Water Quality Monitoring Report

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

First 2018 Semiannual Event
Sampled February 20-21, 2018

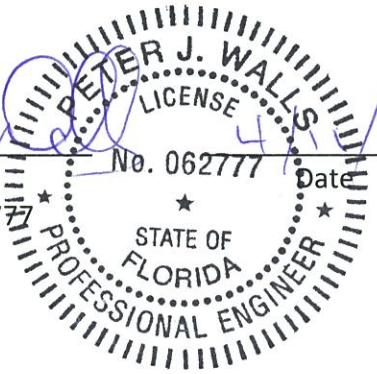
Prepared For:
Trail Ridge Landfill, Inc.

Prepared By:

Carlson Environmental Consultants, PC
305 S Main Street
Monroe, NC 28112
April 2018

PROFESSIONAL CERTIFICATION - TRAIL RIDGE LANDFILL 1H 2018 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.



4/19/2018

Peter Walls, P.E. Date

Florida License # 62777

Expires 02/28/2019

CEC

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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 Trailridge 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.

4/5/18
(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

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 first 2018 semi-annual groundwater and surface water monitoring event conducted on February 20-21, 2018. 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 near 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 total disposal area of approximately 427 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. As of this report, waste has been placed in Phases 1-6 only and the stormwater management system for Phases 6-14 remains under construction.

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.

SGMW-1(S) is scheduled to be abandoned and replaced on April 18, 2018. After development, TRL will perform a dedicated sampling event for this replacement well for normal semiannual parameters and provide the results in the 2H 2018 semiannual report.

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

As of this event, the Site surface water monitoring system consists of seven surface water monitoring locations: SW-1, SW-3, SW-4, SW-5, SW-6, SW-7 and SW-B (Figure 2A). SW-B is intended to be a background water quality sampling point. SW-4 monitors the new retention pond associated with an interceptor ditch which is designed to capture shallow groundwater and surface water migrating on to the Trail Ridge property from the west. SW-5 and SW-6 monitor the new retention pond that captures runoff from the expansion areas (Phases 6-14). SW-7 is a downgradient point.

3.0 DATA COLLECTION METHODS

3.1 Groundwater Elevation Measurements

ProTech field personnel measured water levels in Site monitoring wells on February 20, 2018 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 February 2018 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 February 20 and February 21, 2018. 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. On March 23, 2018, CEC notified the Department of the of the planned date to abandonment/replacement currently scheduled for April 18, 2018. TRL intends to conduct an individual initial sampling event for normal semiannual monitoring parameters for the replacement well in April and will provide the results in the 2H 2018 semiannual report.

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 February 21, 2018, surface water samples were collected from the 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. SW-B was not sampled because the location was dry.

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 February 2018 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 February 20, 2018, 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 February 2018 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 recoveries of Nitrate for J1801998022 (SW-3) was outside control criteria because of matrix interference. The chromatogram indicated the presence of background components that prevented adequate resolution of the target analytes. As a result, accurate quantitation was not possible. The result is qualified to indicate matrix interference.
- The relative percent difference (RPD) for the following analytes in the Laboratory Control Spike (LCS) and Duplicate (LCSD) were outside control criteria: 1,1-dichoroethene and PCE. All spike recoveries LCS and LCSD were within acceptable limits, indicating the analytical batch was in control. No further corrective action was needed.
- The matrix spike (MS) recovery of PCE for J1801998001 (MWB-3S) was outside control criteria. Recoveries in the Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential bias in this matrix. The affected sample is J4 qualified to indicate matrix interference.

Other QA/QC issues were not identified; therefore, the remaining results from the February 2018 event are considered acceptable without qualification. However, during this event, there were VOC detections in both groundwater and surface water that were anomalous. Several of these are likely lab contamination (e.g. acetone and EDB). Chloromethane, a naturally occurring

compound also historically used as a refrigerant (R-40), was detected in multiple groundwater and surface water samples. Inquiry with the laboratory revealed no known sources of chloromethane in the lab setting. TRL landfill resampled for EDB and chloromethane on April 9th, 2018 and suspects both are false positives or related to non-landfill sources.

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 slightly 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)and SGMW-2(S), both of which have historically had elevated turbidity.

Surface water field parameter readings and observations for SW-1 and SW-3 are comparable to historical surface water measurements and turbidities were low during this event. SW-B was not sampled because it was dry. SW-4, SW-5, SW-6, and SW-7 were sampled for the first time during this event, so there is no baseline for comparison. The new stormwater management system and retention ponds were still under construction at the time of sampling. The north pond, which receives discharge from the perimeter interceptor ditch only, was isolated from the system at the time of sampling for construction related reasons. That pond was not discharging. Elevated turbidity was observed in SW-4, SW-5, SW-7, and to a lesser degree SW-6. SW-4 had the highest turbidity and does not receive any runoff from the active landfill areas. SW-6 had the lowest turbidity and is the point nearest the active area of the landfill (Phase 6). Elevated turbidities were likely related to ongoing construction of the stormwater management system.

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

The groundwater monitoring results from the February 2018 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. SMCL exceedances were measured for iron, and pH, and total dissolved solids (TDS) in several wells. These exceedances are identified and discussed below.

Iron (SMCL 0.3 mg/L)

- Shallow wells: MWB-2(S), MWB-3(S), MWB-11(S), MWB-29(S), MWB-32(S), MWB-34(S), MWB-40(S), and SGMW-2(S)

- Intermediate wells: MWB-2(I), MWB-3(I), MWB-12(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-34(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. With the possible exception of MWB-34(S), these SMCL exceedances, therefore, appear to be related to natural subsurface conditions rather than landfill impacts. TDS concentrations in MWB-34(S) declined in this event. This well continues to show minor impacts with elevated TDS and ammonia that exceed the SMCL and GCTL respectively. The prior exceedances and detections were attributed to a leachate release that occurred in January 2017 which was quickly repaired. Additional information was provided in the 1H and 2H 2017 semiannual monitoring reports. 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. TRL proposes to monitor MWB-34(S) to ensure no other wells are impacted and concentrations continue to decline.

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):

Chloromethane (Class I 5.67 ug/L; Class III 470.8 ug/L)

- SW-1, SW-4, SW-5, SW-6, SW-7 (pending resample all points)

Iron (Class I/III – 1000 ug/L)

- SW-1, SW-3, SW-4, SW-5, and SW-7 (pending resample SW-4 through SW-7)

Lead (Calculated)

- SW-1, SW-3, SW-4, and SW-5(pending resample SW-4 and SW-5)

Mercury (Class I/III – 0.012 ug/L)

- SW-1, SW-4, SW-5, SW-6, and SW-7 (pending resample SW-4 through SW-7)

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

- SW-1

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 during the last event. Only SW-4 and SW-5 were greater than 29 NTU above this amount, though turbidities in SW-6 and SW-7 were likely elevated.

With the exception of SW-4 through SW-7 which were initial samples and hence initial detections, and chloromethane which will be resampled at all detected points, all exceedances have been historically detected at surface water locations at comparable concentrations exceeding the applicable WQS. Ongoing efforts to reduce total suspended solids and metals concentrations have been successful at SW-3. Detections during this event at SW-1 and SW-3 were between the method detection limit and laboratory practical quantitation limits, and only slightly above the very low standards that result from low hardness values.

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.

The results showing potentially elevated levels of metals in the new retention ponds were unexpected. CEC/TRL provided notification to the Department on March 23, 2018 to ensure the Department was aware of the potential issue in accordance with the solid waste permit.

There is currently no evidence to suggest these detections are related to the issue that has existed at SW-3. Phases 1-5 are largely capped and are almost entirely isolated from the new retention ponds. No ash has been accepted in Phases 1-5 for approximately 1.5 years and none that was accepted in the past remains exposed. No ash has been disposed of in Phase 6. A limited amount of contaminated soil associated with the City of Jacksonville ash project has been

disposed of in Phase 6 since December 2017. This contaminated soil was managed in accordance with the solid waste permit. The soil was stockpiled on top of the landfill with silt fence surrounding the area, mixed 50/50 with mulch, and utilized for daily cover only on interior top slopes away from exterior slopes.

Importantly, high turbidity and the highest metals concentrations were found at SW-4, which does not receive any runoff from the landfill itself, but instead only receives flow from the perimeter interceptor ditch which captures shallow groundwater and surface water run-on flowing onto the Trail Ridge property from the west. This indicates that the detections are correlated with turbidity and suggest a non-landfill source. While it is true that SW-5 and SW-6 could be impacted from runoff from Phase 6, there are no obvious indicators of leachate impacts in adjacent wells or in that pond. It is possible that those points, as well as SW-7 which can receive discharge from both new retention ponds, were also impacted from upgradient non-landfill sources.

7.0 DISCUSSION AND RECOMMENDATIONS

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. Several surface water and ground water locations were resampled on April 9th, 2018. TRL will report the results to FDEP when available and provide detail in the next semiannual report.

Previously reported detections for MWB-21(S) and MWB-34(S) improved relative to the prior event. TDS dropped below the SMCL at MWB-21(S) and thus was not verified during this event. The well shows no other evidence of impacts. Nitrate was significantly lower and dropped below the MCL in MWB-34(S). TDS also declined. This well continues to show minor impacts with elevated TDS and ammonia that exceed the SMCL and GCTL respectively. The prior exceedances and detections were attributed to a leachate release that occurred in January 2017 which was quickly repaired. Additional information was provided in the 1H and 2H 2017 semiannual monitoring reports. 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. TRL proposes to monitor MWB-34(S) to ensure no other wells are impacted and concentrations continue to decline.

A few VOCs were detected in groundwater monitoring wells and in surface water. None are thought to be related to landfill impacts. Acetone was detected in numerous locations and is attributed to lab contamination. TRL will resample for other VOCs on April 9th, 2018.

The results showing potentially elevated levels of metals in the new retention ponds were unexpected. There is currently no evidence to suggest these detections are related to the issue that has existed at SW-3. Phases 1-5 are largely capped and are almost entirely isolated from the new retention ponds. No ash has been accepted in Phases 1-5 for approximately 1.5 years and

none that was accepted in the past remains exposed. No ash has been disposed of in Phase 6. A limited amount of contaminated soil associated with the City of Jacksonville ash project has been disposed of in Phase 6 since December 2017. This contaminated soil was managed in accordance with the solid waste permit. The soil was stockpiled on top of the landfill with silt fence surrounding the area, mixed 50/50 with mulch, and utilized for daily cover only on interior top slopes away from exterior slopes.

Importantly, high turbidity and the highest metals concentrations were found at SW-4, which does not receive any runoff from the landfill itself, but instead only receives flow from the perimeter interceptor ditch which captures shallow groundwater and surface water run-on flowing onto the Trail Ridge property from the west. This indicates that the detections are correlated with turbidity and suggest a non-landfill source. While it is true that SW-5 and SW-6 could be impacted from runoff from Phase 6, there are no obvious indicators of leachate impacts in adjacent wells or in that pond. It is possible that those points, as well as SW-7 which can receive discharge from both new retention ponds, were also impacted from upgradient non-landfill sources. On April 9th, 2018, TRLF resampled for several metals, including dissolved and total fractions. TRLF may also collect additional data to help identify any potential off-site or non-landfill sources.

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

The results of the last five semiannual monitoring events, up to this event, were incorporated into the 2.5 Year Technical Report due March 31, 2018. An extension was approved by the Department on March 26, 2018 to allow the Technical Report to be submitted by April 15, 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
February 2018

Well ID	TOC Elevation	Depth to Water	Groundwater Elevation
	(ft MSL)	(ft BTOC)	(ft MSL)
Shallow Wells			
MWB-2(S)	146.64	7.94	138.70
MWB-3(S)	154.38	7.62	146.76
MWB-7(S)	123.29	10.37	112.92
MWB-11(S)	120.81	11.18	109.63
MWB-12(S)	124.63	10.15	114.48
MWB-13(S)	126.05	13.19	112.86
MWB-14(S)	126.05	Below pump	
MWB-20(S)	121.01	9.13	111.88
MWB-21(S)	122.84	10.61	112.23
MWB-22(S)	126.97	11.53	115.44
MWB-23(S)	125.34	14.36	110.98
MWB-24(S)	126.04	7.17	118.87
MWB-25(S)	125.22	7.82	117.40
MWB-26(S)	126.55	7.13	119.42
MWB-27(S)	128.42	7.06	121.36
MWB-29(S)	138.02	8.17	129.85
MWB-32(S)	124.64	8.23	116.41
MWB-33(S)	125.90	9.96	115.94
MWB-34(S)	125.78	8.58	117.20
MWB-35(S)	147.79	7.02	140.77
MWB-39(S)	126.85	13.57	113.28
MWB-40(S)	115.41	8.59	106.82
SGMW-1(S)	138.86	15.43	123.43
SGMW-2(S)	130.55	15.72	114.83
Intermediate Wells			
MWB-2(I)	145.73	10.28	135.45
MWB-3(I)	151.86	13.71	138.15
MWB-7(I)	121.53	7.56	113.97
MWB-11(IR)	120.43	15.13	105.30
MWB-12(I)	124.62	9.17	115.45
MWB-13(I)	125.98	16.74	109.24
MWB-14(I)	125.92	10.81	115.11
MWB-25(I)	124.03	6.71	117.32
MWB-27(I)	128.63	7.52	121.11
MWB-29(I)	138.08	7.02	131.06
MWB-32(I)	124.79	8.30	116.49
MWB-34(I)	125.80	9.51	116.29
MWB-35(I)	147.93	8.65	139.28
MWB-39(I)	126.76	12.45	114.31
Deep Wells			
MWB-7(D)	121.65	4.06	117.59
MWB-12(D)	124.56	7.62	116.94
MWB-14(D)	125.87	10.82	115.05
MWB-25(D)	124.64	7.25	117.39
MWB-27(D)	128.88	7.89	120.99
MWB-29(D)	138.18	7.13	131.05
MWB-31(D)	156.15	18.32	137.83
MWB-32(D)	124.93	8.55	116.38
MWB-34(D)	125.92	9.72	116.20

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 February 20, 2018. 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
February 2018

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)	4.75	20.10	34.00	2.20	30.31
MWB-3(S)	4.17	19.70	89.00	1.10	4.75
MWB-11(S)	3.92	21.40	163.00	0.50	6.24
MWB-12(S)	5.61	20.60	278.00	1.40	12.10
MWB-13(S)	5.86	22.10	498.00	1.30	4.18
MWB-20(S)	4.49	22.80	95.00	0.30	12.74
MWB-21(S)	4.95	23.90	213.00	0.60	3.41
MWB-22(S)	5.92	21.50	657.00	0.20	2.71
MWB-27(S)	5.29	19.10	159.00	0.80	11.00
MWB-29(S)	4.23	19.20	87.00	1.10	3.42
MWB-32(S)	5.11	22.50	140.00	0.10	5.75
MWB-33(S)	5.81	22.80	321.00	0.10	4.42
MWB-34(S)	6.38	22.60	1062.00	0.10	3.50
MWB-35(S)	3.85	18.70	36.00	0.10	5.01
MWB-39(S)	5.72	21.00	412.00	0.40	5.88
MWB-40(S)	4.80	20.60	220.00	0.00	17.06
SGMW-1(S)	*No sample collected*				
SGMW-2(S)	4.80	22.30	50.00	0.00	31.37
Intermediate Wells					
MWB-2(I)	4.46	21.70	38.00	0.30	2.89
MWB-3(I)	4.38	21.80	42.00	0.70	2.92
MWB-11(IR)	4.64	25.10	35.00	0.10	4.51
MWB-12(I)	4.89	25.00	41.00	0.10	3.47
MWB-13(I)	4.83	25.80	38.00	0.10	3.40
MWB-27(I)	5.20	21.20	52.00	0.50	3.87
MWB-29(I)	4.75	24.20	41.00	1.20	4.54
MWB-32(I)	5.02	22.30	43.00	0.50	3.57
MWB-34(I)	4.95	26.00	42.00	0.50	4.33
MWB-35(I)	4.63	21.30	35.00	0.30	3.17
MWB-39(I)	4.99	23.20	41.00	0.00	3.92
Surface Water					
SW-1	6.79	20.60	437.00	7.20	22.43
SW-3	7.21	22.20	456.00	4.60	20.55
SW-B	Sample Location Dry				
SW-4	7.11	29.30	198.00	7.10	96.24
SW-5	7.65	22.20	195.00	6.70	166.30
SW-6	7.61	25.40	265.00	6.60	34.48
SW-7	7.31	20.60	149.00	7.10	55.50

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

Table 4 - Groundwater Constituent Concentrations
Trail Ridge Landfill, Jacksonville, Florida
February 2018

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	0.11	U	0.11	U	0.11	U	0.35	I	0.11	U	0.11	U	0.25	I	0.15	I	0.11	U	0.11	U	0.19	I	0.62	I	0.11	U	0.11	U	0.11	U	0.11	I	NS	0.11	U																				
ARSENIC	ug/L	10	9	U	9	U	9	U	9	U	9	U	9	U	9	U	9	U	9	U	9	U	9	U	9	U	9	U	9	U	9	U	9	U	NS	9	U																				
BARIUM	ug/L	2000	66		20		6.1		3		7.7		22		4.5		5.2		5.5		15		8.9		7.8		15		4.7		3.3		53		NS	100																				
BERYLLIUM	ug/L	4	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	NS	0.84																				
CADMIUM	ug/L	5	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	NS	0.45	U																				
CALCIUM	ug/L		4000		2300		1100		27000		14000		1300		51000		54000		4000		17000														NS																				
CHROMIUM	ug/L	100	1.6	U	1.6	U	1.9	I	1.6	I	2.8	I	1.6	U	2.4	I	1.7	I	1.9	I	1.6	U	1.9	I	2.5	I	1.6	U	1.6	U	1.6	U	4.6		NS	8.3																				
COBALT	ug/L	140	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	NS	1.9	U																				
COPPER	ug/L	1000	3.2	U	3.2	U	3.2	U	3.2	U	3.2	U	3.2	U	3.2	U	3.2	U	3.2	U	3.2	U	3.2	U	7.3		3.2	U	3.2	U	3.2	U	6.1		NS	3.2	U																				
IRON	ug/L	300	1900		460		550		160	I	130	I	700		260		110	I	100	U	280		160	I	440		510		150	I	100	U	800		NS	920		350		100	U	840		270		290		330		330		350		380		710		290	
LEAD	ug/L	15	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U	NS	3.1	I																				
MAGNESIUM	ug/L		1900		930		1200		4300		3100		1100		10000		9300		430		3400														NS																				
MERCURY	ug/L	2	0.011	U	0.011	U	0.037	I	0.011	U	0.016	I	0.011	U	0.011	U	0.011	U	0.011	U	0.011	U	0.039	I	0.025	I	0.011	U	0.011	U	0.011	U	0.018	I	NS	0.043	I																				
NICKEL	ug/L	100	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	NS	6	U																				
SELENIUM	ug/L	50	0.58	U	0.58	U	0.58	U	3.2	I	0.68	I	0.58	U	2	I	0.68	I	0.64	I	0.58	U	0.78	I	1.7	I	0.58	U	0.58	U	0.8	I	1.7	I	NS	1.2	I																				
SILVER	ug/L	100	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	NS	9.6	U																				
SODIUM	ug/L	160000	12000		6100		2700		15000		6400		7800		22000		50000		10000		10000		5400		71000		6200		1900		19000		29000		NS	3600		2800		2600		1300		2700		2900		3000		3700		3300		3000		3300		2900	
THALLIUM	ug/L	2	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	0.057	U	NS	0.057	U																				
VANADIUM	ug/L	49	3.9		1.4		4		29		10		0.98	I	23		4.1		6.7		2.3		7.4		31		3		1.1		2.1		15		NS	19																				
ZINC	ug/L	5000	33	U	33	U	33	U	33	U	33	U	33	U	33	U	33	U	33	U	33	U	33	U	56	I	33	U	33	U	33	U	140		NS	33	U																				
1,1,1,2-TETRACHLOROETHANE	ug/L	1.3	0.54	U	0.54	U	0.54	U	0.54	U	0.54	U	0.54	U	0.54	U	0.54	U	0.54	U	0.54	U	0.54	U	0.54	U	0.54	U	0.54	U	0.54	U	0.54	U	NS	0.54	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	0.91	U	0.91	U	0.91	U	0.91	U	0.91	U	0.91	U	0.91	U	0.91	U	0.91	U	0.91	U	0.91	U	0.91	U	0.91	U	0.91	U	0.91	U	0.91	U	NS	0.91	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	I	0.02	U	0.02	I	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	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	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U	NS	0.66	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	0.22	U																				
2-HEXANONE	ug/L	280	0.71	U	0.71	U	0.71	U	0.71	U	0.71	U	0.71	U	0.71	U	0.71	U	0.71	U	0.71	U	0.71	U	0.71	U	0.71	U	0.71	U	0.71	U	0.71	U	NS	0.71	U																				
ACETONE	ug/L	6300	3.4	I	2.1	U	2.1	U	2.7	I	4.1	I	5.2		2.1	U	3.8	I	2.1	U	2.1	U	2.1	U	4	I	6.5		4.2	I	2.1	U	2.4	I	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	0.16	U	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	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	NS	0.46	U																				
BROMOFORM	ug/L	4.4	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																				
BROMOMETHANE	ug/L	9.8	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																				
CARBON DISULFIDE	ug/L	700	0.67	U	0.67	U	0.67	U	0.67	U	0.67	U	0.67	U	0.67	U	0.67	U	0.67	U	0.67	U	0.67	U	0.67	U	0.67	U	0.67	U	0.67	U	0.67	U	NS	0.67	U																				
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	120		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	150		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,J	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	0.21	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																				
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	22000		18000		3900	I	18000		11000		15000		84000		110000		14000		32000		10000		62000		9800		4500	I	23000		37000		NS	7600		5500		5200		4000		5200		5400		5500		7200		6200		5800		7500		5900	
NITRATE (AS N)	ug/L	10000	83	I	50	U	110	I	150		1600		50	U	630		50	U	180	I	50	U	50	U	980		50	U	50	U	50		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	60		60		40		20		90		240		180		100		380		1400		870		7300		710		10	I	3400		1400		NS	40		60		20		150		60		40		40		10		40		40		8	U	20	
RESIDUES - FILTERABLE (TDS)	ug/L	500000	150000		72000		85000		200000		140000		72000		390000		420000		110000		160000		220000		690000		71000		19000		280000		220000		NS	56000		34000		23000		21000		22000		39000		59000		35000		57000		56000		42000		46000	

U = Result was less than the Method Detection Limit (MDL)
J = Estimated value
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 or VOC detection
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-4		SW-5		SW-6		SW-7		SW-B	
ANTIMONY	ug/L	14	4300	0.96		1.1		0.19	I	0.23	I	0.31	I	0.11	U	NS	
ARSENIC	ug/L	10	50	9	U	9	U	9	U	9	U	9	U	9	U	NS	
BARIUM	ug/L	1000		36		30		72		76		52		45		NS	
BERYLLIUM	ug/L	0.0077	<.3	0.4	U	0.4	U	0.4	U	0.58	I	0.4	U	0.4	U	NS	
CADMIUM	ug/L	See Table 6	See Table 6	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	NS	
CALCIUM	ug/L			39000		45000		24000		25000		33000		21000		NS	
CHROMIUM	ug/L	See Table 6	See Table 6	4.6		5.3		13		18		5.2		5.5		NS	
COBALT	ug/L			1.9	U	3	I	1.9	U	1.9	U	1.9	U	1.9	U	NS	
COPPER	ug/L	See Table 6	See Table 6	3.4	I	5.1	I	3.2	U	3.2	I	3.2	U	3.2	U	NS	
IRON	ug/L	1000	1000	1300		1500		1900		2900		870		1300		NS	
LEAD	ug/L	See Table 6	See Table 6	4.4	I	5.7	I	7.5		9.5		2.9	U	2.9	U	NS	
MAGNESIUM	ug/L			5000		5200		7000		3900		3300		1600		NS	
MERCURY	ug/L	0.012	0.012	0.017	I	0.011	I	0.049	I	0.087	I	0.02	I	0.028	I	NS	
NICKEL	ug/L	See Table 6	See Table 6	6	U	6	U	6	U	6	U	6	U	6	U	NS	
SELENIUM	ug/L	5	5	0.61	I	0.72	I	2	I	1.9	I	0.93	I	0.58	U	NS	
SILVER	ug/L	0.07	0.07	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	NS	
THALLIUM	ug/L	1.7	6.3	0.057	U	0.057	U	0.06	I	0.057	U	0.057	U	0.057	U	NS	
VANADIUM	ug/L			6.8		8.5		27		29		11		9		NS	
ZINC	ug/L	See Table 6	See Table 6	33	U	35	I	33	U	33	U	33	U	33	U	NS	
1,1,1,2-TETRACHLOROETHANE	ug/L			0.54	U	0.54	U	0.54	U	0.54	U	0.54	U	0.54	U	NS	
1,1,1-TRICHLOROETHANE	ug/L			0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	NS	
1,1,2,2-TETRACHLOROETHANE	ug/L	0.17	10.8	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS	
1,1,2-TRICHLOROETHANE	ug/L			0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	NS	
1,1-DICHLOROETHANE	ug/L			0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	NS	
1,1-DICHLOROETHENE	ug/L	7	3.2	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	NS	
1,2,3-TRICHLOROPROPANE	ug/L			0.91	U	0.91	U	0.91	U	0.91	U	0.91	U	0.91	U	NS	
1,2-DIBROMO-3-CHLOROPROPANE	ug/L			0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	NS	
1,2-DIBROMOETHANE (EDB)	ug/L			0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	NS	
1,2-DICHLOROBENZENE	ug/L			0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	NS	
1,2-DICHLOROETHANE	ug/L			0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	NS	
1,2-DICHLOROPROPANE	ug/L			0.66	U	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U	NS	
1,4-DICHLOROBENZENE	ug/L			0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	NS	
2-HEXANONE	ug/L			0.71	U	0.71	U	0.71	U	0.71	U	0.71	U	0.71	U	NS	
ACETONE	ug/L			2.1	U	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U	NS	
ACRYLONITRILE	ug/L			1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	NS	
BENZENE	ug/L	1.18	71.28	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	NS	
BROMOCHLOROMETHANE	ug/L			0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	NS	
BROMODICHLOROMETHANE	ug/L	0.27	22	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	NS	
BROMOFORM	ug/L	4.3	360	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	NS	
BROMOMETHANE	ug/L			0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	NS	
CARBON DISULFIDE	ug/L			0.67	U	0.67	U	0.67	U	0.67	U	0.67	U	0.67	U	NS	
CARBON TETRACHLORIDE	ug/L	3	4.42	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	NS	
CHLOROBENZENE	ug/L			0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	NS	
CHLOROETHANE	ug/L			0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	NS	
CHLOROFORM	ug/L	5.67	470.8	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	NS	
CHLOROMETHANE	ug/L	5.67	470.8	40		0.21	U	150		190		72		79		NS	

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 or VOC detection

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	0.24	U	0.24	U	0.24	U	NS	
cis-1,3-DICHLOROPROPENE	ug/L			0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	NS	
DIBROMOCHLOROMETHANE	ug/L	4.65	1580	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	NS	
DIBROMOMETHANE	ug/L			0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	NS	
ETHYLBENZENE	ug/L			0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	NS	
IODOMETHANE (METHYL IODIDE)	ug/L			0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	NS	
METHYL ETHYL KETONE (2-BUTANONE)	ug/L			0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	0.43	U	NS	
METHYL ISOBUTYL KETONE	ug/L			0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	NS	
METHYLENE CHLORIDE	ug/L			2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	NS	
STYRENE	ug/L			0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	NS	
TETRACHLOROETHENE	ug/L	3	8.85	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	NS	
TOLUENE	ug/L			0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	NS	
trans-1,2-DICHLOROETHENE	ug/L			0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS	
trans-1,3-DICHLOROPROPENE	ug/L			0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	NS	
trans-1,4-DICHLORO-2-BUTENE	ug/L			1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	NS	
TRICHLOROETHYLENE	ug/L	3	80.7	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	NS	
TRICHLOROFLUOROMETHANE	ug/L			0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	NS	
VINYL ACETATE	ug/L			0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	NS	
VINYL CHLORIDE	ug/L			0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS	
XYLENES, TOTAL	ug/L			0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	NS	
NITROGEN, AMMONIA (AS N)	ug/L			2300		1700		8	U	30		60		60		NS	
UNIONIZED AMMONIA	ug/L	20	20	7.2	I	15		0.095	U	0.64	I	1.6	I	0.6	I	NS	
BIOCHEMICAL OXYGEN DEMAND (BOD)	ug/L			5600		11000		4100		3600		2000	U	3800		NS	
CALCIUM HARDNESS (CALC)	ug/L			120000		130000		90000		78000		96000		60000		NS	
TOTAL ORGANIC CARBON	ug/L			25000		18000		6200		11000		12000		6400		NS	
CHEMICAL OXYGEN DEMAND (COD)	ug/L			57000		53000		19000	I	39000		39000		21000		NS	
CHLORIDE	ug/L	250,000				500	U									NS	
NITRATE (AS N)	ug/L			4300		4700	J	50	U	840		1300		50	U	NS	
NITRATE-NITRITE (AS N)	ug/L	10,000		4300		4700		50	U	840		1300		50	U	NS	
PHOSPHORUS, TOTAL (AS P)	ug/L			150		50	U	450		340		50	U	50	U	NS	
RESIDUES - FILTERABLE (TDS)	ug/L			300000		280000		200000		290000		180000		110000		NS	
RESIDUES - NONFILTERABLE (TSS)	ug/L			16000		23000		76000		13000		1300	I	44000		NS	
TOTAL NITROGEN	ug/L			8200		8200		790		2100		2100		500		NS	
CHLOROPHYLL-a	mg/m3			7.1		30		24		3.6		2.1		3.6		NS	
FECAL COLIFORM	CFU/100 mL	800	800	1800	B	100		100	U	100	U	300	B	700	B	NS	

NS	= Not Sampled (Dry)
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
J	= Estimated Value
	Exceeds Class I or Class III WQS or VOC detection

Table 6 - Surface Water Quality Standard Calculations
Trail Ridge Landfill, Jacksonville, Florida
February 2018

Parameter	Units	WQS Class I & Class III	SW-1		SW-3		SW-4		SW-5		SW-6		SW-7		SW-B		
			120		130		90		78		96		60		NS		Total Hardness [1]
			4.79		4.87		4.50		4.36		4.56		4.09				lnH [2]
			Result (total)	Std	Result (total)	Std	Result (total)	Std	Result (total)	Std	Result (total)	Std	Result (total)	Std	Result (total)	Std	
Cadmium	ug/L	Measured ≤ $e^{(0.7409[lnH]-4.719)}$	<0.45	0.3	<0.45	0.3	<0.45	0.3	<0.45	0.2	<0.45	0.3	<0.45	0.2	NS		
Chromium	ug/L	Measured ≤ $e^{(0.819[lnH]+0.6848)}$	**4.6**	100	**5.3**	107	**13.0**	79	**18.0**	70	**5.2**	83	**5.5**	57	NS		
Copper	ug/L	Measured ≤ $e^{(0.8545[lnH]-1.702)}$	**3.4 I**	10.9	**5.1 I**	11.7	<3.2	8.5	**3.2 I**	7.5	<3.2	9.0	<3.2	6.0	NS		
Lead	ug/L	Measured ≤ $e^{(1.273[lnH]- 4.705)}$	**4.4 I**	4.0	**5.7 I**	4.4	**7.5**	2.8	**9.5**	2.3	<2.9	3.0	<2.9	1.7	NS		
Nickel	ug/L	Measured ≤ $e^{(0.846[lnH]+0.0584)}$	<6.0	61	<6.0	65	<6.0	48	<6.0	42	<6.0	50	<6.0	34	NS		
Zinc	ug/L	Measured ≤ $e^{(0.8473[lnH]+0.884)}$	<33	140	**35 I**	150	<33	110	<33	97	<33	116	<33	78	NS		

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 hardness (H) is reported in mg/L of CaCO3 in the laboratory report

[2]- "ln H" means the natural logarithm of total hardness expressed as mg/L of CaCO3

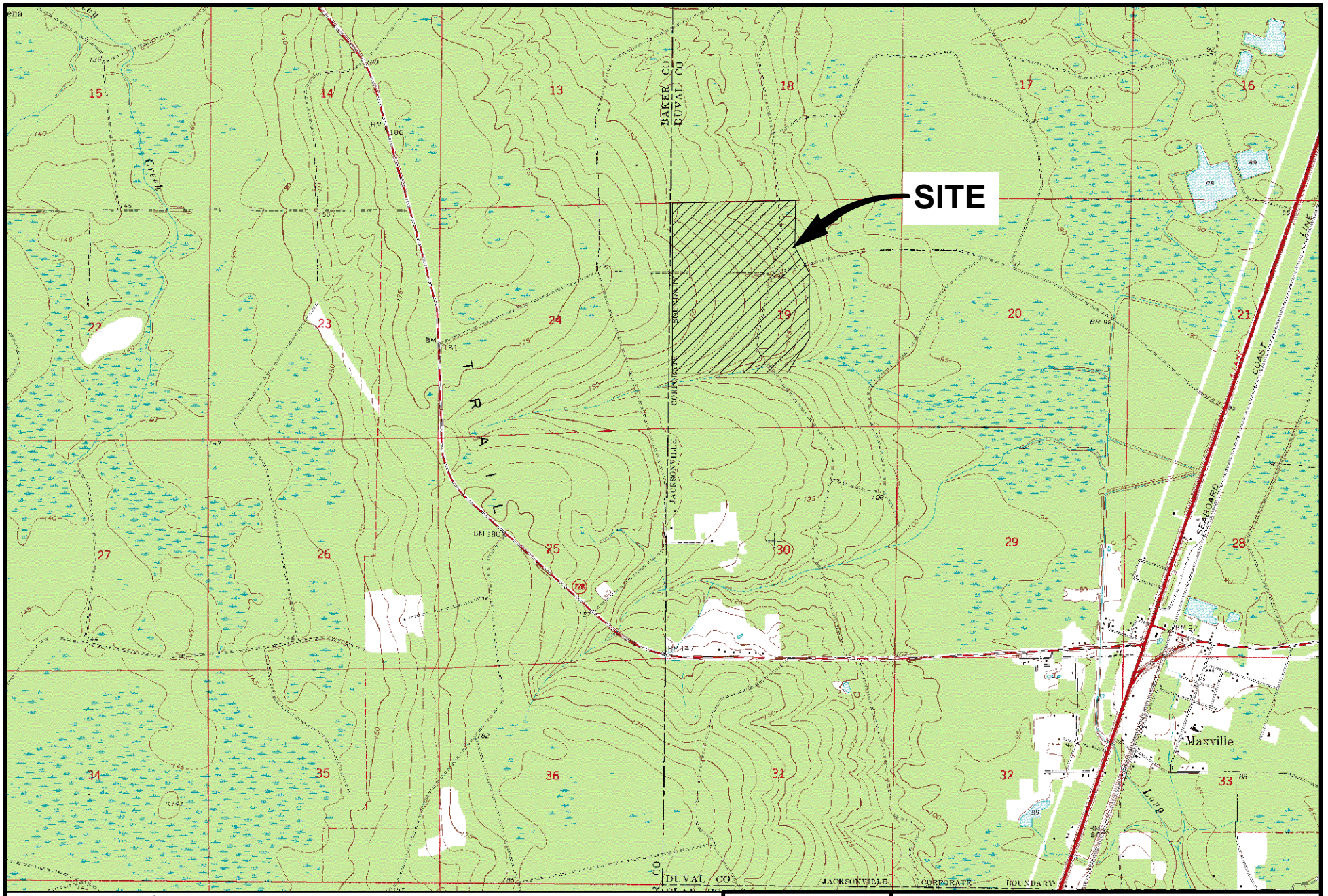
I - result is qualified because the detection was between method detection limits and practical quantitation limits.

