 6.85 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 138.02 | GROUNDWATER ELEVATION (ft NGVD): 131.17

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet - feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 20.00 feet) + 0.05 gallons = 0.47 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | PURGING INITIATED AT: 1105 | PURGING ENDED AT: 1125 | TOTAL VOLUME PURGED (gallons): 3.40

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1115	1.70	1.70	0.17	6.96	4.31	28.3	152	0.3	4.90	35		
1118	0.51	2.21	0.17	6.96	4.31	28.3	153	0.3	4.64	34		
1121	0.51	2.72	0.17	6.96	4.33	28.3	154	0.3	4.41	31		
1124	0.51	3.23	0.17	6.96	4.34	28.3	155	0.3	3.98	29	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1125 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present: YES (NO)

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

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

NOTES:
1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MW1B27S | SAMPLE ID: | DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 5.5 feet to 15.5 feet | STATIC DEPTH TO WATER (feet): 6.15 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 128.42 | GROUNDWATER ELEVATION (ft NGVD): 122.27

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (15.50 feet - 6.15 feet) X 0.163 gallons/foot = 1.52 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 15.50 feet) + 0.05 gallons = 0.443 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13.50 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.50 | PURGING INITIATED AT: 1000 | PURGING ENDED AT: 1020 | TOTAL VOLUME PURGED (gallons): 3.20

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1010	1.60	1.60	0.16	6.45	5.61	26.0	162	0.9	19.91	85		
1013	0.48	2.08	0.16	6.45	5.63	26.0	162	0.8	19.42	86		
1016	0.48	2.56	0.16	6.45	5.62	26.0	162	0.8	19.27	87		
1019	0.48	3.04	0.16	6.45	5.62	26.0	161	0.8	18.99	86	LIGHT TAN	

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./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0025; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1020 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 13.50 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MW1B12S | SAMPLE ID: | DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 14.5 feet to 24.5 feet | STATIC DEPTH TO WATER (feet): 7.86 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 124.63 | GROUNDWATER ELEVATION (ft NGVD): 116.77

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (24.50 feet - 7.86 feet) X 0.163 gallons/foot = 2.71 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 24.50 feet) + 0.05 gallons = 0.5 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 19.50 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 19.50 | PURGING INITIATED AT: 0655 | PURGING ENDED AT: 0715 | TOTAL VOLUME PURGED (gallons): 3.60

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0705	1.80	1.80	0.18	9.57	5.36	26.4	359	1.1	6.36	114		
0708	0.54	2.34	0.18	9.57	5.39	26.4	360	1.0	7.04	104		
0711	0.54	2.88	0.18	9.57	5.40	26.4	357	1.0	8.29	100		
0714	0.54	3.42	0.18	9.57	5.41	26.4	358	1.0	9.02	99	BROWN TINT	

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./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0715 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 19.50 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB2S | SAMPLE ID: | DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet | STATIC DEPTH TO WATER (feet): 3.91 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 146.64 | GROUNDWATER ELEVATION (ft NGVD): 142.73

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet - feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 20.00 feet) + 0.05 gallons = 0.47 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | PURGING INITIATED AT: 1208 | PURGING ENDED AT: 1228 | TOTAL VOLUME PURGED (gallons): 3.60

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1218	1.80	1.80	0.18	5.13	5.22	27.7	40	2.5	84.69	116		
1221	0.54	2.34	0.18	5.13	5.13	27.7	41	2.5	85.10	119		
1224	0.54	2.88	0.18	5.13	5.08	27.7	41	2.5	85.99	123		
1227	0.54	3.42	0.18	5.13	5.08	27.7	42	2.5	87.52	123	BROWN TINT	

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./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1228 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) µm Filtration Equipment Type: | FILTER SIZE:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present: YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB3S | SAMPLE ID: | DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet | STATIC DEPTH TO WATER (feet): 6.21 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 154.38 | GROUNDWATER ELEVATION (ft NGVD): 148.17

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

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

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 20.00 feet) + 0.05 gallons = 0.47 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | PURGING INITIATED AT: 1245 | PURGING ENDED AT: 1305 | TOTAL VOLUME PURGED (gallons): 3.40

