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Water Quality Monitoring Report

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

First 2019 Semiannual Event
Sampled February 20-25, 2019
Limited Resample March 29, 2019

Prepared For:
Trail Ridge Landfill, Inc.

Prepared By:

Carlson Environmental Consultants, PC
305 S Main Street
Monroe, NC 28112
March 2019

PROFESSIONAL CERTIFICATION - TRAIL RIDGE LANDFILL 2H 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.

PETER J. WALLS LICENSE No. 062777 STATE OF FLORIDA PROFESSIONAL ENGINEER

4/25/2019

Peter Walls, P.E. Date
Florida License # 62777
Expires 02/28/2021

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 Trail Ridge Landfill, Inc.

Address 5110 U.S. Highway 301

City Baldwin, FL Zip 32234 County Duval

Telephone Number ( )

(2) WACS Facility ID 33628

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

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

Address 5110 U.S. Highway 301

City Baldwin, FL Zip 32234 County Duval

Telephone Number (904) 748-6006

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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.

4/23/19 _____
(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) jallen@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 and minor mod 0013493-028-SO-MM issued April 5, 2019. 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 2019 semi-annual groundwater and surface water monitoring event conducted on February 20-25, 2019 with a limited resample event conducted March 28, 2019. 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 but is approximately 95% complete.

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

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

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

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

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

The Site surface water monitoring system 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-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 point that is further downgradient of the ponds. SW-B is intended to be a background water quality sampling point and is located in the outer interceptor ditch on the southwestern side of the expansion area.

3.0 DATA COLLECTION METHODS

3.1 Groundwater Elevation Measurements

ProTech field personnel measured water levels in Site monitoring wells on February 25, 2019 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 2019 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 all monitoring wells listed in Section 2.2 between February 20 and February 21, 2019 with a limited resample of MWB-39(s) and MWB-40(s) on March 28, 2019.

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 placed the samples in coolers with ice. On February 25, 2019, 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.

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 and March 2019 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, 2019, 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 four field blanks during the February 2019 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 Laboratory Reports J1809127 and J1809066 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 relative percent difference (RPD) for the following analytes in the Laboratory Control Sample (LCS) and Duplicate (LCSD) were outside control criteria: Vinyl Chloride, 1,1-Dichloroethylene, Methyl ter-Butyl Ether, cis-1,2-Dichloroethylene, Chloroform, Benzene, and Chlorobenzene. All spike recoveries in the LCS, LCSD, and MS were within acceptable limits, indicating the analytical batch was in control. No further corrective action was needed.
- The Laboratory Control Sample Duplicate (LCSD) recoveries of Trichloroethane, Toluene, Tetrachloroethane, Ethylbenzene, Xylene-totals, 1,2,4-Trimethylbenzene, 1,3- Dichlorobenzene, and 1,2-Dichlorobenzene were outside control criteria. Recoveries in the Laboratory Control Sample (LCS) and Matrix Spike (MS) were acceptable, which indicates the analytical batch was in control. The LCSD was analyzed only to allow for RPD determination. All samples were analyzed following a passing CCV and LCS and no further corrective action was deemed necessary.
- The matrix spike recoveries of Chloride and Nitrate for J1809066001, J1809066015 and J1809066016 were outside control criteria due to the presence of target analytes in the sample. Recoveries in the Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential high bias in this matrix. The affected samples are qualified to indicate matrix interference.
- Chloromethane remains a probable false positive detection. In the 1H 2018 sampling event, chloromethane was initially detected in MWB-2(S) and MWB-40(S)

as well as at surface water monitoring points SW-1, SW-4, SW-5, SW-6, and SW-7 at levels below the Class III WQS of 470.8 ug/L. The pattern of detection in two isolated monitoring wells (each on opposite sides of the landfill, one upgradient, and with no obvious other impacts) and at nearly all surface water monitoring points suggested some sort of false positive or a non-landfill source. However, chloromethane is not a common lab contaminant and the lab was not aware of any potential sources of contamination, so TRLF elected to resample these points to verify the detections. In the resample event, chloromethane was again detected in all resampled points but at significantly lower concentrations. In the 2H 2018, sampling event, both the number of locations and magnitude of detections again decreased. An apparent decreasing trend was evident. However, during the 1H 2019 event, chloromethane was again detected in MWB-2(S) (an upgradient well) and multiple surface water points at higher concentrations than in the previous event. The lab again indicated there were no known QC issues they were aware of that could lead to false positives for chloromethane, but that in their experience, chloromethane is occasionally detected with no apparent explanation. Trail Ridge continues to believe these detections are not related to landfill operations and instead are related to an as yet unknown lab or method issue or are naturally occurring. Trail Ridge intends to collect split samples during the 2H 2019 event to send to a different laboratory to verify the detections.

- Other QA/QC issues were not identified; therefore, the remaining results from the February 2019 event are considered acceptable without qualification.

5.2 Field Parameter Measurement Results

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

Groundwater field parameter readings and observations are consistent with those from previous semi-annual monitoring events. Historically, the average pH increases with depth 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 the recently installed replacement well SGMW-1(SR). Both MWB-2(S) and SGMW-1(S) have historically had elevated turbidity. It is likely the aquifer in this area contains fines and elevated turbidity, which may worsen seasonally during periods of lower water levels.

Surface water field parameter readings and observations for SW-1 and SW-3 were comparable to recent measurements. Turbidities were again low during this event, suggesting BMPs implemented by TRL for Ponds 1 and 2 remain effective. Turbidities measured in SW-4, SW-5, SW-6, and SW-7 were significantly elevated and similar to those obtained in the 2H 2018 sampling event. The new stormwater management system

and retention ponds remain under construction and during the past 6-8 months there has been extensive pumping between the ponds to facilitate sediment removal and final grading which likely exacerbated existing conditions. Neither stormwater pond was discharging at the time of sampling. Elevated turbidity in expansion area surface water is further discussed in Section 6.2.

5.3 Laboratory Analysis Results

Table 4 summarizes the 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 2019 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, chloromethane, and total dissolved solids (TDS). These exceedances are identified and discussed below.

Iron (SMCL 0.3 mg/L)

- Shallow wells: MWB-3(S), MWB-11(S), MWB-2(S), MWB-29(S), MWB-21(S), MWB-34(S), MWB-39(S), MWB-40(S), SGMW-1(SR) and SGMW-2(S)

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

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.

Chloromethane (GCTL 2.7 µg/L)

- Shallow wells: MWB-2S

VOCs MWB-39(S) and 40(S)

- VOCs were detected at MWB-39(S) and MWB-40(S). Trail Ridge elected to resample for these compounds to verify the initial detections. The detection of methyl ethyl ketone (MEK) at MWB-39(S) was not confirmed. The detections of acetone, 2-hexanone, MEK, and toluene at MWB-40(S) were confirmed.

Nitrogen, Ammonia (as N) (GCTL 2800 mg/L)

- Shallow wells: MWB-40S

Total Dissolved Solids (SMCL 500 mg/L)

- Shallow wells: MWB-34(S)

The SMCL and GCTL 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.

Both TDS and ammonia concentrations in MWB-34(S) declined in this event. This well continues to show minor impacts with elevated TDS that exceed the SMCL, while ammonia levels are now below the GCTL. 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 previous 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.

The verified VOC detections and presence of ammonia above the GCTL in MWB-40(S) (presented for informational purposes only) are new issues and were reported to FDEP on April 19, 2019. All of the VOCs in MWB-40(S) are at concentrations below standards. These detections may be related to a leachate impact caused by side slope erosion and construction. Heavy rainfall events occurred during select waste placement, most notably during Hurricane Irma. Significant side slope erosion occurred and the northeast corner of Cell 6 sloughed as a result of the high velocity stormwater that was channeled to an undersized culvert placed during construction. Early in Q1 2019, a permanent concrete culvert was placed at the northeast corner of Cell 6. Soil disturbance occurred within five feet of MWB-40(S). As an additional corrective action, lining the east perimeter ditch of Cell 6 with a durascrim plastic liner and riprap. This work will be complete by the 2nd week of May. TRL proposes to monitor the well for at least one additional event to determine if these corrective actions are having a positive impact.

The chloromethane detections have been previously reported to the Department. As described in detail in Section 5.1, Trail Ridge continues to believe these random detections are not related to landfill operations and instead are related to an as yet unknown lab/method issue or are the result of naturally occurring processes. Trail Ridge intends to collect split samples during the 2H 2019 event to send to a different laboratory to verify the detections.

6.2 Surface Water

6.2.1 Established Standards

Surface water analytical results were compared to Class III WQS. Standards 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 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 III surface water quality standards (WQS) identified in Table 3 (field parameters), Table 5 (laboratory parameters), or Table 6 (calculated standards):

Iron (Class III - 1000 ug/L)

- SW-3, SW-4, SW-5, SW-6, and SW-7

Lead (Calculated)

- SW-1, SW-3, SW-4, SW-5, and SW-6

Mercury (Class III – 0.012 ug/L)

- SW-4, SW-5, and SW-6

Turbidity (>29 NTU above background)

- SW-4, SW-5, SW-6, and SW-7 all exhibited turbidity significantly greater than 29 NTU. It should be noted that highly turbid water periodically discharges on to the TRL property from the neighboring Chemours property thus raising the background relative to TRL significantly.

Chloromethane

- Chloromethane was detected above background in SW-1, SW-4, SW-5, SW-6, and SW-7.

All of the noted exceedances of applicable Class III WQS in SW-1, SW-3, SW-4, SW-5, SW-6, and SW-7 were previously reported to the Department.

The SW-1 and SW-3 exceedances for lead (both locations) and iron (SW-3) are likely not significant. The lead detection in SW-1 was very low, an estimated value of 3.7 ug/L that was below the PQL. The fact this the detection exceeded the calculated standard of 1.8 ug/L was due primarily to the very low hardness in the pond which in turn leads to a very low calculated standard. Water quality in SW-1 remains generally good. The exceedances for the two metals in SW-3 appear to be outliers as turbidity during this event 16.77 NTU was low. Samples collected by TRL during February and analyzed by Eurofins TestAmerica laboratory were much lower (2.4 I ug/L) also supporting the SW-3 result in this event was an outlier.

With regard to the exceedances of metal water quality standards in the expansion area sampling points SW-4 through SW-7, the initial detections occurred during the first sampling event at these new ponds in 1H 2018. The majority of these exceedances were confirmed during a confirmation resampling event conducted in April 2018. In May and June 2018, TRL conducted a source investigation and submitted an Alternate Source Demonstration (ASD) to FDEP in July 2018. The ASD concluded elevated metal

concentrations observed in the expansion area surface water ponds were likely associated with elevated turbidity and caused by contaminated run-on from the Chemours property and disturbance of native soils caused primarily by ongoing construction of the stormwater system. There was no evidence the exceedances were related to landfilling operations in Phase 6.

Additional sampling to evaluate run-on was conducted and TRL submitted an initial data summary to the Department on October 16, 2018. This data further supported the premise that run-on from Chemours is a significant source of sediment and contamination.

Several steps remain underway to address the issue. First, the City of Jacksonville contractor responsible for the stormwater system construction continues work to complete the system construction and soil stabilization and is working to repair sections of the perimeter ditches that were damaged by heavy rains. As of this report, most of these repairs are complete. Second, the City has attempted to contact Chemours to address the run-on. To date, Chemours has not responded to the City's request for dialogue and to implement repairs and control measures upgradient (west) of TRL to disperse and slow run-on migrating onto the TRL property. However, some improvements have been made by the City on the east side of the property boundary to mitigate the issue. Lastly, TRL and City are currently evaluating BMPs to implement in the expansion area to reduce turbidity. These BMPs have proven successful in Ponds 1 and 2 and will be implemented as needed and appropriate after construction and repair are complete. The BMPs implemented on-site will be limited in effectiveness until the ultimate source of the detections (run-on from Chemours) is addressed by the property owner and FDEP.

Neither Pond 3 or Pond 4 were discharging at the time of sampling. However, lead did exceed its calculated water quality standard at the downstream sampling point SW-7.

As described in detail in Section 5.1 and previously reported, Trail Ridge continues to believe the chloromethane detections are not related to landfill operations and instead are related to an as yet unknown lab or method issue or are naturally occurring. Trail Ridge intends to collect split samples during the 2H 2019 event to send to a different laboratory to verify the detections.

7.0 DISCUSSION AND RECOMMENDATIONS

Except as noted, analyte detections and the exceedances observed during this event for both groundwater and surface water are consistent with historical conditions and/or background water quality.

Previously reported detections for MWB-34(S) improved again relative to the prior event. This well continues to show minor impacts of elevated TDS that exceed the SMCL, but concentrations are trending down and ammonia is now below the GCTL. 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 2017 and 2018 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.

The verified VOC detections and presence of ammonia above the GCTL in MWB-40(S) are new issues and were reported to FDEP on April 19, 2019. The concentrations of all detected VOCs in MWB-40(S) were below applicable standards. These detections may be related to a leachate impact caused by side slope erosion and construction. Heavy rainfall events occurred during select waste placement, most notably during Hurricane Irma. Significant side slope erosion occurred and the northeast corner of Cell 6 sloughed as a result of the high velocity stormwater that was channeled to an undersized culvert placed during construction. Early in Q1 2019, a permanent concrete culvert was placed at the northeast corner of Cell 6. Soil disturbance occurred within five feet of MWB-40(S). As an additional corrective action, lining the east perimeter ditch of Cell 6 with a durascrim plastic liner and riprap. This work will be complete by the 2nd week of May. TRL proposes to monitor the well for at least one additional event to determine if these corrective actions are having a positive impact.

As described in detail in Section 5.1, Trail Ridge continues to believe the chloromethane detections in groundwater and surface water are not related to landfill operations and instead are related to an as yet unknown lab or method issue or are naturally occurring. Trail Ridge intends to collect split samples during the 2H 2019 event to send to a different laboratory to verify the detections.

With regard to the exceedances of metal water quality standards in the expansion area sampling points SW-4 through SW-7, the initial detections occurred during the first sampling event at these new ponds in 1H 2018. The majority of these exceedances were confirmed during a confirmation resampling event conducted in April 2018. In May and June 2018, TRL conducted a source investigation and submitted an Alternate Source Demonstration (ASD) to FDEP in July 2018. The ASD concluded elevated metal concentrations observed in the expansion area surface water ponds were likely associated with elevated turbidity and caused by contaminated run-on from the Chemours property and disturbance of native soils caused primarily by ongoing construction of the stormwater system. There was no evidence the exceedances were related to landfilling operations in Phase 6.

Additional sampling to evaluate run-on was conducted and TRL submitted an initial data summary to the Department on October 16, 2018. This data further supported the premise that run-on from Chemours is a significant source of sediment and contamination.

Several steps remain underway to address the issue. First, the City of Jacksonville contractor responsible for the stormwater system construction continues work to complete the system construction and soil stabilization and is working to repair sections of the perimeter ditches that were damaged by heavy rains. As of this report, most of these repairs are complete. Second, the City has attempted to contact Chemours to address the run-on. To date, Chemours has not responded to the City's request for dialogue and to implement repairs and control measures upgradient (west) of TRL to disperse and slow run-on migrating onto the TRL property. However, some improvements have been made by the City on the east side of the property boundary to mitigate the issue. Lastly, TRL and City are currently evaluating BMPs to implement in the expansion area to reduce turbidity. These BMPs have proven successful in Ponds 1 and 2 and will be implemented as needed and appropriate after construction and repair are complete. The BMPs implemented on-site may be limited in effectiveness until the ultimate source of the detections (run-on from Chemours) is addressed by the property owner and FDEP. Trail Ridge recommends conducting at least one additional semiannual monitoring event after construction is complete to determine the significance of the issues in the absence of ongoing construction and after some stabilization has been achieved.

The next sampling event should be conducted prior to September 30, 2019 per the facility's permit and is currently scheduled for August 2019.

8.0 REFERENCES

Carlson Environmental Consultants, July 2018, Alternate Source Demonstration, Trail Ridge Landfill.

Carlson Environmental Consultants, October 2018, Additional Surface Water Sample Results Memo, Trail Ridge Landfill.

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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)[2]		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)R	Temp. Detection	Phase 6	325,783	2,144,798	2	15	140.30	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 2019

Well ID	TOC Elevation	Depth to Water	Groundwater Elevation
	(ft MSL)	(ft BTOC)	(ft MSL)
Shallow Wells			
MWB-2(S)	146.64	7.49	139.15
MWB-3(S)	154.38	7.64	146.74
MWB-7(S)	123.29		123.29
MWB-11(S)	120.81	11.21	109.60
MWB-12(S)	124.63	9.99	114.64
MWB-13(S)	126.05	12.81	113.24
MWB-14(S)	126.05		
MWB-20(S)	121.01	9.63	111.38
MWB-21(S)	122.84	10.73	112.11
MWB-22(S)	126.97	11.51	115.46
MWB-23(S)	125.34		125.34
MWB-24(S)	126.04		126.04
MWB-25(S)	125.22		125.22
MWB-26(S)	126.55		126.55
MWB-27(S)	128.42	7.26	121.16
MWB-29(S)	138.02	8.21	129.81
MWB-32(S)	124.64	8.37	116.27
MWB-33(S)	125.90	10.08	115.82
MWB-34(S)	125.78	8.71	117.07
MWB-35(S)	147.79	7.17	140.62
MWB-39(S)	126.85	14.1	112.75
MWB-40(S)	115.41	10.97	104.44
SGMW-1(S)R	140.30	16.24	124.06
SGMW-2(S)	130.55	15.74	114.81
Intermediate Wells			
MWB-2(I)	145.73	10.9	134.83
MWB-3(I)	151.86	14.11	137.75
MWB-7(I)	121.53		121.53
MWB-11(IR)	120.43	16.53	103.90
MWB-12(I)	124.62	9.82	114.80
MWB-13(I)	125.98	16.98	109.00
MWB-14(I)	125.92		125.92
MWB-25(I)	124.03		124.03
MWB-27(I)	128.63	8.02	120.61
MWB-29(I)	138.08	7.72	130.36
MWB-32(I)	124.79	8.73	116.06
MWB-34(I)	125.80	10.00	115.80
MWB-35(I)	147.93	9.06	138.87
MWB-39(I)	126.76	13.66	113.10
Deep Wells			
MWB-7(D)	121.65		121.65
MWB-12(D)	124.56		124.56
MWB-14(D)	125.87		125.87
MWB-25(D)	124.64		124.64
MWB-27(D)	128.88		128.88
MWB-29(D)	138.18		138.18
MWB-31(D)	156.15		156.15
MWB-32(D)	124.93		124.93
MWB-34(D)	125.92		125.92

Notes:
TOC - top of casing; ft BTOC - feet below top of casing; ft MSL - feet above mean sea level; NM - Not Measured
Depth to water measurements collected by ProTech on August 14, 2018. Top of casing elevations based on groundwater well survey data provided in August 2017 by Golder, CDM, and Pro-Tech and CEC 2018.