J - Estimated value

Bold values indicate detections above the laboratory detection limit; yellow cells indicate result exceeded WQS.

[NS]- Not Sampled (Dry)

FIGURES



NOTES:

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

N

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
  - (D) DEEP 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.

2. BASE MAP OF NORTHERN PORTION OF EXPANSION AREA PROVIDED BY CDM AND IS BASED ON CONFORMED CONSTRUCTION DRAWINGS FOR THE EXPANSION AREA RETENTION PONDS. THIS PORTION OF THE MAP IS NOT AN AS-BUILT AND LOCATIONS ARE APPROXIMATE.

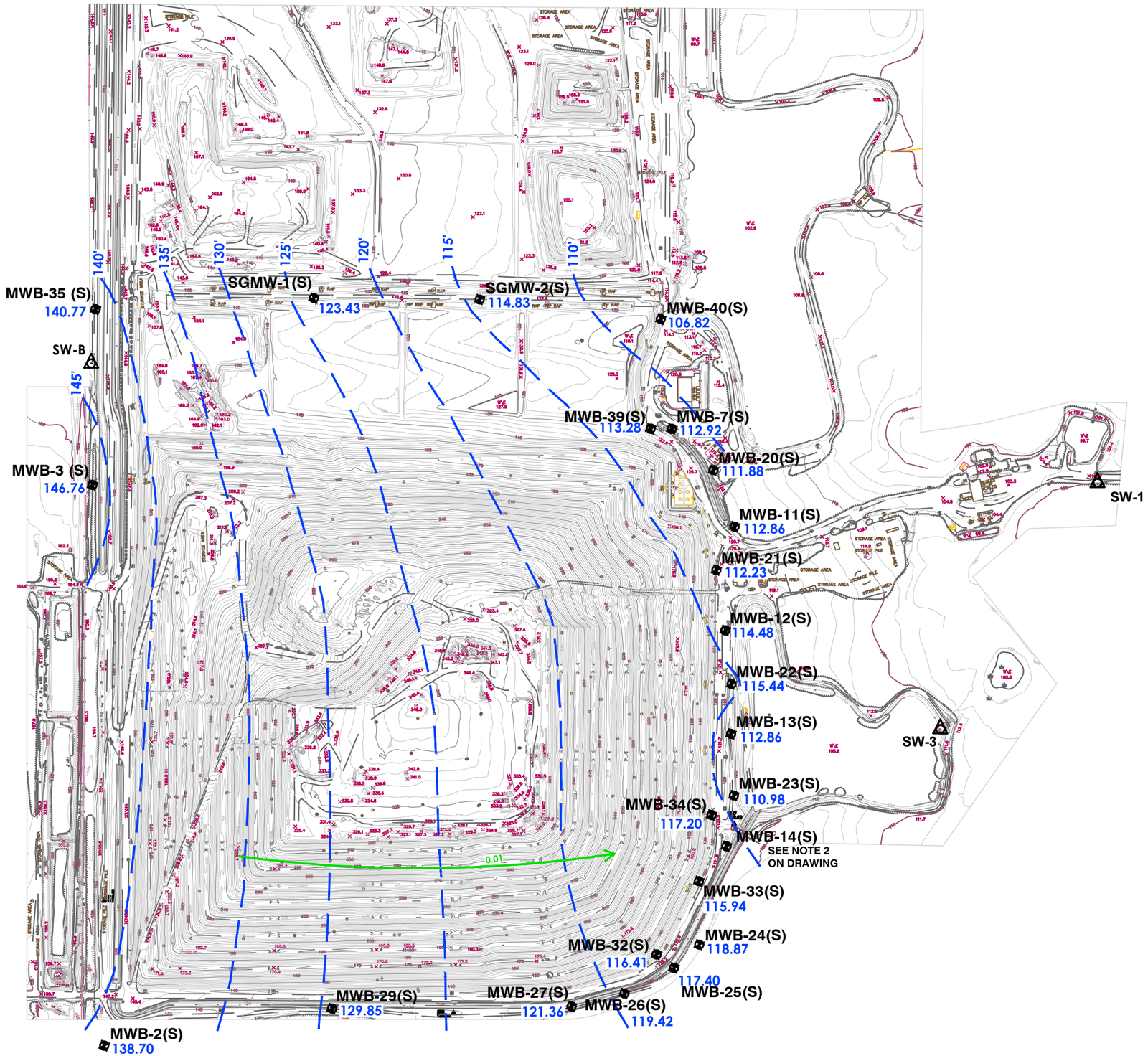
N

0 1000 2000

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 02/20/2018.
- 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.

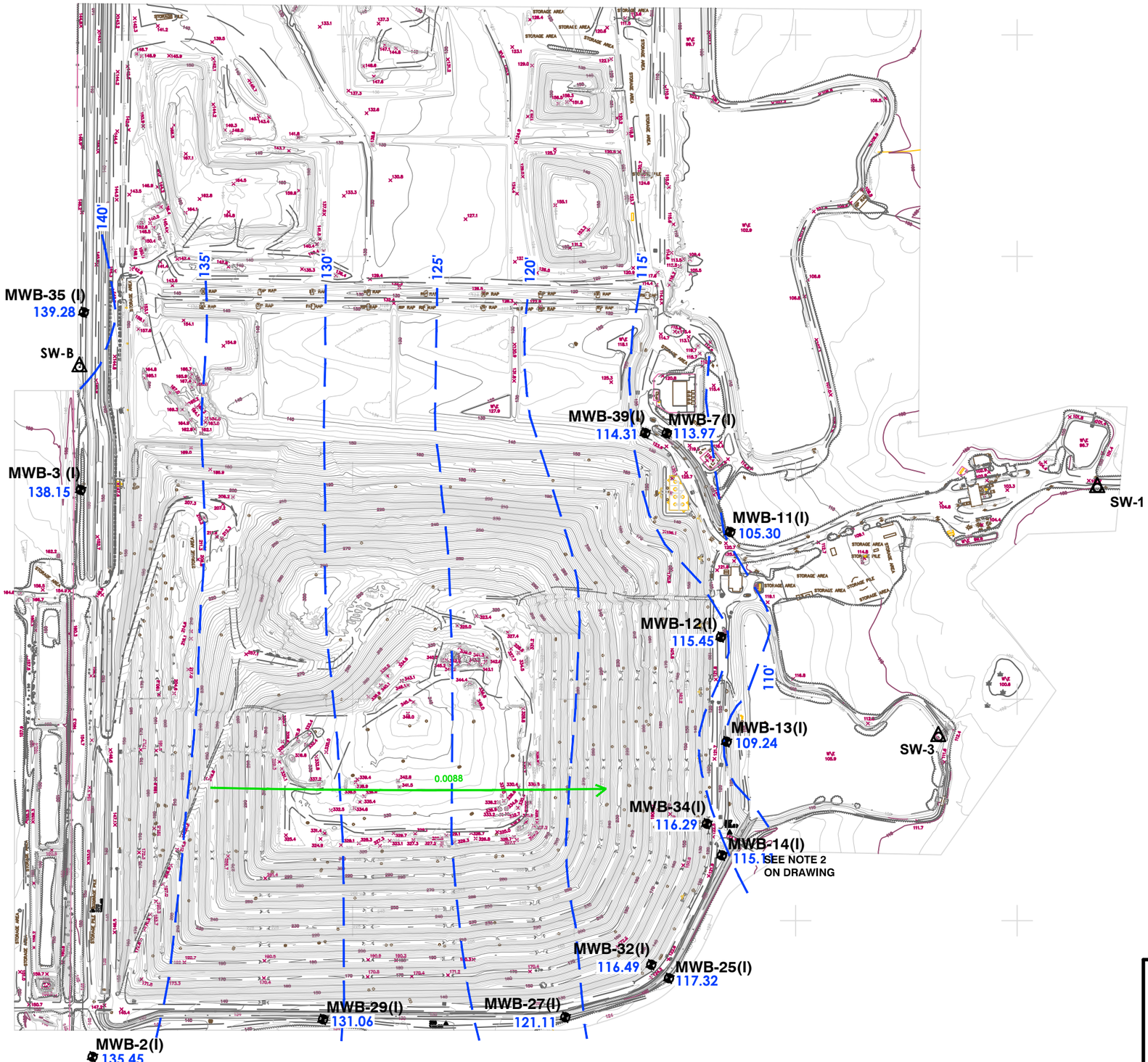
N

0 500 1000

GRAPHIC SCALE (FEET)

CEC

FIGURE 3:
SHALLOW WELLS
POTENTIOMETRIC MAP 02/20/2018
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 02/20/2018.
- 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.

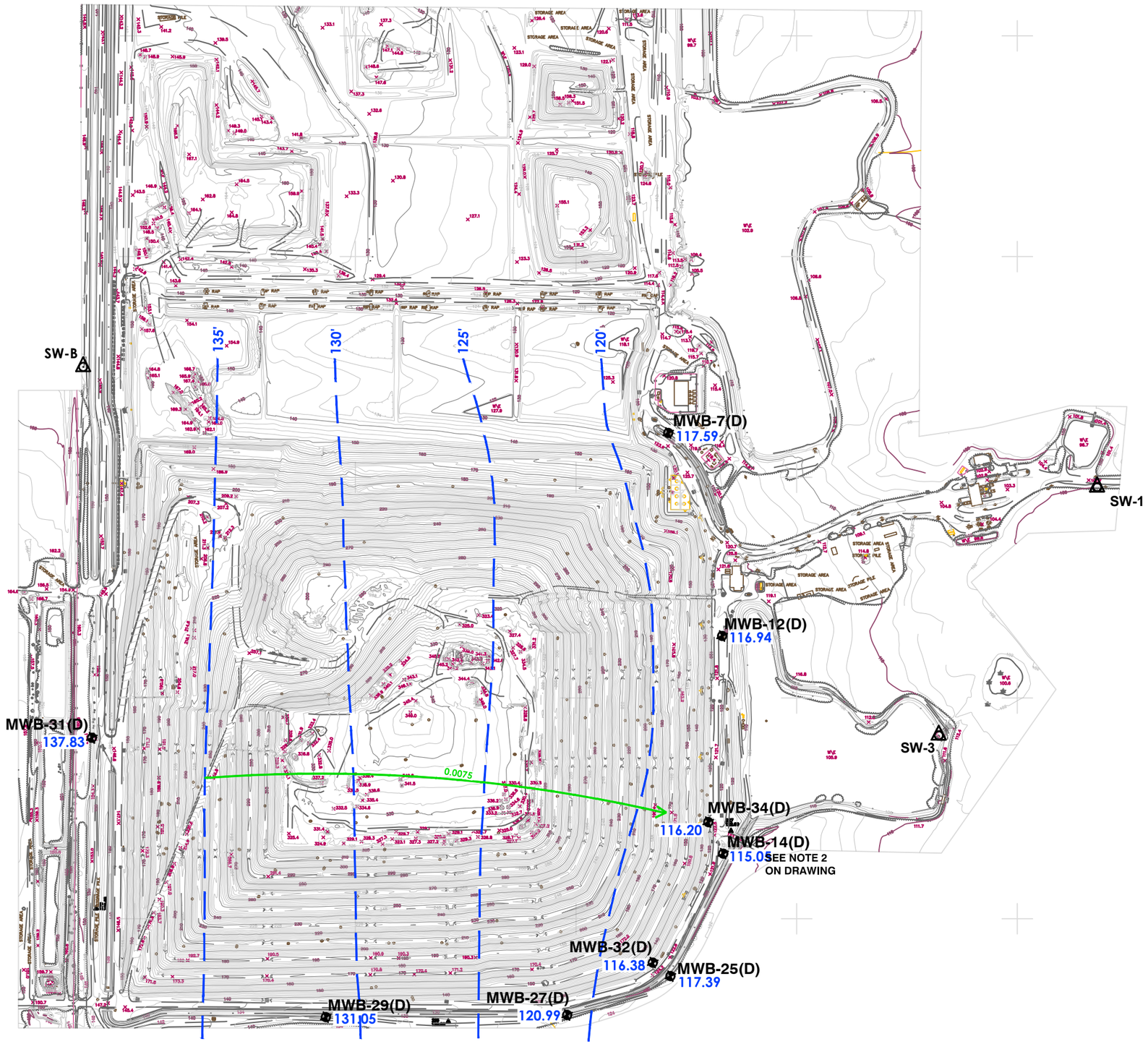
N

0 500 1000

GRAPHIC SCALE (FEET)

CEC

FIGURE 4:
INTERMEDIATE WELLS POTENTIOMETRIC MAP 02/20/2018
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 02/20/2018.
- 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 5:
DEEP WELLS
POTENTIOMETRIC MAP 02/20/2018
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 7.00 (std) RICCA CHEM LOT# 2708A14 EXP: 7/23/19

Standard B 4.00 (std) RICCA CHEM LOT# 2703F77 EXP: 3/2019

Standard C 10.00 (std) RICCA CHEM LOT# 2703951 EXP: 08/2019

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
18/02/20	0615	A	7.00	AUTO CAL	-	YES	INIT	DSA
"	"	B	4.00	"	-	YES	INIT	DSA
"	"	C	10.00	"	-	YES	INIT	DSA
18/02/21	0630	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 1.413 mS/cm AQUAPHOENIX LOT# 766708 EXP: 07/2018

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
18/02/20	0615	A	1.413	AUTO CAL	–	YES	INIT	DA
18/02/21	0630	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: FEB 2019
Standard B 10.0 NTU HF SCIENTIFIC EXP: FEB 2019
Standard C 0.02 NTU HF SCIENTIFIC EXP: FEB 2019

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
18/02/20	0615	A	1000	AUTO CAL	-	YES	INIT	DSA
〃	〃	B	10.0	〃	-	YES	INIT	DSA
		C	0.02		-	YES	INIT	DSA
18/02/21	0630	A	1000	AUTO CAL	-	YES	CONT	DSA
〃	〃	B	10.0	〃	-	YES	CONT	DSA
		C	0.02		-	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	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
18/02/20	0615	A	100% SAT	100%	-	YES	INIT	DR
18/02/21	0630	A	100% SAT	100%	-	YES	CONT	DR

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

March 6, 2018

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

RE: Workorder: J1801998 Trail Ridge Landfill

Dear Eric Fuller:

Enclosed are the analytical results for sample(s) received by the laboratory between Tuesday, February 20, 2018 and Wednesday, February 21, 2018. 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: J1801998 Trail Ridge Landfill

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1801998001	MWB-3S	Water	2/20/2018 12:30	2/20/2018 16:10
J1801998002	MWB-12S	Water	2/20/2018 07:05	2/20/2018 16:10
J1801998003	MWB-22S	Water	2/20/2018 08:05	2/20/2018 16:10
J1801998004	MWB-13S	Water	2/20/2018 08:35	2/20/2018 16:10
J1801998005	MWB-27S	Water	2/20/2018 09:35	2/20/2018 16:10
J1801998006	MWB-29S	Water	2/20/2018 10:35	2/20/2018 16:10
J1801998007	MWB-2S	Water	2/20/2018 11:32	2/20/2018 16:10
J1801998008	MWB-11S	Water	2/20/2018 13:35	2/20/2018 16:10
J1801998009	MWB-20S	Water	2/20/2018 14:35	2/20/2018 16:10
J1801998010	MWB-21S	Water	2/20/2018 15:05	2/20/2018 16:10
J1801998011	Equipment Blank #1	Water	2/20/2018 15:20	2/20/2018 16:10
J1801998012	Trip Blank	Water	2/20/2018 00:00	2/20/2018 16:10
J1801998013	MWB-12I	Water	2/20/2018 07:35	2/20/2018 16:10
J1801998014	MWB-13I	Water	2/20/2018 09:02	2/20/2018 16:10
J1801998015	MWB-27I	Water	2/20/2018 10:05	2/20/2018 16:10
J1801998016	MWB-29I	Water	2/20/2018 11:02	2/20/2018 16:10
J1801998017	MWB-2I	Water	2/20/2018 12:00	2/20/2018 16:10
J1801998018	MWB-3I	Water	2/20/2018 13:00	2/20/2018 16:10
J1801998019	MWB-11IR	Water	2/20/2018 14:03	2/20/2018 16:10
J1801998020	Equipment Blank #2	Water	2/20/2018 15:20	2/20/2018 16:10
J1801998021	SW-1	Water	2/21/2018 12:30	2/21/2018 16:05
J1801998022	SW-3	Water	2/21/2018 12:50	2/21/2018 16:05
J1801998023	SW-4	Water	2/21/2018 13:20	2/21/2018 16:05
J1801998024	SW-7	Water	2/21/2018 13:50	2/21/2018 16:05
J1801998025	SW-5	Water	2/21/2018 14:10	2/21/2018 16:05
J1801998026	SW-6	Water	2/21/2018 14:30	2/21/2018 16:05
J1801998027	Trip Blank 2	Water	2/21/2018 12:30	2/21/2018 16:05
J1801998028	MWB-34I	Water	2/20/2018 16:30	2/21/2018 16:05
J1801998029	MWB-32I	Water	2/20/2018 17:58	2/21/2018 16:05
J1801998030	MWB-35I	Water	2/21/2018 07:48	2/21/2018 16:05
J1801998031	MWB-39I	Water	2/21/2018 08:50	2/21/2018 16:05
J1801998032	MWB-34S	Water	2/20/2018 16:00	2/21/2018 16:05
J1801998033	MWB-33S	Water	2/20/2018 17:00	2/21/2018 16:05
J1801998034	MWB-32S	Water	2/20/2018 17:30	2/21/2018 16:05
J1801998035	MWB-35S	Water	2/21/2018 07:20	2/21/2018 16:05

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SAMPLE SUMMARY

Workorder: J1801998 Trail Ridge Landfill

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1801998036	MWB-39S	Water	2/21/2018 08:21	2/21/2018 16:05
J1801998037	MWB-40S	Water	2/21/2018 09:26	2/21/2018 16:05
J1801998038	SGMW-2S	Water	2/21/2018 10:51	2/21/2018 16:05
J1801998039	Trip Blank 3	Water	2/20/2018 16:00	2/21/2018 16:05

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998001** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-3S** Date Collected: 02/20/18 12:30

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	**9.0**	**U**	**ug/L**	**1**	10	9.0	2/28/2018 21:31	J
Barium	**20**		**ug/L**	**1**	2.0	0.83	2/28/2018 21:31	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/28/2018 21:31	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/28/2018 21:31	J
Calcium	**2.3**		**mg/L**	**1**	0.20	0.082	2/28/2018 21:31	J
Chromium	**1.6**	**U**	**ug/L**	**1**	3.0	1.6	2/28/2018 21:31	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/28/2018 21:31	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2018 21:31	J
Iron	**460**		**ug/L**	**1**	200	100	2/28/2018 21:31	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	2/28/2018 21:31	J
Magnesium	**0.93**		**mg/L**	**1**	0.20	0.085	2/28/2018 21:31	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/28/2018 21:31	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/28/2018 21:31	J
Sodium	**6.1**		**mg/L**	**1**	0.70	0.34	2/28/2018 21:31	J
Vanadium	**1.4**		**ug/L**	**1**	1.0	0.55	2/28/2018 21:31	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/28/2018 21:31	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.11**	**U**	**ug/L**	**1**	0.70	0.11	2/27/2018 16:16	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/27/2018 16:16	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 16:16	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	2/26/2018 14:25	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/21/2018 15:00	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 15:00	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 15:00	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/21/2018 15:00	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/21/2018 15:00	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998001** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-3S** Date Collected: 02/20/18 12:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 15:00	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/21/2018 15:00	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/21/2018 15:00	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 15:00	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 15:00	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/21/2018 15:00	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 15:00	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/21/2018 15:00	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/21/2018 15:00	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/21/2018 15:00	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/21/2018 15:00	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/21/2018 15:00	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 15:00	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/21/2018 15:00	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/21/2018 15:00	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/21/2018 15:00	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 15:00	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/21/2018 15:00	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 15:00	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 15:00	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 15:00	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 15:00	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 15:00	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 15:00	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/21/2018 15:00	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 15:00	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 15:00	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 15:00	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/21/2018 15:00	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 15:00	J
Tetrachloroethylene (PCE)	**0.36**	**U,J4**	**ug/L**	**1**	1.0	0.36	2/21/2018 15:00	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 15:00	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 15:00	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/21/2018 15:00	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/21/2018 15:00	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 15:00	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/21/2018 15:00	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 15:00	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 15:00	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 15:00	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998001** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-3S** Date Collected: 02/20/18 12:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 15:00	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/21/2018 15:00	J
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	70-128		2/21/2018 15:00	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		2/21/2018 15:00	
Bromofluorobenzene (S)	**108**		**%**	**1**	86-123		2/21/2018 15:00	
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	2/21/2018 15:00	J
Ethylene Dibromide (EDB)	**0.020**	**I**	**ug/L**	**1**	0.10	0.020	2/21/2018 15:00	J
1,2-Dichloroethane-d4 (S)	**97**		**%**	**1**	77-125		2/21/2018 15:00	
Toluene-d8 (S)	**116**		**%**	**1**	80-121		2/21/2018 15:00	
Bromofluorobenzene (S)	**107**		**%**	**1**	80-129		2/21/2018 15:00	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**18**		**mg/L**	**1**	5.0	0.50	2/21/2018 06:09	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 06:09	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.06**		**mg/L**	**1**	0.010	0.0080	2/27/2018 11:46	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**72**		**mg/L**	**1**	10	10	2/22/2018 10:59	J

Lab ID: **J1801998002** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-12S** Date Collected: 02/20/18 07:05

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	**9.0**	**U**	**ug/L**	**1**	10	9.0	2/28/2018 21:34	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998002** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-12S** Date Collected: 02/20/18 07:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Barium	**3.0**		**ug/L**	**1**	2.0	0.83	2/28/2018 21:34	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/28/2018 21:34	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/28/2018 21:34	J
Calcium	**27**		**mg/L**	**1**	0.20	0.082	2/28/2018 21:34	J
Chromium	**1.6**	**I**	**ug/L**	**1**	3.0	1.6	2/28/2018 21:34	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/28/2018 21:34	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2018 21:34	J
Iron	**160**	**I**	**ug/L**	**1**	200	100	2/28/2018 21:34	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	2/28/2018 21:34	J
Magnesium	**4.3**		**mg/L**	**1**	0.20	0.085	2/28/2018 21:34	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/28/2018 21:34	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/28/2018 21:34	J
Sodium	**15**		**mg/L**	**1**	0.70	0.34	2/28/2018 21:34	J
Vanadium	**29**		**ug/L**	**1**	1.0	0.55	2/28/2018 21:34	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/28/2018 21:34	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.35**	**I**	**ug/L**	**1**	0.70	0.11	2/27/2018 16:35	J
Selenium	**3.2**	**I**	**ug/L**	**1**	5.0	0.58	2/27/2018 16:35	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 16:35	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	2/26/2018 14:40	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/21/2018 15:36	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 15:36	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 15:36	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/21/2018 15:36	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/21/2018 15:36	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 15:36	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/21/2018 15:36	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/21/2018 15:36	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 15:36	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 15:36	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998002** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-12S** Date Collected: 02/20/18 07:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/21/2018 15:36	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 15:36	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/21/2018 15:36	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/21/2018 15:36	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/21/2018 15:36	J
Acetone	**2.7**	**I**	**ug/L**	**1**	5.0	2.1	2/21/2018 15:36	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/21/2018 15:36	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 15:36	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/21/2018 15:36	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/21/2018 15:36	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/21/2018 15:36	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 15:36	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/21/2018 15:36	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 15:36	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 15:36	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 15:36	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 15:36	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 15:36	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 15:36	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/21/2018 15:36	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 15:36	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 15:36	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 15:36	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/21/2018 15:36	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 15:36	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 15:36	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 15:36	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 15:36	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/21/2018 15:36	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/21/2018 15:36	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 15:36	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/21/2018 15:36	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 15:36	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 15:36	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 15:36	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 15:36	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/21/2018 15:36	J
1,2-Dichloroethane-d4 (S)	**103**		**%**	**1**	70-128		2/21/2018 15:36	
Toluene-d8 (S)	**97**		**%**	**1**	77-119		2/21/2018 15:36	
Bromofluorobenzene (S)	**110**		**%**	**1**	86-123		2/21/2018 15:36	

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998002** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-12S** Date Collected: 02/20/18 07:05

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	2/21/2018 15:36	J
Ethylene Dibromide (EDB)	**0.020**	**I**	**ug/L**	**1**	0.10	0.020	2/21/2018 15:36	J
1,2-Dichloroethane-d4 (S)	**101**		**%**	**1**	77-125		2/21/2018 15:36	
Toluene-d8 (S)	**113**		**%**	**1**	80-121		2/21/2018 15:36	
Bromofluorobenzene (S)	**110**		**%**	**1**	80-129		2/21/2018 15:36	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**18**		**mg/L**	**1**	5.0	0.50	2/21/2018 06:54	J
Nitrate	**0.15**	**I**	**mg/L**	**1**	0.50	0.050	2/21/2018 06:54	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.02**		**mg/L**	**1**	0.010	0.0080	2/27/2018 11:46	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**200**		**mg/L**	**1**	10	10	2/22/2018 10:59	J

Lab ID: **J1801998003** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-22S** Date Collected: 02/20/18 08:05

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	**9.0**	**U**	**ug/L**	**1**	10	9.0	2/28/2018 21:37	J
Barium	**5.2**		**ug/L**	**1**	2.0	0.83	2/28/2018 21:37	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/28/2018 21:37	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/28/2018 21:37	J
Calcium	**54**		**mg/L**	**1**	0.20	0.082	2/28/2018 21:37	J
Chromium	**1.7**	**I**	**ug/L**	**1**	3.0	1.6	2/28/2018 21:37	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/28/2018 21:37	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998003** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-22S** Date Collected: 02/20/18 08:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2018 21:37	J
Iron	**110**	**I**	**ug/L**	**1**	200	100	2/28/2018 21:37	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	2/28/2018 21:37	J
Magnesium	**9.3**		**mg/L**	**1**	0.20	0.085	2/28/2018 21:37	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/28/2018 21:37	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/28/2018 21:37	J
Sodium	**50**		**mg/L**	**1**	0.70	0.34	2/28/2018 21:37	J
Vanadium	**4.1**		**ug/L**	**1**	1.0	0.55	2/28/2018 21:37	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/28/2018 21:37	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.15**	**I**	**ug/L**	**1**	0.70	0.11	2/27/2018 16:40	J
Selenium	**0.68**	**I**	**ug/L**	**1**	5.0	0.58	2/27/2018 16:40	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 16:40	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	2/26/2018 14:43	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/21/2018 16:05	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 16:05	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 16:05	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/21/2018 16:05	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/21/2018 16:05	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 16:05	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/21/2018 16:05	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/21/2018 16:05	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 16:05	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 16:05	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/21/2018 16:05	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 16:05	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/21/2018 16:05	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/21/2018 16:05	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/21/2018 16:05	J
Acetone	**3.8**	**I**	**ug/L**	**1**	5.0	2.1	2/21/2018 16:05	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998003** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-22S** Date Collected: 02/20/18 08:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/21/2018 16:05	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 16:05	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/21/2018 16:05	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/21/2018 16:05	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/21/2018 16:05	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 16:05	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/21/2018 16:05	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 16:05	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 16:05	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 16:05	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 16:05	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 16:05	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 16:05	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/21/2018 16:05	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 16:05	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 16:05	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 16:05	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/21/2018 16:05	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 16:05	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 16:05	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 16:05	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 16:05	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/21/2018 16:05	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/21/2018 16:05	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 16:05	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/21/2018 16:05	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 16:05	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 16:05	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 16:05	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 16:05	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/21/2018 16:05	J
1,2-Dichloroethane-d4 (S)	**98**		**%**	**1**	70-128		2/21/2018 16:05	
Toluene-d8 (S)	**97**		**%**	**1**	77-119		2/21/2018 16:05	
Bromofluorobenzene (S)	**110**		**%**	**1**	86-123		2/21/2018 16:05	
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	2/21/2018 16:05	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/21/2018 16:05	J
1,2-Dichloroethane-d4 (S)	**96**		**%**	**1**	77-125		2/21/2018 16:05	

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998003** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-22S** Date Collected: 02/20/18 08:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Toluene-d8 (S)	**113**		**%**	**1**	80-121		2/21/2018 16:05	
Bromofluorobenzene (S)	**109**		**%**	**1**	80-129		2/21/2018 16:05	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**110**		**mg/L**	**1**	5.0	0.50	2/21/2018 07:16	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 07:16	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.10**		**mg/L**	**1**	0.010	0.0080	2/27/2018 14:04	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**420**		**mg/L**	**1**	10	10	2/22/2018 10:59	J

Lab ID: **J1801998004** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-13S** Date Collected: 02/20/18 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	**9.0**	**U**	**ug/L**	**1**	10	9.0	2/28/2018 21:41	J
Barium	**4.5**		**ug/L**	**1**	2.0	0.83	2/28/2018 21:41	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/28/2018 21:41	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/28/2018 21:41	J
Calcium	**51**		**mg/L**	**1**	0.20	0.082	2/28/2018 21:41	J
Chromium	**2.4**	**I**	**ug/L**	**1**	3.0	1.6	2/28/2018 21:41	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/28/2018 21:41	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2018 21:41	J
Iron	**260**		**ug/L**	**1**	200	100	2/28/2018 21:41	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	2/28/2018 21:41	J
Magnesium	**10**		**mg/L**	**1**	0.20	0.085	2/28/2018 21:41	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/28/2018 21:41	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/28/2018 21:41	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998004** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-13S** Date Collected: 02/20/18 08:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Sodium	**22**		**mg/L**	**1**	0.70	0.34	2/28/2018 21:41	J
Vanadium	**23**		**ug/L**	**1**	1.0	0.55	2/28/2018 21:41	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/28/2018 21:41	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.25**	**I**	**ug/L**	**1**	0.70	0.11	2/27/2018 16:45	J
Selenium	**2.0**	**I**	**ug/L**	**1**	5.0	0.58	2/27/2018 16:45	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 16:45	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	2/26/2018 14:52	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/21/2018 16:31	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 16:31	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 16:31	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/21/2018 16:31	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/21/2018 16:31	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 16:31	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/21/2018 16:31	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/21/2018 16:31	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 16:31	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 16:31	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/21/2018 16:31	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 16:31	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/21/2018 16:31	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/21/2018 16:31	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/21/2018 16:31	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/21/2018 16:31	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/21/2018 16:31	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 16:31	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/21/2018 16:31	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/21/2018 16:31	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/21/2018 16:31	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 16:31	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998004** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-13S** Date Collected: 02/20/18 08:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/21/2018 16:31	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 16:31	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 16:31	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 16:31	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 16:31	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 16:31	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 16:31	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/21/2018 16:31	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 16:31	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 16:31	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 16:31	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/21/2018 16:31	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 16:31	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 16:31	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 16:31	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 16:31	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/21/2018 16:31	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/21/2018 16:31	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 16:31	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/21/2018 16:31	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 16:31	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 16:31	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 16:31	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 16:31	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/21/2018 16:31	J
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	70-128		2/21/2018 16:31	
Toluene-d8 (S)	**98**		**%**	**1**	77-119		2/21/2018 16:31	
Bromofluorobenzene (S)	**109**		**%**	**1**	86-123		2/21/2018 16:31	
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	2/21/2018 16:31	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/21/2018 16:31	J
1,2-Dichloroethane-d4 (S)	**98**		**%**	**1**	77-125		2/21/2018 16:31	
Toluene-d8 (S)	**115**		**%**	**1**	80-121		2/21/2018 16:31	
Bromofluorobenzene (S)	**108**		**%**	**1**	80-129		2/21/2018 16:31	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998004** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-13S** Date Collected: 02/20/18 08:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chloride	**84**		**mg/L**	**1**	5.0	0.50	2/21/2018 07:39	J
Nitrate	**0.63**		**mg/L**	**1**	0.50	0.050	2/21/2018 07:39	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.18**		**mg/L**	**1**	0.010	0.0080	2/27/2018 14:04	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**390**		**mg/L**	**1**	10	10	2/22/2018 10:59	J

Lab ID: **J1801998005** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-27S** Date Collected: 02/20/18 09:35

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	**9.0**	**U**	**ug/L**	**1**	10	9.0	2/28/2018 21:45	J
Barium	**7.7**		**ug/L**	**1**	2.0	0.83	2/28/2018 21:45	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/28/2018 21:45	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/28/2018 21:45	J
Calcium	**14**		**mg/L**	**1**	0.20	0.082	2/28/2018 21:45	J
Chromium	**2.8**	**I**	**ug/L**	**1**	3.0	1.6	2/28/2018 21:45	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/28/2018 21:45	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2018 21:45	J
Iron	**130**	**I**	**ug/L**	**1**	200	100	2/28/2018 21:45	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	2/28/2018 21:45	J
Magnesium	**3.1**		**mg/L**	**1**	0.20	0.085	2/28/2018 21:45	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/28/2018 21:45	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/28/2018 21:45	J
Sodium	**6.4**		**mg/L**	**1**	0.70	0.34	2/28/2018 21:45	J
Vanadium	**10**		**ug/L**	**1**	1.0	0.55	2/28/2018 21:45	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/28/2018 21:45	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998005** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-27S** Date Collected: 02/20/18 09:35