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1255	1.70	1.70	0.17	6.46	4.32	26.2	76	0.8	11.46	191		
1258	0.51	2.21	0.17	6.46	4.32	26.2	76	0.8	9.98	189		
1301	0.51	2.72	0.17	6.46	4.32	26.2	76	0.8	8.67	189		
1304	0.51	3.23	0.17	6.46	4.34	26.2	77	0.8	8.29	187	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1305 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE ID CODE	SAMPLE CONTAINER SPECIFICATION: # CONTAINERS	MATERIAL CODE	VOLUME	SAMPLE PRESERVATION: PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB11S | SAMPLE ID: | DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 9.5 feet to 19.5 feet | STATIC DEPTH TO WATER (feet): 9.31 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 120.81 | GROUNDWATER ELEVATION (ft NGVD): 111.50

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (19.50 feet - 9.31 feet) X 0.163 gallons/foot = 1.66 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 19.50 feet) + 0.05 gallons = 0.97 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 19.50 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 19.50 | PURGING INITIATED AT: 1348 | PURGING ENDED AT: 1408 | TOTAL VOLUME PURGED (gallons): 3.40

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm & µS/cm	DISSOLVED OXYGEN (circle units) mg/L & % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1358	1.70	1.70	0.17	9.42	4.01	25.8	189	0.8	7.41	230		
1401	0.51	2.21	0.17	9.42	4.02	25.8	189	0.7	7.30	231		
1404	0.51	2.72	0.17	9.42	4.02	25.8	189	0.7	7.22	231		
1407	0.51	3.23	0.17	9.42	4.02	25.8	188	0.7	5.55	229	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0025; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1408 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 14.50 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present: YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: EQUIPMENT BLANK | SAMPLE ID: | DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): NA | TUBING DIAMETER (inches): NA | WELL SCREEN INTERVAL DEPTH: — feet to — feet | STATIC DEPTH TO WATER (feet): NA | PURGE PUMP TYPE OR BAILER: NA

WELL ELEVATION TOC (ft NGVD): — | GROUNDWATER ELEVATION (ft NGVD): —

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet - feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): NA | FINAL PUMP OR TUBING DEPTH IN WELL (feet): NA | PURGING INITIATED AT: NA | PURGING ENDED AT: NA | TOTAL VOLUME PURGED (gallons): NA

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1450	NA	NA	NA	NA	6.97	25.1	3	0.3	0.00	21	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAA ARMOR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1450 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): NA | TUBING MATERIAL CODE: NA | FIELD-FILTERED: Y (N) µm Filtration Equipment Type: | FILTER SIZE:

FIELD DECONTAMINATION: PUMP Y N NA TUBING Y N (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present: YES NO EB - COMPLETED USING D.I. H_2O PROVIDED BY TEST AMERICA

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

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

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

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

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

Revision Date: February 12, 2009

FORM FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB27I | SAMPLE ID: | DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 52.5 feet to 62.5 feet | STATIC DEPTH TO WATER (feet): 7.88 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 128.63 | GROUNDWATER ELEVATION (ft NGVD): 120.75

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

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

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 62.50 feet) + 0.05 gallons = 0.73 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 57.50 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 57.50 | PURGING INITIATED AT: 0930 | PURGING ENDED AT: 0950 | TOTAL VOLUME PURGED (gallons): 5.00

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0940	2.50	2.50	0.25	7.88	5.13	23.7	53	0.2	4.02	5.7		
0943	0.75	3.25	0.25	7.88	5.06	23.7	53	0.2	3.99	11		
0946	0.75	4.00	0.25	7.88	5.03	23.7	53	0.2	3.30	10		
0949	0.75	4.75	0.25	7.88	5.03	23.7	53	0.2	3.25	9.0	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0950 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 57.50 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

FORM FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB3I | SAMPLE ID: | DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 52 feet to 62 feet | STATIC DEPTH TO WATER (feet): 12.86 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 151.86 | GROUNDWATER ELEVATION (ft NGVD): 139.00

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

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

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 62.00 feet) + 0.05 gallons = 0.72 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 57.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 57.00 | PURGING INITIATED AT: 1315 | PURGING ENDED AT: 1335 | TOTAL VOLUME PURGED (gallons): 5.40

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1325	2.70	2.70	0.27	13.65	4.25	23.4	41	0.4	3.28	60		
1328	0.81	3.51	0.27	13.65	4.26	23.4	41	0.4	2.86	59		
1331	0.81	4.32	0.27	13.65	4.28	23.4	41	0.4	2.96	56		
1334	0.81	5.13	0.27	13.65	4.29	23.4	41	0.4	3.05	55	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1335 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 57.00 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) µm Filtration Equipment Type: | FILTER SIZE:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWD29I | SAMPLE ID: | DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 53.5 feet to 63.5 feet | STATIC DEPTH TO WATER (feet): 6.66 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 138.08 | GROUNDWATER ELEVATION (ft NGVD): 131.42