TABLE 3 - Groundwater and Surface Water Summary of Select Field Parameters
Trail Ridge Landfill, Jacksonville, Florida
February 2019

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)	4.72	22.70	29.00	2.30	33.63
MWB-3(S)	4.25	19.80	67.00	1.00	4.61
MWB-11(S)	3.96	21.10	130.00	0.50	4.90
MWB-12(S)	5.81	20.30	302.00	1.30	6.71
MWB-13(S)	5.87	206.00	649.00	1.30	3.69
MWB-20(S)	4.45	21.40	237.00	0.40	11.84
MWB-21(S)	4.81	22.70	136.00	0.60	4.63
MWB-22(S)	5.99	20.90	770.00	0.30	2.66
MWB-27(S)	5.64	19.10	145.00	0.60	10.55
MWB-29(S)	4.34	19.00	63.00	1.10	2.59
MWB-32(S)	5.17	23.00	139.00	0.20	4.21
MWB-33(S)	5.60	23.10	192.00	0.10	2.99
MWB-34(S)	6.38	22.80	1011.00	0.10	5.72
MWB-35(S)	4.42	18.40	31.00	0.10	6.82
MWB-39(S)	5.51	20.60	427.00	0.30	2.16
MWB-40(S)	4.71	20.10	356.00	0.00	6.39
SGMW-1(SR)	5.31	21.00	134.00	1.30	127.40
SGMW-2(S)	4.87	22.20	58.00	0.10	9.25
Intermediate Wells					
MWB-2(I)	4.50	21.40	42.00	0.20	1.94
MWB-3(I)	4.37	21.70	44.00	0.50	1.69
MWB-11(IR)	4.54	23.90	37.00	0.10	3.78
MWB-12(I)	4.98	24.50	44.00	0.10	2.45
MWB-13(I)	4.99	25.10	42.00	0.10	3.43
MWB-27(I)	5.25	21.00	57.00	0.40	4.13
MWB-29(I)	4.82	23.70	45.00	0.60	11.64
MWB-32(I)	5.04	22.60	46.00	0.30	8.72
MWB-34(I)	5.01	25.70	46.00	0.30	4.89
MWB-35(I)	4.60	21.00	47.00	0.10	2.27
MWB-39(I)	4.89	22.30	46.00	0.00	2.65
Surface Water					
SW-1	7.38	13.80	214.00	6.80	14.09
SW-3	7.54	18.30	472.00	4.80	16.77
SW-B	7.73	11.70	111.00	4.80	3.15
SW-4	7.32	18.00	220.00	7.30	182.70
SW-5	7.56	19.80	213.00	6.50	171.10
SW-6	6.83	18.20	223.00	6.40	172.70
SW-7	7.22	13.80	108.00	5.70	41.45

Notes:
SU-standard units; mg/L-milligrams per liter; uS/cm-microSiemens per centimeter;
NTU-nephelometric turbidity unit; BG-background level
SMCL-secondary maximum contaminant level drinking water standard provided in F.A.C. Chapter 62-550
Class I and III surface water quality standards provided in F.A.C. Chapter 62-302

Table 4 - Groundwater Constituent Concentrations
Trail Ridge Landfill, Jacksonville, Florida
February 2019

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-1SR	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	0.4 I	0.11 U	0.11 U	0.3 I	0.18 I	0.11 U	0.11 U	0.11 U	0.63 I	0.11 U	0.11 U	0.11 U	0.5 I	0.19 I	0.2 I											
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	9 U	9 U											
BARIUM	ug/L	2000	34	15	8	2.2	5.8	13	3.3	4.4	5.9	25	6.9	12	14	2	18	77	200	82											
BERYLLIUM	ug/L	4	0.4 U	0.4 U	0.4 U	0.5 I	0.4 U	0.4 U	0.4 U	0.5 I	0.4 U	0.4 U	0.4 U	0.5 I	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U											
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	0.45 U	0.45 U											
CHROMIUM	ug/L	100	1.6 U	1.6 U	3.2	2 I	2.7 I	1.6 U	2 I	3	1.7 I	1.6 U	1.6 U	2.6 I	2 I	1.6 U	1.7 I	2.1 I	6.6	1.6 U											
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	1.9 U	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	8.9	3.2 U	3.2 U	3.2 U	3.2 U	6.7	3.2 U											
IRON	ug/L	300	440	770	690	100 U	200 I	410	100 U	130 I	100 U	1000	100 U	710	260	100 U	730	960	830	690	170 I	240	540	260	330	280	400	440	430	830	300
LEAD	ug/L	15	7.8	2.9 U	9.2	4 I	3.9 I	4.6 I	4.5 I	3.6 I	3.4 U	5.1 I	5.3 I	4.8 I	2.9 U	2.9 U	2.9 U	2.9 U	6.5	3.1 I											
MERCURY	ug/L	2	0.011 U	0.011 U	0.064 I	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 I	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U											
NICKEL	ug/L	100	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6.8 I	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	8 I	6 U											
SELENIUM	ug/L	50	1.3 I	0.58 U	0.62 I	4 I	0.58 U	0.58 U	1.8 I	0.58 U	0.58 U	0.58 U	0.58 U	1.1 I	0.58 U	0.58 U	0.63 I	0.58 U	0.7 I	0.58 U											
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	9.6 U	9.6 U											
SODIUM	ug/L	160000	13000	5000	1900	15000	8400	5500	46000	80000	38000	8800	7100	38000	7200	1900	2300	48000	11000	4100	4100	3500	2300	3100	3600	3600	4800	4200	3700	3900	3300
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	0.057 U	0.057 U											
VANADIUM	ug/L	49	7.7	1.9 I	4.3	42	14	2.2 I	28	7.2	11	3.6 I	6.5	25	1.5 I	1.5 I	3.4 I	8	8.3	1.5 I											
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	39 I	33 U	33 U	33 U	33 U	33 U	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	0.54 U	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	0.22 U	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	0.2 U	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	0.3 U	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	0.14 U	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	0.18 U	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	0.91 U	0.91 U											
1,2-DIBROMO-3-CHLOROPROPANE	ug/L	0.2	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	0.11 U	3.1 U	3.1 U											
1,2-DIBROMOETHANE (EDB)	ug/L	0.02	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	0.2 U	0.2 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	0.18 U	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	0.23 U	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	0.66 U	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	0.22 U	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	5.9	0.71 U	0.71 U											
ACETONE	ug/L	6300	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.3 I	2.1 U	2.2 I	2.1 U	2.1 U	2.7 I	260*	2.1 U	2.2 I											
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	1.1 U	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	0.16 U	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	0.17 U	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	0.46 U	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	0.44 U	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	0.29 U	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	0.67 U	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	0.36 U	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	0.21 U	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	0.33 U	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	0.18 U	0.18 U											
CHLOROMETHANE	ug/L	2.7	0.21 U	0.21 U	37	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											
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	1.3	0.24 U	0.24 U	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	0.16 U	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	0.33 U	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	0.26 U	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	0.24 U	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	0.16 U	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	1* I	230*	0.43 U	0.43 U											
METHYL ISOBUTYL KETONE (MIBK)	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	0.55* I	0.47 U	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	2.5 U	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	0.23 U	0.23 U											
TETRACHLOROETHENE	ug/L	3	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	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	4.8*	0.23 U	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	0.2 U	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	0.21 U	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	1.8 U	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	0.29 U	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	0.32 U	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	0.19 U	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	0.2 U	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	0.53 U	0.53 U											
CHLORIDE (AS Cl)	ug/L	250000	10000	6500 I	1300 I	14000	7100 I	6900 I	95000	130000	46000	14000	8100 I	51000	7700 I	2800 I	46000	55000	15000	5900	4000 I	3800 I	4.4 I	4900 I	3900 I	4000 I	5400 I	4500 I	4110 I	5100 I	4000 I
NITRATE (AS N)	ug/L	10000	280	22 U	150 I	1100	140 I	22 U	310	22 U	500	320	22 U	22 U	22 U	250 U	250 U	250 U	250 U	250 U	22 U	22 U	250 U	250 U	22 U	22 U	22 U	22 U	410 I	22 U	22 U
NITROGEN, AMMONIA (AS N)	ug/L	2800	50	20	100	40	170	140	120	100	730	1600	950	100	640	90	1600	2900*	350	70	30	60	100	60	60	80	50	70	90	40	60
RESIDUES - FILTERABLE (TDS)	ug/L	500000	380000	80000	110000	210000	110000	40000	350000	430000	190000	100000	150000	630000	94000	4700	260000	260000	120000	63000	83000	110000	50000	110000	35000	40000	24000	46000	50000	58000	57000

U = Result was less than the Method Detection Limit (MDL).
J = Indicates an 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
* MWB-39(S) was resampled for MED and the detection was not confirmed. MWB-40(S) was resampled for detected VOCs. All detected VOCs were confirmed except MIBK.

Table 5 - Surface Water Constituent Concentrations
Trail Ridge Landfill, Jacksonville, FL
February 2019

Analyte	Units	Class III WQ Standard	SW-1		SW-3		SW-4		SW-5		SW-6		SW-7		SW-B	
ANTIMONY	ug/L	4300	0.23	I	1.4		0.31	I	0.31	I	0.36	I	0.11	U	0.11	U
ARSENIC	ug/L	50	9	U	9	U	9	U	9	U	9	U	9	U	9	U
BARIUM	ug/L		24		46		82		84		94		26		8.6	
BERYLLIUM	ug/L	<.3	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
CADMIUM	ug/L	See Table 6	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U
CALCIUM	ug/L		21000		53000		33000		34000		33000		12000		16000	
CHROMIUM	ug/L	See Table 6	2.6	I	5.8		18		18		19		5.2		1.6	U
COBALT	ug/L		1.9	U	2.1	I	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
COPPER	ug/L	See Table 6	3.2	U	7.5		6.8		3.2	U	6.2		3.2	U	3.2	U
IRON	ug/L	1000	520		1700		2300		2300		2400		2800		100	
LEAD	ug/L	See Table 6	3.7	I	15		19		18		18		4.8	I	2.9	U
MAGNESIUM	ug/L		2900		5.2		3.1		3200		3300		2300		820	
MERCURY	ug/L	0.012	0.011	U	0.011	U	0.14		0.13	I	0.14		0.011	U	0.011	U
NICKEL	ug/L	See Table 6	6	U	8.5	I	7.9	I	8.3	I	9.2	I	6	U	6	U
SELENIUM	ug/L	5	0.58	I	0.64	U	2.9	U	1.3	I	2.9	U	0.58	I	0.58	U
SILVER	ug/L	0.07	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U	9.6	U
THALLIUM	ug/L	6.3	0.057	U	0.057	U	0.057	U	0.057	U	0.057	U	0.057	U	0.057	U
VANADIUM	ug/L		3.1	I	9.2		33		34		35		7.5		1	U
ZINC	ug/L	See Table 6	33	U	33	U	33	U	33	U	33	U	33	U	33	U
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	0.54	U
1,1,1-TRICHLOROETHANE	ug/L		0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U
1,1,2,2-TETRACHLOROETHANE	ug/L	10.8	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,1,2-TRICHLOROETHANE	ug/L		0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,1-DICHLOROETHANE	ug/L		0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U
1,1-DICHLOROETHENE	ug/L	3.2	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
1,2,3-TRICHLOROPROPANE	ug/L		0.91	U	0.91	U	0.91	U	0.91	U	0.91	U	0.91	U	0.91	U
1,2-DIBROMO-3-CHLOROPROPANE	ug/L		3.1	U	3.1	U	3.1	U	3.1	U	3.1	U	3.1	U	3.1	U
1,2-DIBROMOETHANE (EDB)	ug/L		0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
1,2-DICHLOROBENZENE	ug/L		0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
1,2-DICHLOROETHANE	ug/L		0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
1,2-DICHLOROPROPANE	ug/L		0.66	U	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U
1,4-DICHLOROBENZENE	ug/L		0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U	0.22	U
2-HEXANONE	ug/L		0.71	U	0.71	U	0.71	U	0.71	U	0.71	U	0.71	U	0.71	U
ACETONE	ug/L		2.1	U	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U
ACRYLONITRILE	ug/L		1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
BENZENE	ug/L	71.28	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
BROMOCHLOROMETHANE	ug/L		0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
BROMODICHLOROMETHANE	ug/L	22	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U	0.46	U
BROMOFORM	ug/L	360	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U
BROMOMETHANE	ug/L		0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U
CARBON DISULFIDE	ug/L		0.67	U	0.67	U	0.67	U	0.67	U	0.67	U	0.67	U	0.67	U
CARBON TETRACHLORIDE	ug/L	4.42	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U
CHLOROBENZENE	ug/L		0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
CHLOROETHANE	ug/L		0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U
CHLOROFORM	ug/L	470.8	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
CHLOROMETHANE	ug/L	470.8	39		0.21	U	29		24		22		22		0.21	U

U = Result was less than the Method Detection Limit (MDL).

I = Result was greater than or equal to the Method Detection Limit (MDL) but below the Practical Quantitation Limit (PQL).

B = Result based on colony counts outside normal range

J4 = Estimated Value

Exceeds Class I or Class III WQS or VOC detection

Table 5 - Surface Water Constituent Concentrations
Trail Ridge Landfill, Jacksonville, FL
February 2019

cis-1,2-DICHLOROETHENE	ug/L		0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U
cis-1,3-DICHLOROPROPENE	ug/L		0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
DIBROMOCHLOROMETHANE	ug/L	1580	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U
DIBROMOMETHANE	ug/L		0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U
ETHYLBENZENE	ug/L		0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U	0.24	U
IODOMETHANE (METHYL IODIDE)	ug/L		0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
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	0.43	U
METHYL ISOBUTYL KETONE (MIBK)	ug/L		0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U	0.47	U
METHYLENE CHLORIDE	ug/L		2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
STYRENE	ug/L		0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
TETRACHLOROETHENE	ug/L	8.85	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U
TOLUENE	ug/L		0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
trans-1,2-DICHLOROETHENE	ug/L		0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
trans-1,3-DICHLOROPROPENE	ug/L		0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
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	1.8	U
TRICHLOROETHYLENE	ug/L	80.7	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U
TRICHLOROFLUOROMETHANE	ug/L		0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U
VINYL ACETATE	ug/L		0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
VINYL CHLORIDE	ug/L		0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
XYLENES, TOTAL	ug/L		0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U
NITROGEN, AMMONIA (AS N)	ug/L		60		110		130		120		160		60		8	U
UNIONIZED AMMONIA	ug/L	20	0.46	I	0	U	0.12	I	2	I	0		0.29	I	0.11	U
BIOCHEMICAL OXYGEN DEMAND (BOD)	ug/L		2000	U	2000	U	24000	U,K	24000	U,K	18000		2000	U	2000	U
CALCIUM HARDNESS (CALC)	ug/L		64000		150000		95000		98000		95000		40000		43000	
TOTAL ORGANIC CARBON	ug/L		20000		16000		10000		12000		10000		16000		3200	
CHEMICAL OXYGEN DEMAND (COD)	ug/L		91000		78000		160000		11000		170000		74000		20000	I
NITRATE (AS N)	ug/L		500	U	3800	I	2000	I	2000	I	2100	I	500	U	500	U
NITRATE-NITRITE (AS N)	ug/L		500	U	4600		1600		1800		1800		88	I	500	U
PHOSPHORUS, TOTAL (AS P)	ug/L		100		120		440		460		440		140		55	U
RESIDUES - FILTERABLE (TDS)	ug/L		210000		320000		370000		390000		380000		160000		83000	
RESIDUES - NONFILTERABLE (TSS)	ug/L		6000		25000		33000		35000		35000		23000		1000	U
TOTAL NITROGEN	ug/L		1100		6700		3400		3800		3700		990		180	U
CHLOROPHYLL-a	mg/m3		2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
FECAL COLIFORM	CFU/100 mL	800	318		85	U	216		86		231		63		156	

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

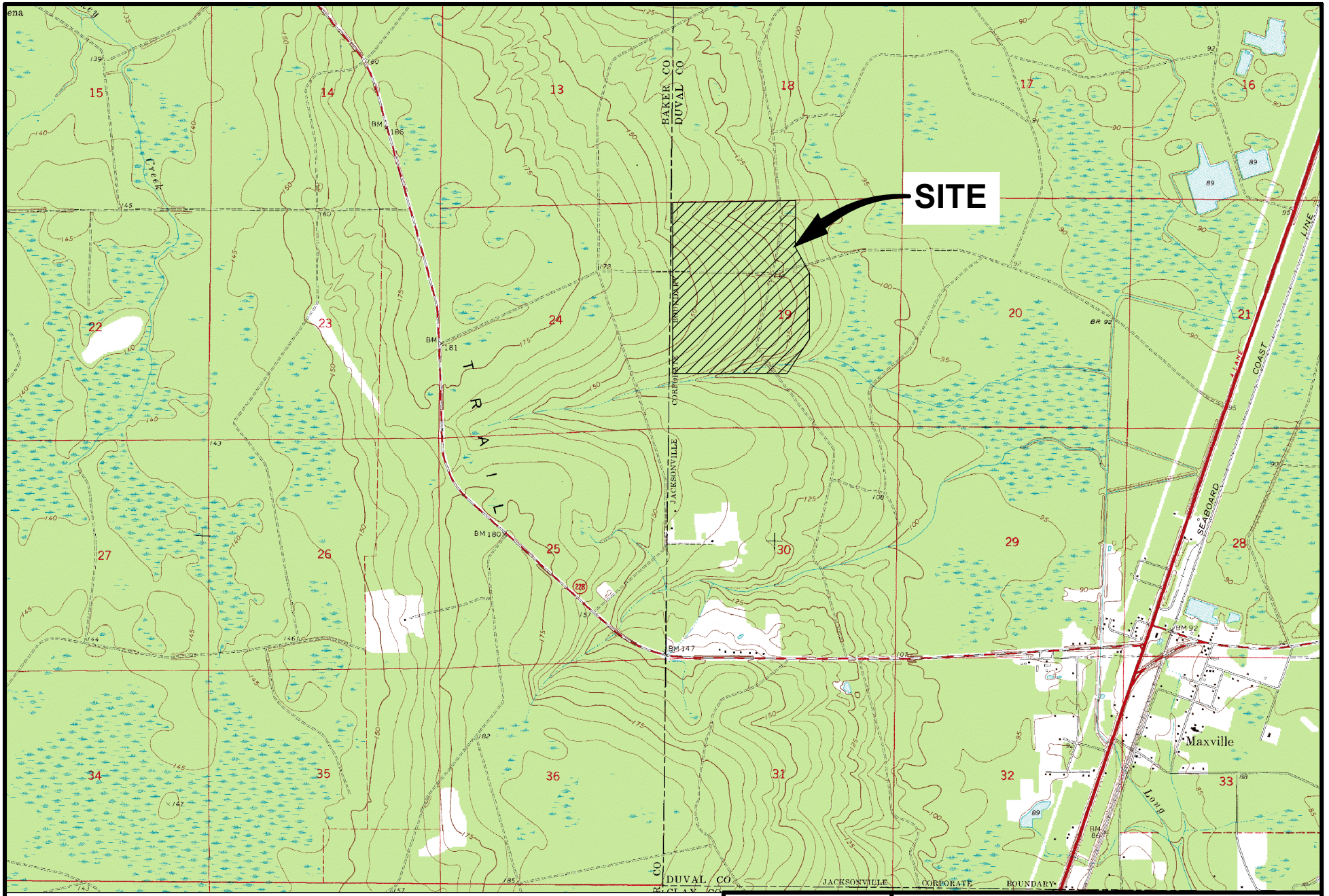
Table 6 - Surface Water Quality Standard Calculations
Trail Ridge Landfill, Jacksonville, Florida
February 2019