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	**0.11**	**U**	**ug/L**	**1**	0.70	0.11	2/27/2018 16:50	J
Selenium	**0.68**	**I**	**ug/L**	**1**	5.0	0.58	2/27/2018 16:50	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 16:50	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	2/26/2018 14:55	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/21/2018 17:15	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 17:15	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 17:15	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/21/2018 17:15	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/21/2018 17:15	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 17:15	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/21/2018 17:15	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/21/2018 17:15	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 17:15	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 17:15	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/21/2018 17:15	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 17:15	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/21/2018 17:15	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/21/2018 17:15	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/21/2018 17:15	J
Acetone	**4.1**	**I**	**ug/L**	**1**	5.0	2.1	2/21/2018 17:15	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/21/2018 17:15	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 17:15	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/21/2018 17:15	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/21/2018 17:15	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/21/2018 17:15	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 17:15	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/21/2018 17:15	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 17:15	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 17:15	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 17:15	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998005** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-27S** Date Collected: 02/20/18 09:35

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	2/21/2018 17:15	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 17:15	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 17:15	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/21/2018 17:15	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 17:15	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 17:15	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 17:15	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/21/2018 17:15	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 17:15	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 17:15	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 17:15	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 17:15	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/21/2018 17:15	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/21/2018 17:15	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 17:15	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/21/2018 17:15	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 17:15	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 17:15	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 17:15	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 17:15	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/21/2018 17:15	J
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	70-128		2/21/2018 17:15	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		2/21/2018 17:15	
Bromofluorobenzene (S)	**110**		**%**	**1**	86-123		2/21/2018 17:15	
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	2/21/2018 17:15	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/21/2018 17:15	J
1,2-Dichloroethane-d4 (S)	**98**		**%**	**1**	77-125		2/21/2018 17:15	
Toluene-d8 (S)	**115**		**%**	**1**	80-121		2/21/2018 17:15	
Bromofluorobenzene (S)	**108**		**%**	**1**	80-129		2/21/2018 17:15	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**11**		**mg/L**	**1**	5.0	0.50	2/21/2018 08:01	J
Nitrate	**1.6**		**mg/L**	**1**	0.50	0.050	2/21/2018 08:01	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998005** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-27S** Date Collected: 02/20/18 09:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Ammonia (N)	**0.09**		**mg/L**	**1**	0.010	0.0080	2/27/2018 14:04	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**140**		**mg/L**	**1**	10	10	2/22/2018 10:59	J

Lab ID: **J1801998006** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-29S** Date Collected: 02/20/18 10:35

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	**9.0**	**U**	**ug/L**	**1**	10	9.0	2/28/2018 22:03	J
Barium	**22**		**ug/L**	**1**	2.0	0.83	2/28/2018 22:03	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/28/2018 22:03	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/28/2018 22:03	J
Calcium	**1.3**		**mg/L**	**1**	0.20	0.082	2/28/2018 22:03	J
Chromium	**1.6**	**U**	**ug/L**	**1**	3.0	1.6	2/28/2018 22:03	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/28/2018 22:03	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2018 22:03	J
Iron	**700**		**ug/L**	**1**	200	100	2/28/2018 22:03	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	2/28/2018 22:03	J
Magnesium	**1.1**		**mg/L**	**1**	0.20	0.085	2/28/2018 22:03	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/28/2018 22:03	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/28/2018 22:03	J
Sodium	**7.8**		**mg/L**	**1**	0.70	0.34	2/28/2018 22:03	J
Vanadium	**0.98**	**I**	**ug/L**	**1**	1.0	0.55	2/28/2018 22:03	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/28/2018 22:03	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.11**	**U**	**ug/L**	**1**	0.70	0.11	2/27/2018 16:54	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/27/2018 16:54	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 16:54	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998006** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-29S** Date Collected: 02/20/18 10:35

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	2/26/2018 14:58	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/21/2018 17:44	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 17:44	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 17:44	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/21/2018 17:44	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/21/2018 17:44	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 17:44	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/21/2018 17:44	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/21/2018 17:44	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 17:44	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 17:44	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/21/2018 17:44	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 17:44	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/21/2018 17:44	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/21/2018 17:44	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/21/2018 17:44	J
Acetone	**5.2**		**ug/L**	**1**	5.0	2.1	2/21/2018 17:44	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/21/2018 17:44	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 17:44	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/21/2018 17:44	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/21/2018 17:44	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/21/2018 17:44	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 17:44	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/21/2018 17:44	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 17:44	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 17:44	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 17:44	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 17:44	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 17:44	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 17:44	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/21/2018 17:44	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 17:44	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 17:44	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998006** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-29S** Date Collected: 02/20/18 10:35

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	2/21/2018 17:44	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/21/2018 17:44	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 17:44	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 17:44	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 17:44	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 17:44	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/21/2018 17:44	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/21/2018 17:44	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 17:44	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/21/2018 17:44	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 17:44	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 17:44	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 17:44	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 17:44	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/21/2018 17:44	J
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	70-128		2/21/2018 17:44	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		2/21/2018 17:44	
Bromofluorobenzene (S)	**115**		**%**	**1**	86-123		2/21/2018 17:44	
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	2/21/2018 17:44	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/21/2018 17:44	J
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	77-125		2/21/2018 17:44	
Toluene-d8 (S)	**117**		**%**	**1**	80-121		2/21/2018 17:44	
Bromofluorobenzene (S)	**113**		**%**	**1**	80-129		2/21/2018 17:44	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**15**		**mg/L**	**1**	5.0	0.50	2/21/2018 08:24	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 08:24	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.24**		**mg/L**	**1**	0.010	0.0080	2/27/2018 14:04	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**72**		**mg/L**	**1**	10	10	2/22/2018 10:59	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998007** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-2S** Date Collected: 02/20/18 11:32

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	**9.0**	**U**	**ug/L**	**1**	10	9.0	2/28/2018 22:06	J
Barium	**6.1**		**ug/L**	**1**	2.0	0.83	2/28/2018 22:06	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/28/2018 22:06	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/28/2018 22:06	J
Calcium	**1.1**		**mg/L**	**1**	0.20	0.082	2/28/2018 22:06	J
Chromium	**1.9**	**I**	**ug/L**	**1**	3.0	1.6	2/28/2018 22:06	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/28/2018 22:06	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2018 22:06	J
Iron	**550**		**ug/L**	**1**	200	100	2/28/2018 22:06	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	2/28/2018 22:06	J
Magnesium	**1.2**		**mg/L**	**1**	0.20	0.085	2/28/2018 22:06	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/28/2018 22:06	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/28/2018 22:06	J
Sodium	**2.7**		**mg/L**	**1**	0.70	0.34	2/28/2018 22:06	J
Vanadium	**4.0**		**ug/L**	**1**	1.0	0.55	2/28/2018 22:06	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/28/2018 22:06	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.11**	**U**	**ug/L**	**1**	0.70	0.11	2/27/2018 16:58	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/27/2018 16:58	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 16:58	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.037**	**I**	**ug/L**	**1**	0.10	0.011	2/26/2018 15:01	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/21/2018 18:21	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 18:21	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 18:21	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/21/2018 18:21	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/21/2018 18:21	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998007** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-2S** Date Collected: 02/20/18 11:32

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 18:21	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/21/2018 18:21	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/21/2018 18:21	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 18:21	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 18:21	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/21/2018 18:21	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 18:21	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/21/2018 18:21	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/21/2018 18:21	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/21/2018 18:21	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/21/2018 18:21	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/21/2018 18:21	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 18:21	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/21/2018 18:21	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/21/2018 18:21	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/21/2018 18:21	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 18:21	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/21/2018 18:21	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 18:21	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 18:21	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 18:21	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 18:21	J
Chloromethane	**120**		**ug/L**	**1**	1.0	0.21	2/21/2018 18:21	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 18:21	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/21/2018 18:21	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 18:21	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 18:21	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 18:21	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/21/2018 18:21	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 18:21	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 18:21	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 18:21	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 18:21	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/21/2018 18:21	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/21/2018 18:21	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 18:21	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/21/2018 18:21	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 18:21	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 18:21	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 18:21	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998007** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-2S** Date Collected: 02/20/18 11:32

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 18:21	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/21/2018 18:21	J
1,2-Dichloroethane-d4 (S)	**102**		**%**	**1**	70-128		2/21/2018 18:21	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		2/21/2018 18:21	
Bromofluorobenzene (S)	**113**		**%**	**1**	86-123		2/21/2018 18:21	
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	2/21/2018 18:21	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/21/2018 18:21	J
1,2-Dichloroethane-d4 (S)	**101**		**%**	**1**	77-125		2/21/2018 18:21	
Toluene-d8 (S)	**116**		**%**	**1**	80-121		2/21/2018 18:21	
Bromofluorobenzene (S)	**111**		**%**	**1**	80-129		2/21/2018 18:21	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**3.9**	**I**	**mg/L**	**1**	5.0	0.50	2/21/2018 08:46	J
Nitrate	**0.11**	**I**	**mg/L**	**1**	0.50	0.050	2/21/2018 08:46	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.04**		**mg/L**	**1**	0.010	0.0080	2/27/2018 14:04	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**85**		**mg/L**	**1**	10	10	2/22/2018 10:59	J

Lab ID: **J1801998008** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-11S** Date Collected: 02/20/18 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							
Arsenic	**9.0**	**U**	**ug/L**	**1**	10	9.0	2/28/2018 22:09	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998008** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-11S** Date Collected: 02/20/18 13:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Barium	**66**		**ug/L**	**1**	2.0	0.83	2/28/2018 22:09	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/28/2018 22:09	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/28/2018 22:09	J
Calcium	**4.0**		**mg/L**	**1**	0.20	0.082	2/28/2018 22:09	J
Chromium	**1.6**	**U**	**ug/L**	**1**	3.0	1.6	2/28/2018 22:09	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/28/2018 22:09	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2018 22:09	J
Iron	**1900**		**ug/L**	**1**	200	100	2/28/2018 22:09	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	2/28/2018 22:09	J
Magnesium	**1.9**		**mg/L**	**1**	0.20	0.085	2/28/2018 22:09	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/28/2018 22:09	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/28/2018 22:09	J
Sodium	**12**		**mg/L**	**1**	0.70	0.34	2/28/2018 22:09	J
Vanadium	**3.9**		**ug/L**	**1**	1.0	0.55	2/28/2018 22:09	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/28/2018 22:09	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.11**	**U**	**ug/L**	**1**	0.70	0.11	2/27/2018 17:02	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/27/2018 17:02	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 17:02	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	2/26/2018 15:04	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/21/2018 18:50	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 18:50	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 18:50	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/21/2018 18:50	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/21/2018 18:50	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 18:50	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/21/2018 18:50	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/21/2018 18:50	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 18:50	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 18:50	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998008** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-11S** Date Collected: 02/20/18 13:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/21/2018 18:50	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 18:50	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/21/2018 18:50	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/21/2018 18:50	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/21/2018 18:50	J
Acetone	**3.4**	**I**	**ug/L**	**1**	5.0	2.1	2/21/2018 18:50	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/21/2018 18:50	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 18:50	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/21/2018 18:50	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/21/2018 18:50	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/21/2018 18:50	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 18:50	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/21/2018 18:50	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 18:50	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 18:50	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 18:50	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 18:50	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 18:50	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 18:50	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/21/2018 18:50	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 18:50	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 18:50	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 18:50	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/21/2018 18:50	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 18:50	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 18:50	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 18:50	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 18:50	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/21/2018 18:50	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/21/2018 18:50	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 18:50	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/21/2018 18:50	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 18:50	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 18:50	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 18:50	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 18:50	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/21/2018 18:50	J
1,2-Dichloroethane-d4 (S)	**101**		**%**	**1**	70-128		2/21/2018 18:50	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		2/21/2018 18:50	
Bromofluorobenzene (S)	**113**		**%**	**1**	86-123		2/21/2018 18:50	

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998008** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-11S** Date Collected: 02/20/18 13:35

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	2/21/2018 18:50	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/21/2018 18:50	J
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	77-125		2/21/2018 18:50	
Toluene-d8 (S)	**116**		**%**	**1**	80-121		2/21/2018 18:50	
Bromofluorobenzene (S)	**112**		**%**	**1**	80-129		2/21/2018 18:50	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**22**		**mg/L**	**1**	5.0	0.50	2/21/2018 09:09	J
Nitrate	**0.083**	**I**	**mg/L**	**1**	0.50	0.050	2/21/2018 09:09	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.06**		**mg/L**	**1**	0.010	0.0080	2/27/2018 14:04	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**150**		**mg/L**	**1**	10	10	2/22/2018 10:59	J

Lab ID: **J1801998009** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-20S** Date Collected: 02/20/18 14:35

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	**9.0**	**U**	**ug/L**	**1**	10	9.0	2/28/2018 18:50	J
Barium	**5.5**		**ug/L**	**1**	2.0	0.83	2/28/2018 18:50	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/28/2018 18:50	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/28/2018 18:50	J
Calcium	**4.0**		**mg/L**	**1**	0.20	0.082	2/28/2018 18:50	J
Chromium	**1.9**	**I**	**ug/L**	**1**	3.0	1.6	2/28/2018 18:50	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/28/2018 18:50	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998009** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-20S** Date Collected: 02/20/18 14:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2018 18:50	J
Iron	**100**	**U**	**ug/L**	**1**	200	100	2/28/2018 18:50	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	2/28/2018 18:50	J
Magnesium	**0.43**		**mg/L**	**1**	0.20	0.085	2/28/2018 18:50	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/28/2018 18:50	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/28/2018 18:50	J
Sodium	**10**		**mg/L**	**1**	0.70	0.34	2/28/2018 18:50	J
Vanadium	**6.7**		**ug/L**	**1**	1.0	0.55	2/28/2018 18:50	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/28/2018 18:50	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.11**	**U**	**ug/L**	**1**	0.70	0.11	2/27/2018 17:05	J
Selenium	**0.64**	**I**	**ug/L**	**1**	5.0	0.58	2/27/2018 17:05	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 17:05	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	2/26/2018 15:07	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/21/2018 19:26	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 19:26	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 19:26	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/21/2018 19:26	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/21/2018 19:26	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 19:26	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/21/2018 19:26	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/21/2018 19:26	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 19:26	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 19:26	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/21/2018 19:26	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 19:26	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/21/2018 19:26	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/21/2018 19:26	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/21/2018 19:26	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/21/2018 19:26	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998009** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-20S** Date Collected: 02/20/18 14:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/21/2018 19:26	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 19:26	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/21/2018 19:26	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/21/2018 19:26	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/21/2018 19:26	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 19:26	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/21/2018 19:26	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 19:26	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 19:26	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 19:26	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 19:26	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 19:26	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 19:26	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/21/2018 19:26	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 19:26	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 19:26	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 19:26	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/21/2018 19:26	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 19:26	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 19:26	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 19:26	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 19:26	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/21/2018 19:26	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/21/2018 19:26	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 19:26	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/21/2018 19:26	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 19:26	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 19:26	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 19:26	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 19:26	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/21/2018 19:26	J
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	70-128		2/21/2018 19:26	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		2/21/2018 19:26	
Bromofluorobenzene (S)	**115**		**%**	**1**	86-123		2/21/2018 19:26	
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	2/21/2018 19:26	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/21/2018 19:26	J
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	77-125		2/21/2018 19:26	

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998009** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-20S** Date Collected: 02/20/18 14:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Toluene-d8 (S)	**117**		**%**	**1**	80-121		2/21/2018 19:26	
Bromofluorobenzene (S)	**114**		**%**	**1**	80-129		2/21/2018 19:26	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**14**		**mg/L**	**1**	5.0	0.50	2/21/2018 09:31	J
Nitrate	**0.18**	**I**	**mg/L**	**1**	0.50	0.050	2/21/2018 09:31	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.38**		**mg/L**	**1**	0.010	0.0080	2/27/2018 14:04	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**110**		**mg/L**	**1**	10	10	2/22/2018 10:59	J

Lab ID: **J1801998010** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-21S** Date Collected: 02/20/18 15:05

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	**9.0**	**U**	**ug/L**	**1**	10	9.0	2/28/2018 19:07	J
Barium	**15**		**ug/L**	**1**	2.0	0.83	2/28/2018 19:07	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/28/2018 19:07	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/28/2018 19:07	J
Calcium	**17**		**mg/L**	**1**	0.20	0.082	2/28/2018 19:07	J
Chromium	**1.6**	**U**	**ug/L**	**1**	3.0	1.6	2/28/2018 19:07	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/28/2018 19:07	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2018 19:07	J
Iron	**280**		**ug/L**	**1**	200	100	2/28/2018 19:07	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	2/28/2018 19:07	J
Magnesium	**3.4**		**mg/L**	**1**	0.20	0.085	2/28/2018 19:07	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/28/2018 19:07	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/28/2018 19:07	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998010** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-21S** Date Collected: 02/20/18 15:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Sodium	**10**		**mg/L**	**1**	0.70	0.34	2/28/2018 19:07	J
Vanadium	**2.3**		**ug/L**	**1**	1.0	0.55	2/28/2018 19:07	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/28/2018 19:07	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.11**	**U**	**ug/L**	**1**	0.70	0.11	2/27/2018 17:20	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/27/2018 17:20	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 17:20	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	2/26/2018 15:10	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/21/2018 19:56	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 19:56	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 19:56	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/21/2018 19:56	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/21/2018 19:56	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 19:56	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/21/2018 19:56	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/21/2018 19:56	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 19:56	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 19:56	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/21/2018 19:56	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 19:56	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/21/2018 19:56	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/21/2018 19:56	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/21/2018 19:56	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/21/2018 19:56	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/21/2018 19:56	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 19:56	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/21/2018 19:56	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/21/2018 19:56	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/21/2018 19:56	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 19:56	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998010** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **MWB-21S** Date Collected: 02/20/18 15:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/21/2018 19:56	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 19:56	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 19:56	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 19:56	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 19:56	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 19:56	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 19:56	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/21/2018 19:56	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 19:56	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 19:56	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 19:56	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/21/2018 19:56	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 19:56	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 19:56	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 19:56	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 19:56	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/21/2018 19:56	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/21/2018 19:56	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 19:56	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/21/2018 19:56	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 19:56	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 19:56	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 19:56	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 19:56	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/21/2018 19:56	J
1,2-Dichloroethane-d4 (S)	**102**		**%**	**1**	70-128		2/21/2018 19:56	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		2/21/2018 19:56	
Bromofluorobenzene (S)	**114**		**%**	**1**	86-123		2/21/2018 19:56	
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	2/21/2018 19:59	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/21/2018 19:59	J
1,2-Dichloroethane-d4 (S)	**102**		**%**	**1**	77-125		2/21/2018 19:59	
Toluene-d8 (S)	**117**		**%**	**1**	80-121		2/21/2018 19:59	
Bromofluorobenzene (S)	**112**		**%**	**1**	80-129		2/21/2018 19:59	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998010** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-21S** Date Collected: 02/20/18 15:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chloride	**32**		**mg/L**	**1**	5.0	0.50	2/21/2018 09:54	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 09:54	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**1.4**		**mg/L**	**5**	0.050	0.040	2/27/2018 14:04	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**160**		**mg/L**	**1**	10	10	2/22/2018 10:59	J

Lab ID: **J1801998011** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **Equipment Blank #1** Date Collected: 02/20/18 15:20

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	**9.0**	**U**	**ug/L**	**1**	10	9.0	2/28/2018 19:11	J
Barium	**0.83**	**U**	**ug/L**	**1**	2.0	0.83	2/28/2018 19:11	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/28/2018 19:11	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/28/2018 19:11	J
Calcium	**0.082**	**U**	**mg/L**	**1**	0.20	0.082	2/28/2018 19:11	J
Chromium	**1.6**	**U**	**ug/L**	**1**	3.0	1.6	2/28/2018 19:11	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/28/2018 19:11	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2018 19:11	J
Iron	**100**	**U**	**ug/L**	**1**	200	100	2/28/2018 19:11	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	2/28/2018 19:11	J
Magnesium	**0.085**	**U**	**mg/L**	**1**	0.20	0.085	2/28/2018 19:11	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/28/2018 19:11	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/28/2018 19:11	J
Sodium	**0.34**	**U**	**mg/L**	**1**	0.70	0.34	2/28/2018 19:11	J
Vanadium	**0.55**	**U**	**ug/L**	**1**	1.0	0.55	2/28/2018 19:11	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/28/2018 19:11	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998011** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **Equipment Blank #1** Date Collected: 02/20/18 15:20

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	**0.11**	**U**	**ug/L**	**1**	0.70	0.11	2/27/2018 17:24	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/27/2018 17:24	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 17:24	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	2/26/2018 15:14	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/21/2018 20:32	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 20:32	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 20:32	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/21/2018 20:32	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/21/2018 20:32	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 20:32	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/21/2018 20:32	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/21/2018 20:32	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 20:32	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 20:32	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/21/2018 20:32	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 20:32	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/21/2018 20:32	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/21/2018 20:32	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/21/2018 20:32	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/21/2018 20:32	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/21/2018 20:32	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 20:32	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/21/2018 20:32	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/21/2018 20:32	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/21/2018 20:32	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 20:32	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/21/2018 20:32	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 20:32	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 20:32	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 20:32	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998011** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **Equipment Blank #1** Date Collected: 02/20/18 15:20

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	2/21/2018 20:32	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 20:32	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 20:32	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/21/2018 20:32	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 20:32	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 20:32	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 20:32	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/21/2018 20:32	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 20:32	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 20:32	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 20:32	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 20:32	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/21/2018 20:32	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/21/2018 20:32	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 20:32	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/21/2018 20:32	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 20:32	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 20:32	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 20:32	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 20:32	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/21/2018 20:32	J
1,2-Dichloroethane-d4 (S)	**104**		**%**	**1**	70-128		2/21/2018 20:32	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		2/21/2018 20:32	
Bromofluorobenzene (S)	**113**		**%**	**1**	86-123		2/21/2018 20:32	
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	2/21/2018 20:32	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/21/2018 20:32	J
1,2-Dichloroethane-d4 (S)	**102**		**%**	**1**	77-125		2/21/2018 20:32	
Toluene-d8 (S)	**116**		**%**	**1**	80-121		2/21/2018 20:32	
Bromofluorobenzene (S)	**113**		**%**	**1**	80-129		2/21/2018 20:32	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**0.50**	**U**	**mg/L**	**1**	5.0	0.50	2/21/2018 11:01	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 11:01	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998011** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **Equipment Blank #1** Date Collected: 02/20/18 15:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Ammonia (N)	**0.0080**	**U**	**mg/L**	**1**	0.010	0.0080	2/27/2018 14:04	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**10**	**U**	**mg/L**	**1**	10	10	2/22/2018 10:59	J

Lab ID: **J1801998012** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **Trip Blank** Date Collected: 02/20/18 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	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/21/2018 21:01	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 21:01	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 21:01	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/21/2018 21:01	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/21/2018 21:01	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 21:01	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/21/2018 21:01	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/21/2018 21:01	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 21:01	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 21:01	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/21/2018 21:01	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/21/2018 21:01	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/21/2018 21:01	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/21/2018 21:01	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/21/2018 21:01	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/21/2018 21:01	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/21/2018 21:01	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 21:01	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/21/2018 21:01	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/21/2018 21:01	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/21/2018 21:01	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 21:01	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998012** Date Received: 02/20/18 16:10 Matrix: Water

Sample ID: **Trip Blank** Date Collected: 02/20/18 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/21/2018 21:01	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 21:01	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 21:01	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 21:01	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/21/2018 21:01	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 21:01	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/21/2018 21:01	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/21/2018 21:01	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 21:01	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 21:01	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 21:01	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/21/2018 21:01	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 21:01	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/21/2018 21:01	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/21/2018 21:01	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/21/2018 21:01	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/21/2018 21:01	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/21/2018 21:01	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 21:01	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/21/2018 21:01	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/21/2018 21:01	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/21/2018 21:01	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/21/2018 21:01	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/21/2018 21:01	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/21/2018 21:01	J
1,2-Dichloroethane-d4 (S)	**102**		**%**	**1**	70-128		2/21/2018 21:01	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		2/21/2018 21:01	
Bromofluorobenzene (S)	**115**		**%**	**1**	86-123		2/21/2018 21:01	
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	2/21/2018 21:01	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/21/2018 21:01	J
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	77-125		2/21/2018 21:01	
Toluene-d8 (S)	**117**		**%**	**1**	80-121		2/21/2018 21:01	
Bromofluorobenzene (S)	**114**		**%**	**1**	80-129		2/21/2018 21:01	

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998013** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-12I** Date Collected: 02/20/18 07:35

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	**330**		**ug/L**	**1**	200	100	2/28/2018 19:32	J
Sodium	**3.0**		**mg/L**	**1**	0.70	0.34	2/28/2018 19:32	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.5**		**mg/L**	**1**	5.0	0.50	2/21/2018 11:24	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 11:24	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.04**		**mg/L**	**1**	0.010	0.0080	2/27/2018 14:04	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**59**		**mg/L**	**1**	10	10	2/22/2018 10:59	J

Lab ID: **J1801998014** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-13I** Date Collected: 02/20/18 09:02

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	**290**		**ug/L**	**1**	200	100	2/28/2018 19:35	J
Sodium	**2.9**		**mg/L**	**1**	0.70	0.34	2/28/2018 19:35	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.4**		**mg/L**	**1**	5.0	0.50	2/21/2018 12:09	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 12:09	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998014** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-13I** Date Collected: 02/20/18 09:02

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)	**0.04**		**mg/L**	**1**	0.010	0.0080	2/27/2018 14:04	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**39**		**mg/L**	**1**	10	10	2/22/2018 10:59	J

Lab ID: **J1801998015** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-27I** Date Collected: 02/20/18 10:05

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	**380**		**ug/L**	**1**	200	100	2/28/2018 19:39	J
Sodium	**3.0**		**mg/L**	**1**	0.70	0.34	2/28/2018 19:39	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.8**		**mg/L**	**1**	5.0	0.50	2/21/2018 12:31	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 12:31	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.04**		**mg/L**	**1**	0.010	0.0080	2/27/2018 14:04	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**56**		**mg/L**	**1**	10	10	2/22/2018 10:59	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998016** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-29I** Date Collected: 02/20/18 11:02

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	**350**		**ug/L**	**1**	200	100	2/28/2018 19:42	J
Sodium	**3.3**		**mg/L**	**1**	0.70	0.34	2/28/2018 19:42	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**6.2**		**mg/L**	**1**	5.0	0.50	2/21/2018 12:55	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 12:55	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.04**		**mg/L**	**1**	0.010	0.0080	2/27/2018 14:04	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**57**		**mg/L**	**1**	10	10	2/22/2018 10:59	J

Lab ID: **J1801998017** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-2I** Date Collected: 02/20/18 12:00

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	100	2/28/2018 19:46	J
Sodium	**3.7**		**mg/L**	**1**	0.70	0.34	2/28/2018 19:46	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**7.2**		**mg/L**	**1**	5.0	0.50	2/21/2018 13:18	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 13:18	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998017** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-2I** Date Collected: 02/20/18 12:00

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)	**0.01**		**mg/L**	**1**	0.010	0.0080	2/27/2018 14:04	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**35**		**mg/L**	**1**	10	10	2/22/2018 10:59	J

Lab ID: **J1801998018** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-3I** Date Collected: 02/20/18 13:00

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	**710**		**ug/L**	**1**	200	100	2/28/2018 19:50	J
Sodium	**3.3**		**mg/L**	**1**	0.70	0.34	2/28/2018 19:50	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**7.5**		**mg/L**	**1**	5.0	0.50	2/21/2018 13:41	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 13:41	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.0080**	**U**	**mg/L**	**1**	0.010	0.0080	2/27/2018 14:04	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**42**		**mg/L**	**1**	10	10	2/22/2018 10:59	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998019** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **MWB-11IR** Date Collected: 02/20/18 14:03

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	**290**		**ug/L**	**1**	200	100	2/28/2018 19:53	J
Sodium	**2.9**		**mg/L**	**1**	0.70	0.34	2/28/2018 19:53	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.9**		**mg/L**	**1**	5.0	0.50	2/21/2018 14:03	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 14:03	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.02**		**mg/L**	**1**	0.010	0.0080	2/27/2018 14:04	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**46**		**mg/L**	**1**	10	10	2/22/2018 10:59	J

Lab ID: **J1801998020** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **Equipment Blank #2** Date Collected: 02/20/18 15:20

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							
Iron	**30**	**U**	**ug/L**	**1**	200	30	2/28/2017 19:57	J
Sodium	**0.16**	**U**	**mg/L**	**1**	0.20	0.16	2/28/2017 19:57	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	2/21/2018 14:26	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 14:26	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998020** Date Received: 02/20/18 16:10 Matrix: Water
Sample ID: **Equipment Blank #2** Date Collected: 02/20/18 15:20

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)	**0.0080**	**U**	**mg/L**	**1**	0.010	0.0080	2/27/2018 14:04	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**10**	**U**	**mg/L**	**1**	10	10	2/22/2018 10:59	J

Lab ID: **J1801998021** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **SW-1** Date Collected: 02/21/18 12:30

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	**437**		**umhos/cm @ 25.0°C**	**1**			2/21/2018 12:30	J^
Dissolved Oxygen	**7.2**		**mg/L**	**1**			2/21/2018 12:30	J^
Salinity	**0**	**U**	**ppt**	**1**			2/21/2018 12:30	J^
Temperature	**20.6**		**°C**	**1**			2/21/2018 12:30	J^
Turbidity	**22.43**		**NTU**	**1**			2/21/2018 12:30	J^
pH	**6.79**		**SU**	**1**			2/21/2018 12:30	J^
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**9.0**	**U**	**ug/L**	**1**	10	9.0	3/1/2018 14:40	J
Barium	**36**		**ug/L**	**1**	2.0	0.83	3/1/2018 14:40	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2018 14:40	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2018 14:40	J
Calcium	**39**		**mg/L**	**1**	0.20	0.082	3/1/2018 14:40	J
Chromium	**4.6**		**ug/L**	**1**	3.0	1.6	3/1/2018 14:40	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2018 14:40	J
Copper	**3.4**	**I**	**ug/L**	**1**	6.0	3.2	3/1/2018 14:40	J
Iron	**1300**		**ug/L**	**1**	200	100	3/1/2018 14:40	J
Lead	**4.4**	**I**	**ug/L**	**1**	6.0	2.9	3/1/2018 14:40	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998021** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-1** Date Collected: 02/21/18 12:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Magnesium	**5.0**		**mg/L**	**1**	0.20	0.085	3/1/2018 14:40	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2018 14:40	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2018 14:40	J
Total Hardness (as CaCO3)	**120**		**mg/L**	**1**	0.16	0.10	3/1/2018 14:40	J
Vanadium	**6.8**		**ug/L**	**1**	1.0	0.55	3/1/2018 14:40	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2018 14:40	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.96**		**ug/L**	**1**	0.70	0.11	2/27/2018 17:28	J
Selenium	**0.61**	**I**	**ug/L**	**1**	5.0	0.58	2/27/2018 17:28	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 17:28	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.017**	**I**	**ug/L**	**1**	0.10	0.011	2/26/2018 15:17	J
Microbiology								
Analysis Desc: Fecal Coliform MF,SM9222D,Water	Analytical Method: SM 9222D							
Coliform Fecal	**1800**	**B**	**#/100 mL**	**100**	100	100	2/21/2018 16:41	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/23/2018 14:43	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/23/2018 14:43	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 14:43	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/23/2018 14:43	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/23/2018 14:43	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/23/2018 14:43	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/23/2018 14:43	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/23/2018 14:43	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/23/2018 14:43	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/23/2018 14:43	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/23/2018 14:43	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/23/2018 14:43	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/23/2018 14:43	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/23/2018 14:43	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998021** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-1** Date Collected: 02/21/18 12:30

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	2/23/2018 14:43	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/23/2018 14:43	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/23/2018 14:43	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/23/2018 14:43	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/23/2018 14:43	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/23/2018 14:43	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/23/2018 14:43	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/23/2018 14:43	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/23/2018 14:43	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/23/2018 14:43	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/23/2018 14:43	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/23/2018 14:43	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/23/2018 14:43	J
Chloromethane	**40**		**ug/L**	**1**	1.0	0.21	2/23/2018 14:43	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/23/2018 14:43	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/23/2018 14:43	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/23/2018 14:43	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 14:43	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/23/2018 14:43	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/23/2018 14:43	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/23/2018 14:43	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/23/2018 14:43	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/23/2018 14:43	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/23/2018 14:43	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/23/2018 14:43	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/23/2018 14:43	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 14:43	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/23/2018 14:43	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/23/2018 14:43	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/23/2018 14:43	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 14:43	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/23/2018 14:43	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/23/2018 14:43	J
1,2-Dichloroethane-d4 (S)	**103**		**%**	**1**	70-128		2/23/2018 14:43	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		2/23/2018 14:43	
Bromofluorobenzene (S)	**113**		**%**	**1**	86-123		2/23/2018 14:43	
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	2/23/2018 14:43	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998021** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-1** Date Collected: 02/21/18 12:30

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	2/23/2018 14:43	J
1,2-Dichloroethane-d4 (S)	**102**		**%**	**1**	77-125		2/23/2018 14:43	
Toluene-d8 (S)	**115**		**%**	**1**	80-121		2/23/2018 14:43	
Bromofluorobenzene (S)	**112**		**%**	**1**	80-129		2/23/2018 14:43	
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**8.2**		**mg/L**	**1**	0.10	0.10	3/6/2018 13:01	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.0072**	**I**	**mg/L**	**1**	0.010	0.00025	3/2/2018 10:01	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate	**4.3**		**mg/L**	**1**	0.50	0.050	2/21/2018 17:59	J
Nitrate + Nitrite	**4.3**		**mg/L**	**1**	0.50	0.050	2/21/2018 17:59	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**2.3**		**mg/L**	**10**	0.10	0.080	3/2/2018 10:01	G
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**3.9**		**mg/L**	**1**	0.10	0.050	3/5/2018 12:08	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.15**		**mg/L**	**1**	0.10	0.050	3/5/2018 18:14	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**57**		**mg/L**	**1**	20	7.3	2/26/2018 16:30	J
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Chlorophyll A	**7.1**		**mg/m3**	**1**	2.0	1.0	2/28/2018 10:32	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**300**		**mg/L**	**1**	10	10	2/22/2018 13:36	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998021** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **SW-1** Date Collected: 02/21/18 12:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**16**		**mg/L**	**1**	2.0	1.0	2/26/2018 10:13	J
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**5.6**		**mg/L**	**1**	2.0	2.0	2/23/2018 09:16	J
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**25**		**mg/L**	**1**	1.0	0.25	2/27/2018 10:46	G