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

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

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 63.50 feet) + 0.05 gallons = 0.73 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 58.50 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 58.50 | PURGING INITIATED AT: 1035 | PURGING ENDED AT: 1055 | TOTAL VOLUME PURGED (gallons): 5.20

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1045	2.60	2.60	0.26	6.68	4.38	25.9	43	0.4	9.40	70		
1048	0.78	3.38	0.26	6.68	4.41	25.9	43	0.4	8.52	69		
1051	0.78	4.16	0.26	6.68	4.43	25.9	43	0.4	8.33	67		
1054	0.78	4.94	0.26	6.68	4.44	25.9	43	0.4	8.13	65	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1055 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 58.50 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) µm | FILTER SIZE: | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
*	SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present: YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

FORM FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB2I | SAMPLE ID: | DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 51.5 feet to 61.5 feet | STATIC DEPTH TO WATER (feet): 9.08 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 145.73 | GROUNDWATER ELEVATION (ft NGVD): 136.65

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet - feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 61.50 feet) + 0.05 gallons = 0.72 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 56.50 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 56.50 | PURGING INITIATED AT: 1138 | PURGING ENDED AT: 1158 | TOTAL VOLUME PURGED (gallons): 5.20

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1148	2.60	2.60	0.26	9.13	4.12	23.6	39	0.4	3.66	66		
1151	0.78	3.38	0.26	9.13	4.12	23.6	40	0.4	3.35	66		
1154	0.78	4.16	0.26	9.13	4.15	23.6	39	0.4	3.24	63		
1157	0.78	4.94	0.26	9.13	4.17	23.6	40	0.4	2.60	60	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0025; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1158 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 56.50 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE ID CODE	SAMPLE CONTAINER SPECIFICATION: # CONTAINERS	MATERIAL CODE	VOLUME	SAMPLE PRESERVATION: PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
*	SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

FORM FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB12I | SAMPLE ID: | DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 61.5 feet to 71.5 feet | STATIC DEPTH TO WATER (feet): 8.96 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 124.62 | GROUNDWATER ELEVATION (ft NGVD): 115.66

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet - feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 71.50 feet) + 0.05 gallons = 0.78 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 66.50 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 66.50 | PURGING INITIATED AT: 0725 | PURGING ENDED AT: 0745 | TOTAL VOLUME PURGED (gallons): 5.60

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0735	2.80	2.80	0.28	8.97	4.88	26.7	42	0.2	4.21	25		
0738	0.84	3.64	0.28	8.97	4.88	26.7	42	0.2	4.12	25		
0741	0.84	4.48	0.28	8.97	4.86	26.7	42	0.2	3.97	24		
0744	0.84	5.32	0.28	8.97	4.87	26.7	42	0.2	2.77	23	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0745 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 66.50 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) µm | FILTER SIZE: | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE ID CODE	SAMPLE CONTAINER SPECIFICATION: # CONTAINERS	MATERIAL CODE	VOLUME	SAMPLE PRESERVATION: PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
*	SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

FORM FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB13I | SAMPLE ID: | DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 50.4 feet to 60.4 feet | STATIC DEPTH TO WATER (feet): 16.41 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 125.98 | GROUNDWATER ELEVATION (ft NGVD): 109.57

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

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

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 60.40 feet) + 0.05 gallons = 0.71 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 55.40 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 55.40 | PURGING INITIATED AT: 0858 | PURGING ENDED AT: 0918 | TOTAL VOLUME PURGED (gallons): 5.00

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0908	2.50	2.50	0.25	17.08	4.77	27.0	38	0.2	9.99	33		
0911	0.75	3.25	0.25	17.08	4.73	27.0	38	0.1	9.75	32		
0914	0.75	4.00	0.25	17.08	4.73	27.0	38	0.1	9.22	33		
0917	0.75	4.75	0.25	17.08	4.72	27.0	38	0.1	9.06	31	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0918 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 55.40 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

FORM FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB11I (R) | SAMPLE ID: | DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 45 feet to 55 feet | STATIC DEPTH TO WATER (feet): 14.72 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 120.43 | GROUNDWATER ELEVATION (ft NGVD): 105.71

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

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

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 55.00 feet) + 0.05 gallons = 0.68 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 50.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 50.00 | PURGING INITIATED AT: 1418 | PURGING ENDED AT: 1438 | TOTAL VOLUME PURGED (gallons): 5.00