Parameter	Units	WQS Class I & Class III	SW-1		SW-3		SW-4		SW-5		SW-6		SW-7		SW-B		
			64		150		95		98		95		40		43		Total Hardness [1]
			4.16		5.01		4.55		4.58		4.55		3.69		3.76		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	0.2	<0.45	0.4	<0.45	0.3	<0.45	0.3	<0.45	0.3	<0.45	0.1	<0.45	0.1	
Chromium	ug/L	Measured ≤ $e^{(0.819[lnH]+0.6848)}$	**2.6 I**	60	**5.8**	120	**18.0**	83	**18.0**	85	**19.0**	83	**5.2**	41	<1.6	43	
Copper	ug/L	Measured ≤ $e^{(0.8545[lnH]-1.702)}$	<3.2	6.4	**7.5**	13.2	**6.8**	8.9	<3.2	9.2	**6.2**	8.9	<3.2	4.3	<3.2	4.5	
Lead	ug/L	Measured ≤ $e^{(1.273[lnH]- 4.705)}$	**3.7 I**	1.8	**15**	5.3	**19.0**	3.0	**18**	3.1	**18**	3.0	**4.8**	1.0	<2.9	1.1	
Nickel	ug/L	Measured ≤ $e^{(0.846[lnH]+0.0584)}$	<6.0	36	**8.5**	74	**7.9 I**	50	**8.3**	51	**9.2 I**	50	<6.0	24	<6.0	26	
Zinc	ug/L	Measured ≤ $e^{(0.8473[lnH]+0.884)}$	<33	82	<33	169	<33	115	<33	118	<33	115	<33	55	<33	59	

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



N

NOTES:

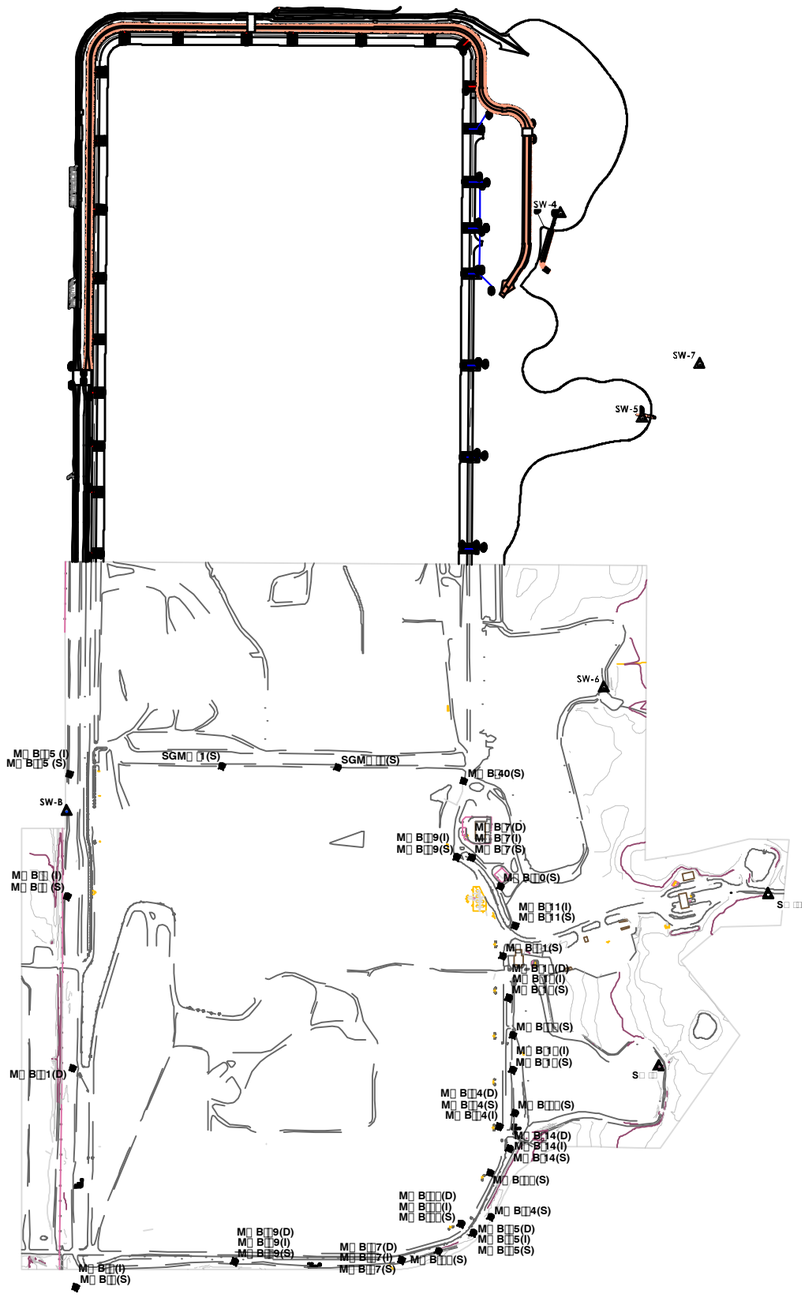
1. BACKGROUND IMAGE FROM USGS 7.5 MINUTE QUADRANGLE; MAXVILLE, FL 1970 (PHOTOINSPECTED 1984.)

0 3000 6000

GRAPHIC SCALE (FEET)

CEC

FIGURE 1:
SITE LOCATION
TRAIL RIDGE LANDFILL
JACKSONVILLE, FL



LEGEND

- CONTOURS
- 10 CONTOURS
- M B GROUND ATER MONITORING ELL
  - (S) SHALLO LEVEL ELL
  - (I) INTERMEDIATE LEVEL ELL
  - (D) DEEP LEVEL ELL
- SW-B SURFACE ATER SAMPLING POINT

NOTES:

1. THE TOPOGRAPHIC MAP AS PREPARED B SOUTHERN RESOURCES MAPPING COORPORATION FROM A PHOTOGRAPHIC FL OVER COMPLETED JANUAR 5, 017 AND AS COMPILED IN FEBRUAR 017.

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

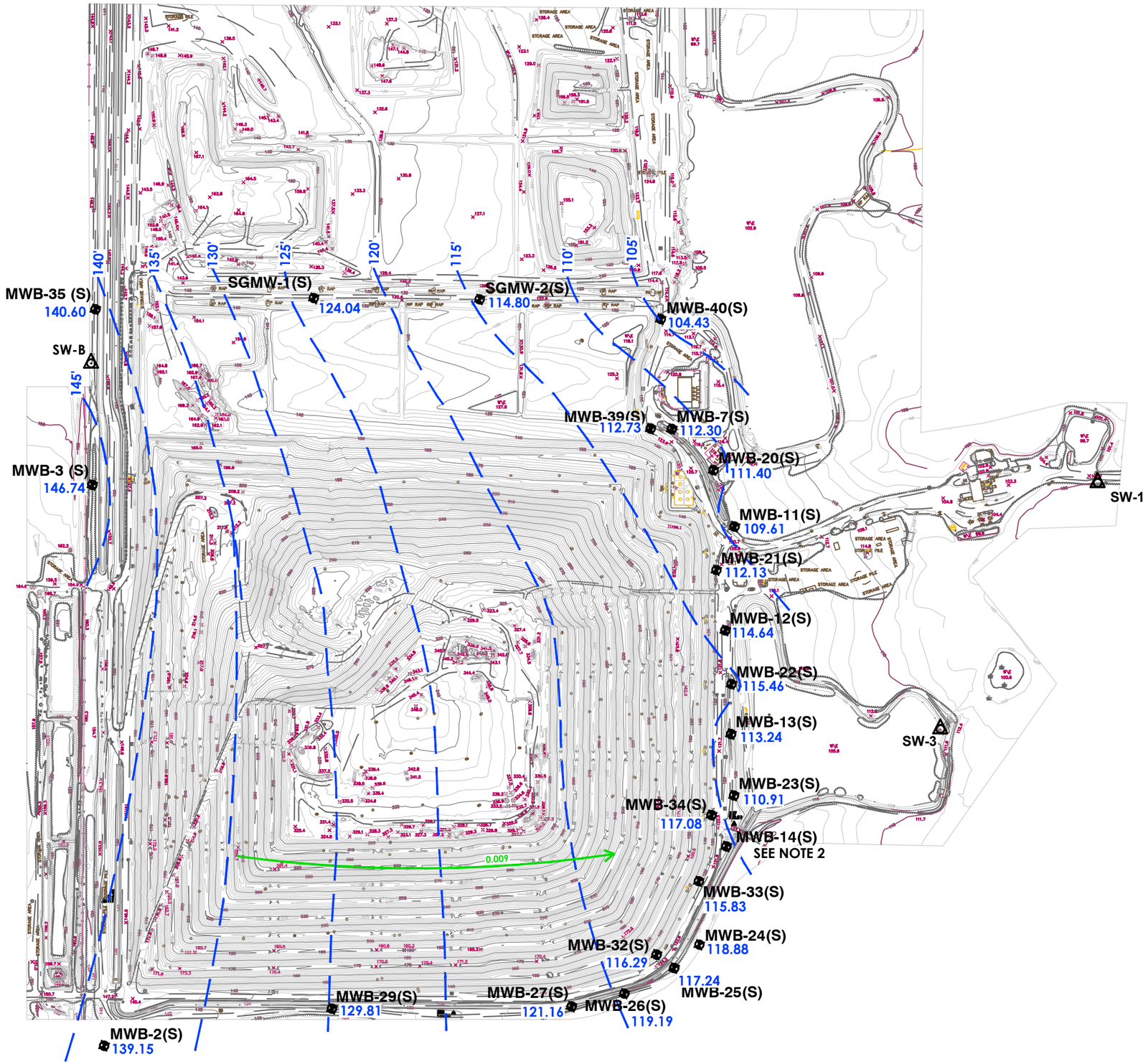
N

0 1000 2000

GRAPHIC SCALE (FEET)

CEC

FIGURE :
SITE LAOUT 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 02/20/2019.
- 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.

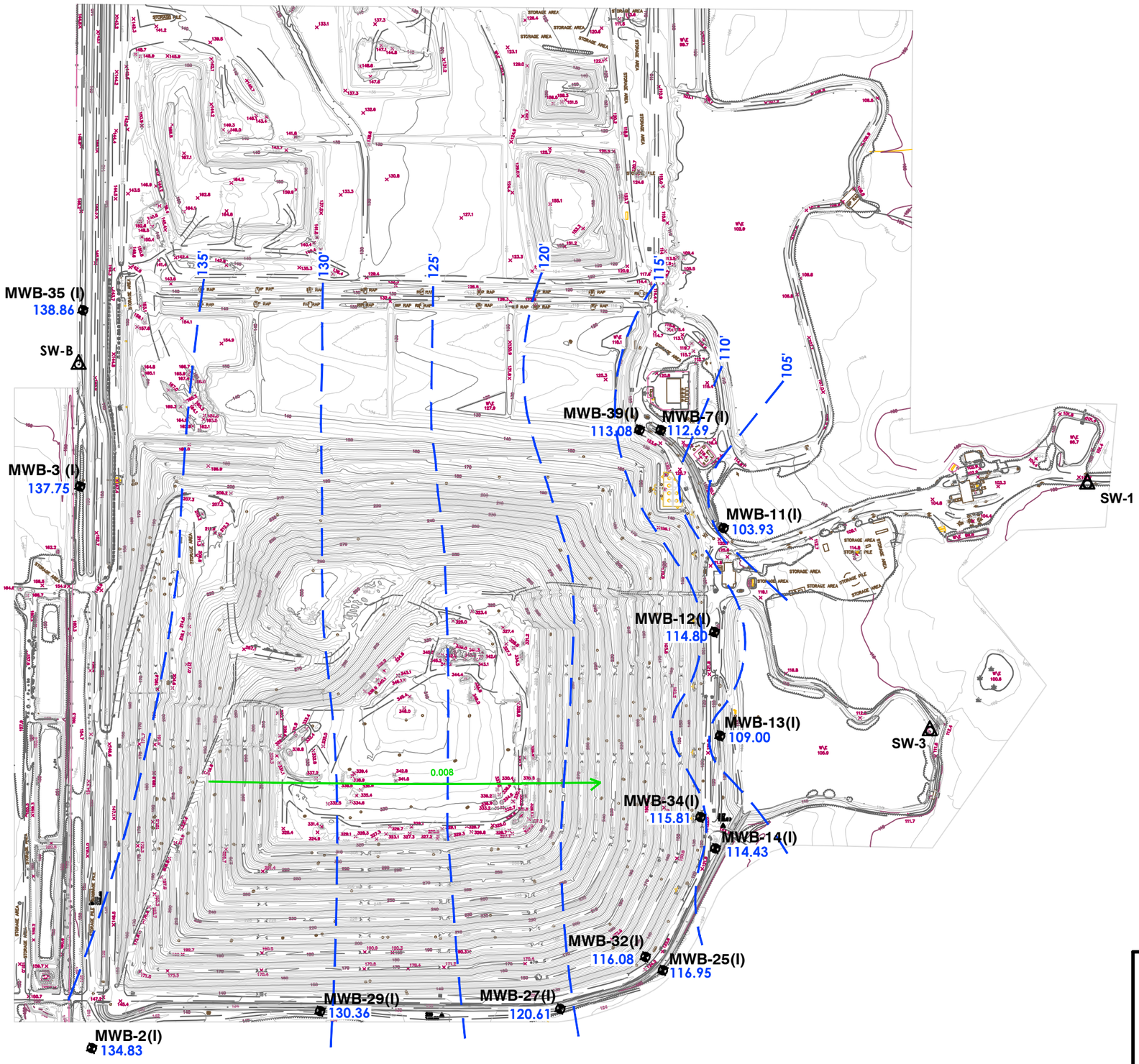
N

0 500 1000

GRAPHIC SCALE (FEET)

CEC

FIGURE 3:
SHALLOW WELLS
POTENTIOMETRIC MAP 02/20/2019
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 02/20/2019.
- 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.

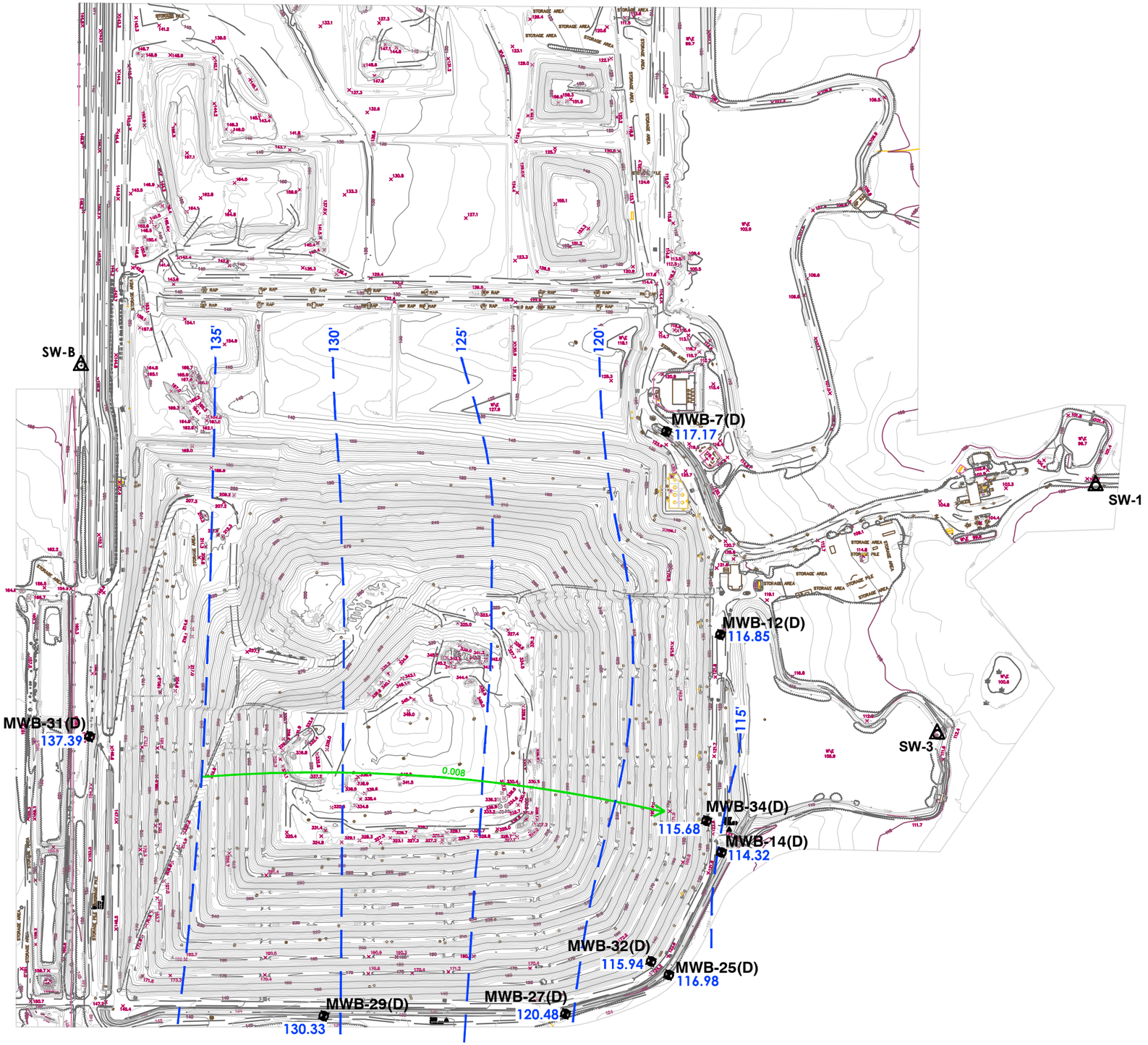
N

0 500 1000

GRAPHIC SCALE (FEET)