Lab ID: **J1801998022** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **SW-3** Date Collected: 02/21/18 12:50

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	**456**		**umhos/cm @ 25.0°C**	**1**			3/2/2018 17:04	J^
Dissolved Oxygen	**4.6**		**mg/L**	**1**			3/2/2018 17:04	J^
Salinity	**0**	**U**	**ppt**	**1**			3/2/2018 17:04	J^
Temperature	**22.2**		**°C**	**1**			3/2/2018 17:04	J^
Turbidity	**20.55**		**NTU**	**1**			3/2/2018 17:04	J^
pH	**7.21**		**SU**	**1**			3/2/2018 17:04	J^
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**9.0**	**U**	**ug/L**	**1**	10	9.0	3/1/2018 15:12	J
Barium	**30**		**ug/L**	**1**	2.0	0.83	3/1/2018 15:12	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2018 15:12	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2018 15:12	J
Calcium	**45**		**mg/L**	**1**	0.20	0.082	3/1/2018 15:12	J
Chromium	**5.3**		**ug/L**	**1**	3.0	1.6	3/1/2018 15:12	J
Cobalt	**3.0**	**I**	**ug/L**	**1**	4.0	1.9	3/1/2018 15:12	J
Copper	**5.1**	**I**	**ug/L**	**1**	6.0	3.2	3/1/2018 15:12	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998022** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-3** Date Collected: 02/21/18 12:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Iron	**1500**		**ug/L**	**1**	200	100	3/1/2018 15:12	J
Lead	**5.7**	**I**	**ug/L**	**1**	6.0	2.9	3/1/2018 15:12	J
Magnesium	**5.2**		**mg/L**	**1**	0.20	0.085	3/1/2018 15:12	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2018 15:12	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2018 15:12	J
Total Hardness (as CaCO3)	**130**		**mg/L**	**1**	0.16	0.10	3/1/2018 15:12	J
Vanadium	**8.5**		**ug/L**	**1**	1.0	0.55	3/1/2018 15:12	J
Zinc	**35**	**I**	**ug/L**	**1**	60	33	3/1/2018 15:12	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**1.1**		**ug/L**	**1**	0.70	0.11	2/27/2018 17:33	J
Selenium	**0.72**	**I**	**ug/L**	**1**	5.0	0.58	2/27/2018 17:33	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 17:33	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**I**	**ug/L**	**1**	0.10	0.011	2/26/2018 15:20	J
Microbiology								
Analysis Desc: Fecal Coliform MF,SM9222D,Water	Analytical Method: SM 9222D							
Coliform Fecal	**100**	**B**	**#/100 mL**	**100**	100	100	2/21/2018 16:41	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/23/2018 15:23	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/23/2018 15:23	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 15:23	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/23/2018 15:23	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/23/2018 15:23	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/23/2018 15:23	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/23/2018 15:23	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/23/2018 15:23	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/23/2018 15:23	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/23/2018 15:23	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/23/2018 15:23	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/23/2018 15:23	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998022** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-3** Date Collected: 02/21/18 12:50

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	2/23/2018 15:23	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/23/2018 15:23	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/23/2018 15:23	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/23/2018 15:23	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/23/2018 15:23	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/23/2018 15:23	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/23/2018 15:23	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/23/2018 15:23	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/23/2018 15:23	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/23/2018 15:23	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/23/2018 15:23	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/23/2018 15:23	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/23/2018 15:23	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/23/2018 15:23	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/23/2018 15:23	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/23/2018 15:23	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/23/2018 15:23	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/23/2018 15:23	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/23/2018 15:23	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 15:23	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/23/2018 15:23	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/23/2018 15:23	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/23/2018 15:23	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/23/2018 15:23	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/23/2018 15:23	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/23/2018 15:23	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/23/2018 15:23	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/23/2018 15:23	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 15:23	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/23/2018 15:23	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/23/2018 15:23	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/23/2018 15:23	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 15:23	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/23/2018 15:23	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/23/2018 15:23	J
1,2-Dichloroethane-d4 (S)	**104**		**%**	**1**	70-128		2/23/2018 15:23	
Toluene-d8 (S)	**97**		**%**	**1**	77-119		2/23/2018 15:23	
Bromofluorobenzene (S)	**117**		**%**	**1**	86-123		2/23/2018 15:23	

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998022** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-3** Date Collected: 02/21/18 12:50

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	2/23/2018 15:23	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/23/2018 15:23	J
1,2-Dichloroethane-d4 (S)	**102**		**%**	**1**	77-125		2/23/2018 15:23	
Toluene-d8 (S)	**113**		**%**	**1**	80-121		2/23/2018 15:23	
Bromofluorobenzene (S)	**115**		**%**	**1**	80-129		2/23/2018 15:23	
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**8.2**		**mg/L**	**1**	0.10	0.10	3/6/2018 13:01	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.015**		**mg/L**	**1**	0.010	0.00036	3/2/2018 10:01	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate	**4.7**	**J4**	**mg/L**	**1**	0.50	0.050	2/21/2018 18:21	J
Nitrate + Nitrite	**4.7**		**mg/L**	**1**	0.50	0.050	2/21/2018 18:21	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**1.7**		**mg/L**	**5**	0.050	0.040	3/2/2018 10:01	G
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**3.5**		**mg/L**	**1**	0.10	0.050	3/5/2018 12:08	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.050**	**U**	**mg/L**	**1**	0.10	0.050	3/5/2018 18:14	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**53**		**mg/L**	**1**	20	7.3	2/26/2018 16:30	J
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Chlorophyll A	**30**		**mg/m3**	**1**	2.0	1.0	2/28/2018 10:32	G

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998022** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **SW-3** Date Collected: 02/21/18 12:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**280**		**mg/L**	**1**	10	10	2/22/2018 13:36	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**23**		**mg/L**	**1**	2.0	1.0	2/26/2018 10:13	J
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**11**		**mg/L**	**1**	2.0	2.0	2/23/2018 09:16	J
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**18**		**mg/L**	**1**	1.0	0.25	2/27/2018 10:46	G

Lab ID: **J1801998023** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **SW-4** Date Collected: 02/21/18 13:20

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	**198**		**umhos/cm @ 25.0°C**	**1**			2/21/2018 13:20	J^
Dissolved Oxygen	**7.1**		**mg/L**	**1**			2/21/2018 13:20	J^
Salinity	**0**	**U**	**ppt**	**1**			2/21/2018 13:20	J^
Temperature	**29.3**		**°C**	**1**			2/21/2018 13:20	J^
Turbidity	**96.24**		**NTU**	**1**			2/21/2018 13:20	J^
pH	**7.11**		**SU**	**1**			2/21/2018 13:20	J^
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**9.0**	**U**	**ug/L**	**1**	10	9.0	3/1/2018 15:15	J
Barium	**72**		**ug/L**	**1**	2.0	0.83	3/1/2018 15:15	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2018 15:15	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2018 15:15	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998023** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-4** Date Collected: 02/21/18 13:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Calcium	**24**		**mg/L**	**1**	0.20	0.082	3/1/2018 15:15	J
Chromium	**13**		**ug/L**	**1**	3.0	1.6	3/1/2018 15:15	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2018 15:15	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	3/1/2018 15:15	J
Iron	**1900**		**ug/L**	**1**	200	100	3/1/2018 15:15	J
Lead	**7.5**		**ug/L**	**1**	6.0	2.9	3/1/2018 15:15	J
Magnesium	**7.0**		**mg/L**	**1**	0.20	0.085	3/1/2018 15:15	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2018 15:15	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2018 15:15	J
Total Hardness (as CaCO3)	**90**		**mg/L**	**1**	0.16	0.10	3/1/2018 15:15	J
Vanadium	**27**		**ug/L**	**1**	1.0	0.55	3/1/2018 15:15	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2018 15:15	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	0.11	2/27/2018 17:38	J
Selenium	**2.0**	**I**	**ug/L**	**1**	5.0	0.58	2/27/2018 17:38	J
Thallium	**0.060**	**I**	**ug/L**	**1**	0.20	0.057	2/27/2018 17:38	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.049**	**I**	**ug/L**	**1**	0.10	0.011	2/26/2018 15:29	J
Microbiology								
Analysis Desc: Fecal Coliform MF,SM9222D,Water	Analytical Method: SM 9222D							
Coliform Fecal	**100**	**U**	**#/100 mL**	**100**	100	100	2/21/2018 16:41	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/23/2018 15:52	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/23/2018 15:52	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 15:52	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/23/2018 15:52	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/23/2018 15:52	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/23/2018 15:52	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/23/2018 15:52	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/23/2018 15:52	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998023** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-4** Date Collected: 02/21/18 13:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/23/2018 15:52	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/23/2018 15:52	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/23/2018 15:52	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/23/2018 15:52	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/23/2018 15:52	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/23/2018 15:52	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/23/2018 15:52	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/23/2018 15:52	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/23/2018 15:52	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/23/2018 15:52	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/23/2018 15:52	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/23/2018 15:52	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/23/2018 15:52	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/23/2018 15:52	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/23/2018 15:52	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/23/2018 15:52	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/23/2018 15:52	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/23/2018 15:52	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/23/2018 15:52	J
Chloromethane	**150**		**ug/L**	**1**	1.0	0.21	2/23/2018 15:52	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/23/2018 15:52	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/23/2018 15:52	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/23/2018 15:52	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 15:52	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/23/2018 15:52	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/23/2018 15:52	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/23/2018 15:52	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/23/2018 15:52	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/23/2018 15:52	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/23/2018 15:52	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/23/2018 15:52	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/23/2018 15:52	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 15:52	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/23/2018 15:52	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/23/2018 15:52	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/23/2018 15:52	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 15:52	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/23/2018 15:52	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/23/2018 15:52	J
1,2-Dichloroethane-d4 (S)	**106**		**%**	**1**	70-128		2/23/2018 15:52	

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998023** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-4** Date Collected: 02/21/18 13:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Toluene-d8 (S)	**99**		**%**	**1**	77-119		2/23/2018 15:52	
Bromofluorobenzene (S)	**114**		**%**	**1**	86-123		2/23/2018 15:52	
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	2/23/2018 15:52	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/23/2018 15:52	J
1,2-Dichloroethane-d4 (S)	**104**		**%**	**1**	77-125		2/23/2018 15:52	
Toluene-d8 (S)	**115**		**%**	**1**	80-121		2/23/2018 15:52	
Bromofluorobenzene (S)	**113**		**%**	**1**	80-129		2/23/2018 15:52	
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**0.79**		**mg/L**	**1**	0.10	0.10	3/6/2018 13:01	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.000095**	**U**	**mg/L**	**1**	0.010	0.000095	3/2/2018 10:01	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 19:06	J
Nitrate + Nitrite	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 19:06	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.0080**	**U**	**mg/L**	**1**	0.010	0.0080	3/2/2018 10:01	G
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**0.75**		**mg/L**	**1**	0.10	0.050	3/5/2018 12:08	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.45**		**mg/L**	**1**	0.10	0.050	3/5/2018 18:14	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**19**	**I**	**mg/L**	**1**	20	7.3	2/26/2018 16:30	J
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998023** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **SW-4** Date Collected: 02/21/18 13:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chlorophyll A	**24**		**mg/m3**	**1**	2.0	1.0	2/28/2018 10:32	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**200**		**mg/L**	**1**	10	10	2/22/2018 13:36	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**76**		**mg/L**	**1**	2.0	1.0	2/26/2018 10:13	J
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**4.1**		**mg/L**	**1**	2.0	2.0	2/23/2018 09:16	J
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**6.2**		**mg/L**	**1**	1.0	0.25	2/27/2018 10:46	G

Lab ID: **J1801998024** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **SW-7** Date Collected: 02/21/18 13:50

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	**149**		**umhos/cm @ 25.0°C**	**1**			2/21/2018 13:50	J^
Dissolved Oxygen	**7.1**		**mg/L**	**1**			2/21/2018 13:50	J^
Salinity	**0**	**U**	**ppt**	**1**			2/21/2018 13:50	J^
Temperature	**20.6**		**°C**	**1**			2/21/2018 13:50	J^
Turbidity	**55.5**		**NTU**	**1**			2/21/2018 13:50	J^
pH	**7.31**		**SU**	**1**			2/21/2018 13:50	J^
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**9.0**	**U**	**ug/L**	**1**	10	9.0	3/1/2018 15:18	J
Barium	**45**		**ug/L**	**1**	2.0	0.83	3/1/2018 15:18	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998024** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-7** Date Collected: 02/21/18 13:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2018 15:18	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2018 15:18	J
Calcium	**21**		**mg/L**	**1**	0.20	0.082	3/1/2018 15:18	J
Chromium	**5.5**		**ug/L**	**1**	3.0	1.6	3/1/2018 15:18	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2018 15:18	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	3/1/2018 15:18	J
Iron	**1300**		**ug/L**	**1**	200	100	3/1/2018 15:18	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	3/1/2018 15:18	J
Magnesium	**1.6**		**mg/L**	**1**	0.20	0.085	3/1/2018 15:18	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2018 15:18	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2018 15:18	J
Total Hardness (as CaCO3)	**60**		**mg/L**	**1**	0.16	0.10	3/1/2018 15:18	J
Vanadium	**9.0**		**ug/L**	**1**	1.0	0.55	3/1/2018 15:18	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2018 15:18	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.11**	**U**	**ug/L**	**1**	0.70	0.11	2/27/2018 17:43	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/27/2018 17:43	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 17:43	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.028**	**I**	**ug/L**	**1**	0.10	0.011	2/26/2018 15:32	J
Microbiology								
Analysis Desc: Fecal Coliform MF,SM9222D,Water	Analytical Method: SM 9222D							
Coliform Fecal	**700**	**B**	**#/100 mL**	**100**	100	100	2/21/2018 16:41	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/23/2018 16:28	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/23/2018 16:28	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 16:28	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/23/2018 16:28	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/23/2018 16:28	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/23/2018 16:28	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998024** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-7** Date Collected: 02/21/18 13:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/23/2018 16:28	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/23/2018 16:28	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/23/2018 16:28	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/23/2018 16:28	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/23/2018 16:28	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/23/2018 16:28	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/23/2018 16:28	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/23/2018 16:28	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/23/2018 16:28	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/23/2018 16:28	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/23/2018 16:28	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/23/2018 16:28	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/23/2018 16:28	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/23/2018 16:28	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/23/2018 16:28	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/23/2018 16:28	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/23/2018 16:28	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/23/2018 16:28	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/23/2018 16:28	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/23/2018 16:28	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/23/2018 16:28	J
Chloromethane	**79**		**ug/L**	**1**	1.0	0.21	2/23/2018 16:28	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/23/2018 16:28	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/23/2018 16:28	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/23/2018 16:28	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 16:28	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/23/2018 16:28	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/23/2018 16:28	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/23/2018 16:28	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/23/2018 16:28	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/23/2018 16:28	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/23/2018 16:28	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/23/2018 16:28	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/23/2018 16:28	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 16:28	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/23/2018 16:28	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/23/2018 16:28	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/23/2018 16:28	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 16:28	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/23/2018 16:28	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998024** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-7** Date Collected: 02/21/18 13:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/23/2018 16:28	J
1,2-Dichloroethane-d4 (S)	**104**		**%**	**1**	70-128		2/23/2018 16:28	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		2/23/2018 16:28	
Bromofluorobenzene (S)	**116**		**%**	**1**	86-123		2/23/2018 16:28	
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	2/23/2018 16:28	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/23/2018 16:28	J
1,2-Dichloroethane-d4 (S)	**102**		**%**	**1**	77-125		2/23/2018 16:28	
Toluene-d8 (S)	**116**		**%**	**1**	80-121		2/23/2018 16:28	
Bromofluorobenzene (S)	**116**		**%**	**1**	80-129		2/23/2018 16:28	
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**0.50**		**mg/L**	**1**	0.10	0.10	3/6/2018 13:01	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.00060**	**I**	**mg/L**	**1**	0.010	0.000081	3/2/2018 10:01	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 19:29	J
Nitrate + Nitrite	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 19:29	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.06**		**mg/L**	**1**	0.010	0.0080	3/2/2018 10:01	G
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**0.48**		**mg/L**	**1**	0.10	0.050	3/5/2018 12:08	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.050**	**U**	**mg/L**	**1**	0.10	0.050	3/5/2018 18:14	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**21**		**mg/L**	**1**	20	7.3	2/26/2018 16:30	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998024** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **SW-7** Date Collected: 02/21/18 13:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Chlorophyll A	**3.6**		**mg/m3**	**1**	2.0	1.0	2/28/2018 10:32	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**110**		**mg/L**	**1**	10	10	2/22/2018 13:36	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**44**		**mg/L**	**1**	2.0	1.0	2/26/2018 10:13	J
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**3.8**		**mg/L**	**1**	2.0	2.0	2/23/2018 09:16	J
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**6.4**		**mg/L**	**1**	1.0	0.25	2/27/2018 10:46	G

Lab ID: **J1801998025** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **SW-5** Date Collected: 02/21/18 14:10

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	**195**		**umhos/cm @ 25.0°C**	**1**			2/21/2018 14:10	J^
Dissolved Oxygen	**6.7**		**mg/L**	**1**			2/21/2018 14:10	J^
Salinity	**0**	**U**	**ppt**	**1**			2/21/2018 14:10	J^
Temperature	**22.2**		**°C**	**1**			2/21/2018 14:10	J^
Turbidity	**166.3**		**NTU**	**1**			2/21/2018 14:10	J^
pH	**7.65**		**SU**	**1**			2/21/2018 14:10	J^
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998025** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-5** Date Collected: 02/21/18 14:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Arsenic	**9.0**	**U**	**ug/L**	**1**	10	9.0	3/1/2018 15:21	J
Barium	**76**		**ug/L**	**1**	2.0	0.83	3/1/2018 15:21	J
Beryllium	**0.58**	**I**	**ug/L**	**1**	0.80	0.40	3/1/2018 15:21	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2018 15:21	J
Calcium	**25**		**mg/L**	**1**	0.20	0.082	3/1/2018 15:21	J
Chromium	**18**		**ug/L**	**1**	3.0	1.6	3/1/2018 15:21	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2018 15:21	J
Copper	**3.2**	**I**	**ug/L**	**1**	6.0	3.2	3/1/2018 15:21	J
Iron	**2900**		**ug/L**	**1**	200	100	3/1/2018 15:21	J
Lead	**9.5**		**ug/L**	**1**	6.0	2.9	3/1/2018 15:21	J
Magnesium	**3.9**		**mg/L**	**1**	0.20	0.085	3/1/2018 15:21	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2018 15:21	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2018 15:21	J
Total Hardness (as CaCO3)	**78**		**mg/L**	**1**	0.16	0.10	3/1/2018 15:21	J
Vanadium	**29**		**ug/L**	**1**	1.0	0.55	3/1/2018 15:21	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2018 15:21	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.23**	**I**	**ug/L**	**1**	0.70	0.11	2/27/2018 17:47	J
Selenium	**1.9**	**I**	**ug/L**	**1**	5.0	0.58	2/27/2018 17:47	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 17:47	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.087**	**I**	**ug/L**	**1**	0.10	0.011	2/26/2018 15:41	J
Microbiology								
Analysis Desc: Fecal Coliform MF,SM9222D,Water	Analytical Method: SM 9222D							
Coliform Fecal	**100**	**U**	**#/100 mL**	**100**	100	100	2/21/2018 16:41	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/23/2018 17:04	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/23/2018 17:04	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 17:04	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/23/2018 17:04	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998025** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-5** Date Collected: 02/21/18 14:10

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	2/23/2018 17:04	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/23/2018 17:04	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/23/2018 17:04	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/23/2018 17:04	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/23/2018 17:04	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/23/2018 17:04	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/23/2018 17:04	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/23/2018 17:04	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/23/2018 17:04	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/23/2018 17:04	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/23/2018 17:04	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/23/2018 17:04	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/23/2018 17:04	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/23/2018 17:04	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/23/2018 17:04	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/23/2018 17:04	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/23/2018 17:04	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/23/2018 17:04	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/23/2018 17:04	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/23/2018 17:04	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/23/2018 17:04	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/23/2018 17:04	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/23/2018 17:04	J
Chloromethane	**190**		**ug/L**	**1**	1.0	0.21	2/23/2018 17:04	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/23/2018 17:04	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/23/2018 17:04	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/23/2018 17:04	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 17:04	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/23/2018 17:04	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/23/2018 17:04	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/23/2018 17:04	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/23/2018 17:04	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/23/2018 17:04	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/23/2018 17:04	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/23/2018 17:04	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/23/2018 17:04	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/23/2018 17:04	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/23/2018 17:04	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/23/2018 17:04	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/23/2018 17:04	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998025** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-5** Date Collected: 02/21/18 14:10

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	2/23/2018 17:04	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/23/2018 17:04	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/23/2018 17:04	J
1,2-Dichloroethane-d4 (S)	**108**		**%**	**1**	70-128		2/23/2018 17:04	
Toluene-d8 (S)	**98**		**%**	**1**	77-119		2/23/2018 17:04	
Bromofluorobenzene (S)	**113**		**%**	**1**	86-123		2/23/2018 17:04	
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	2/23/2018 17:04	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/23/2018 17:04	J
1,2-Dichloroethane-d4 (S)	**106**		**%**	**1**	77-125		2/23/2018 17:04	
Toluene-d8 (S)	**114**		**%**	**1**	80-121		2/23/2018 17:04	
Bromofluorobenzene (S)	**111**		**%**	**1**	80-129		2/23/2018 17:04	
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**2.1**		**mg/L**	**1**	0.10	0.10	3/6/2018 13:02	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.00064**	**I**	**mg/L**	**1**	0.010	0.00020	3/2/2018 10:01	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate	**0.84**		**mg/L**	**1**	0.50	0.050	2/21/2018 19:51	J
Nitrate + Nitrite	**0.84**		**mg/L**	**1**	0.50	0.050	2/21/2018 19:51	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.03**		**mg/L**	**1**	0.010	0.0080	3/2/2018 10:01	G
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**1.3**		**mg/L**	**1**	0.10	0.050	3/5/2018 12:08	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.34**		**mg/L**	**1**	0.10	0.050	3/5/2018 18:14	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998025** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **SW-5** Date Collected: 02/21/18 14:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chemical Oxygen Demand	**39**		**mg/L**	**1**	20	7.3	2/26/2018 16:30	J
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Chlorophyll A	**3.6**		**mg/m3**	**1**	2.0	1.0	2/28/2018 10:32	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**290**		**mg/L**	**1**	10	10	2/22/2018 13:36	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**13**		**mg/L**	**1**	2.0	1.0	2/26/2018 10:13	J
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**3.6**		**mg/L**	**1**	2.0	2.0	2/23/2018 09:16	J
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**11**		**mg/L**	**1**	1.0	0.25	2/27/2018 10:46	G

Lab ID: **J1801998026** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **SW-6** Date Collected: 02/21/18 14:30

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	**265**		**umhos/cm @ 25.0°C**	**1**			2/21/2018 14:30	J^
Dissolved Oxygen	**6.6**		**mg/L**	**1**			2/21/2018 14:30	J^
Salinity	**0**	**U**	**ppt**	**1**			2/21/2018 14:30	J^
Temperature	**25.4**		**°C**	**1**			2/21/2018 14:30	J^
Turbidity	**34.48**		**NTU**	**1**			2/21/2018 14:30	J^
pH	**7.61**		**SU**	**1**			2/21/2018 14:30	J^
METALS								

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998026** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-6** Date Collected: 02/21/18 14:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**9.0**	**U**	**ug/L**	**1**	10	9.0	3/1/2018 15:24	J
Barium	**52**		**ug/L**	**1**	2.0	0.83	3/1/2018 15:24	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2018 15:24	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2018 15:24	J
Calcium	**33**		**mg/L**	**1**	0.20	0.082	3/1/2018 15:24	J
Chromium	**5.2**		**ug/L**	**1**	3.0	1.6	3/1/2018 15:24	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2018 15:24	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	3/1/2018 15:24	J
Iron	**870**		**ug/L**	**1**	200	100	3/1/2018 15:24	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	3/1/2018 15:24	J
Magnesium	**3.3**		**mg/L**	**1**	0.20	0.085	3/1/2018 15:24	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2018 15:24	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2018 15:24	J
Total Hardness (as CaCO3)	**96**		**mg/L**	**1**	0.16	0.10	3/1/2018 15:24	J
Vanadium	**11**		**ug/L**	**1**	1.0	0.55	3/1/2018 15:24	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2018 15:24	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	0.11	2/27/2018 17:52	J
Selenium	**0.93**	**I**	**ug/L**	**1**	5.0	0.58	2/27/2018 17:52	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 17:52	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	2/26/2018 15:56	J
Microbiology								
Analysis Desc: Fecal Coliform MF,SM9222D,Water	Analytical Method: SM 9222D							
Coliform Fecal	**300**	**B**	**#/100 mL**	**100**	100	100	2/21/2018 16:41	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/26/2018 12:02	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998026** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-6** Date Collected: 02/21/18 14:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 12:02	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 12:02	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/26/2018 12:02	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/26/2018 12:02	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 12:02	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/26/2018 12:02	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/26/2018 12:02	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 12:02	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 12:02	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/26/2018 12:02	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 12:02	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/26/2018 12:02	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/26/2018 12:02	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/26/2018 12:02	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/26/2018 12:02	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/26/2018 12:02	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 12:02	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/26/2018 12:02	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/26/2018 12:02	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/26/2018 12:02	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 12:02	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/26/2018 12:02	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 12:02	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 12:02	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 12:02	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 12:02	J
Chloromethane	**72**		**ug/L**	**1**	1.0	0.21	2/26/2018 12:02	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 12:02	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/26/2018 12:02	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 12:02	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 12:02	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 12:02	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/26/2018 12:02	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 12:02	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 12:02	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 12:02	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 12:02	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/26/2018 12:02	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/26/2018 12:02	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 12:02	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998026** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SW-6** Date Collected: 02/21/18 14:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/26/2018 12:02	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 12:02	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 12:02	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 12:02	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 12:02	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/26/2018 12:02	J
1,2-Dichloroethane-d4 (S)	**105**		**%**	**1**	70-128		2/26/2018 12:02	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		2/26/2018 12:02	
Bromofluorobenzene (S)	**113**		**%**	**1**	86-123		2/26/2018 12:02	
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	2/26/2018 12:02	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/26/2018 12:02	J
1,2-Dichloroethane-d4 (S)	**104**		**%**	**1**	77-125		2/26/2018 12:02	
Toluene-d8 (S)	**115**		**%**	**1**	80-121		2/26/2018 12:02	
Bromofluorobenzene (S)	**112**		**%**	**1**	80-129		2/26/2018 12:02	
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**2.1**		**mg/L**	**1**	0.10	0.10	3/6/2018 13:02	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.0016**	**I**	**mg/L**	**1**	0.010	0.00023	3/2/2018 10:01	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate	**1.3**		**mg/L**	**1**	0.50	0.050	2/21/2018 20:14	J
Nitrate + Nitrite	**1.3**		**mg/L**	**1**	0.50	0.050	2/21/2018 20:14	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.06**		**mg/L**	**1**	0.010	0.0080	3/2/2018 10:01	G
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**0.80**		**mg/L**	**1**	0.10	0.050	3/5/2018 12:08	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998026** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **SW-6** Date Collected: 02/21/18 14:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Phosphorus (as P)	**0.050**	**U**	**mg/L**	**1**	0.10	0.050	3/5/2018 18:14	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**39**		**mg/L**	**1**	20	7.3	2/26/2018 16:30	J
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Chlorophyll A	**2.1**		**mg/m3**	**1**	2.0	1.0	2/28/2018 10:32	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**180**		**mg/L**	**1**	10	10	2/22/2018 13:36	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**1.3**	**I**	**mg/L**	**1**	2.0	1.0	2/26/2018 10:13	J
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**2.0**	**U**	**mg/L**	**1**	2.0	2.0	2/23/2018 09:16	J
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**12**		**mg/L**	**1**	1.0	0.25	2/27/2018 10:46	G

Lab ID: **J1801998027** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **Trip Blank 2** Date Collected: 02/21/18 12:30

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	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/26/2018 12:31	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 12:31	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 12:31	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/26/2018 12:31	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/26/2018 12:31	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 12:31	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998027** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **Trip Blank 2** Date Collected: 02/21/18 12:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/26/2018 12:31	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/26/2018 12:31	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 12:31	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 12:31	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/26/2018 12:31	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 12:31	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/26/2018 12:31	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/26/2018 12:31	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/26/2018 12:31	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/26/2018 12:31	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/26/2018 12:31	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 12:31	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/26/2018 12:31	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/26/2018 12:31	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/26/2018 12:31	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 12:31	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/26/2018 12:31	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 12:31	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 12:31	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 12:31	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 12:31	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 12:31	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 12:31	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/26/2018 12:31	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 12:31	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 12:31	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 12:31	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/26/2018 12:31	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 12:31	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 12:31	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 12:31	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 12:31	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/26/2018 12:31	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/26/2018 12:31	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 12:31	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/26/2018 12:31	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 12:31	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 12:31	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 12:31	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 12:31	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998027** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **Trip Blank 2** Date Collected: 02/21/18 12:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/26/2018 12:31	J
1,2-Dichloroethane-d4 (S)	**103**		**%**	**1**	70-128		2/26/2018 12:31	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		2/26/2018 12:31	
Bromofluorobenzene (S)	**115**		**%**	**1**	86-123		2/26/2018 12:31	
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	2/26/2018 12:31	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/26/2018 12:31	J
1,2-Dichloroethane-d4 (S)	**101**		**%**	**1**	77-125		2/26/2018 12:31	
Toluene-d8 (S)	**115**		**%**	**1**	80-121		2/26/2018 12:31	
Bromofluorobenzene (S)	**114**		**%**	**1**	80-129		2/26/2018 12:31	

Lab ID: **J1801998028** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **MWB-34I** Date Collected: 02/20/18 16:30

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	**350**		**ug/L**	**1**	200	100	3/1/2018 15:27	J
Sodium	**2.8**		**mg/L**	**1**	0.70	0.34	3/1/2018 15:27	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.5**		**mg/L**	**1**	5.0	0.50	2/21/2018 20:36	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 20:36	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.06**		**mg/L**	**1**	0.010	0.0080	3/2/2018 10:01	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**34**		**mg/L**	**1**	10	10	2/22/2018 13:36	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998029** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **MWB-32I** Date Collected: 02/20/18 17:58

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	**100**	**U**	**ug/L**	**1**	200	100	3/1/2018 15:31	J
Sodium	**2.6**		**mg/L**	**1**	0.70	0.34	3/1/2018 15:31	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.2**		**mg/L**	**1**	5.0	0.50	2/21/2018 20:59	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 20:59	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.02**		**mg/L**	**1**	0.010	0.0080	3/2/2018 10:01	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**23**		**mg/L**	**1**	10	10	2/22/2018 13:36	J

Lab ID: **J1801998030** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **MWB-35I** Date Collected: 02/21/18 07:48

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	**840**		**ug/L**	**1**	200	100	3/1/2018 15:35	J
Sodium	**1.3**		**mg/L**	**1**	0.70	0.34	3/1/2018 15:35	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4.0**	**I**	**mg/L**	**1**	5.0	0.50	2/21/2018 21:21	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 21:21	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998030** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **MWB-35I** Date Collected: 02/21/18 07:48

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)	**0.15**		**mg/L**	**1**	0.010	0.0080	3/2/2018 10:01	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**21**		**mg/L**	**1**	10	10	2/22/2018 13:36	J

Lab ID: **J1801998031** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **MWB-39I** Date Collected: 02/21/18 08:50

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	**270**		**ug/L**	**1**	200	100	3/1/2018 15:38	J
Sodium	**2.7**		**mg/L**	**1**	0.70	0.34	3/1/2018 15:38	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.2**		**mg/L**	**1**	5.0	0.50	2/21/2018 21:44	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 21:44	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.06**		**mg/L**	**1**	0.010	0.0080	3/2/2018 10:01	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**22**		**mg/L**	**1**	10	10	2/22/2018 13:36	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998032** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **MWB-34S** Date Collected: 02/20/18 16:00

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	**9.0**	**U**	**ug/L**	**1**	10	9.0	3/1/2018 15:41	J
Barium	**7.8**		**ug/L**	**1**	2.0	0.83	3/1/2018 15:41	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2018 15:41	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2018 15:41	J
Chromium	**2.5**	**I**	**ug/L**	**1**	3.0	1.6	3/1/2018 15:41	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2018 15:41	J
Copper	**7.3**		**ug/L**	**1**	6.0	3.2	3/1/2018 15:41	J
Iron	**440**		**ug/L**	**1**	200	100	3/1/2018 15:41	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	3/1/2018 15:41	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2018 15:41	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2018 15:41	J
Sodium	**71**		**mg/L**	**1**	0.70	0.34	3/1/2018 15:41	J
Vanadium	**31**		**ug/L**	**1**	1.0	0.55	3/1/2018 15:41	J
Zinc	**56**	**I**	**ug/L**	**1**	60	33	3/1/2018 15:41	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.62**	**I**	**ug/L**	**1**	0.70	0.11	2/27/2018 18:58	J
Selenium	**1.7**	**I**	**ug/L**	**1**	5.0	0.58	2/27/2018 18:58	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 18:58	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.025**	**I**	**ug/L**	**1**	0.10	0.011	2/26/2018 16:05	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/26/2018 13:01	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 13:01	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 13:01	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/26/2018 13:01	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/26/2018 13:01	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 13:01	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/26/2018 13:01	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998032** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **MWB-34S** Date Collected: 02/20/18 16:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/26/2018 13:01	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 13:01	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 13:01	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/26/2018 13:01	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 13:01	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/26/2018 13:01	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/26/2018 13:01	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/26/2018 13:01	J
Acetone	**4.0**	**I**	**ug/L**	**1**	5.0	2.1	2/26/2018 13:01	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/26/2018 13:01	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 13:01	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/26/2018 13:01	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/26/2018 13:01	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/26/2018 13:01	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 13:01	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/26/2018 13:01	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 13:01	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 13:01	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 13:01	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 13:01	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 13:01	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 13:01	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/26/2018 13:01	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 13:01	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 13:01	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 13:01	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/26/2018 13:01	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 13:01	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 13:01	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 13:01	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 13:01	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/26/2018 13:01	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/26/2018 13:01	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 13:01	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/26/2018 13:01	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 13:01	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 13:01	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 13:01	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 13:01	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/26/2018 13:01	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998032** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **MWB-34S** Date Collected: 02/20/18 16:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**105**		**%**	**1**	70-128		2/26/2018 13:01	
Toluene-d8 (S)	**98**		**%**	**1**	77-119		2/26/2018 13:01	
Bromofluorobenzene (S)	**114**		**%**	**1**	86-123		2/26/2018 13:01	
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	2/26/2018 13:01	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/26/2018 13:01	J
1,2-Dichloroethane-d4 (S)	**102**		**%**	**1**	77-125		2/26/2018 13:01	
Toluene-d8 (S)	**115**		**%**	**1**	80-121		2/26/2018 13:01	
Bromofluorobenzene (S)	**113**		**%**	**1**	80-129		2/26/2018 13:01	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**62**		**mg/L**	**1**	5.0	0.50	2/21/2018 22:51	J
Nitrate	**0.98**		**mg/L**	**1**	0.50	0.050	2/21/2018 22:51	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**7.3**		**mg/L**	**20**	0.20	0.16	3/2/2018 10:01	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**690**		**mg/L**	**1**	10	10	2/22/2018 13:36	J