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm & µS/cm	DISSOLVED OXYGEN (circle units) mg/L & % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1428	2.50	2.50	0.25	14.87	4.47	27.2	36	0.1	5.78	45		
1431	0.75	3.25	0.25	14.87	4.49	27.2	36	0.1	10.71	44		
1434	0.75	4.00	0.25	14.87	4.50	27.2	36	0.1	9.99	43		
1437	0.75	4.75	0.25	14.87	4.51	27.2	36	0.1	9.08	41	LIGHT TAN	

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./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1438 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 50.00 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

FORM FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB21S | SAMPLE ID:

DATE: 8-8-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 8 feet to 18 feet | STATIC DEPTH TO WATER (feet): 9.22 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 122.84 | GROUNDWATER ELEVATION (ft NGVD): 113.62

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (18.00 feet - 9.22 feet) X 0.163 gallons/foot = 1.43 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 18.00 feet) + 0.05 gallons = 0.46 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.00 | PURGING INITIATED AT: 1630 | PURGING ENDED AT: 1650 | TOTAL VOLUME PURGED (gallons): 3.20

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1640	1.60	1.60	0.16	9.73	5.48	28.7	817	0.4	5.27	76		
1643	0.48	2.08	0.16	9.73	5.49	28.7	818	0.4	5.22	76		
1646	0.48	2.56	0.16	9.73	5.49	28.7	818	0.4	5.10	76		
1649	0.48	3.04	0.16	9.73	5.50	28.7	820	0.4	4.98	75	VERY LIGHT TAN	

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./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1650 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 13.00 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) µm | FILTER SIZE: | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MW320S | SAMPLE ID:

PURGING DATA

DATE: 8-8-17

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet | STATIC DEPTH TO WATER (feet): 6.52 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 121.01 | GROUNDWATER ELEVATION (ft NGVD): 114.49

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

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

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 20.00 feet) + 0.05 gallons = 0.47 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | PURGING INITIATED AT: 1505 | PURGING ENDED AT: 1525 | TOTAL VOLUME PURGED (gallons): 3.40

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1515	1.70	1.70	0.17	6.68	4.74	27.9	366	0.8	20.04	73		
1518	0.51	2.21	0.17	6.68	4.75	27.9	373	0.8	18.91	70		
1521	0.51	2.72	0.17	6.68	4.75	27.9	376	0.8	18.42	69		
1524	0.51	3.23	0.17	6.68	4.74	27.9	378	0.8	18.01	68	LIGHT TAN	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FT.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1525 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) µm Filtration Equipment Type: | FILTER SIZE:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION						
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE	
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET			

REMARKS:

Sheen Present: YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: EQUIPMENT + FIELD BLANK | SAMPLE ID: | DATE: 8-9-17

PURGING DATA

WELL DIAMETER (inches): NA | TUBING DIAMETER (inches): NA | WELL SCREEN INTERVAL DEPTH: — feet to — feet | STATIC DEPTH TO WATER (feet): NA | PURGE PUMP TYPE OR BAILER: NA

WELL ELEVATION TOC (ft NGVD): — | GROUNDWATER ELEVATION (ft NGVD): —

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet - feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): NA | FINAL PUMP OR TUBING DEPTH IN WELL (feet): NA | PURGING INITIATED AT: NA | PURGING ENDED AT: NA | TOTAL VOLUME PURGED (gallons): NA

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1440	NA	NA	NA	NA	6.91	24.0	4	0.6	0.00	19	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAA ARMOR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1440 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): NA | TUBING MATERIAL CODE: NA | FIELD-FILTERED: Y (N) µm | FILTER SIZE: | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y N NA TUBING Y N (replaced) | DUPLICATE: Y (N)

SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
*	SEE SAMPLE	COC AND	BOTTLE	ORDER	WORKSHEET				

REMARKS:
Sheen Present: YES NO EB - COMPLETED USING D.I. H_2O PROVIDED BY TEST AMERICA

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: SGMW-15 | SAMPLE ID: | DATE: 8-9-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 1/4 | WELL SCREEN INTERVAL DEPTH: 7.7 feet to 17.7 feet | STATIC DEPTH TO WATER (feet): 15.10 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): ~~NR~~ 138.86 | GROUNDWATER ELEVATION (ft NGVD): ~~NR~~ 123.76

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (17.70 feet - 15.10 feet) X 0.163 gallons/foot = 0.42 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 17.70 feet) + 0.05 gallons = 0.10 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 17.50 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 17.50 | PURGING INITIATED AT: 1330 | PURGING ENDED AT: 1420 | TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1340	1.00	1.00	0.10	~~15.86~~					*NA			
1350	1.00	2.00	0.10						*NA			
1400	1.00	3.00	0.10						*NA			
1410	1.00	4.00	0.10						*NA			
1420	1.00	5.00	0.10						*NA			