CEC

FIGURE 4:
INTERMEDIATE WELLS POTENTIOMETRIC MAP 02/20/2019
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 02/20/2019.
- 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 02/20/2019
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 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
19/02/18	0700	A	100% SAT	100%	-	YES	INIT	DA
19/02/19	0630	A	100% SAT	100%	-	YES	CONT	DA
19/02/20	0630	A	100% SAT	100 %	-	YES	CONT	DA
19/02/21	0630	A	100% SAT	100 %	-	YES	CONT	DA
19/02/22	0630	A	100% SAT	100 %	-	YES	CONT	DA
19/02/23	0730	A	100% SAT	100%	-	YES	CONT	DA
19/02/25	0615	A	100% SAT	100%	-	YES	INIT	DA

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

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HF SCIENTIFIC MICRO TSI 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
19/02/18	0700	A	1000	AUTO CAL	-	YES	INIT	DA
"	"	B	10.0	"	-	YES	INIT	DA
		C	0.02		-	YES	INIT	DA
19/02/19	0630	A	1000	AUTO CAL	-	YES	CONT	DA
"	"	B	10.0	"	-	YES	CONT	DA
		C	0.02		-	YES	CONT	DA
19/02/20	0630	A	1000	AUTO CAL	-	YES	CONT	DA
"	"	B	10.0	"	-	YES	CONT	DA
		C	0.02		-	YES	CONT	DA
19/02/21	0630	A	1000	AUTO CAL	-	YES	CONT	DA
"	"	B	10.0	"	-	YES	CONT	DA
		C	0.02		-	YES	CONT	DA
19/02/22	0630	A	1000	AUTO CAL	-	YES	CONT	DA
"	"	B	10.0	"	-	YES	CONT	DA
		C	0.02		-	YES	CONT	DA
19/02/23	0730	A	1000	AUTO CAL	-	YES	CONT	DA
"	"	B	10.0	"	-	YES	CONT	DA
		C	0.02		-	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
19/02/25	0615	A	1000	AUTO CAL	-	YES	INIT	DKA
"	"	B	10.0	"	-	YES	INIT	DKA
"	"	C	0.02	"	-	YES	INIT	DKA

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

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

PARAMETER: *[check only one]*

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

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

Standard A 7.00 (Std) Ricca Chem Lot# 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
19/02/18	0700	A	7.00	Auto Cal	-	Yes	Init	DA
"	"	B	4.00	"	-	Yes	Init	DA
		C	10.00		-	Yes	Init	DA
19/02/19	0630	A	7.00	Auto Cal	-	Yes	Cont	DA
"	"	B	4.00	"	-	Yes	Cont	DA
		C	10.00		-	Yes	Cont	DA
19/02/20	0630	A	7.00	Auto Cal	-	Yes	Cont	DA
"	"	B	4.00	"	-	Yes	Cont	DA
		C	10.00		-	Yes	Cont	DA
19/02/21	0630	A	7.00	Auto Cal	-	Yes	Cont	DA
"	"	B	4.00	"	-	Yes	Cont	DA
		C	10.00		-	Yes	Cont	DA
19/02/22	0630	A	7.00	Auto Cal	-	Yes	Cont	DA
"	"	B	4.00	"	-	Yes	Cont	DA
		C	10.00		-	Yes	Cont	DA
19/02/23	0730	A	7.00	Auto Cal	-	Yes	Cont	DA
"	"	B	4.00	"	-	Yes	Cont	DA
		C	10.00		-	Yes	Cont	DA

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 INITALS
19/02/25	0615	A	7.00	Auto Cal	-	Yes	INIT	DSA
"	"	B	4.00	"	-	Yes	INIT	DSA
"	"	C	10.00	"	-	Yes	INIT	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
19/02/19	0700	A	1.413	AUTO CAL	-	YES	INIT	DA
19/02/19	0630	A	1.413	AUTO CAL	-	YES	CONT	DA
19/02/20	0630 ~~0700~~	A	1.413	AUTO CAL	-	YES	CONT	DA
19/02/21	0630	A	1.413	AUTO CAL	-	YES	CONT	DA
19/02/22	0630	A	1.413	AUTO CAL	-	YES	CONT	DA
19/02/23	0730	A	1.413	AUTO CAL	-	YES	CONT	DA
19/02/25	0615	A	1.413	AUTO CAL	-	YES	INIT	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 LOT* 90103 EXP: JAN 2021

Standard B 10.0 NTU HF SCIENTIFIC LOT* 90102 EXP: JAN 2021

Standard C 0.02 NTU HF SCIENTIFIC LOT* 90101 EXP: JAN 2021

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
19/03/25	0630	A	1000	AUTO CAL	-	YES	INIT	DA
|	|	B	10.0	|	-	YES	INIT	DA
		C	0.02		-	YES	INIT	DA
19/03/26	0800	A	1000	AUTO CAL	-	YES	CONT	DA
|	|	B	10.0	|	-	YES	CONT	DA
		C	0.02		-	YES	CONT	DA
19/03/27	0700	A	1000	AUTO CAL	-	YES	CONT	DA
|	|	B	10.0	|	-	YES	CONT	DA
		C	0.02		-	YES	CONT	DA
19/03/28	0700	A	1000	AUTO CAL	-	YES	CONT	DA
|	|	B	10.0	|	-	YES	CONT	DA
		C	0.02		-	YES	CONT	DA

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
19/03/25	0630	A	100% SAT	100%	-	YES	INIT	DA
19/03/26	0800	A	100% SAT	100%	-	YES	CONT	DA
19/03/27	0700	A	100% SAT	100%	-	YES	CONT	DA
19/03/28	0700	A	100% SAT	100%	-	YES	CONT	DA

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	1.976	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.

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 uS/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
19/03/25	0630	A	1.413	AUTO CAL	-	YES	INIT	DK
19/03/26	0800	A	1.413	AUTO CAL	-	YES	CONT	DK
19/03/27	0700	A	1.413	AUTO CAL	-	YES	CONT	DK
19/03/28	0700	A	1.413	AUTO CAL	-	YES	CONT	DK

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
19/03/25	0630	A	7.00	Auto Cal	-	Yes	Init	DA
"	"	B	4.00	"	-	Yes	Init	DA
		C	10.00		-	Yes	Init	DA
19/03/26	0800	A	7.00	Auto Cal	-	Yes	Cont	DA
"	"	B	4.00	"	-	Yes	Cont	DA
		C	10.00		-	Yes	Cont	DA
19/03/27	0700	A	7.00	Auto Cal	-	Yes	Cont	DA
"	"	B	4.00	"	-	Yes	Cont	DA
		C	10.00		-	Yes	Cont	DA
19/03/28	0700	A	7.00	Auto Cal	-	Yes	Cont	DA
"	"	B	4.00	"	-	Yes	Cont	DA
		C	10.00		-	Yes	Cont	DA

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 15, 2019

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

RE: Workorder: J1902354 Trail Ridge Landfill

Dear Eric Fuller:

Enclosed are the analytical results for sample(s) received by the laboratory between Thursday, February 21, 2019 and Monday, February 25, 2019. 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,

Jerry Allen - Project Manager
JAllen@aellab.com

Enclosures

CERTIFICATE OF ANALYSIS

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Advanced Environmental Laboratories, Inc.

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

SAMPLE SUMMARY

Workorder: J1902354 Trail Ridge Landfill

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1902354001	MWB-12I	Water	2/20/2019 07:31	2/21/2019 10:40
J1902354002	MWB-13I	Water	2/20/2019 09:10	2/21/2019 10:40
J1902354003	MWB-27I	Water	2/20/2019 10:12	2/21/2019 10:40
J1902354004	MWB-29I	Water	2/20/2019 11:16	2/21/2019 10:40
J1902354005	MWB-2I	Water	2/20/2019 12:18	2/21/2019 10:40
J1902354006	MWB-3I	Water	2/20/2019 13:57	2/21/2019 10:40
J1902354007	MWB-12S	Water	2/20/2019 08:01	2/21/2019 10:40
J1902354008	MWB-22S	Water	2/20/2019 08:36	2/21/2019 10:40
J1902354009	MWB-13S	Water	2/20/2019 09:38	2/21/2019 10:40
J1902354010	MWB-27S	Water	2/20/2019 10:41	2/21/2019 10:40
J1902354011	MWB-29S	Water	2/20/2019 11:44	2/21/2019 10:40
J1902354012	MWB-2S	Water	2/20/2019 12:50	2/21/2019 10:40
J1902354013	MWB-3S	Water	2/20/2019 13:25	2/21/2019 10:40
J1902354014	TRIP BLANK-1	Water	2/20/2019 00:00	2/21/2019 10:40
J1902354015	MWB-11I (R)	Water	2/21/2019 08:26	2/21/2019 13:25
J1902354016	MWB-34I	Water	2/21/2019 09:32	2/21/2019 13:25
J1902354017	MWB-32I	Water	2/21/2019 11:09	2/21/2019 13:25
J1902354018	MWB-20S	Water	2/21/2019 07:23	2/21/2019 13:25
J1902354019	MWB-11S	Water	2/21/2019 07:55	2/21/2019 13:25
J1902354020	MWB-21S	Water	2/21/2019 09:00	2/21/2019 13:25
J1902354021	MWB-34S	Water	2/21/2019 10:01	2/21/2019 13:25
J1902354022	MWB-33S	Water	2/21/2019 10:35	2/21/2019 13:25
J1902354023	MWB-32S	Water	2/21/2019 11:40	2/21/2019 13:25
J1902354024	TRIP BLANK-2	Water	2/21/2019 00:00	2/21/2019 13:25
J1902354025	SGMW-2S	Water	2/22/2019 10:47	2/22/2019 14:45
J1902354026	SGMW-1S(R)	Water	2/22/2019 10:13	2/22/2019 14:45
J1902354027	MWB-35S	Water	2/22/2019 09:36	2/22/2019 14:45
J1902354028	MWB-40S	Water	2/22/2019 08:18	2/22/2019 14:45
J1902354029	MWB-39S	Water	2/22/2019 07:42	2/22/2019 14:45
J1902354030	EQUIPMENT BLANK	Water	2/22/2019 11:15	2/22/2019 14:45
J1902354031	TRIP BLANK-3	Water	2/22/2019 00:00	2/22/2019 14:45
J1902354032	MWB-35I	Water	2/22/2019 09:01	2/22/2019 14:45
J1902354033	MWB-39I	Water	2/22/2019 07:13	2/22/2019 14:45
J1902354034	EQUIPMENT BLANK	Water	2/22/2019 11:15	2/22/2019 14:45
J1902354035	SW-1	Water	2/25/2019 09:40	2/25/2019 13:20

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

SAMPLE SUMMARY

Workorder: J1902354 Trail Ridge Landfill

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1902354036	SW-3	Water	2/25/2019 09:15	2/25/2019 13:20
J1902354037	SW-B	Water	2/25/2019 08:30	2/25/2019 13:20
J1902354038	SW-4	Water	2/25/2019 08:00	2/25/2019 13:20
J1902354039	SW-7	Water	2/25/2019 07:22	2/25/2019 13:20
J1902354040	SW-5	Water	2/25/2019 06:55	2/25/2019 13:20
J1902354041	SW-6	Water	2/25/2019 06:40	2/25/2019 13:20
J1902354042	TRIP-4	Water	2/25/2019 00:00	2/25/2019 13:20

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Fax: (904)363-9354

ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354001** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-12I** Date Collected: 02/20/19 07:31

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**280**		**ug/L**	**1**	200	100	2/27/2019 16:22	J
Sodium	**3.6**		**mg/L**	**1**	0.70	0.34	2/27/2019 16:22	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4.0**	**I**	**mg/L**	**2**	10	1.0	2/22/2019 07:23	G
Nitrate (as N)	**0.022**	**U**	**mg/L**	**2**	0.20	0.022	2/22/2019 07:23	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.08**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**40**		**mg/L**	**1**	10	10	2/22/2019 13:30	J

Lab ID: **J1902354002** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-13I** Date Collected: 02/20/19 09:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**330**		**ug/L**	**1**	200	100	2/27/2019 16:53	J
Sodium	**3.6**		**mg/L**	**1**	0.70	0.34	2/27/2019 16:53	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**3.9**	**I**	**mg/L**	**2**	10	1.0	2/22/2019 08:22	G
Nitrate (as N)	**0.022**	**U**	**mg/L**	**2**	0.20	0.022	2/22/2019 08:22	G

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

ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354002** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-13I** Date Collected: 02/20/19 09:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.06**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**35**		**mg/L**	**1**	10	10	2/22/2019 13:30	J

Lab ID: **J1902354003** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-27I** Date Collected: 02/20/19 10:12

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	**430**		**ug/L**	**1**	200	100	2/27/2019 16:58	J
Sodium	**3.7**		**mg/L**	**1**	0.70	0.34	2/27/2019 16:58	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4.1**	**I**	**mg/L**	**2**	10	1.0	2/22/2019 08:57	G
Nitrate (as N)	**0.041**	**I**	**mg/L**	**2**	0.20	0.022	2/22/2019 08:57	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.09**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**50**		**mg/L**	**1**	10	10	2/22/2019 13:30	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354004** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-29I** Date Collected: 02/20/19 11:16

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	**440**		**ug/L**	**1**	200	100	2/27/2019 17:02	J
Sodium	**4.2**		**mg/L**	**1**	0.70	0.34	2/27/2019 17:02	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4.5**	**I**	**mg/L**	**2**	10	1.0	2/22/2019 09:32	G
Nitrate (as N)	**0.022**	**U**	**mg/L**	**2**	0.20	0.022	2/22/2019 09:32	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.07**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**46**		**mg/L**	**1**	10	10	2/22/2019 13:30	J

Lab ID: **J1902354005** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-2I** Date Collected: 02/20/19 12:18

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**400**		**ug/L**	**1**	200	100	2/27/2019 17:07	J
Sodium	**4.8**		**mg/L**	**1**	0.70	0.34	2/27/2019 17:07	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.4**	**I**	**mg/L**	**2**	10	1.0	2/22/2019 10:07	G
Nitrate (as N)	**0.022**	**U**	**mg/L**	**2**	0.20	0.022	2/22/2019 10:07	G

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354005** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-2I** Date Collected: 02/20/19 12:18

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)	**0.05**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**24**		**mg/L**	**1**	10	10	2/22/2019 13:30	J

Lab ID: **J1902354006** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-3I** Date Collected: 02/20/19 13:57

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	**830**		**ug/L**	**1**	200	100	2/27/2019 17:11	J
Sodium	**3.9**		**mg/L**	**1**	0.70	0.34	2/27/2019 17:11	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.1**	**I**	**mg/L**	**2**	10	1.0	2/22/2019 12:09	G
Nitrate (as N)	**0.022**	**U**	**mg/L**	**2**	0.20	0.022	2/22/2019 12:09	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.04**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**58**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354007** Date Received: 02/21/19 10:40 Matrix: Water

Sample ID: **MWB-12S** Date Collected: 02/20/19 08:01

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	2/27/2019 17:16	J
Barium	**2.2**		**ug/L**	**1**	2.0	0.83	2/27/2019 17:16	J
Beryllium	**0.50**	**I**	**ug/L**	**1**	0.80	0.40	2/27/2019 17:16	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/27/2019 17:16	J
Chromium	**2.0**	**I**	**ug/L**	**1**	3.0	1.6	2/27/2019 17:16	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/27/2019 17:16	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2019 17:05	J
Iron	**100**	**U**	**ug/L**	**1**	200	100	2/27/2019 17:16	J
Lead	**4.0**	**I**	**ug/L**	**1**	6.0	2.9	2/27/2019 17:16	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/27/2019 17:16	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/27/2019 17:16	J
Sodium	**15**		**mg/L**	**1**	0.70	0.34	2/27/2019 17:16	J
Vanadium	**42**		**ug/L**	**1**	4.0	1.0	2/27/2019 17:16	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/27/2019 17:16	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.40**	**I**	**ug/L**	**1**	0.70	0.11	2/26/2019 18:17	J
Selenium	**4.0**	**I**	**ug/L**	**1**	5.0	0.58	2/26/2019 18:17	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/26/2019 18:17	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	3/1/2019 15:13	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	2/28/2019 13:26	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 13:26	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 13:26	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 13:26	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 13:26	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 13:26	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 13:26	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354007** Date Received: 02/21/19 10:40 Matrix: Water

Sample ID: **MWB-12S** Date Collected: 02/20/19 08:01

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	2/28/2019 13:26	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 13:26	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 13:26	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 13:26	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 13:26	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 13:26	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 13:26	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/28/2019 13:26	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/28/2019 13:26	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 13:26	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 13:26	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 13:26	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 13:26	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 13:26	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 13:26	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 13:26	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 13:26	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 13:26	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 13:26	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 13:26	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 13:26	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 13:26	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 13:26	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 13:26	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 13:26	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 13:26	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 13:26	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 13:26	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 13:26	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 13:26	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 13:26	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 13:26	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 13:26	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 13:26	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 13:26	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 13:26	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 13:26	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 13:26	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 13:26	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 13:26	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354007** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-12S** Date Collected: 02/20/19 08:01

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**106**		**%**	**1**	70-128		2/28/2019 13:26	
Toluene-d8 (S)	**106**		**%**	**1**	77-119		2/28/2019 13:26	
Bromofluorobenzene (S)	**113**		**%**	**1**	86-123		2/28/2019 13:26	
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	2/28/2019 13:26	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/28/2019 13:26	J
1,2-Dichloroethane-d4 (S)	**88**		**%**	**1**	77-125		2/28/2019 13:26	
Toluene-d8 (S)	**111**		**%**	**1**	80-121		2/28/2019 13:26	
Bromofluorobenzene (S)	**95**		**%**	**1**	80-129		2/28/2019 13:26	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**14**		**mg/L**	**2**	10	1.0	2/22/2019 07:47	G
Nitrate (as N)	**0.11**	**I**	**mg/L**	**2**	0.20	0.022	2/22/2019 07:47	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.04**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**210**		**mg/L**	**1**	10	10	2/22/2019 13:30	J

Lab ID: **J1902354008** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-22S** Date Collected: 02/20/19 08:36

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	2/27/2019 17:20	J
Barium	**4.4**		**ug/L**	**1**	2.0	0.83	2/27/2019 17:20	J
Beryllium	**0.50**	**I**	**ug/L**	**1**	0.80	0.40	2/27/2019 17:20	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354008** Date Received: 02/21/19 10:40 Matrix: Water

Sample ID: **MWB-22S** Date Collected: 02/20/19 08:36

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	2/27/2019 17:20	J
Chromium	**3.0**		**ug/L**	**1**	3.0	1.6	2/27/2019 17:20	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/27/2019 17:20	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2019 17:10	J
Iron	**130**	**I**	**ug/L**	**1**	200	100	2/27/2019 17:20	J
Lead	**3.6**	**I**	**ug/L**	**1**	6.0	2.9	2/27/2019 17:20	J
Nickel	**6.8**	**I**	**ug/L**	**1**	10	6.0	2/27/2019 17:20	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/27/2019 17:20	J
Sodium	**80**		**mg/L**	**1**	0.70	0.34	2/27/2019 17:20	J
Vanadium	**7.2**		**ug/L**	**1**	4.0	1.0	2/27/2019 17:20	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/27/2019 17:20	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.18**	**I**	**ug/L**	**1**	0.70	0.11	2/26/2019 18:54	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/26/2019 18:54	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/26/2019 18:54	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	3/1/2019 15:16	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	2/28/2019 13:56	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 13:56	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 13:56	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 13:56	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 13:56	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 13:56	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 13:56	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/28/2019 13:56	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 13:56	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 13:56	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 13:56	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 13:56	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 13:56	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 13:56	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354008** Date Received: 02/21/19 10:40 Matrix: Water