Lab ID: **J1801998033** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **MWB-33S** Date Collected: 02/20/18 17:00

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	**9.0**	**U**	**ug/L**	**1**	10	9.0	3/1/2018 16:03	J
Barium	**8.9**		**ug/L**	**1**	2.0	0.83	3/1/2018 16:03	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2018 16:03	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998033** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **MWB-33S** Date Collected: 02/20/18 17:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2018 16:03	J
Chromium	**1.9**	**I**	**ug/L**	**1**	3.0	1.6	3/1/2018 16:03	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2018 16:03	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	3/1/2018 16:03	J
Iron	**160**	**I**	**ug/L**	**1**	200	100	3/1/2018 16:03	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	3/1/2018 16:03	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2018 16:03	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2018 16:03	J
Sodium	**5.4**		**mg/L**	**1**	0.70	0.34	3/1/2018 16:03	J
Vanadium	**7.4**		**ug/L**	**1**	1.0	0.55	3/1/2018 16:03	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2018 16:03	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	0.11	2/27/2018 19:16	J
Selenium	**0.78**	**I**	**ug/L**	**1**	5.0	0.58	2/27/2018 19:16	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 19:16	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.039**	**I**	**ug/L**	**1**	0.10	0.011	2/26/2018 16:08	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/26/2018 13:30	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 13:30	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 13:30	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/26/2018 13:30	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/26/2018 13:30	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 13:30	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/26/2018 13:30	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/26/2018 13:30	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 13:30	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 13:30	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/26/2018 13:30	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 13:30	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/26/2018 13:30	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/26/2018 13:30	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998033** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **MWB-33S** Date Collected: 02/20/18 17:00

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	2/26/2018 13:30	J
Acetone	**2.1**	**I**	**ug/L**	**1**	5.0	2.1	2/26/2018 13:30	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/26/2018 13:30	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 13:30	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/26/2018 13:30	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/26/2018 13:30	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/26/2018 13:30	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 13:30	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/26/2018 13:30	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 13:30	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 13:30	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 13:30	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 13:30	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 13:30	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 13:30	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/26/2018 13:30	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 13:30	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 13:30	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 13:30	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/26/2018 13:30	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 13:30	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 13:30	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 13:30	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 13:30	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/26/2018 13:30	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/26/2018 13:30	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 13:30	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/26/2018 13:30	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 13:30	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 13:30	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 13:30	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 13:30	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/26/2018 13:30	J
1,2-Dichloroethane-d4 (S)	**105**		**%**	**1**	70-128		2/26/2018 13:30	
Toluene-d8 (S)	**98**		**%**	**1**	77-119		2/26/2018 13:30	
Bromofluorobenzene (S)	**113**		**%**	**1**	86-123		2/26/2018 13:30	
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	2/26/2018 13:30	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998033** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **MWB-33S** Date Collected: 02/20/18 17:00

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	2/26/2018 13:30	J
1,2-Dichloroethane-d4 (S)	**104**		**%**	**1**	77-125		2/26/2018 13:30	
Toluene-d8 (S)	**113**		**%**	**1**	80-121		2/26/2018 13:30	
Bromofluorobenzene (S)	**110**		**%**	**1**	80-129		2/26/2018 13:30	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**10**		**mg/L**	**1**	5.0	0.50	2/21/2018 23:14	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 23:14	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.87**		**mg/L**	**2**	0.020	0.016	3/2/2018 10:01	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**220**		**mg/L**	**1**	10	10	2/22/2018 13:36	J

Lab ID: **J1801998034** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **MWB-32S** Date Collected: 02/20/18 17:30

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	**9.0**	**U**	**ug/L**	**1**	10	9.0	3/1/2018 16:06	J
Barium	**15**		**ug/L**	**1**	2.0	0.83	3/1/2018 16:06	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2018 16:06	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2018 16:06	J
Chromium	**1.6**	**U**	**ug/L**	**1**	3.0	1.6	3/1/2018 16:06	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2018 16:06	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	3/1/2018 16:06	J
Iron	**510**		**ug/L**	**1**	200	100	3/1/2018 16:06	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	3/1/2018 16:06	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2018 16:06	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2018 16:06	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998034** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **MWB-32S** Date Collected: 02/20/18 17:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Sodium	**6.2**		**mg/L**	**1**	0.70	0.34	3/1/2018 16:06	J
Vanadium	**3.0**		**ug/L**	**1**	1.0	0.55	3/1/2018 16:06	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2018 16:06	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.11**	**U**	**ug/L**	**1**	0.70	0.11	2/27/2018 19:21	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/27/2018 19:21	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 19:21	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	2/26/2018 16:11	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/26/2018 13:59	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 13:59	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 13:59	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/26/2018 13:59	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/26/2018 13:59	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 13:59	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/26/2018 13:59	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/26/2018 13:59	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 13:59	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 13:59	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/26/2018 13:59	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 13:59	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/26/2018 13:59	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/26/2018 13:59	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/26/2018 13:59	J
Acetone	**6.5**		**ug/L**	**1**	5.0	2.1	2/26/2018 13:59	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/26/2018 13:59	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 13:59	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/26/2018 13:59	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/26/2018 13:59	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/26/2018 13:59	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 13:59	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998034** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **MWB-32S** Date Collected: 02/20/18 17:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/26/2018 13:59	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 13:59	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 13:59	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 13:59	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 13:59	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 13:59	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 13:59	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/26/2018 13:59	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 13:59	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 13:59	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 13:59	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/26/2018 13:59	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 13:59	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 13:59	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 13:59	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 13:59	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/26/2018 13:59	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/26/2018 13:59	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 13:59	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/26/2018 13:59	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 13:59	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 13:59	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 13:59	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 13:59	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/26/2018 13:59	J
1,2-Dichloroethane-d4 (S)	**107**		**%**	**1**	70-128		2/26/2018 13:59	
Toluene-d8 (S)	**98**		**%**	**1**	77-119		2/26/2018 13:59	
Bromofluorobenzene (S)	**113**		**%**	**1**	86-123		2/26/2018 13:59	
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	2/26/2018 13:59	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/26/2018 13:59	J
1,2-Dichloroethane-d4 (S)	**105**		**%**	**1**	77-125		2/26/2018 13:59	
Toluene-d8 (S)	**114**		**%**	**1**	80-121		2/26/2018 13:59	
Bromofluorobenzene (S)	**113**		**%**	**1**	80-129		2/26/2018 13:59	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998034** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **MWB-32S** Date Collected: 02/20/18 17:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chloride	**9.8**		**mg/L**	**1**	5.0	0.50	2/21/2018 23:36	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 23:36	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.71**		**mg/L**	**1**	0.010	0.0080	3/2/2018 10:01	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**71**		**mg/L**	**1**	10	10	2/22/2018 13:36	J

Lab ID: **J1801998035** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **MWB-35S** Date Collected: 02/21/18 07:20

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	**9.0**	**U**	**ug/L**	**1**	10	9.0	3/1/2018 16:09	J
Barium	**4.7**		**ug/L**	**1**	2.0	0.83	3/1/2018 16:09	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2018 16:09	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2018 16:09	J
Chromium	**1.6**	**U**	**ug/L**	**1**	3.0	1.6	3/1/2018 16:09	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2018 16:09	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	3/1/2018 16:09	J
Iron	**150**	**I**	**ug/L**	**1**	200	100	3/1/2018 16:09	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	3/1/2018 16:09	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2018 16:09	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2018 16:09	J
Sodium	**1.9**		**mg/L**	**1**	0.70	0.34	3/1/2018 16:09	J
Vanadium	**1.1**		**ug/L**	**1**	1.0	0.55	3/1/2018 16:09	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2018 16:09	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.11**	**U**	**ug/L**	**1**	0.70	0.11	2/27/2018 19:25	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998035** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **MWB-35S** Date Collected: 02/21/18 07:20

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	2/27/2018 19:25	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 19:25	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	2/26/2018 16:14	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/26/2018 14:28	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 14:28	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 14:28	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/26/2018 14:28	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/26/2018 14:28	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 14:28	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/26/2018 14:28	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/26/2018 14:28	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 14:28	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 14:28	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/26/2018 14:28	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 14:28	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/26/2018 14:28	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/26/2018 14:28	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/26/2018 14:28	J
Acetone	**4.2**	**I**	**ug/L**	**1**	5.0	2.1	2/26/2018 14:28	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/26/2018 14:28	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 14:28	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/26/2018 14:28	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/26/2018 14:28	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/26/2018 14:28	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 14:28	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/26/2018 14:28	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 14:28	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 14:28	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 14:28	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 14:28	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 14:28	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 14:28	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998035** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **MWB-35S** Date Collected: 02/21/18 07:20

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	2/26/2018 14:28	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 14:28	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 14:28	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 14:28	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/26/2018 14:28	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 14:28	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 14:28	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 14:28	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 14:28	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/26/2018 14:28	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/26/2018 14:28	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 14:28	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/26/2018 14:28	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 14:28	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 14:28	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 14:28	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 14:28	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/26/2018 14:28	J
1,2-Dichloroethane-d4 (S)	**105**		**%**	**1**	70-128		2/26/2018 14:28	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		2/26/2018 14:28	
Bromofluorobenzene (S)	**114**		**%**	**1**	86-123		2/26/2018 14:28	
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	2/26/2018 14:28	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/26/2018 14:28	J
1,2-Dichloroethane-d4 (S)	**104**		**%**	**1**	77-125		2/26/2018 14:28	
Toluene-d8 (S)	**116**		**%**	**1**	80-121		2/26/2018 14:28	
Bromofluorobenzene (S)	**112**		**%**	**1**	80-129		2/26/2018 14:28	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4.5**	**I**	**mg/L**	**1**	5.0	0.50	2/21/2018 23:59	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/21/2018 23:59	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.01**	**I**	**mg/L**	**1**	0.010	0.0080	3/2/2018 10:01	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998035** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **MWB-35S** Date Collected: 02/21/18 07:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Dissolved Solids	**19**		**mg/L**	**1**	10	10	2/22/2018 13:36	J

Lab ID: **J1801998036** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **MWB-39S** Date Collected: 02/21/18 08:21

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	**9.0**	**U**	**ug/L**	**1**	10	9.0	3/1/2018 16:13	J
Barium	**3.3**		**ug/L**	**1**	2.0	0.83	3/1/2018 16:13	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2018 16:13	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2018 16:13	J
Chromium	**1.6**	**U**	**ug/L**	**1**	3.0	1.6	3/1/2018 16:13	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2018 16:13	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	3/1/2018 16:13	J
Iron	**100**	**U**	**ug/L**	**1**	200	100	3/1/2018 16:13	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	3/1/2018 16:13	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2018 16:13	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2018 16:13	J
Sodium	**19**		**mg/L**	**1**	0.70	0.34	3/1/2018 16:13	J
Vanadium	**2.1**		**ug/L**	**1**	1.0	0.55	3/1/2018 16:13	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2018 16:13	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.11**	**U**	**ug/L**	**1**	0.70	0.11	2/27/2018 19:28	J
Selenium	**0.80**	**I**	**ug/L**	**1**	5.0	0.58	2/27/2018 19:28	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 19:28	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	2/26/2018 16:17	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998036** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **MWB-39S** Date Collected: 02/21/18 08:21

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	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/26/2018 14:58	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 14:58	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 14:58	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/26/2018 14:58	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/26/2018 14:58	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 14:58	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/26/2018 14:58	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/26/2018 14:58	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 14:58	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 14:58	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/26/2018 14:58	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 14:58	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/26/2018 14:58	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/26/2018 14:58	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/26/2018 14:58	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/26/2018 14:58	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/26/2018 14:58	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 14:58	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/26/2018 14:58	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/26/2018 14:58	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/26/2018 14:58	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 14:58	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/26/2018 14:58	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 14:58	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 14:58	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 14:58	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 14:58	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 14:58	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 14:58	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/26/2018 14:58	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 14:58	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 14:58	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 14:58	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/26/2018 14:58	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 14:58	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 14:58	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998036** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **MWB-39S** Date Collected: 02/21/18 08:21

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	2/26/2018 14:58	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 14:58	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/26/2018 14:58	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/26/2018 14:58	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 14:58	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/26/2018 14:58	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 14:58	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 14:58	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 14:58	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 14:58	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/26/2018 14:58	J
1,2-Dichloroethane-d4 (S)	**106**		**%**	**1**	70-128		2/26/2018 14:58	
Toluene-d8 (S)	**98**		**%**	**1**	77-119		2/26/2018 14:58	
Bromofluorobenzene (S)	**113**		**%**	**1**	86-123		2/26/2018 14:58	
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	2/26/2018 14:58	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/26/2018 14:58	J
1,2-Dichloroethane-d4 (S)	**104**		**%**	**1**	77-125		2/26/2018 14:58	
Toluene-d8 (S)	**115**		**%**	**1**	80-121		2/26/2018 14:58	
Bromofluorobenzene (S)	**112**		**%**	**1**	80-129		2/26/2018 14:58	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**23**		**mg/L**	**1**	5.0	0.50	2/22/2018 00:44	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/22/2018 00:44	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**3.4**		**mg/L**	**10**	0.10	0.080	3/2/2018 10:01	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**280**		**mg/L**	**1**	10	10	2/22/2018 13:36	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998037** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **MWB-40S** Date Collected: 02/21/18 09:26

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	**9.0**	**U**	**ug/L**	**1**	10	9.0	3/1/2018 16:17	J
Barium	**53**		**ug/L**	**1**	2.0	0.83	3/1/2018 16:17	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2018 16:17	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2018 16:17	J
Chromium	**4.6**		**ug/L**	**1**	3.0	1.6	3/1/2018 16:17	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2018 16:17	J
Copper	**6.1**		**ug/L**	**1**	6.0	3.2	3/1/2018 16:17	J
Iron	**800**		**ug/L**	**1**	200	100	3/1/2018 16:17	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	3/1/2018 16:17	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2018 16:17	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2018 16:17	J
Sodium	**29**		**mg/L**	**1**	0.70	0.34	3/1/2018 16:17	J
Vanadium	**15**		**ug/L**	**1**	1.0	0.55	3/1/2018 16:17	J
Zinc	**140**		**ug/L**	**1**	60	33	3/1/2018 16:17	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.11**	**I**	**ug/L**	**1**	0.70	0.11	2/27/2018 19:32	J
Selenium	**1.7**	**I**	**ug/L**	**1**	5.0	0.58	2/27/2018 19:32	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 19:32	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.018**	**I**	**ug/L**	**1**	0.10	0.011	2/26/2018 16:20	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/26/2018 15:27	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 15:27	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 15:27	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/26/2018 15:27	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/26/2018 15:27	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 15:27	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/26/2018 15:27	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998037** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **MWB-40S** Date Collected: 02/21/18 09:26

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/26/2018 15:27	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 15:27	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 15:27	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/26/2018 15:27	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 15:27	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/26/2018 15:27	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/26/2018 15:27	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/26/2018 15:27	J
Acetone	**2.4**	**I**	**ug/L**	**1**	5.0	2.1	2/26/2018 15:27	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/26/2018 15:27	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 15:27	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/26/2018 15:27	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/26/2018 15:27	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/26/2018 15:27	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 15:27	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/26/2018 15:27	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 15:27	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 15:27	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 15:27	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 15:27	J
Chloromethane	**150**		**ug/L**	**1**	1.0	0.21	2/26/2018 15:27	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 15:27	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/26/2018 15:27	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 15:27	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 15:27	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 15:27	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/26/2018 15:27	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 15:27	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 15:27	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 15:27	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 15:27	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/26/2018 15:27	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/26/2018 15:27	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 15:27	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/26/2018 15:27	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 15:27	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 15:27	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 15:27	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 15:27	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/26/2018 15:27	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998037** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **MWB-40S** Date Collected: 02/21/18 09:26

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**104**		**%**	**1**	70-128		2/26/2018 15:27	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		2/26/2018 15:27	
Bromofluorobenzene (S)	**117**		**%**	**1**	86-123		2/26/2018 15:27	
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	2/26/2018 15:27	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/26/2018 15:27	J
1,2-Dichloroethane-d4 (S)	**102**		**%**	**1**	77-125		2/26/2018 15:27	
Toluene-d8 (S)	**115**		**%**	**1**	80-121		2/26/2018 15:27	
Bromofluorobenzene (S)	**115**		**%**	**1**	80-129		2/26/2018 15:27	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**37**		**mg/L**	**1**	5.0	0.50	2/22/2018 01:06	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/22/2018 01:06	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**1.4**		**mg/L**	**5**	0.050	0.040	3/2/2018 10:01	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**220**		**mg/L**	**1**	10	10	2/22/2018 13:36	J

Lab ID: **J1801998038** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **SGMW-2S** Date Collected: 02/21/18 10:51

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	**9.0**	**U**	**ug/L**	**1**	10	9.0	3/1/2018 16:21	J
Barium	**100**		**ug/L**	**1**	2.0	0.83	3/1/2018 16:21	J
Beryllium	**0.84**		**ug/L**	**1**	0.80	0.40	3/1/2018 16:21	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998038** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SGMW-2S** Date Collected: 02/21/18 10:51

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2018 16:21	J
Chromium	**8.3**		**ug/L**	**1**	3.0	1.6	3/1/2018 16:21	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2018 16:21	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	3/1/2018 16:21	J
Iron	**920**		**ug/L**	**1**	200	100	3/1/2018 16:21	J
Lead	**3.1**	**I**	**ug/L**	**1**	6.0	2.9	3/1/2018 16:21	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2018 16:21	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2018 16:21	J
Sodium	**3.6**		**mg/L**	**1**	0.70	0.34	3/1/2018 16:21	J
Vanadium	**19**		**ug/L**	**1**	1.0	0.55	3/1/2018 16:21	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2018 16:21	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.11**	**U**	**ug/L**	**1**	0.70	0.11	2/27/2018 19:37	J
Selenium	**1.2**	**I**	**ug/L**	**1**	5.0	0.58	2/27/2018 19:37	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/27/2018 19:37	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.043**	**I**	**ug/L**	**1**	0.10	0.011	2/26/2018 16:23	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/26/2018 15:56	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 15:56	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 15:56	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/26/2018 15:56	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/26/2018 15:56	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 15:56	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/26/2018 15:56	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/26/2018 15:56	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 15:56	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 15:56	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/26/2018 15:56	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 15:56	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/26/2018 15:56	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/26/2018 15:56	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998038** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **SGMW-2S** Date Collected: 02/21/18 10:51

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	2/26/2018 15:56	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/26/2018 15:56	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/26/2018 15:56	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 15:56	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/26/2018 15:56	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/26/2018 15:56	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/26/2018 15:56	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 15:56	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/26/2018 15:56	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 15:56	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 15:56	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 15:56	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 15:56	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 15:56	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 15:56	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/26/2018 15:56	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 15:56	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 15:56	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 15:56	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/26/2018 15:56	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 15:56	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 15:56	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 15:56	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 15:56	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/26/2018 15:56	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/26/2018 15:56	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 15:56	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/26/2018 15:56	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 15:56	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 15:56	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 15:56	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 15:56	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/26/2018 15:56	J
1,2-Dichloroethane-d4 (S)	**103**		**%**	**1**	70-128		2/26/2018 15:56	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		2/26/2018 15:56	
Bromofluorobenzene (S)	**115**		**%**	**1**	86-123		2/26/2018 15:56	
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	2/26/2018 15:56	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998038** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **SGMW-2S** Date Collected: 02/21/18 10:51

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	2/26/2018 15:56	J
1,2-Dichloroethane-d4 (S)	**101**		**%**	**1**	77-125		2/26/2018 15:56	
Toluene-d8 (S)	**115**		**%**	**1**	80-121		2/26/2018 15:56	
Bromofluorobenzene (S)	**114**		**%**	**1**	80-129		2/26/2018 15:56	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**7.6**		**mg/L**	**1**	5.0	0.50	2/22/2018 01:29	J
Nitrate	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/22/2018 01:29	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.04**		**mg/L**	**1**	0.010	0.0080	3/2/2018 10:01	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**56**		**mg/L**	**1**	10	10	2/22/2018 13:36	J

Lab ID: **J1801998039** Date Received: 02/21/18 16:05 Matrix: Water
Sample ID: **Trip Blank 3** Date Collected: 02/20/18 16:00

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	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	2/26/2018 16:30	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/26/2018 16:30	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 16:30	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/26/2018 16:30	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/26/2018 16:30	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 16:30	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/26/2018 16:30	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/26/2018 16:30	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 16:30	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 16:30	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/26/2018 16:30	J

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998039** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **Trip Blank 3** Date Collected: 02/20/18 16:00

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	2/26/2018 16:30	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/26/2018 16:30	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/26/2018 16:30	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/26/2018 16:30	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/26/2018 16:30	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/26/2018 16:30	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 16:30	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/26/2018 16:30	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/26/2018 16:30	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/26/2018 16:30	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 16:30	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/26/2018 16:30	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 16:30	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 16:30	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 16:30	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/26/2018 16:30	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 16:30	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/26/2018 16:30	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/26/2018 16:30	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 16:30	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 16:30	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 16:30	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/26/2018 16:30	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 16:30	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/26/2018 16:30	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/26/2018 16:30	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/26/2018 16:30	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/26/2018 16:30	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/26/2018 16:30	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 16:30	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/26/2018 16:30	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/26/2018 16:30	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/26/2018 16:30	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/26/2018 16:30	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/26/2018 16:30	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/26/2018 16:30	J
1,2-Dichloroethane-d4 (S)	**106**		**%**	**1**	70-128		2/26/2018 16:30	
Toluene-d8 (S)	**98**		**%**	**1**	77-119		2/26/2018 16:30	
Bromofluorobenzene (S)	**112**		**%**	**1**	86-123		2/26/2018 16:30	

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ANALYTICAL RESULTS

Workorder: J1801998 Trail Ridge Landfill

Lab ID: **J1801998039** Date Received: 02/21/18 16:05 Matrix: Water

Sample ID: **Trip Blank 3** Date Collected: 02/20/18 16:00

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	2/26/2018 16:30	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/26/2018 16:30	J
1,2-Dichloroethane-d4 (S)	**104**		**%**	**1**	77-125		2/26/2018 16:30	
Toluene-d8 (S)	**115**		**%**	**1**	80-121		2/26/2018 16:30	
Bromofluorobenzene (S)	**111**		**%**	**1**	80-129		2/26/2018 16:30	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: J1801998 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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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

QC Batch: WCAj/1348 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: J1801998001, J1801998002, J1801998003, J1801998004, J1801998005, J1801998006, J1801998007, J1801998008,

METHOD BLANK: 2625757

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

LABORATORY CONTROL SAMPLE: 2625758

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	300	290	98	75-125	

SAMPLE DUPLICATE: 2625759 Original: J1801998001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	72	70	3	5	

SAMPLE DUPLICATE: 2625760 Original: J1801998010

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	160	150	4	5	

QC Batch: WCAj/1360 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Prepared:

Associated Lab Samples: J1801998001, J1801998002, J1801998003, J1801998004, J1801998005, J1801998006, J1801998007, J1801998008,

METHOD BLANK: 2627287

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

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

METHOD BLANK: 2627287

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

LABORATORY CONTROL SAMPLE & LCSD: 2627288 2627289

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY										
Chloride	mg/L	20	22	21	109	106	90-110	3	10	
Nitrate	mg/L	2	2.0	1.9	101	94	90-110	7	10	

MATRIX SPIKE SAMPLE: 2634080 Original: J1801998001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY							
Chloride	mg/L	18	20	37	95	90-110	
Nitrate	mg/L	0.013	2	2.5	127	90-110	

MATRIX SPIKE SAMPLE: 2634081 Original: J1801998013

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY							
Chloride	mg/L	5.5	20	27	106	90-110	
Nitrate	mg/L	0	2	2.6	130	90-110	

QC Batch: MSVj/1299 Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B Prepared: 02/21/2018 11:43

Associated Lab Samples: J1801998001, J1801998002, J1801998003, J1801998004, J1801998005, J1801998006, J1801998007, J1801998008,

METHOD BLANK: 2627336

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

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

METHOD BLANK: 2627336

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Bromomethane	ug/L	0.29	0.29	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	0.67	0.67	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	0.66	0.66	U
Trichloroethene	ug/L	0.29	0.29	U
Bromodichloromethane	ug/L	0.46	0.46	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	0.21	0.21	U
1,1,2-Trichloroethane	ug/L	0.30	0.30	U
Toluene	ug/L	0.23	0.23	U
2-Hexanone	ug/L	0.71	0.71	U
Dibromochloromethane	ug/L	0.33	0.33	U
Ethylene Dibromide (EDB)	ug/L	0.20	0.20	U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36	U
1,1,1,2-Tetrachloroethane	ug/L	0.54	0.54	U
Chlorobenzene	ug/L	0.21	0.21	U
Ethylbenzene	ug/L	0.24	0.24	U
Bromoform	ug/L	0.44	0.44	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	0.91	0.91	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	3.1	3.1	U
trans-1,4-Dichloro-2-butene	ug/L	1.8	1.8	U
Xylene (Total)	ug/L	0.53	0.53	U

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

METHOD BLANK: 2627336

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,2-Dichloroethane-d4 (S)	%	94	70-128	
Toluene-d8 (S)	%	98	77-119	
Bromofluorobenzene (S)	%	108	86-123	

LABORATORY CONTROL SAMPLE & LCSD: 2627337 2627338

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Chloromethane	ug/L	20	26	33	129	166		25		
Vinyl Chloride	ug/L	20	24	24	119	119	70-130	0	20	
Bromomethane	ug/L	20	26	30	130	152		16		
Chloroethane	ug/L	20	22	25	111	125		12		
Trichlorofluoromethane	ug/L	20	23	22	117	111		5		
Acetone	ug/L	20	18	22	88	109		21		
1,1-Dichloroethylene	ug/L	20	17	23	85	115	70-130	30	20	
Iodomethane (Methyl Iodide)	ug/L	20	18	24	91	120		27		
Acrylonitrile	ug/L	20	20	25	101	125		21		
Methylene Chloride	ug/L	20	18	24	91	122		29		
Carbon Disulfide	ug/L	20	14	24	69	121		55		
trans-1,2-Dichloroethylene	ug/L	20	20	25	101	124		20		
1,1-Dichloroethane	ug/L	20	20	24	99	118		17		
Vinyl Acetate	ug/L	20	27	13	133	66		67		
2-Butanone (MEK)	ug/L	20	21	23	107	116		8		
cis-1,2-Dichloroethylene	ug/L	20	20	23	102	116	70-130	13	20	
Bromochloromethane	ug/L	20	22	23	110	114		4		
Chloroform	ug/L	20	22	22	109	110	70-130	1	20	
1,2-Dichloroethane	ug/L	20	20	24	102	122		17		
1,1,1-Trichloroethane	ug/L	20	21	24	105	121		14		
Carbon Tetrachloride	ug/L	20	23	26	114	129		13		
Benzene	ug/L	20	22	25	111	123	70-130	10	20	
Dibromomethane	ug/L	20	21	24	106	120		13		
1,2-Dichloropropane	ug/L	20	21	24	106	119		12		
Trichloroethene	ug/L	20	21	25	105	127	70-130	19	20	
Bromodichloromethane	ug/L	20	22	25	109	123		12		
cis-1,3-Dichloropropene	ug/L	20	24	26	121	129		7		
4-Methyl-2-pentanone (MIBK)	ug/L	20	21	24	105	118		12		
trans-1,3-Dichloropropylene	ug/L	20	22	22	108	111		3		
1,1,2-Trichloroethane	ug/L	20	21	24	106	119		12		
Toluene	ug/L	20	22	21	111	104	70-130	7	20	
2-Hexanone	ug/L	20	20	19	102	96		6		
Dibromochloromethane	ug/L	20	21	21	106	106		0		

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE & LCSD: 2627337 2627338

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Ethylene Dibromide (EDB)	ug/L	20	22	21	112	107		4		
Tetrachloroethylene (PCE)	ug/L	20	14	22	72	111	70-130	42	20	
1,1,1,2-Tetrachloroethane	ug/L	20	22	21	110	105		5		
Chlorobenzene	ug/L	20	23	21	114	105	70-130	8	20	
Ethylbenzene	ug/L	20	23	21	116	107	70-130	8	20	
Bromoform	ug/L	20	22	21	110	103		6		
Styrene	ug/L	20	24	22	121	112		8		
1,1,2,2-Tetrachloroethane	ug/L	20	23	20	116	98		16		
1,2,3-Trichloropropane	ug/L	20	22	20	110	102		8		
1,4-Dichlorobenzene	ug/L	20	22	22	111	108		3		
1,2-Dichlorobenzene	ug/L	20	23	23	115	117	70-130	2	20	
1,2-Dibromo-3-Chloropropane	ug/L	20	23	22	113	109		3		
Xylene (Total)	ug/L	60	71	65	118	108	70-130	8	20	
1,2-Dichloroethane-d4 (S)	%				93	96	70-128	3		
Toluene-d8 (S)	%				97	85	77-119	12		
Bromofluorobenzene (S)	%				95	92	86-123	3		

MATRIX SPIKE SAMPLE: 2627339 Original: J1801998001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Chloromethane	ug/L	0	20	29	145		
Vinyl Chloride	ug/L	0	20	26	129	70-130	
Bromomethane	ug/L	0	20	26	132		
Chloroethane	ug/L	0	20	23	115		
Trichlorofluoromethane	ug/L	0	20	23	115		
Acetone	ug/L	0	20	18	89		
1,1-Dichloroethylene	ug/L	0	20	22	110	70-130	
Iodomethane (Methyl Iodide)	ug/L	0	20	19	96		
Acrylonitrile	ug/L	0	20	22	111		
Methylene Chloride	ug/L	0	20	19	93		
Carbon Disulfide	ug/L	0	20	23	116		
trans-1,2-Dichloroethylene	ug/L	0	20	22	112		
1,1-Dichloroethane	ug/L	0	20	22	112		
Vinyl Acetate	ug/L	0	20	24	120		
2-Butanone (MEK)	ug/L	0	20	19	94		
cis-1,2-Dichloroethylene	ug/L	0	20	21	107	70-130	
Bromochloromethane	ug/L	0	20	22	108		
Chloroform	ug/L	0	20	22	109	70-130	

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 2627339 Original: J1801998001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	0	20	21	107		
1,1,1-Trichloroethane	ug/L	0	20	22	109		
Carbon Tetrachloride	ug/L	0	20	23	113		
Benzene	ug/L	0	20	22	109	70-130	
Dibromomethane	ug/L	0	20	21	105		
1,2-Dichloropropane	ug/L	0	20	21	106		
Trichloroethene	ug/L	0	20	21	105	70-130	
Bromodichloromethane	ug/L	0	20	21	107		
cis-1,3-Dichloropropene	ug/L	0	20	22	110		
4-Methyl-2-pentanone (MIBK)	ug/L	0	20	20	100		
trans-1,3-Dichloropropylene	ug/L	0	20	19	93		
1,1,2-Trichloroethane	ug/L	0	20	20	102		
Toluene	ug/L	0	20	21	106	70-130	
2-Hexanone	ug/L	0	20	18	90		
Dibromochloromethane	ug/L	0	20	21	105		
Ethylene Dibromide (EDB)	ug/L	0	20	21	104		
Tetrachloroethylene (PCE)	ug/L	0	20	14	68	70-130	
1,1,1,2-Tetrachloroethane	ug/L	0	20	21	104		
Chlorobenzene	ug/L	0	20	21	106	70-130	
Ethylbenzene	ug/L	0	20	22	110	70-130	
Bromoform	ug/L	0	20	20	100		
Styrene	ug/L	0	20	22	112		
1,1,2,2-Tetrachloroethane	ug/L	0	20	22	108		
1,2,3-Trichloropropane	ug/L	0	20	20	99		
1,4-Dichlorobenzene	ug/L	0	20	21	104		
1,2-Dichlorobenzene	ug/L	0	20	22	109	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	20	20	100		
Xylene (Total)	ug/L	0	60	66	110	70-130	
1,2-Dichloroethane-d4 (S)	%	99			101	70-128	
Toluene-d8 (S)	%	100			100	77-119	
Bromofluorobenzene (S)	%	108			101	86-123	

QC Batch: MSVj/1301 Analysis Method: SW-846 8260B (SIM)

QC Batch Method: SW-846 5030B Prepared: 02/21/2018 08:00

Associated Lab Samples: J1801998001, J1801998002, J1801998003, J1801998004, J1801998005, J1801998006, J1801998007, J1801998008,

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

METHOD BLANK: 2627340

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)	%	92	77-125	
Toluene-d8 (S)	%	116	80-121	
Bromofluorobenzene (S)	%	109	80-129	

LABORATORY CONTROL SAMPLE & LCSD: 2627341 2627342

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	0.65	0.74	81	93	70-130	13	30	
1,2-Dibromo-3-Chloropropane	ug/L	0.8	0.78	0.71	98	89	70-130	9	30	
1,2-Dichloroethane-d4 (S)	%				97	102	77-125	5		
Toluene-d8 (S)	%				116	116	80-121	0		
Bromofluorobenzene (S)	%				107	110	80-129	3		

MATRIX SPIKE SAMPLE: 2627343 Original: J1801998002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Ethylene Dibromide (EDB)	ug/L	0.02	0.8	0.60	73	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	0.8	0.69	86	70-130	
1,2-Dichloroethane-d4 (S)	%	101			107	77-125	
Toluene-d8 (S)	%	113			114	80-121	
Bromofluorobenzene (S)	%	110			116	80-129	

QC Batch: WCAj/1362 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Prepared:

Associated Lab Samples: J1801998021, J1801998022, J1801998023, J1801998024, J1801998025, J1801998026, J1801998028, J1801998029,