*- POSSIBLE WELL INTEGRITY ISSUE. NO SAMPLES COLLECTED

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; 6" = 1.02; 8" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DANNY ARMOUR BLAKE GRISSOM / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 17.50 | TUBING MATERIAL CODE: PE | FIELD-FILTERED: Y N | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y N (replaced) | DUPLICATE: Y (N)

SAMPLE ID CODE	SAMPLE CONTAINER SPECIFICATION: # CONTAINERS	MATERIAL CODE	VOLUME	SAMPLE PRESERVATION: PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
(N)	SEE SAMPLE L-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS: *- TURBIDITY ABOVE METER'S SCALE

Sheen Present YES NO

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SGMW-25	SAMPLE ID:		DATE: 8-9-07

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 9.7 feet to 17.7 feet	STATIC DEPTH TO WATER (feet): 15.52		PURGE PUMP TYPE OR BAILER: PP
WELL ELEVATION TOC (ft NGVD): NA 130.55			GROUNDWATER ELEVATION (ft NGVD): NA 115.03		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (17.70 feet - 15.52 feet) X 0.163 gallons/foot = 0.36 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 17.70 feet) + 0.05 gallons = 0.1 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 17.50	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 17.50	PURGING INITIATED AT: 1225	PURGING ENDED AT: 1315		TOTAL VOLUME PURGED (gallons): 5.00

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1235	1.00	1.00	0.10	1					40.56			
1245	1.00	2.00	0.10						55.21			
1255	1.00	3.00	0.10						50.10			
1305	1.00	4.00	0.10	15.57	4.83	26.4	53	0.0	42.81	-18		
1308	0.30	4.30	0.10	15.57	4.83	26.4	53	0.0	44.88	-18		
1311	0.30	4.60	0.10	15.57	4.90	26.4	53	0.0	43.76	-23		
1314	0.30	4.90	0.10	15.57	4.93	26.4	52	0.0	44.29	-25	BROWN TINT	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FT.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DANNY ARMOUR BLAINE GRISSOM / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1315	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 17.50	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y N (replaced)	DUPLICATE: Y (N)	

SAMPLE ID CODE	SAMPLE CONTAINER SPECIFICATION: # CONTAINERS	MATERIAL CODE	VOLUME	SAMPLE PRESERVATION: PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
(S)	SEE SAMPLE L-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present: YES (NO)

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

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

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

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

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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB-40S | SAMPLE ID: | DATE: 8-9-17

PURGING DATA

WELL DIAMETER (Inches): 2 | TUBING DIAMETER (Inches): 1/4 | WELL SCREEN INTERVAL DEPTH: 8.5 feet to 18.5 feet | STATIC DEPTH TO WATER (feet): 9.61 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): NA 115.41 | GROUNDWATER ELEVATION (ft NGVD): NA 105.80

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (18.52 feet - 9.61 feet) X 0.163 gallons/foot = 1.45 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 18.52 feet) + 0.05 gallons = 0.10 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 18.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 18.00 | PURGING INITIATED AT: 1150 | PURGING ENDED AT: 1210 | TOTAL VOLUME PURGED (gallons): 3.00

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1200	1.50	1.50	0.15	9.78	4.07	27.6	738	0.1	14.51	141	1	
1203	0.45	1.95	0.15	9.78	4.08	27.6	740	0.1	12.41	139		
1206	0.45	2.40	0.15	9.78	4.06	27.6	736	0.1	11.75	141		
1209	0.45	2.85	0.15	9.78	4.05	27.6	739	0.1	10.72	142	TAN	

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; 6" = 1.02; 8" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DANNY ARMOUR BLAINE GRESSM / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1210 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 18.00 | TUBING MATERIAL CODE: PE | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y N (replaced) | DUPLICATE: Y (N)

SAMPLE ID CODE	SAMPLE CONTAINER SPECIFICATION: # CONTAINERS	MATERIAL CODE	VOLUME	SAMPLE PRESERVATION: PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
(X)	SEE SAMPLE L-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present: YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB-39S | SAMPLE ID: | DATE: 8-9-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 1/4 | WELL SCREEN INTERVAL DEPTH: 8.9 feet to 18.9 feet | STATIC DEPTH TO WATER (feet): 12.37 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): ~~NA~~ 126.85 | GROUNDWATER ELEVATION (ft NGVD): ~~NA~~ 114.48