Sample ID: **MWB-22S** Date Collected: 02/20/19 08:36

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	2/28/2019 13:56	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/28/2019 13:56	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 13:56	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 13:56	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 13:56	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 13:56	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 13:56	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 13:56	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 13:56	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 13:56	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 13:56	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 13:56	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 13:56	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 13:56	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 13:56	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 13:56	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 13:56	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 13:56	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 13:56	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 13:56	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 13:56	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 13:56	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 13:56	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 13:56	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 13:56	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 13:56	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 13:56	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 13:56	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 13:56	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 13:56	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 13:56	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 13:56	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 13:56	J
1,2-Dichloroethane-d4 (S)	**110**		**%**	**1**	70-128		2/28/2019 13:56	
Toluene-d8 (S)	**104**		**%**	**1**	77-119		2/28/2019 13:56	
Bromofluorobenzene (S)	**115**		**%**	**1**	86-123		2/28/2019 13:56	
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	2/28/2019 13:56	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354008** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-22S** Date Collected: 02/20/19 08:36

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	2/28/2019 13:56	J
1,2-Dichloroethane-d4 (S)	**91**		**%**	**1**	77-125		2/28/2019 13:56	
Toluene-d8 (S)	**109**		**%**	**1**	80-121		2/28/2019 13:56	
Bromofluorobenzene (S)	**97**		**%**	**1**	80-129		2/28/2019 13:56	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**130**		**mg/L**	**2**	10	1.0	2/22/2019 08:04	G
Nitrate (as N)	**0.022**	**U**	**mg/L**	**2**	0.20	0.022	2/22/2019 08:04	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.10**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**430**		**mg/L**	**1**	10	10	2/22/2019 13:30	J

Lab ID: **J1902354009** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-13S** Date Collected: 02/20/19 09:38

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**9.0**	**U**	**ug/L**	**1**	10	9.0	2/27/2019 17:24	J
Barium	**3.3**		**ug/L**	**1**	2.0	0.83	2/27/2019 17:24	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/27/2019 17:24	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/27/2019 17:24	J
Chromium	**2.0**	**I**	**ug/L**	**1**	3.0	1.6	2/27/2019 17:24	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/27/2019 17:24	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2019 17:23	J
Iron	**100**	**U**	**ug/L**	**1**	200	100	2/27/2019 17:24	J
Lead	**4.5**	**I**	**ug/L**	**1**	6.0	2.9	2/27/2019 17:24	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/27/2019 17:24	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/27/2019 17:24	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354009** Date Received: 02/21/19 10:40 Matrix: Water

Sample ID: **MWB-13S** Date Collected: 02/20/19 09:38

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Sodium	**46**		**mg/L**	**1**	0.70	0.34	2/27/2019 17:24	J
Vanadium	**28**		**ug/L**	**1**	4.0	1.0	2/27/2019 17:24	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/27/2019 17:24	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.30**	**I**	**ug/L**	**1**	0.70	0.11	2/26/2019 18:58	J
Selenium	**1.8**	**I**	**ug/L**	**1**	5.0	0.58	2/26/2019 18:58	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/26/2019 18:58	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	3/1/2019 15:19	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	2/28/2019 14:25	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 14:25	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 14:25	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 14:25	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 14:25	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 14:25	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 14:25	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/28/2019 14:25	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 14:25	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 14:25	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 14:25	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 14:25	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 14:25	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 14:25	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/28/2019 14:25	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/28/2019 14:25	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 14:25	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 14:25	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 14:25	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 14:25	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 14:25	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 14:25	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354009** Date Received: 02/21/19 10:40 Matrix: Water

Sample ID: **MWB-13S** Date Collected: 02/20/19 09:38

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	2/28/2019 14:25	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 14:25	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 14:25	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 14:25	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 14:25	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 14:25	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 14:25	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 14:25	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 14:25	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 14:25	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 14:25	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 14:25	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 14:25	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 14:25	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 14:25	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 14:25	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 14:25	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 14:25	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 14:25	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 14:25	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 14:25	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 14:25	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 14:25	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 14:25	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 14:25	J
1,2-Dichloroethane-d4 (S)	**109**		**%**	**1**	70-128		2/28/2019 14:25	
Toluene-d8 (S)	**105**		**%**	**1**	77-119		2/28/2019 14:25	
Bromofluorobenzene (S)	**114**		**%**	**1**	86-123		2/28/2019 14:25	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	2/28/2019 14:25	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/28/2019 14:25	J
1,2-Dichloroethane-d4 (S)	**90**		**%**	**1**	77-125		2/28/2019 14:25	
Toluene-d8 (S)	**110**		**%**	**1**	80-121		2/28/2019 14:25	
Bromofluorobenzene (S)	**96**		**%**	**1**	80-129		2/28/2019 14:25	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354009** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-13S** Date Collected: 02/20/19 09:38

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chloride	**95**		**mg/L**	**2**	10	1.0	2/22/2019 08:39	G
Nitrate (as N)	**0.31**		**mg/L**	**2**	0.20	0.022	2/22/2019 08:39	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.12**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**350**		**mg/L**	**1**	10	10	2/22/2019 13:30	J

Lab ID: **J1902354010** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-27S** Date Collected: 02/20/19 10:41

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	2/27/2019 17:29	J
Barium	**5.8**		**ug/L**	**1**	2.0	0.83	2/27/2019 17:29	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/27/2019 17:29	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/27/2019 17:29	J
Chromium	**2.7**	**I**	**ug/L**	**1**	3.0	1.6	2/27/2019 17:29	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/27/2019 17:29	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2019 17:28	J
Iron	**200**	**I**	**ug/L**	**1**	200	100	2/27/2019 17:29	J
Lead	**3.9**	**I**	**ug/L**	**1**	6.0	2.9	2/27/2019 17:29	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/27/2019 17:29	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/27/2019 17:29	J
Sodium	**8.4**		**mg/L**	**1**	0.70	0.34	2/27/2019 17:29	J
Vanadium	**14**		**ug/L**	**1**	4.0	1.0	2/27/2019 17:29	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/27/2019 17:29	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	2/26/2019 19:02	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354010** Date Received: 02/21/19 10:40 Matrix: Water

Sample ID: **MWB-27S** Date Collected: 02/20/19 10:41

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	2/26/2019 19:02	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/26/2019 19:02	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	3/1/2019 15:22	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	2/28/2019 14:55	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 14:55	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 14:55	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 14:55	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 14:55	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 14:55	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 14:55	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/28/2019 14:55	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 14:55	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 14:55	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 14:55	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 14:55	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 14:55	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 14:55	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/28/2019 14:55	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/28/2019 14:55	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 14:55	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 14:55	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 14:55	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 14:55	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 14:55	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 14:55	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 14:55	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 14:55	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 14:55	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 14:55	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 14:55	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 14:55	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 14:55	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354010** Date Received: 02/21/19 10:40 Matrix: Water

Sample ID: **MWB-27S** Date Collected: 02/20/19 10:41

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	2/28/2019 14:55	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 14:55	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 14:55	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 14:55	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 14:55	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 14:55	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 14:55	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 14:55	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 14:55	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 14:55	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 14:55	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 14:55	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 14:55	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 14:55	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 14:55	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 14:55	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 14:55	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 14:55	J
1,2-Dichloroethane-d4 (S)	**106**		**%**	**1**	70-128		2/28/2019 14:55	
Toluene-d8 (S)	**107**		**%**	**1**	77-119		2/28/2019 14:55	
Bromofluorobenzene (S)	**117**		**%**	**1**	86-123		2/28/2019 14:55	
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	2/28/2019 14:55	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/28/2019 14:55	J
1,2-Dichloroethane-d4 (S)	**88**		**%**	**1**	77-125		2/28/2019 14:55	
Toluene-d8 (S)	**112**		**%**	**1**	80-121		2/28/2019 14:55	
Bromofluorobenzene (S)	**99**		**%**	**1**	80-129		2/28/2019 14:55	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**7.1**	**I**	**mg/L**	**2**	10	1.0	2/22/2019 09:14	G
Nitrate (as N)	**0.14**	**I**	**mg/L**	**2**	0.20	0.022	2/22/2019 09:14	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.17**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354010** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-27S** Date Collected: 02/20/19 10:41

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Dissolved Solids	**110**		**mg/L**	**1**	10	10	2/22/2019 13:30	J

Lab ID: **J1902354011** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-29S** Date Collected: 02/20/19 11:44

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	2/27/2019 17:33	J
Barium	**13**		**ug/L**	**1**	2.0	0.83	2/27/2019 17:33	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/27/2019 17:33	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/27/2019 17:33	J
Chromium	**1.6**	**U**	**ug/L**	**1**	3.0	1.6	2/27/2019 17:33	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/27/2019 17:33	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2019 17:32	J
Iron	**410**		**ug/L**	**1**	200	100	2/27/2019 17:33	J
Lead	**4.6**	**I**	**ug/L**	**1**	6.0	2.9	2/27/2019 17:33	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/27/2019 17:33	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/27/2019 17:33	J
Sodium	**5.5**		**mg/L**	**1**	0.70	0.34	2/27/2019 17:33	J
Vanadium	**2.2**	**I**	**ug/L**	**1**	4.0	1.0	2/27/2019 17:33	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/27/2019 17:33	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	2/26/2019 19:06	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/26/2019 19:06	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/26/2019 19:06	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	3/1/2019 15:25	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354011** Date Received: 02/21/19 10:40 Matrix: Water

Sample ID: **MWB-29S** Date Collected: 02/20/19 11:44

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	2/28/2019 15:24	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 15:24	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 15:24	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 15:24	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 15:24	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 15:24	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 15:24	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/28/2019 15:24	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 15:24	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 15:24	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 15:24	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 15:24	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 15:24	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 15:24	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/28/2019 15:24	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/28/2019 15:24	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 15:24	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 15:24	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 15:24	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 15:24	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 15:24	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 15:24	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 15:24	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 15:24	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 15:24	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 15:24	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 15:24	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 15:24	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 15:24	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 15:24	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 15:24	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 15:24	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 15:24	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 15:24	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 15:24	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 15:24	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354011** Date Received: 02/21/19 10:40 Matrix: Water

Sample ID: **MWB-29S** Date Collected: 02/20/19 11:44

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	2/28/2019 15:24	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 15:24	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 15:24	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 15:24	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 15:24	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 15:24	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 15:24	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 15:24	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 15:24	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 15:24	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 15:24	J
1,2-Dichloroethane-d4 (S)	**110**		**%**	**1**	70-128		2/28/2019 15:24	
Toluene-d8 (S)	**106**		**%**	**1**	77-119		2/28/2019 15:24	
Bromofluorobenzene (S)	**114**		**%**	**1**	86-123		2/28/2019 15:24	
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	2/28/2019 15:24	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/28/2019 15:24	J
1,2-Dichloroethane-d4 (S)	**91**		**%**	**1**	77-125		2/28/2019 15:24	
Toluene-d8 (S)	**111**		**%**	**1**	80-121		2/28/2019 15:24	
Bromofluorobenzene (S)	**97**		**%**	**1**	80-129		2/28/2019 15:24	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**6.9**	**I**	**mg/L**	**2**	10	1.0	2/22/2019 09:49	G
Nitrate (as N)	**0.022**	**U**	**mg/L**	**2**	0.20	0.022	2/22/2019 09:49	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.14**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**40**		**mg/L**	**1**	10	10	2/22/2019 13:30	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354012** Date Received: 02/21/19 10:40 Matrix: Water

Sample ID: **MWB-2S** Date Collected: 02/20/19 12:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**9.0**	**U**	**ug/L**	**1**	10	9.0	2/27/2019 17:47	J
Barium	**8.0**		**ug/L**	**1**	2.0	0.83	2/27/2019 17:47	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/27/2019 17:47	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/27/2019 17:47	J
Chromium	**3.2**		**ug/L**	**1**	3.0	1.6	2/27/2019 17:47	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/27/2019 17:47	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2019 17:37	J
Iron	**690**		**ug/L**	**1**	200	100	2/27/2019 17:47	J
Lead	**9.2**		**ug/L**	**1**	6.0	2.9	2/27/2019 17:47	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/27/2019 17:47	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/27/2019 17:47	J
Sodium	**1.9**		**mg/L**	**1**	0.70	0.34	2/27/2019 17:47	J
Vanadium	**4.3**		**ug/L**	**1**	4.0	1.0	2/27/2019 17:47	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/27/2019 17:47	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	2/26/2019 19:10	J
Selenium	**0.62**	**I**	**ug/L**	**1**	5.0	0.58	2/26/2019 19:10	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/26/2019 19:10	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.064**	**I**	**ug/L**	**1**	0.10	0.011	3/1/2019 15:34	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	2/28/2019 15:54	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 15:54	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 15:54	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 15:54	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 15:54	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 15:54	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 15:54	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354012** Date Received: 02/21/19 10:40 Matrix: Water

Sample ID: **MWB-2S** Date Collected: 02/20/19 12:50

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	2/28/2019 15:54	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 15:54	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 15:54	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 15:54	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 15:54	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 15:54	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 15:54	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/28/2019 15:54	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/28/2019 15:54	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 15:54	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 15:54	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 15:54	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 15:54	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 15:54	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 15:54	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 15:54	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 15:54	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 15:54	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 15:54	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 15:54	J
Chloromethane	**37**		**ug/L**	**1**	1.0	0.21	2/28/2019 15:54	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 15:54	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 15:54	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 15:54	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 15:54	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 15:54	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 15:54	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 15:54	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 15:54	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 15:54	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 15:54	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 15:54	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 15:54	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 15:54	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 15:54	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 15:54	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 15:54	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 15:54	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 15:54	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 15:54	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354012** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-2S** Date Collected: 02/20/19 12:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**108**		**%**	**1**	70-128		2/28/2019 15:54	
Toluene-d8 (S)	**105**		**%**	**1**	77-119		2/28/2019 15:54	
Bromofluorobenzene (S)	**112**		**%**	**1**	86-123		2/28/2019 15:54	
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	2/28/2019 15:54	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/28/2019 15:54	J
1,2-Dichloroethane-d4 (S)	**89**		**%**	**1**	77-125		2/28/2019 15:54	
Toluene-d8 (S)	**110**		**%**	**1**	80-121		2/28/2019 15:54	
Bromofluorobenzene (S)	**95**		**%**	**1**	80-129		2/28/2019 15:54	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**1.3**	**I**	**mg/L**	**2**	10	1.0	2/22/2019 11:34	G
Nitrate (as N)	**0.15**	**I**	**mg/L**	**2**	0.20	0.022	2/22/2019 11:34	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.10**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**110**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

Lab ID: **J1902354013** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-3S** Date Collected: 02/20/19 13:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**9.0**	**U**	**ug/L**	**1**	10	9.0	2/27/2019 17:51	J
Barium	**15**		**ug/L**	**1**	2.0	0.83	2/27/2019 17:51	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/27/2019 17:51	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354013** Date Received: 02/21/19 10:40 Matrix: Water

Sample ID: **MWB-3S** Date Collected: 02/20/19 13:25

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	2/27/2019 17:51	J
Chromium	**1.6**	**U**	**ug/L**	**1**	3.0	1.6	2/27/2019 17:51	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/27/2019 17:51	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2019 17:41	J
Iron	**770**		**ug/L**	**1**	200	100	2/27/2019 17:51	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	2/27/2019 17:51	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/27/2019 17:51	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/27/2019 17:51	J
Sodium	**5.0**		**mg/L**	**1**	0.70	0.34	2/27/2019 17:51	J
Vanadium	**1.9**	**I**	**ug/L**	**1**	4.0	1.0	2/27/2019 17:51	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/27/2019 17:51	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	2/26/2019 19:14	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/26/2019 19:14	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/26/2019 19:14	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	3/1/2019 15:37	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	2/28/2019 16:24	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 16:24	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 16:24	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 16:24	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 16:24	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 16:24	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 16:24	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/28/2019 16:24	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 16:24	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 16:24	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 16:24	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 16:24	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 16:24	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 16:24	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354013** Date Received: 02/21/19 10:40 Matrix: Water

Sample ID: **MWB-3S** Date Collected: 02/20/19 13:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/28/2019 16:24	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/28/2019 16:24	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 16:24	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 16:24	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 16:24	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 16:24	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 16:24	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 16:24	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 16:24	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 16:24	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 16:24	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 16:24	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 16:24	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 16:24	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 16:24	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 16:24	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 16:24	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 16:24	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 16:24	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 16:24	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 16:24	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 16:24	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 16:24	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 16:24	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 16:24	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 16:24	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 16:24	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 16:24	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 16:24	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 16:24	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 16:24	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 16:24	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 16:24	J
1,2-Dichloroethane-d4 (S)	**108**		**%**	**1**	70-128		2/28/2019 16:24	
Toluene-d8 (S)	**106**		**%**	**1**	77-119		2/28/2019 16:24	
Bromofluorobenzene (S)	**118**		**%**	**1**	86-123		2/28/2019 16:24	
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	2/18/2019 16:24	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354013** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **MWB-3S** Date Collected: 02/20/19 13:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/18/2019 16:24	J
1,2-Dichloroethane-d4 (S)	**90**		**%**	**1**	77-125		2/18/2019 16:24	
Toluene-d8 (S)	**111**		**%**	**1**	80-121		2/18/2019 16:24	
Bromofluorobenzene (S)	**100**		**%**	**1**	80-129		2/18/2019 16:24	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**6.5**	**I**	**mg/L**	**2**	10	1.0	2/22/2019 11:52	G
Nitrate (as N)	**0.022**	**U**	**mg/L**	**2**	0.20	0.022	2/22/2019 11:52	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.02**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**80**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

Lab ID: **J1902354014** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **TRIP BLANK-1** Date Collected: 02/20/19 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	2/28/2019 16:53	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 16:53	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 16:53	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 16:53	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 16:53	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 16:53	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 16:53	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/28/2019 16:53	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 16:53	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 16:53	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 16:53	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354014** Date Received: 02/21/19 10:40 Matrix: Water