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

METHOD BLANK: 2627401

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
Nitrate + Nitrite	mg/L	0.050	0.050	U

LABORATORY CONTROL SAMPLE & LCSD: 2627402 2627403

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY										
Chloride	mg/L	20	22	22	109	110	90-110	1	10	
Nitrate	mg/L	2	2.1	2.1	105	107	90-110	2	10	
Nitrate + Nitrite	mg/L		4.3	4.3				2	10	

MATRIX SPIKE SAMPLE: 2635759 Original: J1801998022

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY							
Chloride	mg/L	0	20	57	286	90-110	
Nitrate	mg/L	4.7	2	7.3	130	90-110	
Nitrate + Nitrite	mg/L			10			

MATRIX SPIKE SAMPLE: 2635760 Original: J1801998035

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY							
Chloride	mg/L	4.5	20	23	95	90-110	
Nitrate	mg/L	0	2	2.3	115	90-110	
Nitrate + Nitrite	mg/L			4.7			

QC Batch: WCAj/1366 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: J1801998021, J1801998022, J1801998023, J1801998024, J1801998025, J1801998026, J1801998028, J1801998029,

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

METHOD BLANK: 2627917

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

LABORATORY CONTROL SAMPLE: 2627918

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	300	290	98	75-125	

SAMPLE DUPLICATE: 2627919 Original: J1801998021

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	300	290	2	5	

SAMPLE DUPLICATE: 2627920 Original: J1802081001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	480	480	0	5	

QC Batch: DGMj/1186 Analysis Method: SW-846 6020

QC Batch Method: SW-846 3010A Prepared: 02/23/2018 03:30

Associated Lab Samples: J1801998001, J1801998002, J1801998003, J1801998004, J1801998005, J1801998006, J1801998007, J1801998008,

METHOD BLANK: 2628658

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Selenium	ug/L	0.58	0.58	U
Antimony	ug/L	0.11	0.11	U
Thallium	ug/L	0.057	0.057	U

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 2628659

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Selenium	ug/L	100	100	100	80-120	
Antimony	ug/L	100	100	102	80-120	
Thallium	ug/L	100	99	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2628660 2628661 Original: J1801998001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Selenium	ug/L	0.084	100	98	98	98	98	75-125	0	20	
Antimony	ug/L	0.032	100	98	99	98	99	75-125	1	20	
Thallium	ug/L	0.0048	100	95	100	95	101	75-125	6	20	

QC Batch: DGMj/1187 Analysis Method: SW-846 6020

QC Batch Method: SW-846 3010A Prepared: 02/23/2018 03:30

Associated Lab Samples: J1801998032, J1801998033, J1801998034, J1801998035, J1801998036, J1801998037, J1801998038

METHOD BLANK: 2628670

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Selenium	ug/L	0.58	0.58	U
Antimony	ug/L	0.11	0.11	U
Thallium	ug/L	0.057	0.057	U

LABORATORY CONTROL SAMPLE: 2628671

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Selenium	ug/L	100	99	99	80-120	
Antimony	ug/L	100	99	99	80-120	
Thallium	ug/L	100	99	99	80-120	

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2628672 2628673 Original: J1801998032

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Selenium	ug/L	1.7	100	100	97	101	95	75-125	6	20	
Antimony	ug/L	0.62	100	100	100	103	101	75-125	2	20	
Thallium	ug/L	0.028	100	110	100	114	102	75-125	11	20	

QC Batch: MICj/1162 Analysis Method: SM 9222D
QC Batch Method: SM 9222D Prepared:
Associated Lab Samples: J1801998021, J1801998022, J1801998023, J1801998024, J1801998025, J1801998026

METHOD BLANK: 2628754

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

METHOD BLANK: 2628755

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

QC Batch: WCAj/1373 Analysis Method: SM 5210B
QC Batch Method: SM 5210B Prepared:
Associated Lab Samples: J1801998021, J1801998022, J1801998023, J1801998024, J1801998025, J1801998026

METHOD BLANK: 2628928

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

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 2628929

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Biochemical Oxygen Demand	mg/L	200	210	104	84.6-115.4	

SAMPLE DUPLICATE: 2628930 Original: J1801998025

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Biochemical Oxygen Demand	mg/L	3.6	3.9	7	20	

QC Batch: WCAj/1377 Analysis Method: SM 2540D

QC Batch Method: SM 2540D Prepared:

Associated Lab Samples: J1801998021, J1801998022, J1801998023, J1801998024, J1801998025, J1801998026

METHOD BLANK: 2629653

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

LABORATORY CONTROL SAMPLE: 2629654

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	100	77	77	75-125	

SAMPLE DUPLICATE: 2629655 Original: J1802048001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	240	250	3	10	

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

QC Batch:	MSVj/1310	Analysis Method:	SW-846 8260B
QC Batch Method:	SW-846 5030B	Prepared:	02/23/2018 08:00

Associated Lab Samples: J1801998021, J1801998022, J1801998023, J1801998024, J1801998025

METHOD BLANK: 2629893

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	0.29	0.29	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	0.67	0.67	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	0.66	0.66	U
Trichloroethene	ug/L	0.29	0.29	U
Bromodichloromethane	ug/L	0.46	0.46	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	0.21	0.21	U
1,1,2-Trichloroethane	ug/L	0.30	0.30	U
Toluene	ug/L	0.23	0.23	U
2-Hexanone	ug/L	0.71	0.71	U
Dibromochloromethane	ug/L	0.33	0.33	U
Ethylene Dibromide (EDB)	ug/L	0.20	0.20	U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36	U
1,1,1,2-Tetrachloroethane	ug/L	0.54	0.54	U
Chlorobenzene	ug/L	0.21	0.21	U
Ethylbenzene	ug/L	0.24	0.24	U
Bromoform	ug/L	0.44	0.44	U

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

METHOD BLANK: 2629893

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
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	0.91	0.91	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	3.1	3.1	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)	%	104	70-128	
Toluene-d8 (S)	%	100	77-119	
Bromofluorobenzene (S)	%	114	86-123	

LABORATORY CONTROL SAMPLE & LCSD: 2629894 2629895

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Chloromethane	ug/L	20	15	23	75	117		44		
Vinyl Chloride	ug/L	20	17	24	85	120	70-130	34	20	
Bromomethane	ug/L	20	21	29	103	146		34		
Chloroethane	ug/L	20	17	23	84	116		33		
Trichlorofluoromethane	ug/L	20	18	22	89	112		22		
Acetone	ug/L	20	15	22	77	109		35		
1,1-Dichloroethylene	ug/L	20	18	24	89	118	70-130	28	20	
Iodomethane (Methyl Iodide)	ug/L	20	18	25	92	124		30		
Acrylonitrile	ug/L	20	18	24	91	121		29		
Methylene Chloride	ug/L	20	14	25	71	124		54		
Carbon Disulfide	ug/L	20	18	25	90	127		34		
trans-1,2-Dichloroethylene	ug/L	20	19	24	93	119		25		
1,1-Dichloroethane	ug/L	20	17	24	85	118		32		
Vinyl Acetate	ug/L	20	22	30	108	148		32		
2-Butanone (MEK)	ug/L	20	16	23	81	117		36		
cis-1,2-Dichloroethylene	ug/L	20	18	23	90	115	70-130	25	20	
Bromochloromethane	ug/L	20	18	22	89	112		23		
Chloroform	ug/L	20	18	23	92	115	70-130	22	20	
1,2-Dichloroethane	ug/L	20	18	22	91	112		21		
1,1,1-Trichloroethane	ug/L	20	17	24	86	119		32		
Carbon Tetrachloride	ug/L	20	19	25	94	125		28		
Benzene	ug/L	20	18	23	91	117	70-130	25	20	
Dibromomethane	ug/L	20	18	22	91	112		20		
1,2-Dichloropropane	ug/L	20	18	22	89	111		22		
Trichloroethene	ug/L	20	18	22	90	112	70-130	22	20	

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE & LCSD: 2629894 2629895

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Bromodichloromethane	ug/L	20	18	23	90	114		24		
cis-1,3-Dichloropropene	ug/L	20	19	25	93	123		28		
4-Methyl-2-pentanone (MIBK)	ug/L	20	18	22	88	111		23		
trans-1,3-Dichloropropylene	ug/L	20	16	21	79	107		30		
1,1,2-Trichloroethane	ug/L	20	18	22	90	109		20		
Toluene	ug/L	20	18	23	91	113	70-130	21	20	
2-Hexanone	ug/L	20	16	21	82	107		26		
Dibromochloromethane	ug/L	20	18	23	91	113		21		
Ethylene Dibromide (EDB)	ug/L	20	18	22	92	112		20		
Tetrachloroethylene (PCE)	ug/L	20	15	15	75	77	70-130	3	20	
1,1,1,2-Tetrachloroethane	ug/L	20	18	23	91	113		22		
Chlorobenzene	ug/L	20	18	23	92	116	70-130	22	20	
Ethylbenzene	ug/L	20	19	24	95	118	70-130	21	20	
Bromoform	ug/L	20	18	22	90	112		22		
Styrene	ug/L	20	20	24	98	122		22		
1,1,2,2-Tetrachloroethane	ug/L	20	19	24	96	119		22		
1,2,3-Trichloropropane	ug/L	20	18	22	88	110		23		
1,4-Dichlorobenzene	ug/L	20	18	23	92	115		21		
1,2-Dichlorobenzene	ug/L	20	19	23	96	117	70-130	20	20	
1,2-Dibromo-3-Chloropropane	ug/L	20	18	23	89	113		24		
Xylene (Total)	ug/L	60	57	72	95	119	70-130	22	20	
1,2-Dichloroethane-d4 (S)	%				101	97	70-128	4		
Toluene-d8 (S)	%				99	98	77-119	1		
Bromofluorobenzene (S)	%				100	97	86-123	3		

MATRIX SPIKE SAMPLE: 2629896 Original: J1801998022

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Chloromethane	ug/L	0	20	30	148		
Vinyl Chloride	ug/L	0	20	24	122	70-130	
Bromomethane	ug/L	0	20	25	124		
Chloroethane	ug/L	0	20	23	115		
Trichlorofluoromethane	ug/L	0	20	23	114		
Acetone	ug/L	0	20	23	116		
1,1-Dichloroethylene	ug/L	0	20	22	108	70-130	
Iodomethane (Methyl Iodide)	ug/L	0	20	21	104		
Acrylonitrile	ug/L	0	20	21	107		
Methylene Chloride	ug/L	0	20	19	96		

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 2629896 Original: J1801998022

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Carbon Disulfide	ug/L	0	20	20	101		
trans-1,2-Dichloroethylene	ug/L	0	20	22	108		
1,1-Dichloroethane	ug/L	0	20	23	114		
Vinyl Acetate	ug/L	0	20	0.19	0		
2-Butanone (MEK)	ug/L	0	20	11	57		
cis-1,2-Dichloroethylene	ug/L	0	20	18	92	70-130	
Bromochloromethane	ug/L	0	20	22	111		
Chloroform	ug/L	0	20	22	110	70-130	
1,2-Dichloroethane	ug/L	0	20	22	109		
1,1,1-Trichloroethane	ug/L	0	20	22	111		
Carbon Tetrachloride	ug/L	0	20	23	115		
Benzene	ug/L	0	20	22	111	70-130	
Dibromomethane	ug/L	0	20	22	108		
1,2-Dichloropropane	ug/L	0	20	21	107		
Trichloroethene	ug/L	0	20	21	106	70-130	
Bromodichloromethane	ug/L	0	20	22	111		
cis-1,3-Dichloropropene	ug/L	0	20	17	83		
4-Methyl-2-pentanone (MIBK)	ug/L	0	20	16	78		
trans-1,3-Dichloropropylene	ug/L	0	20	13	65		
1,1,2-Trichloroethane	ug/L	0	20	21	106		
Toluene	ug/L	0	20	21	106	70-130	
2-Hexanone	ug/L	0	20	9.5	48		
Dibromochloromethane	ug/L	0	20	22	108		
Ethylene Dibromide (EDB)	ug/L	0	20	21	104		
Tetrachloroethylene (PCE)	ug/L	0	20	21	107	70-130	
1,1,1,2-Tetrachloroethane	ug/L	0	20	21	106		
Chlorobenzene	ug/L	0	20	21	105	70-130	
Ethylbenzene	ug/L	0	20	21	106	70-130	
Bromoform	ug/L	0	20	20	101		
Styrene	ug/L	0	20	20	100		
1,1,2,2-Tetrachloroethane	ug/L	0	20	20	102		
1,2,3-Trichloropropane	ug/L	0	20	18	91		
1,4-Dichlorobenzene	ug/L	0	20	20	100		
1,2-Dichlorobenzene	ug/L	0	20	21	107	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	20	19	94		
Xylene (Total)	ug/L	0	60	65	108	70-130	
1,2-Dichloroethane-d4 (S)	%	104			99	70-128	
Toluene-d8 (S)	%	97			99	77-119	
Bromofluorobenzene (S)	%	117			100	86-123	

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

QC Batch: DGMj/1196 Analysis Method: SW-846 7470A
QC Batch Method: SW-846 7470A Prepared: 02/26/2018 10:15
Associated Lab Samples: J1801998001, J1801998002, J1801998003, J1801998004, J1801998005, J1801998006, J1801998007, J1801998008,

METHOD BLANK: 2630063

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

LABORATORY CONTROL SAMPLE: 2630064

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Mercury	ug/L	2	2.0	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630065 2630066 Original: J1801998001

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	1.9	99	93	80-120	6	20	

QC Batch: DGMj/1197 Analysis Method: SW-846 7470A
QC Batch Method: SW-846 7470A Prepared: 02/26/2018 10:15
Associated Lab Samples: J1801998025, J1801998026, J1801998032, J1801998033, J1801998034, J1801998035, J1801998036, J1801998037,

METHOD BLANK: 2630074

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

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 2630075

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Mercury	ug/L	2	1.8	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630076 2630077 Original: J1801998025

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Mercury	ug/L	0.087	2	2.1	2.0	99	97	80-120	2	20	

QC Batch: MSVj/1312 Analysis Method: SW-846 8260B (SIM)

QC Batch Method: SW-846 5030B Prepared: 02/23/2018 08:00

Associated Lab Samples: J1801998021, J1801998022, J1801998023, J1801998024, J1801998025

METHOD BLANK: 2630133

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)	%	102	77-125	
Toluene-d8 (S)	%	117	80-121	
Bromofluorobenzene (S)	%	114	80-129	

LABORATORY CONTROL SAMPLE & LCSD: 2630134 2630135

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	0.64	0.64	80	80	70-130	0	30	
1,2-Dibromo-3-Chloropropane	ug/L	0.8	0.78	0.78	98	98	70-130	0	30	
1,2-Dichloroethane-d4 (S)	%				105	105	77-125	0		
Toluene-d8 (S)	%				114	114	80-121	0		
Bromofluorobenzene (S)	%				112	112	80-129	0		

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

QC Batch: DGMj/1201 Analysis Method: SW-846 6010

QC Batch Method: SW-846 3010A Prepared: 02/27/2018 03:30

Associated Lab Samples: J1801998001, J1801998002, J1801998003, J1801998004, J1801998005, J1801998006, J1801998007, J1801998008

METHOD BLANK: 2630994

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Silver	ug/L	9.6	9.6	U
Arsenic	ug/L	9.0	9.0	U
Barium	ug/L	0.83	0.83	U
Beryllium	ug/L	0.40	0.40	U
Calcium	mg/L	0.082	0.082	U
Cadmium	ug/L	0.45	0.45	U
Cobalt	ug/L	1.9	1.9	U
Chromium	ug/L	1.6	1.6	U
Copper	ug/L	3.2	3.2	U
Iron	ug/L	100	100	U
Magnesium	mg/L	0.085	0.085	U
Sodium	mg/L	0.34	0.34	U
Nickel	ug/L	6.0	6.0	U
Lead	ug/L	2.9	2.9	U
Vanadium	ug/L	0.55	0.55	U
Zinc	ug/L	33	33	U

LABORATORY CONTROL SAMPLE: 2630995

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Silver	ug/L	400	400	100	80-120	
Arsenic	ug/L	400	400	100	80-120	
Barium	ug/L	400	410	102	80-120	
Beryllium	ug/L	400	410	103	80-120	
Calcium	mg/L	25	24	95	80-120	
Cadmium	ug/L	400	400	101	80-120	
Cobalt	ug/L	400	370	93	80-120	
Chromium	ug/L	400	410	103	80-120	
Copper	ug/L	400	380	94	80-120	
Iron	ug/L	25000	25000	99	80-120	
Magnesium	mg/L	25	27	104	80-120	
Sodium	mg/L	50	50	99	80-120	
Nickel	ug/L	400	360	89	80-120	
Lead	ug/L	400	360	91	80-120	

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 2630995

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vanadium	ug/L	400	420	104	80-120	
Zinc	ug/L	400	380	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2630996 2630997 Original: J1802143001

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	400	400	100	100	75-125	0	20	
Arsenic	ug/L	0	400	400	400	100	99	75-125	1	20	
Barium	ug/L	0	400	420	420	105	106	75-125	1	20	
Beryllium	ug/L	0	400	430	430	107	107	75-125	0	20	
Calcium	mg/L	0	25	110	110	431	434	75-125	1	20	
Cadmium	ug/L	0	400	400	400	101	101	75-125	0	20	
Cobalt	ug/L	0	400	370	370	93	94	75-125	1	20	
Chromium	ug/L	0	400	420	410	104	103	75-125	1	20	
Copper	ug/L	0	400	380	380	94	94	75-125	0	20	
Iron	ug/L	0	25000	26000	27000	103	105	75-125	1	20	
Magnesium	mg/L	0	25	41	41	160	162	75-125	1	20	
Sodium	mg/L	0	50	130	130	254	256	75-125	1	20	
Nickel	ug/L	0	400	360	360	90	90	75-125	1	20	
Lead	ug/L	0	400	360	360	90	90	75-125	1	20	
Vanadium	ug/L	0	400	430	420	107	106	75-125	0	20	
Zinc	ug/L	0	400	390	390	98	98	75-125	0	20	

QC Batch: DGMj/1202 Analysis Method: SW-846 6010

QC Batch Method: SW-846 3010A Prepared: 02/27/2018 03:30

Associated Lab Samples: J1801998009, J1801998010, J1801998011, J1801998013, J1801998014, J1801998015, J1801998016, J1801998017,

METHOD BLANK: 2630998

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Silver	ug/L	9.6	9.6	U
Arsenic	ug/L	9.0	9.0	U
Barium	ug/L	0.83	0.83	U
Beryllium	ug/L	0.40	0.40	U
Calcium	mg/L	0.082	0.082	U

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

METHOD BLANK: 2630998

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cadmium	ug/L	0.45	0.45	U
Cobalt	ug/L	1.9	1.9	U
Chromium	ug/L	1.6	1.6	U
Copper	ug/L	3.2	3.2	U
Iron	ug/L	100	100	U
Magnesium	mg/L	0.085	0.085	U
Sodium	mg/L	0.34	0.34	U
Nickel	ug/L	6.0	6.0	U
Lead	ug/L	2.9	2.9	U
Vanadium	ug/L	0.55	0.55	U
Zinc	ug/L	33	33	U

LABORATORY CONTROL SAMPLE: 2630999

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Silver	ug/L	400	410	102	80-120	
Arsenic	ug/L	400	410	104	80-120	
Barium	ug/L	400	410	103	80-120	
Beryllium	ug/L	400	420	106	80-120	
Calcium	mg/L	25	25	97	80-120	
Cadmium	ug/L	400	410	103	80-120	
Cobalt	ug/L	400	380	96	80-120	
Chromium	ug/L	400	420	106	80-120	
Copper	ug/L	400	380	96	80-120	
Iron	ug/L	25000	25000	100	80-120	
Magnesium	mg/L	25	27	107	80-120	
Sodium	mg/L	50	50	100	80-120	
Nickel	ug/L	400	370	92	80-120	
Lead	ug/L	400	380	94	80-120	
Vanadium	ug/L	400	420	106	80-120	
Zinc	ug/L	400	390	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631000 2631001 Original: J1801998009

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

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631000 2631001 Original: J1801998009

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Silver	ug/L	0.31	400	410	390	102	98	75-125	4	20	
Arsenic	ug/L	1.9	400	420	410	105	104	75-125	1	20	
Barium	ug/L	5.5	400	420	410	104	101	75-125	3	20	
Beryllium	ug/L	0.06	400	430	410	107	103	75-125	4	20	
Calcium	mg/L	4	25	29	28	99	95	75-125	3	20	
Cadmium	ug/L	0	400	420	410	106	102	75-125	4	20	
Cobalt	ug/L	0	400	390	380	97	95	75-125	2	20	
Chromium	ug/L	1.9	400	430	410	107	102	75-125	4	20	
Copper	ug/L	0.96	400	390	380	98	95	75-125	3	20	
Iron	ug/L	55	25000	26000	25000	101	98	75-125	3	20	
Magnesium	mg/L	0.43	25	28	27	109	106	75-125	3	20	
Sodium	mg/L	10	50	60	59	99	96	75-125	2	20	
Nickel	ug/L	0	400	370	360	93	91	75-125	2	20	
Lead	ug/L	1.4	400	370	360	94	91	75-125	3	20	
Vanadium	ug/L	6.7	400	430	420	107	103	75-125	4	20	
Zinc	ug/L	6.8	400	400	380	100	96	75-125	4	20	

QC Batch: WCAj/1388 Analysis Method: EPA 410.4

QC Batch Method: EPA 410.4 Prepared:

Associated Lab Samples: J1801998021, J1801998022, J1801998023, J1801998024, J1801998025, J1801998026

METHOD BLANK: 2631044

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

LABORATORY CONTROL SAMPLE: 2631045

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Chemical Oxygen Demand	mg/L	500	500	100	90-110	

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631046 2631047 Original: J1801998026

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	39	500	550	500	102	93	90-110	9	10	

QC Batch: MSVj/1320 Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B Prepared: 02/26/2018 08:09

Associated Lab Samples: J1801998026, J1801998027, J1801998032, J1801998033, J1801998034, J1801998035, J1801998036, J1801998037,

METHOD BLANK: 2631120

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	0.29	0.29	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	0.67	0.67	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	0.66	0.66	U
Trichloroethene	ug/L	0.29	0.29	U
Bromodichloromethane	ug/L	0.46	0.46	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	0.21	0.21	U
1,1,2-Trichloroethane	ug/L	0.30	0.30	U

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

METHOD BLANK: 2631120

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Toluene	ug/L	0.23	0.23	U
2-Hexanone	ug/L	0.71	0.71	U
Dibromochloromethane	ug/L	0.33	0.33	U
Ethylene Dibromide (EDB)	ug/L	0.20	0.20	U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36	U
1,1,1,2-Tetrachloroethane	ug/L	0.54	0.54	U
Chlorobenzene	ug/L	0.21	0.21	U
Ethylbenzene	ug/L	0.24	0.24	U
Bromoform	ug/L	0.44	0.44	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	0.91	0.91	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	3.1	3.1	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)	%	104	70-128	
Toluene-d8 (S)	%	100	77-119	
Bromofluorobenzene (S)	%	119	86-123	

LABORATORY CONTROL SAMPLE & LCSD: 2631121 2631122

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Chloromethane	ug/L	20	27	28	135	141		4		
Vinyl Chloride	ug/L	20	23	23	117	117	70-130	0	20	
Bromomethane	ug/L	20	25	25	124	126		2		
Chloroethane	ug/L	20	24	22	118	109		7		
Trichlorofluoromethane	ug/L	20	21	21	106	107		1		
Acetone	ug/L	20	21	20	105	98		7		
1,1-Dichloroethylene	ug/L	20	21	21	106	105	70-130	2	20	
Iodomethane (Methyl Iodide)	ug/L	20	23	22	115	111		4		
Acrylonitrile	ug/L	20	25	21	127	106		18		
Methylene Chloride	ug/L	20	25	23	127	115		10		
Carbon Disulfide	ug/L	20	21	20	107	99		8		
trans-1,2-Dichloroethylene	ug/L	20	23	21	113	104		9		
1,1-Dichloroethane	ug/L	20	24	21	121	106		13		
Vinyl Acetate	ug/L	20	25	10	124	50		85		
2-Butanone (MEK)	ug/L	20	23	18	114	88		26		
cis-1,2-Dichloroethylene	ug/L	20	23	19	113	97	70-130	15	20	

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE & LCSD: 2631121 2631122

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Bromochloromethane	ug/L	20	23	21	117	103		13		
Chloroform	ug/L	20	23	21	116	104	70-130	11	20	
1,2-Dichloroethane	ug/L	20	24	21	122	105		15		
1,1,1-Trichloroethane	ug/L	20	21	21	106	104		2		
Carbon Tetrachloride	ug/L	20	21	21	107	106		1		
Benzene	ug/L	20	22	21	111	104	70-130	7	20	
Dibromomethane	ug/L	20	24	21	120	103		15		
1,2-Dichloropropane	ug/L	20	23	20	114	102		11		
Trichloroethene	ug/L	20	21	21	104	103	70-130	1	20	
Bromodichloromethane	ug/L	20	24	21	119	104		14		
cis-1,3-Dichloropropene	ug/L	20	24	18	121	88		32		
4-Methyl-2-pentanone (MIBK)	ug/L	20	23	19	114	94		20		
trans-1,3-Dichloropropylene	ug/L	20	21	14	105	73		37		
1,1,2-Trichloroethane	ug/L	20	24	20	118	101		16		
Toluene	ug/L	20	20	20	102	101	70-130	0	20	
2-Hexanone	ug/L	20	21	17	105	85		21		
Dibromochloromethane	ug/L	20	23	20	115	102		12		
Ethylene Dibromide (EDB)	ug/L	20	24	20	118	99		18		
Tetrachloroethylene (PCE)	ug/L	20	18	22	90	108	70-130	19	20	
1,1,1,2-Tetrachloroethane	ug/L	20	22	21	111	103		8		
Chlorobenzene	ug/L	20	21	20	104	100	70-130	4	20	
Ethylbenzene	ug/L	20	21	20	103	102	70-130	1	20	
Bromoform	ug/L	20	23	20	113	100		12		
Styrene	ug/L	20	22	21	110	106		4		
1,1,2,2-Tetrachloroethane	ug/L	20	23	19	117	94		21		
1,2,3-Trichloropropane	ug/L	20	22	18	112	91		21		
1,4-Dichlorobenzene	ug/L	20	20	19	101	96		5		
1,2-Dichlorobenzene	ug/L	20	22	21	108	104	70-130	3	20	
1,2-Dibromo-3-Chloropropane	ug/L	20	22	19	110	94		16		
Xylene (Total)	ug/L	60	63	62	105	104	70-130	1	20	
1,2-Dichloroethane-d4 (S)	%				98	99	70-128	1		
Toluene-d8 (S)	%				98	100	77-119	2		
Bromofluorobenzene (S)	%				98	102	86-123	3		

MATRIX SPIKE SAMPLE: 2631123 Original: T1803098001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Chloromethane	ug/L	0	20	28	139		
Vinyl Chloride	ug/L	0	20	23	117	70-130	

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 2631123 Original: T1803098001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromomethane	ug/L	0	20	26	131		
Chloroethane	ug/L	0	20	22	108		
Trichlorofluoromethane	ug/L	0	20	22	109		
Acetone	ug/L	0	20	26	132		
1,1-Dichloroethylene	ug/L	0	20	21	103	70-130	
Iodomethane (Methyl Iodide)	ug/L	0	20	23	116		
Acrylonitrile	ug/L	0	20	20	102		
Methylene Chloride	ug/L	0	20	18	92		
Carbon Disulfide	ug/L	0	20	20	102		
trans-1,2-Dichloroethylene	ug/L	0	20	21	104		
1,1-Dichloroethane	ug/L	0	20	21	104		
Vinyl Acetate	ug/L	0	20	0.19	0		
2-Butanone (MEK)	ug/L	0	20	13	66		
cis-1,2-Dichloroethylene	ug/L	0	20	18	88	70-130	
Bromochloromethane	ug/L	0	20	21	106		
Chloroform	ug/L	0	20	21	106	70-130	
1,2-Dichloroethane	ug/L	0	20	21	104		
1,1,1-Trichloroethane	ug/L	0	20	21	104		
Carbon Tetrachloride	ug/L	0	20	22	109		
Benzene	ug/L	0	20	21	107	70-130	
Dibromomethane	ug/L	0	20	20	102		
1,2-Dichloropropane	ug/L	0	20	20	102		
Trichloroethene	ug/L	0	20	20	98	70-130	
Bromodichloromethane	ug/L	0	20	21	105		
cis-1,3-Dichloropropene	ug/L	0	20	16	82		
4-Methyl-2-pentanone (MIBK)	ug/L	0	20	19	95		
trans-1,3-Dichloropropylene	ug/L	0	20	13	65		
1,1,2-Trichloroethane	ug/L	0	20	20	101		
Toluene	ug/L	0	20	20	98	70-130	
2-Hexanone	ug/L	0	20	15	75		
Dibromochloromethane	ug/L	0	20	20	102		
Ethylene Dibromide (EDB)	ug/L	0	20	20	101		
Tetrachloroethylene (PCE)	ug/L	0	20	14	69	70-130	
1,1,1,2-Tetrachloroethane	ug/L	0	20	20	102		
Chlorobenzene	ug/L	0	20	20	101	70-130	
Ethylbenzene	ug/L	0	20	20	101	70-130	
Bromoform	ug/L	0	20	20	99		
Styrene	ug/L	0	20	21	103		
1,1,2,2-Tetrachloroethane	ug/L	0	20	21	104		
1,2,3-Trichloropropane	ug/L	0	20	18	89		
1,4-Dichlorobenzene	ug/L	0	20	19	96		
1,2-Dichlorobenzene	ug/L	0	20	21	105	70-130	

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 2631123 Original: T1803098001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-Chloropropane	ug/L	0	20	20	100		
Xylene (Total)	ug/L	0	60	62	103	70-130	
1,2-Dichloroethane-d4 (S)	%	100			98	70-128	
Toluene-d8 (S)	%	98			98	77-119	
Bromofluorobenzene (S)	%	114			99	86-123	

QC Batch: MSVj/1324 Analysis Method: SW-846 8260B (SIM)

QC Batch Method: SW-846 5030B Prepared: 02/26/2018 08:09

Associated Lab Samples: J1801998026, J1801998027, J1801998032, J1801998033, J1801998034, J1801998035, J1801998036, J1801998037,

METHOD BLANK: 2631136

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)	%	102	77-125	
Toluene-d8 (S)	%	117	80-121	
Bromofluorobenzene (S)	%	119	80-129	

LABORATORY CONTROL SAMPLE & LCSD: 2631137 2631138

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	0.66	0.59	83	74	70-130	11	30	
1,2-Dibromo-3-Chloropropane	ug/L	0.8	0.72	0.77	90	96	70-130	7	30	
1,2-Dichloroethane-d4 (S)	%				103	98	77-125	5		
Toluene-d8 (S)	%				117	115	80-121	2		
Bromofluorobenzene (S)	%				116	115	80-129	1		

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 2631139 Original: J1802142002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Ethylene Dibromide (EDB)	ug/L	0	0.8	0.60	75	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	0.8	0.65	81	70-130	
1,2-Dichloroethane-d4 (S)	%	104			105	77-125	
Toluene-d8 (S)	%	114			114	80-121	
Bromofluorobenzene (S)	%	115			116	80-129	

QC Batch: WCAg/1439 Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1 Prepared:

Associated Lab Samples: J1801998001, J1801998002

METHOD BLANK: 2631840

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	0.0080	0.0080	U

LABORATORY CONTROL SAMPLE: 2631841

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.51	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2631844 2631845 Original: A1801379001

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	0.01	0.4	0.39	0.38	95	93	90-110	2	10	

QC Batch: WCAg/1441 Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1 Prepared:

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

Associated Lab Samples: J1801998003, J1801998004, J1801998005, J1801998006, J1801998007, J1801998008, J1801998009, J1801998010,

METHOD BLANK: 2632358

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	0.0080	0.0080	U

LABORATORY CONTROL SAMPLE: 2632359

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: 2632362 2632363 Original: G1801415003

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	3.5	4	7.5	7.6	100	103	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2632364 2632365 Original: J1801998004

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	0.18	0.4	0.58	0.58	99	98	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2632366 2632367 Original: T1802728001

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	0.19	0.4	0.60	0.60	101	101	90-110	0	10	

QC Batch: DGMj/1217 Analysis Method: SW-846 6010

QC Batch Method: SW-846 3010A Prepared: 03/01/2018 03:30

Associated Lab Samples: J1801998021, J1801998022, J1801998023, J1801998024, J1801998025, J1801998026, J1801998028, J1801998029,

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

METHOD BLANK: 2633463

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Silver	ug/L	9.6	9.6	U
Arsenic	ug/L	9.0	9.0	U
Barium	ug/L	0.83	0.83	U
Beryllium	ug/L	0.40	0.40	U
Calcium	mg/L	0.082	0.082	U
Cadmium	ug/L	0.45	0.45	U
Cobalt	ug/L	1.9	1.9	U
Chromium	ug/L	1.6	1.6	U
Copper	ug/L	3.2	3.2	U
Iron	ug/L	100	100	U
Magnesium	mg/L	0.085	0.085	U
Sodium	mg/L	0.34	0.34	U
Nickel	ug/L	6.0	6.0	U
Lead	ug/L	2.9	2.9	U
Vanadium	ug/L	0.55	0.55	U
Zinc	ug/L	33	33	U

LABORATORY CONTROL SAMPLE: 2633464

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Silver	ug/L	400	390	98	80-120	
Arsenic	ug/L	400	390	97	80-120	
Barium	ug/L	400	410	103	80-120	
Beryllium	ug/L	400	410	102	80-120	
Calcium	mg/L	25	24	94	80-120	
Cadmium	ug/L	400	390	97	80-120	
Cobalt	ug/L	400	380	95	80-120	
Chromium	ug/L	400	400	100	80-120	
Copper	ug/L	400	380	96	80-120	
Iron	ug/L	25000	25000	98	80-120	
Magnesium	mg/L	25	26	102	80-120	
Sodium	mg/L	50	49	98	80-120	
Nickel	ug/L	400	350	89	80-120	
Lead	ug/L	400	360	89	80-120	
Vanadium	ug/L	400	420	105	80-120	
Zinc	ug/L	400	370	92	80-120	

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2633465 2633466 Original: J1801998021