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (18.90 feet - 12.37 feet) x 0.163 gallons/foot = 1.06 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 18.90 feet) + 0.05 gallons = 0.10 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 18.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 18.00 | PURGING INITIATED AT: 1115 | PURGING ENDED AT: 1135 | TOTAL VOLUME PURGED (gallons): 2.20

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1125	1.10	1.10	0.11	12.59	5.45	27.2	242	0.1	15.02	-61		
1128	0.33	1.43	0.11	12.59	5.48	27.2	242	0.1	15.82	-64		
1131	0.33	1.76	0.11	12.59	5.49	27.2	241	0.1	15.83	-65		
1134	0.33	2.09	0.11	12.59	5.48	27.2	242	0.1	14.56	-65	SLT. YELLOW TINT	

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./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DANNY ARMFOUR BLAINE GRISSOM / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1135 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 18.00 | TUBING MATERIAL CODE: PE | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y N (replaced) | DUPLICATE: Y (N)

SAMPLE ID CODE	SAMPLE CONTAINER SPECIFICATION: # CONTAINERS	MATERIAL CODE	VOLUME	SAMPLE PRESERVATION: PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
(X)	SEE SAMPLE L-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present: YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB-39I | SAMPLE ID: | DATE: 8-9-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 1/4 | WELL SCREEN INTERVAL DEPTH: 53.88 feet to 63.88 feet | STATIC DEPTH TO WATER (feet): 12.00 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): NA 126.76 | GROUNDWATER ELEVATION (ft NGVD): ~~NA~~ 114.76

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (feet - feet) X gallons/foot = 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 63.88 feet) + 0.05 gallons = 0.22 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 55.88 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 55.88 | PURGING INITIATED AT: 1045 | PURGING ENDED AT: 1105 | TOTAL VOLUME PURGED (gallons): 2.80

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1055	1.40	1.40	0.14	13.55	4.83	26.0	46	0.2	5.22	31		
1058	0.42	1.82	0.14	13.55	4.73	26.0	42	0.2	5.04	26		
1101	0.42	2.24	0.14	13.55	4.72	26.0	42	0.2	4.28	25		
1104	0.42	2.66	0.14	13.55	4.71	26.0	42	0.2	4.54	29	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DANNY ARMOUR / BLAINE GRISSOM / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1105 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 55.88 | TUBING MATERIAL CODE: PE | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y N (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
(X)	SEE SAMPLE LOG AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB-35S	SAMPLE ID:		DATE: 8-9-17

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 7.5 feet to 17.5 feet	STATIC DEPTH TO WATER (feet): 4.32	PURGE PUMP TYPE OR BAILER: PP
WELL ELEVATION TOC (ft NGVD): ~~NA~~ 147.79		GROUNDWATER ELEVATION (ft NGVD): ~~NA~~ 143.47		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet - feet) X gallons/foot = 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 17.50 feet) + 0.05 gallons = 0.10 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 17.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 17.00	PURGING INITIATED AT: 1000	PURGING ENDED AT: 1020	TOTAL VOLUME PURGED (gallons): 2.80

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1010	1.40	1.40	0.14	4.57	4.53	26.6	40	0.1	5.54	88		
1013	0.42	1.82	0.14	4.57	4.52	26.6	39	0.1	4.96	87		
1016	0.42	2.24	0.14	4.57	4.47	26.6	39	0.1	5.32	86		
1019	0.42	2.66	0.14	4.57	4.53	26.6	40	0.1	5.32	80	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DANNY ARMOUR BLAINE GRISSOM / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1020	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 17.00	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
(8)	SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MW3-35I | SAMPLE ID: | DATE: 8-9-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 1/4 | WELL SCREEN INTERVAL DEPTH: 53 feet to 63.4 feet | STATIC DEPTH TO WATER (feet): 7.34 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): ~~NA~~ 147.93 | GROUNDWATER ELEVATION (ft NGVD): ~~NA~~ 140.59

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (feet - feet) X gallons/foot = 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 63.40 feet) + 0.05 gallons = 0.21 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 58.40 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 58.40 | PURGING INITIATED AT: 0930 | PURGING ENDED AT: 0950 | TOTAL VOLUME PURGED (gallons): 3.00

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0940	1.50	1.50	0.15	7.96	4.28	22.8	40	0.2	4.44	71		
0943	0.45	1.95	0.15	7.96	4.29	22.8	40	0.2	3.76	71		
0946	0.45	2.40	0.15	7.96	4.29	22.8	40	0.2	4.07	69		
0949	0.45	2.85	0.15	7.96	4.29	22.8	40	0.2	4.49	66	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Daniel Armour BLAINE GRISSOM / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0950 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 58.40 | TUBING MATERIAL CODE: PE | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y N (replaced) | DUPLICATE: Y (N)