Sample ID: **TRIP BLANK-1** Date Collected: 02/20/19 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 16:53	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 16:53	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 16:53	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/28/2019 16:53	J
Acetone	**2.6**	**I**	**ug/L**	**1**	5.0	2.1	2/28/2019 16:53	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 16:53	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 16:53	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 16:53	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 16:53	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 16:53	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 16:53	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 16:53	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 16:53	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 16:53	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 16:53	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 16:53	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 16:53	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 16:53	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 16:53	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 16:53	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 16:53	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 16:53	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 16:53	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 16:53	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 16:53	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 16:53	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 16:53	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 16:53	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 16:53	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 16:53	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 16:53	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 16:53	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 16:53	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 16:53	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 16:53	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 16:53	J
1,2-Dichloroethane-d4 (S)	**109**		**%**	**1**	70-128		2/28/2019 16:53	
Toluene-d8 (S)	**105**		**%**	**1**	77-119		2/28/2019 16:53	
Bromofluorobenzene (S)	**118**		**%**	**1**	86-123		2/28/2019 16:53	

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354014** Date Received: 02/21/19 10:40 Matrix: Water
Sample ID: **TRIP BLANK-1** Date Collected: 02/20/19 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	2/28/2019 16:53	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/28/2019 16:53	J
1,2-Dichloroethane-d4 (S)	**90**		**%**	**1**	77-125		2/28/2019 16:53	
Toluene-d8 (S)	**110**		**%**	**1**	80-121		2/28/2019 16:53	
Bromofluorobenzene (S)	**100**		**%**	**1**	80-129		2/28/2019 16:53	

Lab ID: **J1902354015** Date Received: 02/21/19 13:25 Matrix: Water
Sample ID: **MWB-11I (R)** Date Collected: 02/21/19 08:26

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							
Iron	**300**		**ug/L**	**1**	200	100	2/27/2019 17:56	J
Sodium	**3.3**		**mg/L**	**1**	0.70	0.34	2/27/2019 17:56	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4.0**	**I**	**mg/L**	**2**	10	1.0	2/22/2019 13:14	G
Nitrate (as N)	**0.022**	**U**	**mg/L**	**2**	0.20	0.022	2/22/2019 13:14	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.06**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**57**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354016** Date Received: 02/21/19 13:25 Matrix: Water
Sample ID: **MWB-34I** Date Collected: 02/21/19 09:32

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							
Iron	**170**	**I**	**ug/L**	**1**	200	100	2/27/2019 18:00	J
Sodium	**4.1**		**mg/L**	**1**	0.70	0.34	2/27/2019 18:00	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4.0**	**I**	**mg/L**	**2**	10	1.0	2/22/2019 13:32	G
Nitrate (as N)	**0.022**	**U**	**mg/L**	**2**	0.20	0.022	2/22/2019 13:32	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.03**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**83**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

Lab ID: **J1902354017** Date Received: 02/21/19 13:25 Matrix: Water
Sample ID: **MWB-32I** Date Collected: 02/21/19 11:09

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	**240**		**ug/L**	**1**	200	100	2/27/2019 18:05	J
Sodium	**3.5**		**mg/L**	**1**	0.70	0.34	2/27/2019 18:05	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**3.8**	**I**	**mg/L**	**2**	10	1.0	2/22/2019 13:49	G
Nitrate (as N)	**0.022**	**U**	**mg/L**	**2**	0.20	0.022	2/22/2019 13:49	G

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354017** Date Received: 02/21/19 13:25 Matrix: Water
Sample ID: **MWB-32I** Date Collected: 02/21/19 11:09

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.06**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**110**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

Lab ID: **J1902354018** Date Received: 02/21/19 13:25 Matrix: Water
Sample ID: **MWB-20S** Date Collected: 02/21/19 07:23

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	2/27/2019 15:37	J
Barium	**5.9**		**ug/L**	**1**	2.0	0.83	2/27/2019 15:37	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/27/2019 15:37	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/27/2019 15:37	J
Chromium	**1.7**	**I**	**ug/L**	**1**	3.0	1.6	2/27/2019 15:37	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/27/2019 15:37	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2019 16:34	J
Iron	**100**	**U**	**ug/L**	**1**	200	100	2/27/2019 15:37	J
Lead	**3.4**	**I**	**ug/L**	**1**	6.0	2.9	2/27/2019 15:37	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/27/2019 15:37	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/27/2019 15:37	J
Sodium	**38**		**mg/L**	**1**	0.70	0.34	2/27/2019 15:37	J
Vanadium	**11**		**ug/L**	**1**	4.0	1.0	2/28/2019 16:34	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/27/2019 15:37	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	3/1/2019 15:40	J
VOLATILES								

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354018** Date Received: 02/21/19 13:25 Matrix: Water

Sample ID: **MWB-20S** Date Collected: 02/21/19 07:23

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	2/26/2019 19:27	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/26/2019 19:27	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/26/2019 19:27	J
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	2/28/2019 17:23	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 17:23	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 17:23	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 17:23	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 17:23	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 17:23	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 17:23	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/28/2019 17:23	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 17:23	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 17:23	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 17:23	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 17:23	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 17:23	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 17:23	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/28/2019 17:23	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/28/2019 17:23	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 17:23	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 17:23	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 17:23	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 17:23	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 17:23	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 17:23	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 17:23	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 17:23	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 17:23	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 17:23	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 17:23	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 17:23	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 17:23	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 17:23	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 17:23	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354018** Date Received: 02/21/19 13:25 Matrix: Water

Sample ID: **MWB-20S** Date Collected: 02/21/19 07:23

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 17:23	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 17:23	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 17:23	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 17:23	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 17:23	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 17:23	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 17:23	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 17:23	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 17:23	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 17:23	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 17:23	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 17:23	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 17:23	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 17:23	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 17:23	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 17:23	J
1,2-Dichloroethane-d4 (S)	**108**		**%**	**1**	70-128		2/28/2019 17:23	
Toluene-d8 (S)	**104**		**%**	**1**	77-119		2/28/2019 17:23	
Bromofluorobenzene (S)	**118**		**%**	**1**	86-123		2/28/2019 17:23	
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	2/28/2019 17:23	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/28/2019 17:23	J
1,2-Dichloroethane-d4 (S)	**90**		**%**	**1**	77-125		2/28/2019 17:23	
Toluene-d8 (S)	**109**		**%**	**1**	80-121		2/28/2019 17:23	
Bromofluorobenzene (S)	**100**		**%**	**1**	80-129		2/28/2019 17:23	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**46**		**mg/L**	**2**	10	1.0	2/22/2019 14:07	G
Nitrate (as N)	**0.50**		**mg/L**	**2**	0.20	0.022	2/22/2019 14:07	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.73**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**190**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354019** Date Received: 02/21/19 13:25 Matrix: Water

Sample ID: **MWB-11S** Date Collected: 02/21/19 07:55

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**9.0**	**U**	**ug/L**	**1**	10	9.0	2/27/2019 15:41	J
Barium	**34**		**ug/L**	**1**	2.0	0.83	2/27/2019 15:41	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/27/2019 15:41	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/27/2019 15:41	J
Chromium	**1.6**	**U**	**ug/L**	**1**	3.0	1.6	2/27/2019 15:41	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/27/2019 15:41	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2019 16:39	J
Iron	**440**		**ug/L**	**1**	200	100	2/27/2019 15:41	J
Lead	**7.8**		**ug/L**	**1**	6.0	2.9	2/27/2019 15:41	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/27/2019 15:41	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/27/2019 15:41	J
Sodium	**13**		**mg/L**	**1**	0.70	0.34	2/27/2019 15:41	J
Vanadium	**7.7**		**ug/L**	**1**	4.0	1.0	2/28/2019 16:39	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/27/2019 15:41	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	2/26/2019 19:31	J
Selenium	**1.3**	**I**	**ug/L**	**1**	5.0	0.58	2/26/2019 19:31	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/26/2019 19:31	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	3/1/2019 15:42	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	2/28/2019 17:53	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 17:53	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 17:53	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 17:53	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 17:53	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 17:53	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 17:53	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354019** Date Received: 02/21/19 13:25 Matrix: Water

Sample ID: **MWB-11S** Date Collected: 02/21/19 07:55

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	2/28/2019 17:53	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 17:53	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 17:53	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 17:53	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 17:53	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 17:53	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 17:53	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/28/2019 17:53	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/28/2019 17:53	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 17:53	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 17:53	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 17:53	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 17:53	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 17:53	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 17:53	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 17:53	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 17:53	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 17:53	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 17:53	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 17:53	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 17:53	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 17:53	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 17:53	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 17:53	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 17:53	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 17:53	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 17:53	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 17:53	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 17:53	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 17:53	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 17:53	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 17:53	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 17:53	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 17:53	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 17:53	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 17:53	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 17:53	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 17:53	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 17:53	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 17:53	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354019** Date Received: 02/21/19 13:25 Matrix: Water
Sample ID: **MWB-11S** Date Collected: 02/21/19 07:55

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**107**		**%**	**1**	70-128		2/28/2019 17:53	
Toluene-d8 (S)	**105**		**%**	**1**	77-119		2/28/2019 17:53	
Bromofluorobenzene (S)	**119**		**%**	**1**	86-123		2/28/2019 17:53	
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	2/28/2019 17:53	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/28/2019 17:53	J
1,2-Dichloroethane-d4 (S)	**89**		**%**	**1**	77-125		2/28/2019 17:53	
Toluene-d8 (S)	**110**		**%**	**1**	80-121		2/28/2019 17:53	
Bromofluorobenzene (S)	**101**		**%**	**1**	80-129		2/28/2019 17:53	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**10**		**mg/L**	**2**	10	1.0	2/22/2019 14:24	G
Nitrate (as N)	**0.28**		**mg/L**	**2**	0.20	0.022	2/22/2019 14:24	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.05**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**380**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

Lab ID: **J1902354020** Date Received: 02/21/19 13:25 Matrix: Water
Sample ID: **MWB-21S** Date Collected: 02/21/19 09:00

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	2/27/2019 15:46	J
Barium	**25**		**ug/L**	**1**	2.0	0.83	2/27/2019 15:46	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/27/2019 15:46	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354020** Date Received: 02/21/19 13:25 Matrix: Water

Sample ID: **MWB-21S** Date Collected: 02/21/19 09:00

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	2/27/2019 15:46	J
Chromium	**1.6**	**U**	**ug/L**	**1**	3.0	1.6	2/27/2019 15:46	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/27/2019 15:46	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2019 16:43	J
Iron	**1000**		**ug/L**	**1**	200	100	2/27/2019 15:46	J
Lead	**5.1**	**I**	**ug/L**	**1**	6.0	2.9	2/27/2019 15:46	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/27/2019 15:46	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/27/2019 15:46	J
Sodium	**8.8**		**mg/L**	**1**	0.70	0.34	2/27/2019 15:46	J
Vanadium	**3.6**	**I**	**ug/L**	**1**	4.0	1.0	2/28/2019 16:43	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/27/2019 15:46	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	2/26/2019 19:35	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/26/2019 19:35	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/26/2019 19:35	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	3/1/2019 15:45	J
VOLATILES								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**1.6**		**mg/L**	**5**	0.050	0.040	2/25/2019 11:22	G
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	2/28/2019 18:23	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 18:23	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 18:23	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 18:23	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 18:23	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 18:23	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 18:23	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/28/2019 18:23	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 18:23	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 18:23	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 18:23	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354020** Date Received: 02/21/19 13:25 Matrix: Water

Sample ID: **MWB-21S** Date Collected: 02/21/19 09:00

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	2/28/2019 18:23	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 18:23	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 18:23	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/28/2019 18:23	J
Acetone	**2.3**	**I**	**ug/L**	**1**	5.0	2.1	2/28/2019 18:23	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 18:23	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 18:23	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 18:23	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 18:23	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 18:23	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 18:23	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 18:23	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 18:23	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 18:23	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 18:23	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 18:23	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 18:23	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 18:23	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 18:23	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 18:23	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 18:23	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 18:23	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 18:23	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 18:23	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 18:23	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 18:23	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 18:23	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 18:23	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 18:23	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 18:23	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 18:23	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 18:23	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 18:23	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 18:23	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 18:23	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 18:23	J
1,2-Dichloroethane-d4 (S)	**108**		**%**	**1**	70-128		2/28/2019 18:23	
Toluene-d8 (S)	**106**		**%**	**1**	77-119		2/28/2019 18:23	
Bromofluorobenzene (S)	**115**		**%**	**1**	86-123		2/28/2019 18:23	

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354020** Date Received: 02/21/19 13:25 Matrix: Water
Sample ID: **MWB-21S** Date Collected: 02/21/19 09:00

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	2/28/2019 18:23	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/28/2019 18:23	J
1,2-Dichloroethane-d4 (S)	**89**		**%**	**1**	77-125		2/28/2019 18:23	
Toluene-d8 (S)	**111**		**%**	**1**	80-121		2/28/2019 18:23	
Bromofluorobenzene (S)	**97**		**%**	**1**	80-129		2/28/2019 18:23	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**14**		**mg/L**	**2**	10	1.0	2/22/2019 14:42	G
Nitrate (as N)	**0.32**		**mg/L**	**2**	0.20	0.022	2/22/2019 14:42	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**100**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

Lab ID: **J1902354021** Date Received: 02/21/19 13:25 Matrix: Water
Sample ID: **MWB-34S** Date Collected: 02/21/19 10:01

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	2/27/2019 15:59	J
Barium	**12**		**ug/L**	**1**	2.0	0.83	2/27/2019 15:59	J
Beryllium	**0.50**	**I**	**ug/L**	**1**	0.80	0.40	2/27/2019 15:59	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/27/2019 15:59	J
Chromium	**2.6**	**I**	**ug/L**	**1**	3.0	1.6	2/27/2019 15:59	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/27/2019 15:59	J
Copper	**8.9**		**ug/L**	**1**	6.0	3.2	2/28/2019 16:48	J
Iron	**710**		**ug/L**	**1**	200	100	2/27/2019 15:59	J
Lead	**4.8**	**I**	**ug/L**	**1**	6.0	2.9	2/27/2019 15:59	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/27/2019 15:59	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354021** Date Received: 02/21/19 13:25 Matrix: Water

Sample ID: **MWB-34S** Date Collected: 02/21/19 10:01

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/27/2019 15:59	J
Sodium	**38**		**mg/L**	**1**	0.70	0.34	2/27/2019 15:59	J
Vanadium	**25**		**ug/L**	**1**	4.0	1.0	2/28/2019 16:48	J
Zinc	**39**	**I**	**ug/L**	**1**	60	33	2/27/2019 15:59	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.63**	**I**	**ug/L**	**1**	0.70	0.11	2/26/2019 19:39	J
Selenium	**1.1**	**I**	**ug/L**	**1**	5.0	0.58	2/26/2019 19:39	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/26/2019 19:39	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	3/1/2019 15:48	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	2/28/2019 18:52	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 18:52	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 18:52	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 18:52	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 18:52	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 18:52	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 18:52	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/28/2019 18:52	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 18:52	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 18:52	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 18:52	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 18:52	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 18:52	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 18:52	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/28/2019 18:52	J
Acetone	**2.2**	**I**	**ug/L**	**1**	5.0	2.1	2/28/2019 18:52	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 18:52	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 18:52	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 18:52	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 18:52	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 18:52	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354021** Date Received: 02/21/19 13:25 Matrix: Water

Sample ID: **MWB-34S** Date Collected: 02/21/19 10:01

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 18:52	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 18:52	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 18:52	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 18:52	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 18:52	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 18:52	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 18:52	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 18:52	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 18:52	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 18:52	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 18:52	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 18:52	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 18:52	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 18:52	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 18:52	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 18:52	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 18:52	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 18:52	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 18:52	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 18:52	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 18:52	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 18:52	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 18:52	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 18:52	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 18:52	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 18:52	J
1,2-Dichloroethane-d4 (S)	**115**		**%**	**1**	70-128		2/28/2019 18:52	
Toluene-d8 (S)	**104**		**%**	**1**	77-119		2/28/2019 18:52	
Bromofluorobenzene (S)	**118**		**%**	**1**	86-123		2/28/2019 18:52	
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	2/28/2019 18:52	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/28/2019 18:52	J
1,2-Dichloroethane-d4 (S)	**95**		**%**	**1**	77-125		2/28/2019 18:52	
Toluene-d8 (S)	**108**		**%**	**1**	80-121		2/28/2019 18:52	
Bromofluorobenzene (S)	**100**		**%**	**1**	80-129		2/28/2019 18:52	

WET CHEMISTRY

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354021** Date Received: 02/21/19 13:25 Matrix: Water
Sample ID: **MWB-34S** Date Collected: 02/21/19 10:01

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**51**		**mg/L**	**2**	10	1.0	2/22/2019 14:59	G
Nitrate (as N)	**0.022**	**U**	**mg/L**	**2**	0.20	0.022	2/22/2019 14:59	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.10**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**630**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

Lab ID: **J1902354022** Date Received: 02/21/19 13:25 Matrix: Water
Sample ID: **MWB-33S** Date Collected: 02/21/19 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	2/27/2019 16:04	J
Barium	**6.9**		**ug/L**	**1**	2.0	0.83	2/27/2019 16:04	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/27/2019 16:04	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/27/2019 16:04	J
Chromium	**1.6**	**U**	**ug/L**	**1**	3.0	1.6	2/27/2019 16:04	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/27/2019 16:04	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2019 16:52	J
Iron	**100**	**U**	**ug/L**	**1**	200	100	2/27/2019 16:04	J
Lead	**5.3**	**I**	**ug/L**	**1**	6.0	2.9	2/27/2019 16:04	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/27/2019 16:04	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/27/2019 16:04	J
Sodium	**7.1**		**mg/L**	**1**	0.70	0.34	2/27/2019 16:04	J
Vanadium	**6.5**		**ug/L**	**1**	4.0	1.0	2/28/2019 16:52	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/27/2019 16:04	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354022** Date Received: 02/21/19 13:25 Matrix: Water

Sample ID: **MWB-33S** Date Collected: 02/21/19 10:35

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	2/26/2019 19:43	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/26/2019 19:43	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/26/2019 19:43	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	3/4/2019 14:03	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	2/28/2019 19:22	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 19:22	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 19:22	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 19:22	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 19:22	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 19:22	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 19:22	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/28/2019 19:22	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 19:22	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 19:22	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 19:22	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 19:22	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 19:22	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 19:22	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/28/2019 19:22	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/28/2019 19:22	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 19:22	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 19:22	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 19:22	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 19:22	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 19:22	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 19:22	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 19:22	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 19:22	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 19:22	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 19:22	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354022** Date Received: 02/21/19 13:25 Matrix: Water