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Silver	ug/L	0.69	400	390	380	96	96	75-125	0	20	
Arsenic	ug/L	0	400	380	380	95	94	75-125	1	20	
Barium	ug/L	36	400	430	430	99	100	75-125	0	20	
Beryllium	ug/L	0.058	400	400	410	101	102	75-125	1	20	
Calcium	mg/L	39	25	64	63	98	97	75-125	1	20	
Cadmium	ug/L	0.21	400	380	370	95	94	75-125	1	20	
Cobalt	ug/L	1.9	400	380	380	95	94	75-125	1	20	
Chromium	ug/L	4.6	400	390	390	97	97	75-125	0	20	
Copper	ug/L	3.4	400	390	380	96	95	75-125	1	20	
Iron	ug/L	1300	25000	26000	26000	97	97	75-125	1	20	
Magnesium	mg/L	5	25	31	31	102	101	75-125	1	20	
Sodium	mg/L	24	50	72	73	96	96	75-125	0	20	
Nickel	ug/L	4.5	400	360	360	89	89	75-125	0	20	
Lead	ug/L	4.4	400	350	340	86	85	75-125	1	20	
Vanadium	ug/L	6.8	400	420	420	103	102	75-125	1	20	
Zinc	ug/L	16	400	380	370	94	94	75-125	1	20	

QC Batch: WCAg/1453 Analysis Method: SM 5310B

QC Batch Method: SM 5310B Prepared:

Associated Lab Samples: J1801998021, J1801998022, J1801998023, J1801998024, J1801998025, J1801998026

METHOD BLANK: 2634398

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

METHOD BLANK: 2634707

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

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 2634400

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Organic Carbon	mg/L	10	10	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2634401 2634402 Original: J1801998021

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	25	26	52	50	108	99	90-110	5	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2634403 2634404 Original: M1800849002

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	5.7	26	33	32	105	104	90-110	1	10	

QC Batch: WCAg/1470 Analysis Method: SM 10200 H

QC Batch Method: SM 10200 H Prepared:

Associated Lab Samples: J1801998021, J1801998022, J1801998023, J1801998024, J1801998025, J1801998026

METHOD BLANK: 2635097

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

METHOD BLANK: 2635099

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

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

SAMPLE DUPLICATE: 2635095 Original: J1802082001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Chlorophyll A	mg/m3	4.0	5.3	28	35	

SAMPLE DUPLICATE: 2635098 Original: J1801998021

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Chlorophyll A	mg/m3	7.1	7.1	0	35	

QC Batch: WCAg/1480 Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1 Prepared:

Associated Lab Samples: J1801998021, J1801998022, J1801998023, J1801998024, J1801998025, J1801998026, J1801998028, J1801998029,

METHOD BLANK: 2636743

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	0.0080	0.0080	U

LABORATORY CONTROL SAMPLE: 2636744

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.54	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2636745 2636746 Original: J1801998022

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	1.7	2	3.7	3.6	102	97	90-110	3	10	

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2636761 2636762 Original: J1801998033

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	0.87	0.8	1.7	1.7	99	100	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2636763 2636764 Original: G1801512005

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	40	40	81	79	102	98	90-110	2	10	

QC Batch: WCAg/1491 Analysis Method: EPA 351.2
QC Batch Method: Copper Sulfate Digestion Prepared: 03/01/2018 16:30
Associated Lab Samples: J1801998021, J1801998022, J1801998023, J1801998024, J1801998025, J1801998026

METHOD BLANK: 2637782

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

METHOD BLANK: 2637783

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

METHOD BLANK: 2638108

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

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

METHOD BLANK: 2638109

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

LABORATORY CONTROL SAMPLE: 2637784

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Kjeldahl Nitrogen	mg/L	1	0.90	90	90-110	

LABORATORY CONTROL SAMPLE: 2637785

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Phosphorus (as P)	mg/L	1	1.1	105	80-120	

LABORATORY CONTROL SAMPLE: 2638110

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Kjeldahl Nitrogen	mg/L	1	0.92	92	90-110	

LABORATORY CONTROL SAMPLE: 2638111

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Phosphorus (as P)	mg/L	1	0.99	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637786 2637787 Original: G1801530005

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	0.16	1	1.3	1.3	112	112	90-110	0	20	

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637788 2637790 Original: J1801972002

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	0.59	1	1.6	1.5	102	93	90-110	5	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637789 2637791 Original: J1801972002

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	0.28	1	1.3	1.3	100	104	80-120	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637792 2637794 Original: G1801578001

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	0.65	1	1.6	1.5	92	84	90-110	6	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637793 2637795 Original: G1801578001

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	0.94	1	1.9	1.9	99	94	80-120	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637796 2637798 Original: G1801611001

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	8.5	1	10	10	180	155	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637797 2637799 Original: G1801611001

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	2.1	1	3.4	3.4	124	125	80-120	0	20	

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

QC Batch: WCAg/1491 Analysis Method: EPA 365.4

QC Batch Method: Copper Sulfate Digestion Prepared: 03/01/2018 16:30

Associated Lab Samples: J1801998021, J1801998022, J1801998023, J1801998024, J1801998025, J1801998026

METHOD BLANK: 2637782

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

METHOD BLANK: 2637783

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

METHOD BLANK: 2638108

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

METHOD BLANK: 2638109

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

LABORATORY CONTROL SAMPLE: 2637784

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Kjeldahl Nitrogen	mg/L	1	0.90	90	90-110	

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 2637785

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Phosphorus (as P)	mg/L	1	1.1	105	80-120	

LABORATORY CONTROL SAMPLE: 2638110

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Kjeldahl Nitrogen	mg/L	1	0.92	92	90-110	

LABORATORY CONTROL SAMPLE: 2638111

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Phosphorus (as P)	mg/L	1	0.99	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637786 2637787 Original: G1801530005

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	0.16	1	1.3	1.3	112	112	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637788 2637790 Original: J1801972002

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	0.59	1	1.6	1.5	102	93	90-110	5	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637789 2637791 Original: J1801972002

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	0.28	1	1.3	1.3	100	104	80-120	2	20	

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QUALITY CONTROL DATA

Workorder: J1801998 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637792 2637794 Original: G1801578001

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	0.65	1	1.6	1.5	92	84	90-110	6	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637793 2637795 Original: G1801578001

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	0.94	1	1.9	1.9	99	94	80-120	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637796 2637798 Original: G1801611001

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	8.5	1	10	10	180	155	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2637797 2637799 Original: G1801611001

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	2.1	1	3.4	3.4	124	125	80-120	0	20	

QUALITY CONTROL DATA QUALIFIERS

Workorder: J1801998 Trail Ridge Landfill

QUALITY CONTROL 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

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1801998 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1801998001	MWB-3S			SM 2540 C	WCAj/1348
J1801998002	MWB-12S			SM 2540 C	WCAj/1348
J1801998003	MWB-22S			SM 2540 C	WCAj/1348
J1801998004	MWB-13S			SM 2540 C	WCAj/1348
J1801998005	MWB-27S			SM 2540 C	WCAj/1348
J1801998006	MWB-29S			SM 2540 C	WCAj/1348
J1801998007	MWB-2S			SM 2540 C	WCAj/1348
J1801998008	MWB-11S			SM 2540 C	WCAj/1348
J1801998009	MWB-20S			SM 2540 C	WCAj/1348
J1801998010	MWB-21S			SM 2540 C	WCAj/1348
J1801998011	Equipment Blank #1			SM 2540 C	WCAj/1348
J1801998013	MWB-12I			SM 2540 C	WCAj/1348
J1801998014	MWB-13I			SM 2540 C	WCAj/1348
J1801998015	MWB-27I			SM 2540 C	WCAj/1348
J1801998016	MWB-29I			SM 2540 C	WCAj/1348
J1801998017	MWB-2I			SM 2540 C	WCAj/1348
J1801998018	MWB-3I			SM 2540 C	WCAj/1348
J1801998019	MWB-11IR			SM 2540 C	WCAj/1348
J1801998020	Equipment Blank #2			SM 2540 C	WCAj/1348
J1801998001	MWB-3S			EPA 300.0	WCAj/1360
J1801998002	MWB-12S			EPA 300.0	WCAj/1360
J1801998003	MWB-22S			EPA 300.0	WCAj/1360
J1801998004	MWB-13S			EPA 300.0	WCAj/1360
J1801998005	MWB-27S			EPA 300.0	WCAj/1360
J1801998006	MWB-29S			EPA 300.0	WCAj/1360
J1801998007	MWB-2S			EPA 300.0	WCAj/1360
J1801998008	MWB-11S			EPA 300.0	WCAj/1360
J1801998009	MWB-20S			EPA 300.0	WCAj/1360
J1801998010	MWB-21S			EPA 300.0	WCAj/1360
J1801998011	Equipment Blank #1			EPA 300.0	WCAj/1360
J1801998013	MWB-12I			EPA 300.0	WCAj/1360
J1801998014	MWB-13I			EPA 300.0	WCAj/1360
J1801998015	MWB-27I			EPA 300.0	WCAj/1360

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1801998 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1801998016	MWB-29I			EPA 300.0	WCAj/1360
J1801998017	MWB-2I			EPA 300.0	WCAj/1360
J1801998018	MWB-3I			EPA 300.0	WCAj/1360
J1801998019	MWB-11IR			EPA 300.0	WCAj/1360
J1801998020	Equipment Blank #2			EPA 300.0	WCAj/1360
J1801998001	MWB-3S	SW-846 5030B	MSVj/1299	SW-846 8260B	MSVj/1300
J1801998002	MWB-12S	SW-846 5030B	MSVj/1299	SW-846 8260B	MSVj/1300
J1801998003	MWB-22S	SW-846 5030B	MSVj/1299	SW-846 8260B	MSVj/1300
J1801998004	MWB-13S	SW-846 5030B	MSVj/1299	SW-846 8260B	MSVj/1300
J1801998005	MWB-27S	SW-846 5030B	MSVj/1299	SW-846 8260B	MSVj/1300
J1801998006	MWB-29S	SW-846 5030B	MSVj/1299	SW-846 8260B	MSVj/1300
J1801998007	MWB-2S	SW-846 5030B	MSVj/1299	SW-846 8260B	MSVj/1300
J1801998008	MWB-11S	SW-846 5030B	MSVj/1299	SW-846 8260B	MSVj/1300
J1801998009	MWB-20S	SW-846 5030B	MSVj/1299	SW-846 8260B	MSVj/1300
J1801998010	MWB-21S	SW-846 5030B	MSVj/1299	SW-846 8260B	MSVj/1300
J1801998011	Equipment Blank #1	SW-846 5030B	MSVj/1299	SW-846 8260B	MSVj/1300
J1801998012	Trip Blank	SW-846 5030B	MSVj/1299	SW-846 8260B	MSVj/1300
J1801998001	MWB-3S	SW-846 5030B	MSVj/1301	SW-846 8260B (SIM)	MSVj/1302
J1801998002	MWB-12S	SW-846 5030B	MSVj/1301	SW-846 8260B (SIM)	MSVj/1302
J1801998003	MWB-22S	SW-846 5030B	MSVj/1301	SW-846 8260B (SIM)	MSVj/1302
J1801998004	MWB-13S	SW-846 5030B	MSVj/1301	SW-846 8260B (SIM)	MSVj/1302
J1801998005	MWB-27S	SW-846 5030B	MSVj/1301	SW-846 8260B (SIM)	MSVj/1302
J1801998006	MWB-29S	SW-846 5030B	MSVj/1301	SW-846 8260B (SIM)	MSVj/1302
J1801998007	MWB-2S	SW-846 5030B	MSVj/1301	SW-846 8260B (SIM)	MSVj/1302
J1801998008	MWB-11S	SW-846 5030B	MSVj/1301	SW-846 8260B (SIM)	MSVj/1302
J1801998009	MWB-20S	SW-846 5030B	MSVj/1301	SW-846 8260B (SIM)	MSVj/1302
J1801998010	MWB-21S	SW-846 5030B	MSVj/1301	SW-846 8260B (SIM)	MSVj/1302
J1801998011	Equipment Blank #1	SW-846 5030B	MSVj/1301	SW-846 8260B (SIM)	MSVj/1302
J1801998012	Trip Blank	SW-846 5030B	MSVj/1301	SW-846 8260B (SIM)	MSVj/1302
J1801998021	SW-1			EPA 300.0	WCAj/1362
J1801998022	SW-3			EPA 300.0	WCAj/1362

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1801998 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1801998023	SW-4			EPA 300.0	WCAj/1362
J1801998024	SW-7			EPA 300.0	WCAj/1362
J1801998025	SW-5			EPA 300.0	WCAj/1362
J1801998026	SW-6			EPA 300.0	WCAj/1362
J1801998028	MWB-34I			EPA 300.0	WCAj/1362
J1801998029	MWB-32I			EPA 300.0	WCAj/1362
J1801998030	MWB-35I			EPA 300.0	WCAj/1362
J1801998031	MWB-39I			EPA 300.0	WCAj/1362
J1801998032	MWB-34S			EPA 300.0	WCAj/1362
J1801998033	MWB-33S			EPA 300.0	WCAj/1362
J1801998034	MWB-32S			EPA 300.0	WCAj/1362
J1801998035	MWB-35S			EPA 300.0	WCAj/1362
J1801998036	MWB-39S			EPA 300.0	WCAj/1362
J1801998037	MWB-40S			EPA 300.0	WCAj/1362
J1801998038	SGMW-2S			EPA 300.0	WCAj/1362
J1801998021	SW-1			SM 2540 C	WCAj/1366
J1801998022	SW-3			SM 2540 C	WCAj/1366
J1801998023	SW-4			SM 2540 C	WCAj/1366
J1801998024	SW-7			SM 2540 C	WCAj/1366
J1801998025	SW-5			SM 2540 C	WCAj/1366
J1801998026	SW-6			SM 2540 C	WCAj/1366
J1801998028	MWB-34I			SM 2540 C	WCAj/1366
J1801998029	MWB-32I			SM 2540 C	WCAj/1366
J1801998030	MWB-35I			SM 2540 C	WCAj/1366
J1801998031	MWB-39I			SM 2540 C	WCAj/1366
J1801998032	MWB-34S			SM 2540 C	WCAj/1366
J1801998033	MWB-33S			SM 2540 C	WCAj/1366
J1801998034	MWB-32S			SM 2540 C	WCAj/1366
J1801998035	MWB-35S			SM 2540 C	WCAj/1366
J1801998036	MWB-39S			SM 2540 C	WCAj/1366
J1801998037	MWB-40S			SM 2540 C	WCAj/1366
J1801998038	SGMW-2S			SM 2540 C	WCAj/1366

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1801998 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1801998001	MWB-3S	SW-846 3010A	DGMj/1186	SW-846 6020	ICMj/1044
J1801998002	MWB-12S	SW-846 3010A	DGMj/1186	SW-846 6020	ICMj/1044
J1801998003	MWB-22S	SW-846 3010A	DGMj/1186	SW-846 6020	ICMj/1044
J1801998004	MWB-13S	SW-846 3010A	DGMj/1186	SW-846 6020	ICMj/1044
J1801998005	MWB-27S	SW-846 3010A	DGMj/1186	SW-846 6020	ICMj/1044
J1801998006	MWB-29S	SW-846 3010A	DGMj/1186	SW-846 6020	ICMj/1044
J1801998007	MWB-2S	SW-846 3010A	DGMj/1186	SW-846 6020	ICMj/1044
J1801998008	MWB-11S	SW-846 3010A	DGMj/1186	SW-846 6020	ICMj/1044
J1801998009	MWB-20S	SW-846 3010A	DGMj/1186	SW-846 6020	ICMj/1044
J1801998010	MWB-21S	SW-846 3010A	DGMj/1186	SW-846 6020	ICMj/1044
J1801998011	Equipment Blank #1	SW-846 3010A	DGMj/1186	SW-846 6020	ICMj/1044
J1801998021	SW-1	SW-846 3010A	DGMj/1186	SW-846 6020	ICMj/1044
J1801998022	SW-3	SW-846 3010A	DGMj/1186	SW-846 6020	ICMj/1044
J1801998023	SW-4	SW-846 3010A	DGMj/1186	SW-846 6020	ICMj/1044
J1801998024	SW-7	SW-846 3010A	DGMj/1186	SW-846 6020	ICMj/1044
J1801998025	SW-5	SW-846 3010A	DGMj/1186	SW-846 6020	ICMj/1044
J1801998026	SW-6	SW-846 3010A	DGMj/1186	SW-846 6020	ICMj/1044
J1801998032	MWB-34S	SW-846 3010A	DGMj/1187	SW-846 6020	ICMj/1043
J1801998033	MWB-33S	SW-846 3010A	DGMj/1187	SW-846 6020	ICMj/1043
J1801998034	MWB-32S	SW-846 3010A	DGMj/1187	SW-846 6020	ICMj/1043
J1801998035	MWB-35S	SW-846 3010A	DGMj/1187	SW-846 6020	ICMj/1043
J1801998036	MWB-39S	SW-846 3010A	DGMj/1187	SW-846 6020	ICMj/1043
J1801998037	MWB-40S	SW-846 3010A	DGMj/1187	SW-846 6020	ICMj/1043
J1801998038	SGMW-2S	SW-846 3010A	DGMj/1187	SW-846 6020	ICMj/1043
J1801998021	SW-1			SM 9222D	MICj/1162
J1801998022	SW-3			SM 9222D	MICj/1162
J1801998023	SW-4			SM 9222D	MICj/1162
J1801998024	SW-7			SM 9222D	MICj/1162
J1801998025	SW-5			SM 9222D	MICj/1162
J1801998026	SW-6			SM 9222D	MICj/1162
J1801998021	SW-1			SM 5210B	WCAj/1373

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1801998 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1801998022	SW-3			SM 5210B	WCAj/1373
J1801998023	SW-4			SM 5210B	WCAj/1373
J1801998024	SW-7			SM 5210B	WCAj/1373
J1801998025	SW-5			SM 5210B	WCAj/1373
J1801998026	SW-6			SM 5210B	WCAj/1373
J1801998021	SW-1			SM 2540D	WCAj/1377
J1801998022	SW-3			SM 2540D	WCAj/1377
J1801998023	SW-4			SM 2540D	WCAj/1377
J1801998024	SW-7			SM 2540D	WCAj/1377
J1801998025	SW-5			SM 2540D	WCAj/1377
J1801998026	SW-6			SM 2540D	WCAj/1377
J1801998021	SW-1	SW-846 5030B	MSVj/1310	SW-846 8260B	MSVj/1311
J1801998022	SW-3	SW-846 5030B	MSVj/1310	SW-846 8260B	MSVj/1311
J1801998023	SW-4	SW-846 5030B	MSVj/1310	SW-846 8260B	MSVj/1311
J1801998024	SW-7	SW-846 5030B	MSVj/1310	SW-846 8260B	MSVj/1311
J1801998025	SW-5	SW-846 5030B	MSVj/1310	SW-846 8260B	MSVj/1311
J1801998001	MWB-3S	SW-846 7470A	DGMj/1196	SW-846 7470A	CVAj/1045
J1801998002	MWB-12S	SW-846 7470A	DGMj/1196	SW-846 7470A	CVAj/1045
J1801998003	MWB-22S	SW-846 7470A	DGMj/1196	SW-846 7470A	CVAj/1045
J1801998004	MWB-13S	SW-846 7470A	DGMj/1196	SW-846 7470A	CVAj/1045
J1801998005	MWB-27S	SW-846 7470A	DGMj/1196	SW-846 7470A	CVAj/1045
J1801998006	MWB-29S	SW-846 7470A	DGMj/1196	SW-846 7470A	CVAj/1045
J1801998007	MWB-2S	SW-846 7470A	DGMj/1196	SW-846 7470A	CVAj/1045
J1801998008	MWB-11S	SW-846 7470A	DGMj/1196	SW-846 7470A	CVAj/1045
J1801998009	MWB-20S	SW-846 7470A	DGMj/1196	SW-846 7470A	CVAj/1045
J1801998010	MWB-21S	SW-846 7470A	DGMj/1196	SW-846 7470A	CVAj/1045
J1801998011	Equipment Blank #1	SW-846 7470A	DGMj/1196	SW-846 7470A	CVAj/1045
J1801998021	SW-1	SW-846 7470A	DGMj/1196	SW-846 7470A	CVAj/1045
J1801998022	SW-3	SW-846 7470A	DGMj/1196	SW-846 7470A	CVAj/1045
J1801998023	SW-4	SW-846 7470A	DGMj/1196	SW-846 7470A	CVAj/1045
J1801998024	SW-7	SW-846 7470A	DGMj/1196	SW-846 7470A	CVAj/1045

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1801998 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1801998025	SW-5	SW-846 7470A	DGMj/1197	SW-846 7470A	CVAj/1043
J1801998026	SW-6	SW-846 7470A	DGMj/1197	SW-846 7470A	CVAj/1043
J1801998032	MWB-34S	SW-846 7470A	DGMj/1197	SW-846 7470A	CVAj/1043
J1801998033	MWB-33S	SW-846 7470A	DGMj/1197	SW-846 7470A	CVAj/1043
J1801998034	MWB-32S	SW-846 7470A	DGMj/1197	SW-846 7470A	CVAj/1043
J1801998035	MWB-35S	SW-846 7470A	DGMj/1197	SW-846 7470A	CVAj/1043
J1801998036	MWB-39S	SW-846 7470A	DGMj/1197	SW-846 7470A	CVAj/1043
J1801998037	MWB-40S	SW-846 7470A	DGMj/1197	SW-846 7470A	CVAj/1043
J1801998038	SGMW-2S	SW-846 7470A	DGMj/1197	SW-846 7470A	CVAj/1043
J1801998021	SW-1	SW-846 5030B	MSVj/1312	SW-846 8260B (SIM)	MSVj/1313
J1801998022	SW-3	SW-846 5030B	MSVj/1312	SW-846 8260B (SIM)	MSVj/1313
J1801998023	SW-4	SW-846 5030B	MSVj/1312	SW-846 8260B (SIM)	MSVj/1313
J1801998024	SW-7	SW-846 5030B	MSVj/1312	SW-846 8260B (SIM)	MSVj/1313
J1801998025	SW-5	SW-846 5030B	MSVj/1312	SW-846 8260B (SIM)	MSVj/1313
J1801998001	MWB-3S	SW-846 3010A	DGMj/1201	SW-846 6010	ICPj/1106
J1801998002	MWB-12S	SW-846 3010A	DGMj/1201	SW-846 6010	ICPj/1106
J1801998003	MWB-22S	SW-846 3010A	DGMj/1201	SW-846 6010	ICPj/1106
J1801998004	MWB-13S	SW-846 3010A	DGMj/1201	SW-846 6010	ICPj/1106
J1801998005	MWB-27S	SW-846 3010A	DGMj/1201	SW-846 6010	ICPj/1106
J1801998006	MWB-29S	SW-846 3010A	DGMj/1201	SW-846 6010	ICPj/1106
J1801998007	MWB-2S	SW-846 3010A	DGMj/1201	SW-846 6010	ICPj/1106
J1801998008	MWB-11S	SW-846 3010A	DGMj/1201	SW-846 6010	ICPj/1106
J1801998009	MWB-20S	SW-846 3010A	DGMj/1202	SW-846 6010	ICPj/1105
J1801998010	MWB-21S	SW-846 3010A	DGMj/1202	SW-846 6010	ICPj/1105
J1801998011	Equipment Blank #1	SW-846 3010A	DGMj/1202	SW-846 6010	ICPj/1105
J1801998013	MWB-12I	SW-846 3010A	DGMj/1202	SW-846 6010	ICPj/1105
J1801998014	MWB-13I	SW-846 3010A	DGMj/1202	SW-846 6010	ICPj/1105
J1801998015	MWB-27I	SW-846 3010A	DGMj/1202	SW-846 6010	ICPj/1105
J1801998016	MWB-29I	SW-846 3010A	DGMj/1202	SW-846 6010	ICPj/1105

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1801998 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1801998017	MWB-2I	SW-846 3010A	DGMj/1202	SW-846 6010	ICPj/1105
J1801998018	MWB-3I	SW-846 3010A	DGMj/1202	SW-846 6010	ICPj/1105
J1801998019	MWB-11IR	SW-846 3010A	DGMj/1202	SW-846 6010	ICPj/1105
J1801998020	Equipment Blank #2	SW-846 3010A	DGMj/1202	SW-846 6010	ICPj/1105
J1801998021	SW-1			EPA 410.4	WCAj/1388
J1801998022	SW-3			EPA 410.4	WCAj/1388
J1801998023	SW-4			EPA 410.4	WCAj/1388
J1801998024	SW-7			EPA 410.4	WCAj/1388
J1801998025	SW-5			EPA 410.4	WCAj/1388
J1801998026	SW-6			EPA 410.4	WCAj/1388
J1801998026	SW-6	SW-846 5030B	MSVj/1320	SW-846 8260B	MSVj/1321
J1801998027	Trip Blank 2	SW-846 5030B	MSVj/1320	SW-846 8260B	MSVj/1321
J1801998032	MWB-34S	SW-846 5030B	MSVj/1320	SW-846 8260B	MSVj/1321
J1801998033	MWB-33S	SW-846 5030B	MSVj/1320	SW-846 8260B	MSVj/1321
J1801998034	MWB-32S	SW-846 5030B	MSVj/1320	SW-846 8260B	MSVj/1321
J1801998035	MWB-35S	SW-846 5030B	MSVj/1320	SW-846 8260B	MSVj/1321
J1801998036	MWB-39S	SW-846 5030B	MSVj/1320	SW-846 8260B	MSVj/1321
J1801998037	MWB-40S	SW-846 5030B	MSVj/1320	SW-846 8260B	MSVj/1321
J1801998038	SGMW-2S	SW-846 5030B	MSVj/1320	SW-846 8260B	MSVj/1321
J1801998039	Trip Blank 3	SW-846 5030B	MSVj/1320	SW-846 8260B	MSVj/1321
J1801998026	SW-6	SW-846 5030B	MSVj/1324	SW-846 8260B (SIM)	MSVj/1325
J1801998027	Trip Blank 2	SW-846 5030B	MSVj/1324	SW-846 8260B (SIM)	MSVj/1325
J1801998032	MWB-34S	SW-846 5030B	MSVj/1324	SW-846 8260B (SIM)	MSVj/1325
J1801998033	MWB-33S	SW-846 5030B	MSVj/1324	SW-846 8260B (SIM)	MSVj/1325
J1801998034	MWB-32S	SW-846 5030B	MSVj/1324	SW-846 8260B (SIM)	MSVj/1325
J1801998035	MWB-35S	SW-846 5030B	MSVj/1324	SW-846 8260B (SIM)	MSVj/1325
J1801998036	MWB-39S	SW-846 5030B	MSVj/1324	SW-846 8260B (SIM)	MSVj/1325
J1801998037	MWB-40S	SW-846 5030B	MSVj/1324	SW-846 8260B (SIM)	MSVj/1325
J1801998038	SGMW-2S	SW-846 5030B	MSVj/1324	SW-846 8260B (SIM)	MSVj/1325
J1801998039	Trip Blank 3	SW-846 5030B	MSVj/1324	SW-846 8260B (SIM)	MSVj/1325

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1801998 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1801998001	MWB-3S			EPA 350.1	WCAg/1439
J1801998002	MWB-12S			EPA 350.1	WCAg/1439
J1801998003	MWB-22S			EPA 350.1	WCAg/1441
J1801998004	MWB-13S			EPA 350.1	WCAg/1441
J1801998005	MWB-27S			EPA 350.1	WCAg/1441
J1801998006	MWB-29S			EPA 350.1	WCAg/1441
J1801998007	MWB-2S			EPA 350.1	WCAg/1441
J1801998008	MWB-11S			EPA 350.1	WCAg/1441
J1801998009	MWB-20S			EPA 350.1	WCAg/1441
J1801998010	MWB-21S			EPA 350.1	WCAg/1441
J1801998011	Equipment Blank #1			EPA 350.1	WCAg/1441
J1801998013	MWB-12I			EPA 350.1	WCAg/1441
J1801998014	MWB-13I			EPA 350.1	WCAg/1441
J1801998015	MWB-27I			EPA 350.1	WCAg/1441
J1801998016	MWB-29I			EPA 350.1	WCAg/1441
J1801998017	MWB-2I			EPA 350.1	WCAg/1441
J1801998018	MWB-3I			EPA 350.1	WCAg/1441
J1801998019	MWB-11IR			EPA 350.1	WCAg/1441
J1801998020	Equipment Blank #2			EPA 350.1	WCAg/1441
J1801998021	SW-1	SW-846 3010A	DGMj/1217	SW-846 6010	ICPj/1111
J1801998022	SW-3	SW-846 3010A	DGMj/1217	SW-846 6010	ICPj/1111
J1801998023	SW-4	SW-846 3010A	DGMj/1217	SW-846 6010	ICPj/1111
J1801998024	SW-7	SW-846 3010A	DGMj/1217	SW-846 6010	ICPj/1111
J1801998025	SW-5	SW-846 3010A	DGMj/1217	SW-846 6010	ICPj/1111
J1801998026	SW-6	SW-846 3010A	DGMj/1217	SW-846 6010	ICPj/1111
J1801998028	MWB-34I	SW-846 3010A	DGMj/1217	SW-846 6010	ICPj/1111
J1801998029	MWB-32I	SW-846 3010A	DGMj/1217	SW-846 6010	ICPj/1111
J1801998030	MWB-35I	SW-846 3010A	DGMj/1217	SW-846 6010	ICPj/1111
J1801998031	MWB-39I	SW-846 3010A	DGMj/1217	SW-846 6010	ICPj/1111
J1801998032	MWB-34S	SW-846 3010A	DGMj/1217	SW-846 6010	ICPj/1111
J1801998033	MWB-33S	SW-846 3010A	DGMj/1217	SW-846 6010	ICPj/1111
J1801998034	MWB-32S	SW-846 3010A	DGMj/1217	SW-846 6010	ICPj/1111

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1801998 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1801998035	MWB-35S	SW-846 3010A	DGMj/1217	SW-846 6010	ICPj/1111
J1801998036	MWB-39S	SW-846 3010A	DGMj/1217	SW-846 6010	ICPj/1111
J1801998037	MWB-40S	SW-846 3010A	DGMj/1217	SW-846 6010	ICPj/1111
J1801998038	SGMW-2S	SW-846 3010A	DGMj/1217	SW-846 6010	ICPj/1111
J1801998021	SW-1			SM 5310B	WCAg/1453
J1801998022	SW-3			SM 5310B	WCAg/1453
J1801998023	SW-4			SM 5310B	WCAg/1453
J1801998024	SW-7			SM 5310B	WCAg/1453
J1801998025	SW-5			SM 5310B	WCAg/1453
J1801998026	SW-6			SM 5310B	WCAg/1453
J1801998021	SW-1			SM 10200 H	WCAg/1470
J1801998022	SW-3			SM 10200 H	WCAg/1470
J1801998023	SW-4			SM 10200 H	WCAg/1470
J1801998024	SW-7			SM 10200 H	WCAg/1470
J1801998025	SW-5			SM 10200 H	WCAg/1470
J1801998026	SW-6			SM 10200 H	WCAg/1470
J1801998021	SW-1			EPA 350.1	WCAg/1480
J1801998022	SW-3			EPA 350.1	WCAg/1480
J1801998023	SW-4			EPA 350.1	WCAg/1480
J1801998024	SW-7			EPA 350.1	WCAg/1480
J1801998025	SW-5			EPA 350.1	WCAg/1480
J1801998026	SW-6			EPA 350.1	WCAg/1480
J1801998028	MWB-34I			EPA 350.1	WCAg/1480
J1801998029	MWB-32I			EPA 350.1	WCAg/1480
J1801998030	MWB-35I			EPA 350.1	WCAg/1480
J1801998031	MWB-39I			EPA 350.1	WCAg/1480
J1801998032	MWB-34S			EPA 350.1	WCAg/1480
J1801998033	MWB-33S			EPA 350.1	WCAg/1480
J1801998034	MWB-32S			EPA 350.1	WCAg/1480
J1801998035	MWB-35S			EPA 350.1	WCAg/1480
J1801998036	MWB-39S			EPA 350.1	WCAg/1480

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1801998 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1801998037	MWB-40S			EPA 350.1	WCAg/1480
J1801998038	SGMW-2S			EPA 350.1	WCAg/1480
J1801998021	SW-1	Copper Sulfate Digestion	WCAg/1491	EPA 351.2	WCAg/1495
J1801998022	SW-3	Copper Sulfate Digestion	WCAg/1491	EPA 351.2	WCAg/1495
J1801998023	SW-4	Copper Sulfate Digestion	WCAg/1491	EPA 351.2	WCAg/1495
J1801998024	SW-7	Copper Sulfate Digestion	WCAg/1491	EPA 351.2	WCAg/1495
J1801998025	SW-5	Copper Sulfate Digestion	WCAg/1491	EPA 351.2	WCAg/1495
J1801998026	SW-6	Copper Sulfate Digestion	WCAg/1491	EPA 351.2	WCAg/1495
J1801998021	SW-1	Copper Sulfate Digestion	WCAg/1491	EPA 365.4	WCAg/1496
J1801998022	SW-3	Copper Sulfate Digestion	WCAg/1491	EPA 365.4	WCAg/1496
J1801998023	SW-4	Copper Sulfate Digestion	WCAg/1491	EPA 365.4	WCAg/1496
J1801998024	SW-7	Copper Sulfate Digestion	WCAg/1491	EPA 365.4	WCAg/1496
J1801998025	SW-5	Copper Sulfate Digestion	WCAg/1491	EPA 365.4	WCAg/1496
J1801998026	SW-6	Copper Sulfate Digestion	WCAg/1491	EPA 365.4	WCAg/1496
J1801998021	SW-1	Calculation	CLCg/	Calculation	CLCg/
J1801998021	SW-1	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J1801998021	SW-1	Field Measurements	FLDj/	Field Measurements	FLDj/
J1801998022	SW-3	Calculation	CLCg/	Calculation	CLCg/
J1801998022	SW-3	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J1801998022	SW-3	Field Measurements	FLDj/	Field Measurements	FLDj/
J1801998023	SW-4	Calculation	CLCg/	Calculation	CLCg/
J1801998023	SW-4	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J1801998023	SW-4	Field Measurements	FLDj/	Field Measurements	FLDj/
J1801998024	SW-7	Calculation	CLCg/	Calculation	CLCg/
J1801998024	SW-7	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J1801998024	SW-7	Field Measurements	FLDj/	Field Measurements	FLDj/
J1801998025	SW-5	Calculation	CLCg/	Calculation	CLCg/
J1801998025	SW-5	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J1801998025	SW-5	Field Measurements	FLDj/	Field Measurements	FLDj/
J1801998026	SW-6	Calculation	CLCg/	Calculation	CLCg/
J1801998026	SW-6	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J1801998026	SW-6	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: WCAj

Batch Number: 1362

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: EPA 300.0

Preparation: None

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 recoveries of Nitrate for J1801998022 was outside control criteria because of matrix interference. The chromatogram indicated the presence of background components that prevented adequate resolution of the target analytes. As a result, accurate quantitation was not possible. The result is qualified to indicate matrix interference.