SAMPLE ID CODE	SAMPLE CONTAINER SPECIFICATION: # CONTAINERS	MATERIAL CODE	VOLUME	SAMPLE PRESERVATION: PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
(X)	SEE SAMPLE L-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present: YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MW B-325 | SAMPLE ID: | DATE: 8-9-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 9.9 feet to 19.9 feet | STATIC DEPTH TO WATER (feet): 6.78 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 124.64 | GROUNDWATER ELEVATION (ft NGVD): 117.86

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (19.90 feet - 6.78 feet) X 0.163 gallons/foot = 2.14 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 19.90 feet) + 0.05 gallons = 0.97 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 14.90 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 14.90 | PURGING INITIATED AT: 0750 | PURGING ENDED AT: 0835 | TOTAL VOLUME PURGED (gallons): 8.10

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0800	1.80	1.80	0.18						180.07			
0805	0.90	2.70	0.18						90.91			
0810	0.90	3.60	0.18						51.67			
0815	0.90	4.50	0.18						42.81			
0820	0.90	5.40	0.18						41.99			
0825	0.90	6.30	0.18	8.61	5.75	24.9	259	0.1	40.13	-30		
0828	0.54	6.84	0.18	8.61	5.74	24.9	257	0.1	40.10	-31		
0831	0.54	7.38	0.18	8.61	5.74	24.9	255	0.1	40.11	-36		
0834	0.54	7.92	0.18	8.61	5.73	24.9	253	0.1	40.16	-39	LIGHT BROWN	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./FT.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM/PRO-TECH | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 0835 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 14.90 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
* - SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET									

REMARKS:

Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

FORM FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB32I | SAMPLE ID:

PURGING DATA

DATE: 8-9-17

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 54.5 feet to 69.5 feet | STATIC DEPTH TO WATER (feet): 8.20 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 124.79 | GROUNDWATER ELEVATION (ft NGVD): 116.59

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

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

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 64.56 feet) + 0.05 gallons = 0.74 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 59.56 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 59.56 | PURGING INITIATED AT: 0720 | PURGING ENDED AT: 0740 | TOTAL VOLUME PURGED (gallons): 5.00

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0730	2.50	2.50	0.25	8.20	4.94	22.9	43	0.3	8.14	7.6		
0733	0.75	3.25	0.25	8.20	4.91	22.4	43	0.3	6.84	12		
0736	0.75	4.00	0.25	8.20	4.91	22.4	43	0.3	6.00	13		
0739	0.75	4.75	0.25	8.20	4.89	22.4	43	0.3	5.82	14	SLT. YELLOW TINT	

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./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S):

PUMP OR TUBING DEPTH IN WELL (feet): 59.56 | TUBING MATERIAL CODE: T | SAMPLING INITIATED AT: 0740 | SAMPLING ENDED AT: NA

FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE ID CODE	SAMPLE CONTAINER SPECIFICATION: # CONTAINERS	MATERIAL CODE	VOLUME	SAMPLE PRESERVATION: PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
*	SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB34S | SAMPLE ID:

DATE: 8-9-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 8.36 feet to 18.36 feet | STATIC DEPTH TO WATER (feet): 7.19 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 125.78 | GROUNDWATER ELEVATION (ft NGVD): 118.59

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (18.36 feet - 7.19 feet) X 0.163 gallons/foot = 1.82 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 18.36 feet) + 0.05 gallons = 0.46 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13.36 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.36 | PURGING INITIATED AT: 0645 | PURGING ENDED AT: 0706 | TOTAL VOLUME PURGED (gallons): 3.57

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0656	1.87	1.87	0.17	8.17	6.29	25.9	1298	0.3	4.34	5.2		
0659	0.51	2.38	0.17	8.17	6.30	25.9	1298	0.3	4.26	5.8		
0702	0.51	2.89	0.17	8.17	6.31	25.9	1300	0.3	4.50	6.4		
0705	0.51	3.40	0.17	8.17	6.31	25.9	1302	0.3	4.37	7.3	SLT. YELLOW TNT	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0706 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 13.36 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present: YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

FORM FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB34I | SAMPLE ID: | DATE: 8-9-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 43.95 feet to 53.95 feet | STATIC DEPTH TO WATER (feet): 9.12 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 125.80 | GROUNDWATER ELEVATION (ft NGVD): 116.68