Sample ID: **MWB-33S** Date Collected: 02/21/19 10:35

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	2/28/2019 19:22	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 19:22	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 19:22	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 19:22	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 19:22	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 19:22	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 19:22	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 19:22	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 19:22	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 19:22	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 19:22	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 19:22	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 19:22	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 19:22	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 19:22	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 19:22	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 19:22	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 19:22	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 19:22	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 19:22	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 19:22	J
1,2-Dichloroethane-d4 (S)	**111**		**%**	**1**	70-128		2/28/2019 19:22	
Toluene-d8 (S)	**105**		**%**	**1**	77-119		2/28/2019 19:22	
Bromofluorobenzene (S)	**116**		**%**	**1**	86-123		2/28/2019 19:22	
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	2/28/2019 19:22	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/28/2019 19:22	J
1,2-Dichloroethane-d4 (S)	**92**		**%**	**1**	77-125		2/28/2019 19:22	
Toluene-d8 (S)	**110**		**%**	**1**	80-121		2/28/2019 19:22	
Bromofluorobenzene (S)	**99**		**%**	**1**	80-129		2/28/2019 19:22	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**8.1**	**I**	**mg/L**	**2**	10	1.0	2/22/2019 15:52	G
Nitrate (as N)	**0.022**	**U**	**mg/L**	**2**	0.20	0.022	2/22/2019 15:52	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354022** Date Received: 02/21/19 13:25 Matrix: Water
Sample ID: **MWB-33S** Date Collected: 02/21/19 10:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Ammonia (N)	**0.95**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**150**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

Lab ID: **J1902354023** Date Received: 02/21/19 13:25 Matrix: Water
Sample ID: **MWB-32S** Date Collected: 02/21/19 11:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**9.0**	**U**	**ug/L**	**1**	10	9.0	2/27/2019 16:08	J
Barium	**14**		**ug/L**	**1**	2.0	0.83	2/27/2019 16:08	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	2/27/2019 16:08	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	2/27/2019 16:08	J
Chromium	**2.0**	**I**	**ug/L**	**1**	3.0	1.6	2/27/2019 16:08	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	2/27/2019 16:08	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	2/28/2019 16:57	J
Iron	**260**		**ug/L**	**1**	200	100	2/27/2019 16:08	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	2/27/2019 16:08	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	2/27/2019 16:08	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	2/27/2019 16:08	J
Sodium	**7.2**		**mg/L**	**1**	0.70	0.34	2/27/2019 16:08	J
Vanadium	**1.5**	**I**	**ug/L**	**1**	4.0	1.0	2/28/2019 16:57	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	2/27/2019 16:08	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	2/26/2019 19:47	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/26/2019 19:47	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/26/2019 19:47	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354023** Date Received: 02/21/19 13:25 Matrix: Water

Sample ID: **MWB-32S** Date Collected: 02/21/19 11:40

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	3/4/2019 14:19	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	2/28/2019 19:52	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 19:52	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 19:52	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 19:52	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 19:52	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 19:52	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 19:52	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/28/2019 19:52	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 19:52	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 19:52	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 19:52	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 19:52	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 19:52	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 19:52	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/28/2019 19:52	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/28/2019 19:52	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 19:52	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 19:52	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 19:52	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 19:52	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 19:52	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 19:52	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 19:52	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 19:52	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 19:52	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 19:52	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 19:52	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 19:52	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 19:52	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 19:52	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 19:52	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 19:52	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354023** Date Received: 02/21/19 13:25 Matrix: Water

Sample ID: **MWB-32S** Date Collected: 02/21/19 11:40

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	2/28/2019 19:52	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 19:52	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 19:52	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 19:52	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 19:52	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 19:52	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 19:52	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 19:52	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 19:52	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 19:52	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 19:52	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 19:52	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 19:52	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 19:52	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 19:52	J
1,2-Dichloroethane-d4 (S)	**111**		**%**	**1**	70-128		2/28/2019 19:52	
Toluene-d8 (S)	**105**		**%**	**1**	77-119		2/28/2019 19:52	
Bromofluorobenzene (S)	**115**		**%**	**1**	86-123		2/28/2019 19:52	
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	2/28/2019 19:52	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/28/2019 19:52	J
1,2-Dichloroethane-d4 (S)	**92**		**%**	**1**	77-125		2/28/2019 19:52	
Toluene-d8 (S)	**110**		**%**	**1**	80-121		2/28/2019 19:52	
Bromofluorobenzene (S)	**98**		**%**	**1**	80-129		2/28/2019 19:52	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**7.7**	**I**	**mg/L**	**2**	10	1.0	2/22/2019 16:44	G
Nitrate (as N)	**0.022**	**U**	**mg/L**	**2**	0.20	0.022	2/22/2019 16:44	G
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.64**		**mg/L**	**1**	0.010	0.0080	2/25/2019 11:22	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**94**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354024** Date Received: 02/21/19 13:25 Matrix: Water

Sample ID: **TRIP BLANK-2** Date Collected: 02/21/19 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	2/28/2019 20:21	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 20:21	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 20:21	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 20:21	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 20:21	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 20:21	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 20:21	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/28/2019 20:21	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 20:21	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 20:21	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 20:21	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 20:21	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 20:21	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 20:21	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/28/2019 20:21	J
Acetone	**3.2**	**I**	**ug/L**	**1**	5.0	2.1	2/28/2019 20:21	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 20:21	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 20:21	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 20:21	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 20:21	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 20:21	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 20:21	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 20:21	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 20:21	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 20:21	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 20:21	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 20:21	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 20:21	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 20:21	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 20:21	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 20:21	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 20:21	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 20:21	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 20:21	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 20:21	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 20:21	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354024** Date Received: 02/21/19 13:25 Matrix: Water
Sample ID: **TRIP BLANK-2** Date Collected: 02/21/19 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 20:21	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 20:21	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 20:21	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 20:21	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 20:21	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 20:21	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 20:21	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 20:21	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 20:21	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 20:21	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 20:21	J
1,2-Dichloroethane-d4 (S)	**111**		**%**	**1**	70-128		2/28/2019 20:21	
Toluene-d8 (S)	**104**		**%**	**1**	77-119		2/28/2019 20:21	
Bromofluorobenzene (S)	**116**		**%**	**1**	86-123		2/28/2019 20:21	
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	2/28/2019 20:21	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/28/2019 20:21	J
1,2-Dichloroethane-d4 (S)	**92**		**%**	**1**	77-125		2/28/2019 20:21	
Toluene-d8 (S)	**109**		**%**	**1**	80-121		2/28/2019 20:21	
Bromofluorobenzene (S)	**98**		**%**	**1**	80-129		2/28/2019 20:21	

Lab ID: **J1902354025** Date Received: 02/22/19 14:45 Matrix: Water
Sample ID: **SGMW-2S** Date Collected: 02/22/19 10:47

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	3/1/2019 14:36	J
Barium	**82**		**ug/L**	**1**	2.0	0.83	3/1/2019 14:36	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2019 14:36	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2019 14:36	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354025** Date Received: 02/22/19 14:45 Matrix: Water

Sample ID: **SGMW-2S** Date Collected: 02/22/19 10:47

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chromium	**1.6**	**U**	**ug/L**	**1**	3.0	1.6	3/1/2019 14:36	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2019 14:36	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	3/1/2019 14:36	J
Iron	**690**		**ug/L**	**1**	200	100	3/1/2019 14:36	J
Lead	**3.1**	**I**	**ug/L**	**1**	6.0	2.9	3/1/2019 14:36	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2019 14:36	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2019 14:36	J
Sodium	**4.1**		**mg/L**	**1**	0.70	0.34	3/1/2019 14:36	J
Vanadium	**1.5**	**I**	**ug/L**	**1**	4.0	1.0	3/1/2019 14:36	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2019 14:36	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.20**	**I**	**ug/L**	**1**	0.70	0.11	2/28/2019 18:53	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/28/2019 18:53	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/28/2019 18:53	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	3/4/2019 14:42	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	2/28/2019 20:51	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 20:51	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 20:51	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 20:51	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 20:51	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 20:51	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 20:51	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/28/2019 20:51	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 20:51	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 20:51	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 20:51	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 20:51	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 20:51	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 20:51	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/28/2019 20:51	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354025** Date Received: 02/22/19 14:45 Matrix: Water

Sample ID: **SGMW-2S** Date Collected: 02/22/19 10:47

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Acetone	**2.2**	**I**	**ug/L**	**1**	5.0	2.1	2/28/2019 20:51	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 20:51	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 20:51	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 20:51	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 20:51	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 20:51	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 20:51	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 20:51	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 20:51	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 20:51	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 20:51	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 20:51	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 20:51	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 20:51	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 20:51	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 20:51	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 20:51	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 20:51	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 20:51	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 20:51	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 20:51	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 20:51	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 20:51	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 20:51	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 20:51	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 20:51	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 20:51	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 20:51	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 20:51	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 20:51	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 20:51	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 20:51	J
1,2-Dichloroethane-d4 (S)	**111**		**%**	**1**	70-128		2/28/2019 20:51	
Toluene-d8 (S)	**106**		**%**	**1**	77-119		2/28/2019 20:51	
Bromofluorobenzene (S)	**118**		**%**	**1**	86-123		2/28/2019 20:51	
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	2/28/2019 20:51	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/28/2019 20:51	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354025** Date Received: 02/22/19 14:45 Matrix: Water
Sample ID: **SGMW-2S** Date Collected: 02/22/19 10:47

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**91**		**%**	**1**	77-125		2/28/2019 20:51	
Toluene-d8 (S)	**111**		**%**	**1**	80-121		2/28/2019 20:51	
Bromofluorobenzene (S)	**100**		**%**	**1**	80-129		2/28/2019 20:51	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.9**		**mg/L**	**1**	5.0	0.50	3/1/2019 23:54	M
Nitrate (as N)	**0.25**	**U**	**mg/L**	**5**	2.5	0.25	2/23/2019 14:30	M
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.07**		**mg/L**	**1**	0.010	0.0080	2/28/2019 11:46	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**63**		**mg/L**	**1**	10	10	2/28/2019 11:30	J

Lab ID: **J1902354026** Date Received: 02/22/19 14:45 Matrix: Water
Sample ID: **SGMW-1S(R)** Date Collected: 02/22/19 10:13

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	3/1/2019 14:59	J
Barium	**200**		**ug/L**	**1**	2.0	0.83	3/1/2019 14:59	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2019 14:59	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2019 14:59	J
Chromium	**6.6**		**ug/L**	**1**	3.0	1.6	3/1/2019 14:59	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2019 14:59	J
Copper	**6.7**		**ug/L**	**1**	6.0	3.2	3/1/2019 14:59	J
Iron	**830**		**ug/L**	**1**	200	100	3/1/2019 14:59	J
Lead	**6.5**		**ug/L**	**1**	6.0	2.9	3/1/2019 14:59	J
Nickel	**8.0**	**I**	**ug/L**	**1**	10	6.0	3/1/2019 14:59	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2019 14:59	J
Sodium	**11**		**mg/L**	**1**	0.70	0.34	3/1/2019 14:59	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354026** Date Received: 02/22/19 14:45 Matrix: Water

Sample ID: **SGMW-1S(R)** Date Collected: 02/22/19 10:13

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vanadium	**8.3**		**ug/L**	**1**	4.0	1.0	3/1/2019 14:59	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2019 14:59	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	2/28/2019 19:16	J
Selenium	**0.70**	**I**	**ug/L**	**1**	5.0	0.58	2/28/2019 19:16	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/28/2019 19:16	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	3/4/2019 14:45	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	2/28/2019 21:20	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 21:20	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 21:20	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 21:20	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 21:20	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 21:20	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 21:20	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/28/2019 21:20	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 21:20	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 21:20	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 21:20	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 21:20	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 21:20	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 21:20	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/28/2019 21:20	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/28/2019 21:20	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 21:20	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 21:20	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 21:20	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 21:20	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 21:20	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 21:20	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 21:20	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354026** Date Received: 02/22/19 14:45 Matrix: Water

Sample ID: **SGMW-1S(R)** Date Collected: 02/22/19 10:13

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 21:20	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 21:20	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 21:20	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 21:20	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 21:20	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 21:20	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 21:20	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 21:20	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 21:20	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 21:20	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 21:20	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 21:20	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 21:20	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 21:20	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 21:20	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 21:20	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 21:20	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 21:20	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 21:20	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 21:20	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 21:20	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 21:20	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 21:20	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 21:20	J
1,2-Dichloroethane-d4 (S)	**111**		**%**	**1**	70-128		2/28/2019 21:20	
Toluene-d8 (S)	**105**		**%**	**1**	77-119		2/28/2019 21:20	
Bromofluorobenzene (S)	**116**		**%**	**1**	86-123		2/28/2019 21:20	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	2/28/2019 21:20	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/28/2019 21:20	J
1,2-Dichloroethane-d4 (S)	**92**		**%**	**1**	77-125		2/28/2019 21:20	
Toluene-d8 (S)	**110**		**%**	**1**	80-121		2/28/2019 21:20	
Bromofluorobenzene (S)	**98**		**%**	**1**	80-129		2/28/2019 21:20	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**15**		**mg/L**	**1**	5.0	0.50	3/1/2019 21:29	M

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354026** Date Received: 02/22/19 14:45 Matrix: Water
Sample ID: **SGMW-1S(R)** Date Collected: 02/22/19 10:13

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Nitrate (as N)	**0.25**	**U**	**mg/L**	**5**	2.5	0.25	2/23/2019 14:45	M
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.35**		**mg/L**	**1**	0.010	0.0080	2/28/2019 11:46	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**120**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

Lab ID: **J1902354027** Date Received: 02/22/19 14:45 Matrix: Water
Sample ID: **MWB-35S** Date Collected: 02/22/19 09:36

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	3/1/2019 15:03	J
Barium	**2.0**		**ug/L**	**1**	2.0	0.83	3/1/2019 15:03	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2019 15:03	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2019 15:03	J
Chromium	**1.6**	**U**	**ug/L**	**1**	3.0	1.6	3/1/2019 15:03	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2019 15:03	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	3/1/2019 15:03	J
Iron	**100**	**U**	**ug/L**	**1**	200	100	3/1/2019 15:03	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	3/1/2019 15:03	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2019 15:03	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2019 15:03	J
Sodium	**1.9**		**mg/L**	**1**	0.70	0.34	3/1/2019 15:03	J
Vanadium	**1.5**	**I**	**ug/L**	**1**	4.0	1.0	3/1/2019 15:03	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2019 15:03	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	2/28/2019 19:20	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/28/2019 19:20	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354027** Date Received: 02/22/19 14:45 Matrix: Water

Sample ID: **MWB-35S** Date Collected: 02/22/19 09:36

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/28/2019 19:20	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	3/4/2019 14:48	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	2/28/2019 21:50	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 21:50	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 21:50	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 21:50	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 21:50	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 21:50	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 21:50	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/28/2019 21:50	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 21:50	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 21:50	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 21:50	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 21:50	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	2/28/2019 21:50	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 21:50	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	2/28/2019 21:50	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	2/28/2019 21:50	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 21:50	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 21:50	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 21:50	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 21:50	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 21:50	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 21:50	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 21:50	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 21:50	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 21:50	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 21:50	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 21:50	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 21:50	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 21:50	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 21:50	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354027** Date Received: 02/22/19 14:45 Matrix: Water

Sample ID: **MWB-35S** Date Collected: 02/22/19 09:36

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 21:50	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 21:50	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 21:50	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 21:50	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 21:50	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 21:50	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 21:50	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 21:50	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 21:50	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 21:50	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 21:50	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 21:50	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 21:50	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 21:50	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 21:50	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 21:50	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 21:50	J
1,2-Dichloroethane-d4 (S)	**112**		**%**	**1**	70-128		2/28/2019 21:50	
Toluene-d8 (S)	**104**		**%**	**1**	77-119		2/28/2019 21:50	
Bromofluorobenzene (S)	**118**		**%**	**1**	86-123		2/28/2019 21:50	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	2/28/2019 21:50	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/28/2019 21:50	J
1,2-Dichloroethane-d4 (S)	**93**		**%**	**1**	77-125		2/28/2019 21:50	
Toluene-d8 (S)	**109**		**%**	**1**	80-121		2/28/2019 21:50	
Bromofluorobenzene (S)	**100**		**%**	**1**	80-129		2/28/2019 21:50	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**2.8**	**I**	**mg/L**	**1**	5.0	0.50	3/1/2019 21:43	M
Nitrate (as N)	**0.25**	**U**	**mg/L**	**5**	2.5	0.25	2/23/2019 14:59	M
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.09**		**mg/L**	**1**	0.010	0.0080	2/28/2019 11:46	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**47**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354028** Date Received: 02/22/19 14:45 Matrix: Water

Sample ID: **MWB-40S** Date Collected: 02/22/19 08:18

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**9.0**	**U**	**ug/L**	**1**	10	9.0	3/1/2019 15:17	J
Barium	**77**		**ug/L**	**1**	2.0	0.83	3/1/2019 15:17	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2019 15:17	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2019 15:17	J
Chromium	**2.1**	**I**	**ug/L**	**1**	3.0	1.6	3/1/2019 15:17	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2019 15:17	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	3/1/2019 15:17	J
Iron	**960**		**ug/L**	**1**	200	100	3/1/2019 15:17	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	3/1/2019 15:17	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2019 15:17	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2019 15:17	J
Sodium	**48**		**mg/L**	**1**	0.70	0.34	3/1/2019 15:17	J
Vanadium	**8.0**		**ug/L**	**1**	4.0	1.0	3/1/2019 15:17	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2019 15:17	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.50**	**I**	**ug/L**	**1**	0.70	0.11	2/28/2019 19:23	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/28/2019 19:23	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/28/2019 19:23	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	3/4/2019 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	2/28/2019 22:19	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 22:19	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 22:19	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 22:19	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 22:19	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 22:19	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 22:19	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354028** Date Received: 02/22/19 14:45 Matrix: Water

Sample ID: **MWB-40S** Date Collected: 02/22/19 08:18

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	2/28/2019 22:19	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 22:19	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 22:19	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 22:19	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 22:19	J
2-Butanone (MEK)	**230**		**ug/L**	**3**	15	1.3	3/2/2019 18:00	J
2-Hexanone	**5.9**		**ug/L**	**1**	5.0	0.71	2/28/2019 22:19	J
4-Methyl-2-pentanone (MIBK)	**0.55**	**I**	**ug/L**	**1**	1.0	0.47	2/28/2019 22:19	J
Acetone	**260**		**ug/L**	**3**	15	6.2	3/2/2019 18:00	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 22:19	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 22:19	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 22:19	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 22:19	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 22:19	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 22:19	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 22:19	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 22:19	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 22:19	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 22:19	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 22:19	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 22:19	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 22:19	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 22:19	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 22:19	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 22:19	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 22:19	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 22:19	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 22:19	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 22:19	J
Toluene	**4.8**		**ug/L**	**1**	1.0	0.23	2/28/2019 22:19	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 22:19	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 22:19	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 22:19	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 22:19	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 22:19	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 22:19	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 22:19	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 22:19	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 22:19	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 22:19	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354028** Date Received: 02/22/19 14:45 Matrix: Water
Sample ID: **MWB-40S** Date Collected: 02/22/19 08:18