E. Serial Diluion:

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: 1300

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: All acceptance criteria were met.

D. Spikes: The relative percent difference (RPD) for the following analytes in the Laboratory Control Spike (LCS) and Duplicate (LCSD) were outside control criteria: 1,1-dichoroethene and PCE. All spike recoveries LCS and LCSD were within acceptable limits, indicating the analytical batch was in control. No further corrective action was needed.

The matrix spike (MS) recovery of PCE for J1801998001 was outside control criteria. Recoveries in the Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential bias in this matrix. The affected sample is J4 qualified to indicate matrix interference.

E. Internal Standard: All acceptance criteria were met.

F. Samples: [SAMPLE] 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.

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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

LAB NUMBER **J1801998**

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:			CEC Contact: Jim Chrisiansen
CONTACT:	Eric B. Fuller		
SAMPLED BY:	DANNY ARMOUR		**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	250m 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						
							PRESERVATION	HCl / DI	HNO3	None	None	H2SO4						
	MWB3S	G	2-20	1230	W	7		3	1	1	1	1						001
	MWB12S	G	2-20	0705	W	7		3	1	1	1	1						002
	MWB22S	G	2-20	0805	W	7		3	1	1	1	1						003
	MWB13S	G	2-20	0835	W	7		3	1	1	1	1						004
	MWB27S	G	2-20	0935	W	7		3	1	1	1	1						005
	MWB29S	G	2-20	1035	W	7		3	1	1	1	1						006
	MWB2S	G	2-20	1132	W	7		3	1	1	1	1						007
	MWB11S	G	2-20	1335	W	7		3	1	1	1	1						008
	MWB20S	G	2-20	1435	W	7		3	1	1	1	1						009
	MWB21S	G	2-20	1505	W	7		3	1	1	1	1						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		2.20.18	1530		2/20/18	1530
2		2/20/18	1610		2/20/18	16:10
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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☐ 528 S. North Lake Blvd., Ste. 1016 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597• E53076

J1801998

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:			CEC Contact: Jim Chrisiansen
CONTACT:	Eric B. Fuller		
SAMPLED BY:	DANNY ARMOUR		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	App I + EDB 8260/8260SIM (HCl / DI)	App I + Na,Fe,Hg 6010/6020/7470 (HNO3)	nitrate/chloride 300.0 (None)	TDS SM2540C (None)	ammonia-N 350.1 (H2SO4)	LABORATORY I.D. NUMBER
	EQUIPMENT BLANK #1	G	2-20	1520	W	7		3	1	1	1	1	011
	TRIP	G	2-20	—	W	3		3					012

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) G: 9A G: LT-1 LT-2 T: 10A A: 3A

	Relinquished by:	Date	Time	Received by:	Date	Time
1		2-20-18	1530		2/20/18	1530
2		2/20/18	1610		2/20/18	16:10
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: J1801998

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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:			CEC Contact: Jim Chrisiansen
CONTACT:	Eric B. Fuller		
SAMPLED BY:	DANNY ARMOUR		33628,TRAIL RIDGE LANDFILL, INC. (ADaPT)
TURN AROUND TIME:			AEL Jax Profile: 30178, Line 4
☒ STANDARD _____	☐ RUSH _____		

ANALYSIS REQUIRED

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	BOTTLE SIZE & TYPE		250mL poly	125mL poly	500mL poly	250mL poly						LABORATORY I.D. NUMBER
							PRESERVATION		Fe,Na by 6010	nitrate/chloride 300.0	TDS SM2540C	ammonia-N 350.1						
									HNO3	None	None	H2SO4						
	MWB12I	G	2-20	0735	W	4			1	1	1	1						013
	MWB13I	G	2-20	0902	W	4			1	1	1	1						014
	MWB27I	G	2-20	1005	W	4			1	1	1	1						015
	MWB29I	G	2-20	1102	W	4			1	1	1	1						016
	MWB2I	G	2-20	1200	W	4			1	1	1	1						017
	MWB3I	G	2-20	1300	W	4			1	1	1	1						018
	MWB11IR	G	2-20	1403	W	4			1	1	1	1						019
	EQUIPMENT BLANK #1	G	2-20	1520	W	4			1	1	1	1						020

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		2-20-18	1530		2/20/18	1530
2		2/20/18	1615		2/20/18	16:10
3						
4						

FOR DRINKING WATER USE:

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

Contact Person:_____ Phone :_____

Supplier of Water:_____

Site-Address:_____

Page 1 of 1 LAB NUMBER: J1801998

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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
ADDRESS: 214 North Hogan Street, 10th Floor
Jacksonville, FL 32202
PHONE: (904)-255-7513
FAX:
CONTACT: Eric B. Fuller
SAMPLED BY: DANNY ARMOUR
TURN AROUND TIME: ☒ STANDARD _____ ☐ RUSH _____

PROJECT NAME: Trail Ridge Landfill
P.O. NUMBER/PROJECT NUMBER: 608372:4
PROJECT LOCATION:
REMARKS/SPECIAL INSTRUCTIONS:
Surface Water
CEC Contact: Jim Chrisiansen

33628,TRAIL RIDGE LANDFILL, INC. (ADaPT)
AEL Jax Profile: 30178, Line 5

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 + Fe,Hg,hardness (HNO3)	500mL poly — nitrate 300.0 / TDS 2540C (None)	1L poly — TSS SM2540D (None)	250mL poly — Nox/TKN/TN/TP/NH3/ un-NH3 (H2SO4)	2X40mL VOA vials — TOC 5310B (HCl)	125mL poly — COD 410.4 (H2SO4)	1 L poly — BOD 5210B (None)	1 L amber — chlorophyll-a 10200H (None 24 hr HT)	100mL Cup — Fecal 9222D (NaThio 6 hr HT)	LABORATORY I.D. NUMBER
	SW-1	G	2.21	1230	W	13		3	1	1	1	1	2	1	1	1	1	021
	SW-3	G	2.21	1250	W	13		3	1	1	1	1	2	1	1	1	1	022
	SW-4	G	2.21	1320	W	13		3	1	1	1	1	2	1	1	1	1	023
	SW-7	G	2.21	1350	W	13		3	1	1	1	1	2	1	1	1	1	024
	SW-5	G	2.21	1410	W	13		3	1	1	1	1	2	1	1	1	1	025
	SW-6	G	2.21	1430	W	13		3	1	1	1	1	2	1	1	1	1	026
	SW-B	—	2.21	—	—	D		DRY POINT										
	TRIP	G	2.21	—	W	3		3										027

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) T: 9A G: LT-1 LT-2 T: 10A A: 3A

Form revised 2/8/08

	Relinquished by:	Date	Time	Received by:	Date	Time
1		2-21-18	1510		2/21/18	1510
2		2/21/18	1605		2/21/18	16:05
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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LAB NUMBER: J1801998

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:	DANNY ARMOUR
TURN AROUND TIME:	☒ STANDARD _____ ☐ RUSH _____
PROJECT NAME:	Trail Ridge Landfill
P.O. NUMBER/PROJECT NUMBER:	608372:4
PROJECT LOCATION:	
REMARKS/SPECIAL INSTRUCTIONS:	Ground Water Intermediate Wells CEC Contact: Jim Chrisiansen 33628,TRAIL RIDGE LANDFILL, INC. (ADaPT) AEL Jax Profile: 30178, Line 4

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	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						
							PRESERVATION		HNO3	None	None	H2SO4						
	MWB-34I	G	2-20	1630	W	4			1	1	1	1						028
	MWB-32I	G	2-20	1758	W	4			1	1	1	1						029
	MWB-35I	G	2-21	0748	W	4			1	1	1	1						030
	MWB39I	G	2-21	0850	W	4			1	1	1	1						031

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		2-21-18	1510		2/21/18	1510
2		2/21/18	1605		2/21/18	16:05
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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☐ 528 S. North Lake Blvd., Ste. 1016 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597• E53076

LAB NUMBER: J1801998

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:	DANNY ARMOUR
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 CEC Contact: Jim Chrisiansen 33628,TRAIL RIDGE LANDFILL, INC. (ADaPT) 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 (3X40mL VOA vials, 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
	MWB-34S	G	2-20	1600	W	7		3	1	1	1	1	032
	MWB-33S	G	2-20	1700	W	7		3	1	1	1	1	033
	MWB-32S	G	2-20	1730	W	7		3	1	1	1	1	034
	MWB-35S	G	2-21	0720	W	7		3	1	1	1	1	035
	MWB-39S	G	2-21	0821	W	7		3	1	1	1	1	036
	MWB-40S	G	2-21	0926	W	7		3	1	1	1	1	037
	SGMW-2S	G	2-21	1051	W	7		3	1	1	1	1	038
	TRIP	G	2-21	-	W	3		3					039

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) 7 9A G: LT-1 LT-2 T: 10A A: 3A

	Relinquished by:	Date	Time	Received by:	Date	Time
1		2-21-18	1510		2/21/18	1510
2		2/21/18	1605		2/21/18	16:05
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 Jacksonville Project name: Trail Ridge Landfill

Date/Time Rcvd: 2-20-18 16:10 Log-In request number: J1801998

Received by: BA Completed by: BA

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 °C				
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)

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: MWB2S | SAMPLE ID: | DATE: 2-20-18

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): 7.94 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 146.64 | GROUNDWATER ELEVATION (ft NGVD): 138.70

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: 1112 | PURGING ENDED AT: 1132 | 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
1122	1.80	1.80	0.18	9.23	4.75	20.1	34	2.3	70.43	149		
1125	0.54	2.34	0.18	9.23	4.75	20.1	34	2.2	42.08	148		
1128	0.54	2.88	0.18	9.23	4.75	20.1	34	2.2	36.22	147		
1131	0.54	3.42	0.18	9.23	4.75	20.1	34	2.2	30.31	146	LIGHT 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: BLAINE GRISSOM DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1132 | 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: (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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MW1B27S | SAMPLE ID: | DATE: 2-20-18

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): 7.06 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 128.42 | GROUNDWATER ELEVATION (ft NGVD): 121.36

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (15.50 feet - 7.06 feet) X 0.163 gallons/foot = 1.38 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 = 0.44 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13.50 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.50 | PURGING INITIATED AT: 0915 | PURGING ENDED AT: 0935 | 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
0925	1.60	1.60	0.16	7.30	5.29	19.1	159	0.8	16.01	147		
0928	0.48	2.08	0.16	7.30	5.29	19.1	159	0.8	12.88	146		
0931	0.48	2.56	0.16	7.30	5.29	19.1	159	0.8	12.61	146		
0934	0.48	3.04	0.16	7.30	5.29	19.1	159	0.8	11.00	145	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: 0935 | SAMPLING ENDED AT: NR

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					
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: (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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MW1B12S | SAMPLE ID: | DATE: 2-20-18

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): 10.15 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 124.63 | GROUNDWATER ELEVATION (ft NGVD): 114.48

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 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: 0645 | PURGING ENDED AT: 0705 | 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
0655	1.80	1.80	0.18	11.91	5.53	20.6	274	1.5	12.04	134		
0658	0.54	2.34	0.18	11.91	5.60	20.6	277	1.4	10.18	133		
0701	0.54	2.88	0.18	11.91	5.60	20.6	278	1.4	12.22	130		
0704	0.54	3.42	0.18	11.91	5.61	20.6	278	1.4	12.10	128	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: 0705 | 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					
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: MWB20S | SAMPLE ID: | DATE: 2-20-18

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): 9.13 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 121.01 | GROUNDWATER ELEVATION (ft NGVD): 111.88

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: 1415 | PURGING ENDED AT: 1435 | 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
1425	1.70	1.70	0.17	~~14.45~~ 9.45	4.46	22.8	90	0.3	15.78	59		
1428	0.51	2.21	0.17	~~14.45~~ 9.45	4.47	22.8	91	0.3	14.83	58		
1431	0.51	2.72	0.17	9.45	4.49	22.8	94	0.3	13.25	54		
1434	0.51	3.23	0.17	9.45	4.49	22.8	95	0.3	12.74	48	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: 1435 | SAMPLING ENDED AT: NR

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: (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

FORM FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB33S | SAMPLE ID: | DATE: 2-20-18

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): 9.96 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 125.90 | GROUNDWATER ELEVATION (ft NGVD): 115.94

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (20.30 feet - 9.96 feet) X 0.163 gallons/foot = 1.69 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: 1640 | PURGING ENDED AT: 1700 | 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
1650	1.90	1.90	0.19	10.10	5.80	22.8	319	0.1	3.39	57		
1653	0.57	2.47	0.19	10.10	5.80	22.8	320	0.1	5.44	55		
1656	0.57	3.04	0.19	10.10	5.80	22.8	320	0.1	4.61	54		
1659	0.57	3.61	0.19	10.10	5.81	22.8	321	0.1	4.42	52	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./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: 1700 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 15.30 | 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			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: MWB32S | SAMPLE ID: | DATE: 2-20-18

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): 8.23 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 124.64 | GROUNDWATER ELEVATION (ft NGVD): 116.41

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 19.90 feet) + 0.05 gallons = 0.47 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 14.90 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 14.90 | PURGING INITIATED AT: 1710 | PURGING ENDED AT: 1730 | 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 & µS/cm	DISSOLVED OXYGEN (circle units) mg/L & % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1720	1.80	1.80	0.18	8.84	5.08	22.5	135	0.0	3.61	76		
1723	0.54	2.34	0.18	8.84	5.08	22.5	136	0.1	6.48	75		
1726	0.54	2.88	0.18	8.84	5.09	22.5	138	0.1	5.32	74		
1729	0.54	3.42	0.18	8.84	5.11	22.5	140	0.1	5.75	74	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: 1730 | SAMPLING ENDED AT: NA

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: MWB34S
SAMPLE ID:
DATE: 2-20-18

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): 8.58
PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 125.78
GROUNDWATER ELEVATION (ft NGVD): 117.20

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (18.36 feet - 8.58 feet) X 0.163 gallons/foot = 1.60 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: 1540
PURGING ENDED AT: 1600
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
1550	1.70	1.70	0.17	10.58	6.40	22.6	1030	0.1	4.21	70		
1553	0.51	2.21	0.17	10.58	6.39	22.6	1048	0.1	3.41	63		
1556	0.51	2.72	0.17	10.58	6.38	22.6	1060	0.1	3.88	61		
1559	0.51	3.23	0.17	10.58	6.38	22.6	1062	0.1	3.50	60	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: 1600
SAMPLING ENDED AT: NA
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 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: MWB32I | SAMPLE ID: | DATE: 2-20-18

PURGING DATA

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): 8.30 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 124.79 | GROUNDWATER ELEVATION (ft NGVD): 116.49

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 59.56 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: 1738 | PURGING ENDED AT: 1758 | 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
1748	2.50	2.50	0.25	8.39	5.06	22.3	44	0.5	4.99	56		
1751	0.75	3.25	0.25	8.39	5.01	22.3	44	0.5	5.03	45		
1754	0.75	4.00	0.25	8.39	5.03	22.3	44	0.5	4.34	35		
1757	0.75	4.75	0.25	8.39	5.02	22.3	43	0.5	3.57	32	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): [signature] | SAMPLING INITIATED AT: 1758 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 59.56 | 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 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: 2-20-18

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): 9.51 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 125.80 | GROUNDWATER ELEVATION (ft NGVD): 116.29

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: 1610 | PURGING ENDED AT: 1630 | 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
1620	2.50	2.50	0.25	9.54	4.95	26.0	42	0.4	5.03	19		
1623	0.75	3.25	0.25	9.54	4.94	26.0	42	0.5	5.01	19		
1626	0.75	4.00	0.25	9.54	4.94	26.0	42	0.5	4.61	17		
1629	0.75	4.75	0.25	9.54	4.95	26.0	42	0.5	4.33	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 DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1630 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 48.95 | 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: (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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB3S | SAMPLE ID: | DATE: 2-20-18

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): 7.62 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 154.38 | GROUNDWATER ELEVATION (ft NGVD): 146.76

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)

= 0.3 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: 1210 | PURGING ENDED AT: 1230 | 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
1220	1.70	1.70	0.17	7.89	4.12	19.7	87	1.1	7.88	194		
1223	0.51	2.21	0.17	7.89	4.15	19.7	88	1.1	5.46	187		
1226	0.51	2.72	0.17	7.89	4.17	19.7	89	1.1	5.27	182		
1229	0.51	3.23	0.17	7.89	4.17	19.7	89	1.1	4.75	175	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: 1230 | 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			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: MWB22S
SAMPLE ID:
DATE: 2-20-18

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): 11.53
PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 126.97
GROUNDWATER ELEVATION (ft NGVD): 115.44

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: 0745
PURGING ENDED AT: 0805
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
0755	2.00	2.00	0.20	11.84	5.93	21.5	666	0.2	2.01	91		
0758	0.60	2.60	0.20	11.84	5.93	21.5	665	0.2	3.31	88		
0801	0.60	3.20	0.20	11.84	5.92	21.5	659	0.2	2.48	85		
0804	0.60	3.80	0.20	11.84	5.92	21.5	657	0.2	2.71	83	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: 0805
SAMPLING ENDED AT: NA
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 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: MWB13S | SAMPLE ID: | DATE: 2-20-18

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 16.56 feet to 26.56 feet | STATIC DEPTH TO WATER (feet): 13.19 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): ~~126.06~~ 126.05 | GROUNDWATER ELEVATION (ft NGVD): 112.86

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: 0815 | PURGING ENDED AT: 0835 | 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
0825	1.70	1.70	0.17	14.72	5.86	22.1	499	1.3	6.75	134		
0828	0.51	2.21	0.17	14.72	5.86	22.1	499	1.3	5.16	133		
0831	0.51	2.72	0.17	14.72	5.86	22.1	498	1.3	4.85	131		
0834	0.51	3.23	0.17	14.72	5.86	22.1	498	1.3	4.18	132	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: 0835 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 21.56 | 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: MWB29S | SAMPLE ID: | DATE: 2-20-18

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): 8.17 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 138.02 | GROUNDWATER ELEVATION (ft NGVD): 129.85

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: 1015 | PURGING ENDED AT: 1035 | 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
1025	1.70	1.70	0.17	8.34	4.22	19.2	83	1.0	3.16	48		
1028	0.51	2.21	0.17	8.34	4.22	19.2	85	1.1	2.93	45		
1031	0.51	2.72	0.17	8.34	4.23	19.2	86	1.0	3.69	43		
1034	0.51	3.23	0.17	8.34	4.23	19.2	87	1.1	3.42	41	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 GRIFFON DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): Blaine G | SAMPLING INITIATED AT: 1035 | SAMPLING ENDED AT: NR

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			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: MWB2I | SAMPLE ID: | DATE: 2-20-18

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): 10.28 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 145.73 | GROUNDWATER ELEVATION (ft NGVD): 135.45

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: 1140 | PURGING ENDED AT: 1200 | 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
1150	2.60	2.60	0.26	10.34	4.43	21.7	38	0.3	3.39	125		
1153	0.78	3.38	0.26	10.34	4.45	21.7	38	0.3	3.78	125		
1156	0.78	4.16	0.26	10.34	4.46	21.7	38	0.3	3.51	122		
1159	0.78	4.94	0.26	10.34	4.46	21.7	38	0.3	2.89	120	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: 1200 | 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 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: MWB29I | SAMPLE ID: | DATE: 2-20-18

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): 7.02 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 138.08 | GROUNDWATER ELEVATION (ft NGVD): 131.06

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: 1042 | PURGING ENDED AT: 1102 | 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
1052	2.60	2.60	0.26	7.05	4.78	24.2	41	1.3	4.17	53		
1055	0.78	3.38	0.26	7.05	4.78	24.2	41	1.3	4.72	52		
1058	0.78	4.16	0.26	7.05	4.79	24.2	41	1.2	4.80	50		
1101	0.78	4.94	0.26	7.05	4.76	24.2	41	1.2	4.54	49	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: 1102 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 58.50 | 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: MWB27I | SAMPLE ID: | DATE: 2-20-18

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): 7.52 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 128.63 | GROUNDWATER ELEVATION (ft NGVD): 121.11

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: 0945 | PURGING ENDED AT: 1005 | 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
0955	2.50	2.50	0.25	7.53	5.15	21.2	52	0.5	3.15	49		
0958	0.75	3.25	0.25	7.53	5.16	21.2	52	0.5	3.14	47		
1001	0.75	4.00	0.25	7.53	5.19	21.2	52	0.5	3.86	43		
1004	0.75	4.75	0.25	7.53	5.20	21.2	52	0.5	3.87	41	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: 1005 | 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					
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: MWB13I | SAMPLE ID: | DATE: 2-20-18

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): 16.74 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 125.98 | GROUNDWATER ELEVATION (ft NGVD): 109.24

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 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: 0842 | PURGING ENDED AT: 0902 | 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
0852	2.50	2.50	0.25	17.20	4.83	25.8	38	0.2	3.91	99		
0855	0.75	3.25	0.25	17.20	4.83	25.8	38	0.1	3.71	95		
0858	0.75	4.00	0.25	17.20	4.82	25.8	38	0.1	4.02	93		
0901	0.75	4.75	0.25	17.20	4.83	25.8	38	0.1	3.40	91	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: 0902 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 55.40 | 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: MWB12I | SAMPLE ID: | DATE: 2-20-18

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): 9.17 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 124.62 | GROUNDWATER ELEVATION (ft NGVD): 115.45

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: 0715 | PURGING ENDED AT: 0735 | 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
0725	2.80	2.80	0.28	9.19	4.86	25.0	42	0.2	3.12	134		
0728	0.84	3.64	0.28	9.19	4.86	25.0	42	0.1	3.68	131		
0731	0.84	4.48	0.28	9.19	4.89	25.0	41	0.1	3.31	124		
0734	0.84	5.32	0.28	9.19	4.89	25.0	41	0.1	3.47	122	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: 0735 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 66.50 | 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: 2-20-18

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): 13.71 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 151.86 | GROUNDWATER ELEVATION (ft NGVD): 138.15

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: 1240 | PURGING ENDED AT: 1300 | 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
1250	2.70	2.70	0.27	14.77	4.38	21.8	42	0.7	3.46	53		
1253	0.81	3.51	0.27	14.77	4.37	21.8	42	0.7	3.40	52		
1256	0.81	4.32	0.27	14.77	4.38	21.8	42	0.7	3.32	48		
1259	0.81	5.13	0.27	14.77	4.38	21.8	42	0.7	2.92	47	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: 1300 | SAMPLING ENDED AT: NA

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					
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: MWB11I (R) | SAMPLE ID: | DATE: 2-20-18

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): 15.13 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 120.43 | GROUNDWATER ELEVATION (ft NGVD): 105.30

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 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: 1343 | PURGING ENDED AT: 1403 | 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
1353	2.50	2.50	0.25	15.28	4.62	25.1	35	0.1	4.49	42		
1356	0.75	3.25	0.25	15.28	4.63	25.1	35	0.1	5.28	40		
1359	0.75	4.00	0.25	15.28	4.63	25.1	35	0.1	5.49	38		
1402	0.75	4.75	0.25	15.28	4.64	25.1	35	0.1	4.51	34	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: 1403 | SAMPLING ENDED AT: NR

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: EQUIPMENT BLANK #1	SAMPLE ID:		DATE: 2-20-18

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): N

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
1520	NA	NA	NA	NA	6.96	24.5	6	1.4	0.00	24	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: DAN ARMOUR BLAINE GRISSOM / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1520		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			
(X)	SEE SAMPLE L-D-G AND			BOTTLE ORDER	WORKSHEET				

REMARKS:
SHEEN: NO EB- COMPLETED USING D.I. H2O PROVIDED BY TEST AMERICA

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

FORM FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB21S | SAMPLE ID: | DATE: 2-20-18

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): 10.61 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 122.84 | GROUNDWATER ELEVATION (ft NGVD): 112.23

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (18.00 feet - 10.61 feet) X 0.163 gallons/foot = 1.21 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: 1445 | PURGING ENDED AT: 1505 | 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
1455	1.60	1.60	0.16	10.89	4.95	23.9	216	0.6	3.10	32		
1458	0.48	2.08	0.16	10.89	4.95	23.9	214	0.6	3.51	26		
1501	0.48	2.56	0.16	10.89	4.95	23.9	213	0.6	3.59	21		
1504	0.48	3.04	0.16	10.89	4.95	23.9	213	0.6	3.41	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 DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1505 | SAMPLING ENDED AT: NA

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: MW811S
SAMPLE ID:
DATE: 2-20-18

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): 11.18
PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 120.81
GROUNDWATER ELEVATION (ft NGVD): 109.63

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)
= (19.50 feet - 11.18 feet) X 0.163 gallons/foot = 1.36 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: 1315
PURGING ENDED AT: 1335
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
1325	1.70	1.70	0.17	11.31	3.89	21.4	165	0.5	13.04	253		
1328	0.51	2.21	0.17	11.31	3.89	21.4	163	0.5	8.61	254		
1331	0.51	2.72	0.17	11.31	3.90	21.4	164	0.5	7.88	233		
1334	0.51	3.23	0.17	11.31	3.92	21.4	163	0.5	6.24	247	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): 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					
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: (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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB-39I | SAMPLE ID: | DATE: 2-21-18

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): 12.46 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): NA 126.76 | GROUNDWATER ELEVATION (ft NGVD): NA 114.30

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)

= 0.0 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: 0830 | PURGING ENDED AT: 0850 | 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
0840	1.40	1.40	0.14	14.05	5.13	23.2	42	0.0	4.78	59		
0843	0.42	1.82	0.14	14.05	5.01	23.2	39	0.0	4.29	40		
0846	0.42	2.24	0.14	14.05	4.99	23.2	40	0.0	4.44	35		
0849	0.42	2.66	0.14	14.05	4.99	23.2	41	0.0	3.92	33	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: 0850 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 55.88 | 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
(X)	SEE SAMPLE L-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present: YES (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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE
SITE LOCATION: JACKSONVILLE, FL
WELL NO: MW B-35I
SAMPLE ID:
DATE: 2-21-18

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): 8.66
PURGE PUMP TYPE OR BAILER: PP
WELL ELEVATION TOC (ft NGVD): NA 147.93
GROUNDWATER ELEVATION (ft NGVD): NA 139.27

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: 0728
PURGING ENDED AT: 0748
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
0738	1.50	1.50	0.15	9.29	4.82	21.3	34	0.3	3.30	82		
0741	0.45	1.95	0.15	9.29	4.66	21.3	35	0.3	3.58	75		
0744	0.45	2.40	0.15	9.29	4.65	21.3	35	0.3	3.23	73		
0747	0.45	2.85	0.15	9.29	4.63	21.3	35	0.3	3.17	72	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: DANNY ARMOUR / BLAINE GRISSOM / PRO-TECH
SAMPLER(S) SIGNATURE(S):
SAMPLING INITIATED AT: 0748
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: MWB-35S | SAMPLE ID: | DATE: 2-21-18

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): 7.04 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): ~~NA~~ 147.79 | GROUNDWATER ELEVATION (ft NGVD): ~~NA~~ 140.75

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)
= 0.0 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: 0700 | PURGING ENDED AT: 0720 | 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
0710	1.40	1.40	0.14	7.35	3.76	18.7	36	0.0	4.00	122		
0713	0.42	1.82	0.14	7.35	3.79	18.7	36	0.1	4.71	114		
0716	0.42	2.24	0.14	7.35	3.80	18.7	36	0.1	4.43	109		
0719	0.42	2.66	0.14	7.35	3.85	18.7	36	0.1	5.01	101	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; 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 GRISSOM / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0720 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 17.00 | 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
(N)	SEE SAMPLE L-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
Sheen Present YES (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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB-39S | SAMPLE ID: | DATE: 2-21-18

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): 13.59 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): NA 126.85 | GROUNDWATER ELEVATION (ft NGVD): NA 113.26

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (18.90 feet - 13.59 feet) X 0.163 gallons/foot = 0.87 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: 0801 | PURGING ENDED AT: 0821 | 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
0811	1.10	1.10	0.11	13.84	5.74	21.0	423	0.4	5.08	15		
0814	0.33	1.43	0.11	13.84	5.73	21.0	418	0.4	5.10	3		
0817	0.33	1.76	0.11	13.84	5.73	21.0	416	0.4	6.00	-3		
0820	0.33	2.09	0.11	13.84	5.72	21.0	412	0.4	5.88	-10	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 ARMOUR BLAINE GRISSOM / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0821 | 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
(N)	SEE SAMPLE L-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present YES (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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB-40S | SAMPLE ID: | DATE: 2-21-18

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 1/4 | WELL SCREEN INTERVAL DEPTH: 8.52 feet to 18.52 feet | STATIC DEPTH TO WATER (feet): 8.60 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): NA 115.41 | GROUNDWATER ELEVATION (ft NGVD): NA 106.81

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (18.52 feet - 8.60 feet) X 0.163 gallons/foot = 1.62 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: 0905 | PURGING ENDED AT: 0926 | TOTAL VOLUME PURGED (gallons): 3.15

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
0916	1.65	1.65	0.15	8.72	4.83	20.6	217	0.0	18.63	79		
0919	0.45	2.10	0.15	8.72	4.79	20.6	222	0.0	17.68	78		
0922	0.45	2.55	0.15	8.72	4.80	20.6	219	0.0	17.48	77		
0925	0.45	3.00	0.15	8.72	4.80	20.6	220	0.0	17.06	76	AMBER/ 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: DANNY ARMOUR BLAINE GRISSOM / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0926 | 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 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 LOG AND BOTTLE ORDER WORKSHEET									

REMARKS:

Sheen Present YES (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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: SGMW-25 | SAMPLE ID: | DATE: 2-21-18

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): 15.74 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): NA 130.55 | GROUNDWATER ELEVATION (ft NGVD): NA 144.81

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (17.70 feet - 15.74 feet) X 0.163 gallons/foot = 0.32 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: 0941 | PURGING ENDED AT: 1051 | TOTAL VOLUME PURGED (gallons): 7.00

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
0951	1.00	1.00	0.10						150.81			
1001	1.00	2.00	0.10						120.6			
1011	1.00	3.00	0.10						106.2			
1021	1.00	4.00	0.10						85.29			
1031	1.00	5.00	0.10						50.52			
1041	1.00	6.00	0.10	15.78	4.77	22.3	46	0.0	37.67	5		
1044	0.30	6.30	0.10	15.78	4.80	22.3	46	0.0	31.68	3		
1047	0.30	6.60	0.10	15.78	4.78	22.3	49	0.0	30.93	2		
1050	0.30	6.90	0.10	15.78	4.80	22.3	50	0.0	31.37	-3	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: DANNY ARMOUR / BLAINE GRISSOM / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1051 | 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
(X)	SEE SAMPLE L-0-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present: YES (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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SW-1	SAMPLE ID:		DATE: 2-21-18

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
1230	NA	NA	NA	NA	6.79	20.6	437	7.2	22.43	157	LT. TAN	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 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: DAN ARMOUR/BLAINE GRISSOM BEN RAMSEAUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1230	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 LOG 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: 2-21-18

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
1250	NA	NA	NA	NA	7.21	22.2	456	4.6	20.55	125	LT. 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: 1250	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 C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS: SW-3 = 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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SW-B	SAMPLE ID:		DATE: 2-21-18

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):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):
NA	NA	NA	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	ODC
	NA	NA	NA	NA								
		(*) – DRY POINT 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; 5" = 1.02; 6" = 1.47; 12" = 5.8
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" = 0.0

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:		SAMPLING ENDED AT: NA
DAN ARMOUR BLAINE GRISSOM / PRO-TECH				

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:		FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:
NA	NA		

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 EQUIPME CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
(*)	SEE SAMPLE L-D-L AND			BOTTLE ORDER			WORKSHEET		

REMARKS:
SHEEN: SW-B = SURFACE WATER POINT

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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	TRAIL RIDGE		SITE LOCATION:	JACKSONVILLE, FL
WELL NO:	SW-7	SAMPLE ID:		DATE:	2-21-18

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: – feet to – feet	STATIC DEPTH TO WATER (feet):		PURGE PUMP TYPE OR BAILER:
NA	NA		NA		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):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):
NA	NA	NA	NA		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
1350	NA	NA	NA	NA	7.31	20.6	149	7.1	55.50	112	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:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:		SAMPLING ENDED AT:
DAN ARMOUR BLAINE GRISSOM / PRO-TECH		1350		NR

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:		FIELD-FILTERED: Y (N) FILTER SIZE: µm Filtration Equipment Type:
NA	NA		

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			
(SW)	SEE SAMPLE I.D. AND			BOTTLE ORDER			WORKSHEET		

REMARKS:
SHEEN: NO SW-7 = 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-4	SAMPLE ID:		DATE: 2-21-18

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
1320	NA	NA	NA	NA	7.11	29.3	198	7.1	96.24	128	LT 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, BLAINE GRISSOM / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1320	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			
(X)	SEE SAMPLE L-D-L AND BOTTLE ORDER WORKSHEET								
(X)	NO DISCHARGE THROUGH OUTFALL								

REMARKS:
SHEEN: NO SW-4 = 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-5	SAMPLE ID:	DATE: 2-21-18

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: - feet to - feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
NA	NA		NA	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):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):
NA	NA	NA	NA		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
1410	NA	NA	NA	NA	7.65	22.2	195	6.7	166.3	98	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./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:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:		SAMPLING ENDED AT:
DAN ARMOUR BLAINE GRISSOM / PRO-TECH		1410		NR

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
NA	NA			

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 I.D. AND			BOTTLE ORDER			WORKSHEET		
(*) -	WATER DISCHARGING			THROUGH	OUTFALL				

REMARKS:
SHEEN: NO SW-5 = 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-6	SAMPLE ID:	DATE: 2-21-18

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: - feet to - feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
NA	NA		NA	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):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):
NA	NA	NA	NA		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
1430	NA	NA	NA	NA	7.61	25.4	265	6.6	34.48	102	LT 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./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:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:		SAMPLING ENDED AT:
DAN ARMOUR / PRO-TECH BLAINE GRISSOM		1430		NR

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
NA	NA			

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 L-D-L AND BOTTLE ORDER WORKSHEET								
(X)	NO FLOW THROUGH OUTFALL								

REMARKS:
SHEEN: NO SW-6 = SURFACE WATER POINT

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)

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