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

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

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 53.95 feet) + 0.05 gallons = 0.67 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 48.95 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 48.95 | PURGING INITIATED AT: 0615 | PURGING ENDED AT: 0635 | TOTAL VOLUME PURGED (gallons): 5.00

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0625	2.50	2.50	0.25	9.14	4.60	26.0	42	0.3	6.55	65		
0628	0.75	3.25	0.25	9.14	4.61	26.0	42	0.4	6.12	60		
0631	0.75	4.00	0.25	9.14	4.62	26.0	42	0.4	6.04	56		
0634	0.75	4.75	0.25	9.14	4.62	26.0	42	0.4	5.98	57	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0635 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 48.95 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE ID CODE	SAMPLE CONTAINER SPECIFICATION: # CONTAINERS	MATERIAL CODE	VOLUME	SAMPLE PRESERVATION: PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
*	SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present: YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB-335 | SAMPLE ID: | DATE: 8-10-17

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH 10.3 feet to 20.3 feet | STATIC DEPTH TO WATER (feet): 8.98 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 125.90 | GROUNDWATER ELEVATION (ft NGVD): 116.92

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

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

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 20.30 feet) + 0.05 gallons = 0.47 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15.30 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.30 | PURGING INITIATED AT: 1025 | PURGING ENDED AT: 1045 | TOTAL VOLUME PURGED (gallons): 3.80

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1035	1.90	1.90	0.19	9.12	5.02	27.0	156	0.5	18.33	103		
1038	0.57	2.47	0.19	9.12	4.95	27.0	147	0.5	17.98	120		
1041	0.57	3.04	0.19	9.12	4.94	27.0	146	0.5	14.04	124		
1044	0.57	3.61	0.19	9.12	4.91	27.0	143	0.5	13.72	129	SLT. YELLOW TINT	

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; 6" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1045 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 15.30 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
* - SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET									

REMARKS:

Sheen Present YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: SW-B | SAMPLE ID: | DATE: 8-10-17

PURGING DATA

WELL DIAMETER (inches): NA | TUBING DIAMETER (inches): NA | WELL SCREEN INTERVAL DEPTH: – feet to – feet | STATIC DEPTH TO WATER (feet): NA | PURGE PUMP TYPE OR BAILER: NA

WELL ELEVATION TOC (ft NGVD): NA | GROUNDWATER ELEVATION (ft NGVD): NA

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): NA | FINAL PUMP OR TUBING DEPTH IN WELL (feet): NA | PURGING INITIATED AT: NA | PURGING ENDED AT: NA | TOTAL VOLUME PURGED (gallons): NA

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1240	NA	NA	NA	NA	6.10	38.6	197	4.7	24.47	48	VERY LIGHT TAN	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1241 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): NA | TUBING MATERIAL CODE: NA | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y N NA | TUBING Y N (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
(X)	SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present YES (NO) SW-B = SURFACE WATER POINT

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SW-1	SAMPLE ID:		DATE: 8-10-17

PURGING DATA

WELL DIAMETER (inches): NA	TUBING DIAMETER (inches): NA	WELL SCREEN INTERVAL DEPTH: — feet to — feet	STATIC DEPTH TO WATER (feet): NA		PURGE PUMP TYPE OR BAILER: NA
WELL ELEVATION TOC (ft NGVD): NA			GROUNDWATER ELEVATION (ft NGVD): NA		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

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

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1150	NA	NA	NA	NA	6.51	25.9	175	3.7	43.13	-16	BROWN	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 4" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.66; 5" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR, BLAKE GRISSOM, BEN RAMJEAWAN / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1150	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y N NA	TUBING Y N (replaced)		DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
*	SEE	SAMPLE	CONT	AND	BOTTLE		ORDER	WORKSHEET	

REMARKS:

SHEEN: NO SW-1 = SURFACE WATER POINT

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SW-3	SAMPLE ID:		DATE: 8-10-17

PURGING DATA

WELL DIAMETER (inches): NA	TUBING DIAMETER (inches): NA	WELL SCREEN INTERVAL DEPTH: — feet to — feet	STATIC DEPTH TO WATER (feet): NA		PURGE PUMP TYPE OR BAILER: NA
WELL ELEVATION TOC (ft NGVD): NA			GROUNDWATER ELEVATION (ft NGVD): NA		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

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

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1100	NA	NA	NA	NA	6.72	27.9	426	1.8	110.50	-66	BROWN	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BLAINE GRISSOM / DAN ARMOUR PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1100	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y N NA TUBING Y N (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SW-2 = SURFACE WATER POINT SHEEN: NO

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

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

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

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

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

Revision Date: February 12, 2009