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**112**		**%**	**1**	70-128		2/28/2019 22:19	
Toluene-d8 (S)	**104**		**%**	**1**	77-119		2/28/2019 22:19	
Bromofluorobenzene (S)	**119**		**%**	**1**	86-123		2/28/2019 22:19	
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	2/28/2019 22:19	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	2/28/2019 22:19	J
1,2-Dichloroethane-d4 (S)	**93**		**%**	**1**	77-125		2/28/2019 22:19	
Toluene-d8 (S)	**109**		**%**	**1**	80-121		2/28/2019 22:19	
Bromofluorobenzene (S)	**101**		**%**	**1**	80-129		2/28/2019 22:19	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**55**		**mg/L**	**1**	5.0	0.50	3/1/2019 21:58	M
Nitrate (as N)	**0.25**	**U**	**mg/L**	**5**	2.5	0.25	2/23/2019 15:14	M
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**2.9**		**mg/L**	**10**	0.10	0.080	2/28/2019 11:46	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**260**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

Lab ID: **J1902354029** Date Received: 02/22/19 14:45 Matrix: Water
Sample ID: **MWB-39S** Date Collected: 02/22/19 07:42

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	3/1/2019 15:21	J
Barium	**5.4**		**ug/L**	**1**	2.0	0.83	3/1/2019 15:21	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2019 15:21	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354029** Date Received: 02/22/19 14:45 Matrix: Water

Sample ID: **MWB-39S** Date Collected: 02/22/19 07:42

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	3/1/2019 15:21	J
Chromium	**6.7**		**ug/L**	**1**	3.0	1.6	3/1/2019 15:21	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2019 15:21	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	3/1/2019 15:21	J
Iron	**160**	**I**	**ug/L**	**1**	200	100	3/1/2019 15:21	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	3/1/2019 15:21	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2019 15:21	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2019 15:21	J
Sodium	**23**		**mg/L**	**1**	0.70	0.34	3/1/2019 15:21	J
Vanadium	**3.4**	**I**	**ug/L**	**1**	4.0	1.0	3/1/2019 15:21	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2019 15:21	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	2/28/2019 19:28	J
Selenium	**0.63**	**I**	**ug/L**	**1**	5.0	0.58	2/28/2019 19:28	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/28/2019 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	3/4/2019 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	2/28/2019 22:49	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 22:49	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 22:49	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	2/28/2019 22:49	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	2/28/2019 22:49	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 22:49	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	2/28/2019 22:49	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	2/28/2019 22:49	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 22:49	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 22:49	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	2/28/2019 22:49	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	2/28/2019 22:49	J
2-Butanone (MEK)	**1.0**	**I**	**ug/L**	**1**	5.0	0.43	2/28/2019 22:49	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	2/28/2019 22:49	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354029** Date Received: 02/22/19 14:45 Matrix: Water

Sample ID: **MWB-39S** Date Collected: 02/22/19 07:42

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	2/28/2019 22:49	J
Acetone	**2.7**	**I**	**ug/L**	**1**	5.0	2.1	2/28/2019 22:49	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	2/28/2019 22:49	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 22:49	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	2/28/2019 22:49	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	2/28/2019 22:49	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	2/28/2019 22:49	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 22:49	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	2/28/2019 22:49	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 22:49	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 22:49	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 22:49	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	2/28/2019 22:49	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 22:49	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	2/28/2019 22:49	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	2/28/2019 22:49	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	2/28/2019 22:49	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 22:49	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 22:49	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	2/28/2019 22:49	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 22:49	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	2/28/2019 22:49	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	2/28/2019 22:49	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	2/28/2019 22:49	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	2/28/2019 22:49	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	2/28/2019 22:49	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 22:49	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	2/28/2019 22:49	J
cis-1,2-Dichloroethylene	**1.3**		**ug/L**	**1**	1.0	0.24	2/28/2019 22:49	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	2/28/2019 22:49	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	2/28/2019 22:49	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	2/28/2019 22:49	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	2/28/2019 22:49	J
1,2-Dichloroethane-d4 (S)	**112**		**%**	**1**	70-128		2/28/2019 22:49	
Toluene-d8 (S)	**107**		**%**	**1**	77-119		2/28/2019 22:49	
Bromofluorobenzene (S)	**120**		**%**	**1**	86-123		2/28/2019 22:49	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	2/28/2019 22:49	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354029** Date Received: 02/22/19 14:45 Matrix: Water
Sample ID: **MWB-39S** Date Collected: 02/22/19 07:42

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	2/28/2019 22:49	J
1,2-Dichloroethane-d4 (S)	**94**		**%**	**1**	77-125		2/28/2019 22:49	
Toluene-d8 (S)	**112**		**%**	**1**	80-121		2/28/2019 22:49	
Bromofluorobenzene (S)	**102**		**%**	**1**	80-129		2/28/2019 22:49	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**46**		**mg/L**	**1**	5.0	0.50	3/2/2019 00:08	M
Nitrate (as N)	**0.25**	**U**	**mg/L**	**5**	2.5	0.25	2/23/2019 15:28	M
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**1.6**		**mg/L**	**5**	0.050	0.040	2/28/2019 11:46	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**260**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

Lab ID: **J1902354030** Date Received: 02/22/19 14:45 Matrix: Water
Sample ID: **EQUIPMENT BLANK** Date Collected: 02/22/19 11:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**9.0**	**U**	**ug/L**	**1**	10	9.0	3/1/2019 15:26	J
Barium	**0.83**	**U**	**ug/L**	**1**	2.0	0.83	3/1/2019 15:26	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2019 15:26	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2019 15:26	J
Chromium	**1.6**	**U**	**ug/L**	**1**	3.0	1.6	3/1/2019 15:26	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2019 15:26	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	3/1/2019 15:26	J
Iron	**100**	**U**	**ug/L**	**1**	200	100	3/1/2019 15:26	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	3/1/2019 15:26	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2019 15:26	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2019 15:26	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354030** Date Received: 02/22/19 14:45 Matrix: Water

Sample ID: **EQUIPMENT BLANK** Date Collected: 02/22/19 11:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Sodium	**0.34**	**U**	**mg/L**	**1**	0.70	0.34	3/1/2019 15:26	J
Vanadium	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	3/1/2019 15:26	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2019 15:26	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	2/28/2019 19:40	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/28/2019 19:40	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/28/2019 19:40	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	3/4/2019 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	3/1/2019 13:54	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 13:54	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 13:54	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	3/1/2019 13:54	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	3/1/2019 13:54	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 13:54	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	3/1/2019 13:54	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	3/1/2019 13:54	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 13:54	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 13:54	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	3/1/2019 13:54	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 13:54	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	3/1/2019 13:54	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	3/1/2019 13:54	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	3/1/2019 13:54	J
Acetone	**3.3**	**I**	**ug/L**	**1**	5.0	2.1	3/1/2019 13:54	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	3/1/2019 13:54	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 13:54	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	3/1/2019 13:54	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	3/1/2019 13:54	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	3/1/2019 13:54	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 13:54	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354030** Date Received: 02/22/19 14:45 Matrix: Water

Sample ID: **EQUIPMENT BLANK** Date Collected: 02/22/19 11:15

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	3/1/2019 13:54	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 13:54	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 13:54	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 13:54	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 13:54	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 13:54	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 13:54	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	3/1/2019 13:54	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 13:54	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 13:54	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 13:54	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	3/1/2019 13:54	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 13:54	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 13:54	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 13:54	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 13:54	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	3/1/2019 13:54	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	3/1/2019 13:54	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 13:54	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	3/1/2019 13:54	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 13:54	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 13:54	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 13:54	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 13:54	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	3/1/2019 13:54	J
1,2-Dichloroethane-d4 (S)	**114**		**%**	**1**	70-128		3/1/2019 13:54	
Toluene-d8 (S)	**104**		**%**	**1**	77-119		3/1/2019 13:54	
Bromofluorobenzene (S)	**121**		**%**	**1**	86-123		3/1/2019 13:54	
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	3/1/2019 13:54	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	3/1/2019 13:54	J
1,2-Dichloroethane-d4 (S)	**95**		**%**	**1**	77-125		3/1/2019 13:54	
Toluene-d8 (S)	**108**		**%**	**1**	80-121		3/1/2019 13:54	
Bromofluorobenzene (S)	**103**		**%**	**1**	80-129		3/1/2019 13:54	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354030** Date Received: 02/22/19 14:45 Matrix: Water
Sample ID: **EQUIPMENT BLANK** Date Collected: 02/22/19 11:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chloride	**0.50**	**U**	**mg/L**	**1**	5.0	0.50	2/23/2019 15:43	M
Nitrate (as N)	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/23/2019 15:43	M
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.01**	**I**	**mg/L**	**1**	0.010	0.0080	2/28/2019 11:46	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**12**		**mg/L**	**1**	10	10	2/28/2019 11:30	J

Lab ID: **J1902354031** Date Received: 02/22/19 14:45 Matrix: Water
Sample ID: **TRIP BLANK-3** Date Collected: 02/22/19 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	3/1/2019 14:31	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 14:31	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 14:31	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	3/1/2019 14:31	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	3/1/2019 14:31	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 14:31	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	3/1/2019 14:31	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	3/1/2019 14:31	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 14:31	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 14:31	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	3/1/2019 14:31	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 14:31	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	3/1/2019 14:31	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	3/1/2019 14:31	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	3/1/2019 14:31	J
Acetone	**3.0**	**I**	**ug/L**	**1**	5.0	2.1	3/1/2019 14:31	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	3/1/2019 14:31	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 14:31	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354031** Date Received: 02/22/19 14:45 Matrix: Water

Sample ID: **TRIP BLANK-3** Date Collected: 02/22/19 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	3/1/2019 14:31	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	3/1/2019 14:31	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	3/1/2019 14:31	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 14:31	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	3/1/2019 14:31	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 14:31	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 14:31	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 14:31	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 14:31	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 14:31	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 14:31	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	3/1/2019 14:31	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 14:31	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 14:31	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 14:31	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	3/1/2019 14:31	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 14:31	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 14:31	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 14:31	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 14:31	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	3/1/2019 14:31	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	3/1/2019 14:31	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 14:31	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	3/1/2019 14:31	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 14:31	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 14:31	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 14:31	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 14:31	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	3/1/2019 14:31	J
1,2-Dichloroethane-d4 (S)	**114**		**%**	**1**	70-128		3/1/2019 14:31	
Toluene-d8 (S)	**103**		**%**	**1**	77-119		3/1/2019 14:31	
Bromofluorobenzene (S)	**117**		**%**	**1**	86-123		3/1/2019 14:31	
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	3/1/2019 14:31	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	3/1/2019 14:31	J
1,2-Dichloroethane-d4 (S)	**95**		**%**	**1**	77-125		3/1/2019 14:31	
Toluene-d8 (S)	**108**		**%**	**1**	80-121		3/1/2019 14:31	
Bromofluorobenzene (S)	**99**		**%**	**1**	80-129		3/1/2019 14:31	

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354032** Date Received: 02/22/19 14:45 Matrix: Water
Sample ID: **MWB-35I** Date Collected: 02/22/19 09:01

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	**540**		**ug/L**	**1**	200	100	3/1/2019 15:30	J
Sodium	**2.3**		**mg/L**	**1**	0.70	0.34	3/1/2019 15:30	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4.4**	**I**	**mg/L**	**1**	5.0	0.50	3/2/2019 00:23	M
Nitrate (as N)	**0.25**	**U**	**mg/L**	**5**	2.5	0.25	2/23/2019 15:57	M
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.10**		**mg/L**	**1**	0.010	0.0080	2/28/2019 11:46	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**50**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

Lab ID: **J1902354033** Date Received: 02/22/19 14:45 Matrix: Water
Sample ID: **MWB-39I** Date Collected: 02/22/19 07:13

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	**260**		**ug/L**	**1**	200	100	3/1/2019 15:35	J
Sodium	**3.1**		**mg/L**	**1**	0.70	0.34	3/1/2019 15:35	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4.9**	**I**	**mg/L**	**1**	5.0	0.50	3/1/2019 22:12	M
Nitrate (as N)	**0.25**	**U**	**mg/L**	**5**	2.5	0.25	2/23/2019 16:12	M

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354033** Date Received: 02/22/19 14:45 Matrix: Water
Sample ID: **MWB-39I** Date Collected: 02/22/19 07:13

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.06**		**mg/L**	**1**	0.010	0.0080	2/28/2019 11:46	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**110**		**mg/L**	**1**	10	10	2/25/2019 14:30	J

Lab ID: **J1902354034** Date Received: 02/22/19 14:45 Matrix: Water
Sample ID: **EQUIPMENT BLANK** Date Collected: 02/22/19 11:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**100**	**U**	**ug/L**	**1**	200	100	3/1/2019 15:39	J
Sodium	**0.34**	**U**	**mg/L**	**1**	0.70	0.34	3/1/2019 15:39	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	2/23/2019 16:26	M
Nitrate (as N)	**0.050**	**U**	**mg/L**	**1**	0.50	0.050	2/23/2019 16:26	M
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.0080**	**U**	**mg/L**	**1**	0.010	0.0080	2/28/2019 11:46	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**17**		**mg/L**	**1**	10	10	2/28/2019 11:30	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354035** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-1** Date Collected: 02/25/19 09:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Temperature	**13.8**		**°C**	**1**			2/28/2019 09:15	J^
pH	**7.38**		**SU**	**1**			2/28/2019 09:15	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	3/1/2019 15:44	J
Barium	**24**		**ug/L**	**1**	2.0	0.83	3/1/2019 15:44	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2019 15:44	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2019 15:44	J
Calcium	**21**		**mg/L**	**1**	0.20	0.082	3/1/2019 15:44	J
Chromium	**2.6**	**I**	**ug/L**	**1**	3.0	1.6	3/1/2019 15:44	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2019 15:44	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	3/1/2019 15:44	J
Iron	**520**		**ug/L**	**1**	200	100	3/1/2019 15:44	J
Lead	**3.7**	**I**	**ug/L**	**1**	6.0	2.9	3/1/2019 15:44	J
Magnesium	**2.9**		**mg/L**	**1**	0.20	0.085	3/1/2019 15:44	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2019 15:44	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2019 15:44	J
Total Hardness (as CaCO3)	**64**		**mg/L**	**1**	0.16	0.10	3/1/2019 15:44	J
Vanadium	**3.1**	**I**	**ug/L**	**1**	4.0	1.0	3/1/2019 15:44	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2019 15:44	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	2/28/2019 19:44	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/28/2019 19:44	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/28/2019 19:44	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	3/4/2019 15:01	J
Microbiology								
Analysis Desc: Fecal Coliform,SM9223D,Water	Analytical Method: COLILERT-18 (Fecal Coliforms)							

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354035** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-1** Date Collected: 02/25/19 09:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Coliform Fecal	**318**		**MPN/100 mL**	**10**	10	10	2/25/2019 14:12	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	3/1/2019 15:00	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 15:00	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 15:00	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	3/1/2019 15:00	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	3/1/2019 15:00	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 15:00	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	3/1/2019 15:00	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	3/1/2019 15:00	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 15:00	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 15:00	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	3/1/2019 15:00	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 15:00	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	3/1/2019 15:00	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	3/1/2019 15:00	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	3/1/2019 15:00	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	3/1/2019 15:00	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	3/1/2019 15:00	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 15:00	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	3/1/2019 15:00	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	3/1/2019 15:00	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	3/1/2019 15:00	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 15:00	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	3/1/2019 15:00	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 15:00	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 15:00	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 15:00	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 15:00	J
Chloromethane	**39**		**ug/L**	**1**	1.0	0.21	3/1/2019 15:00	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 15:00	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	3/1/2019 15:00	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 15:00	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 15:00	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 15:00	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	3/1/2019 15:00	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354035** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-1** Date Collected: 02/25/19 09:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 15:00	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 15:00	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 15:00	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 15:00	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	3/1/2019 15:00	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	3/1/2019 15:00	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 15:00	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	3/1/2019 15:00	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 15:00	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 15:00	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 15:00	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 15:00	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	3/1/2019 15:00	J
1,2-Dichloroethane-d4 (S)	**117**		**%**	**1**	70-128		3/1/2019 15:00	
Toluene-d8 (S)	**102**		**%**	**1**	77-119		3/1/2019 15:00	
Bromofluorobenzene (S)	**123**		**%**	**1**	86-123		3/1/2019 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	3/1/2019 15:00	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	3/1/2019 15:00	J
1,2-Dichloroethane-d4 (S)	**97**		**%**	**1**	77-125		3/1/2019 15:00	
Toluene-d8 (S)	**107**		**%**	**1**	80-121		3/1/2019 15:00	
Bromofluorobenzene (S)	**104**		**%**	**1**	80-129		3/1/2019 15:00	
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**1.1**		**mg/L**	**1**	0.40	0.18	3/5/2019 16:12	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.00046**	**I**	**mg/L**	**1**	0.050	0.000058	2/28/2019 09:17	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate (as N)	**0.50**	**U**	**mg/L**	**10**	5.0	0.50	2/26/2019 14:02	M
Nitrate + Nitrite	**0.50**	**U**	**mg/L**	**10**	5.0	0.50	2/26/2019 14:02	M
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.06**		**mg/L**	**1**	0.010	0.0080	2/28/2019 11:46	G

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354035** Date Received: 02/25/19 13:20 Matrix: Water
Sample ID: **SW-1** Date Collected: 02/25/19 09:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**1.1**		**mg/L**	**1**	0.10	0.085	3/1/2019 10:20	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.10**		**mg/L**	**1**	0.10	0.055	3/1/2019 10:20	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**91**		**mg/L**	**1**	20	7.3	2/28/2019 12:38	J
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Chlorophyll A	**2.5**	**U**	**mg/m3**	**1**	5.0	2.5	3/5/2019 13:00	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**210**		**mg/L**	**1**	10	10	2/28/2019 11:30	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**6.0**		**mg/L**	**1**	2.0	1.0	2/26/2019 14:35	J
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**2.0**	**U**	**mg/L**	**1**	2.0	2.0	2/27/2019 06:23	J
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**20**		**mg/L**	**1**	1.0	0.42	2/27/2019 11:53	G

Lab ID: **J1902354036** Date Received: 02/25/19 13:20 Matrix: Water
Sample ID: **SW-3** Date Collected: 02/25/19 09:15

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							

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354036** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-3** Date Collected: 02/25/19 09:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Temperature	**18.3**		**°C**	**1**			2/28/2019 09:16	J^
pH	**7.54**		**SU**	**1**			2/28/2019 09:16	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	3/1/2019 15:48	J
Barium	**46**		**ug/L**	**1**	2.0	0.83	3/1/2019 15:48	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2019 15:48	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2019 15:48	J
Calcium	**53**		**mg/L**	**2**	0.40	0.16	3/5/2019 12:31	J
Chromium	**5.8**		**ug/L**	**1**	3.0	1.6	3/1/2019 15:48	J
Cobalt	**2.1**	**I**	**ug/L**	**1**	4.0	1.9	3/1/2019 15:48	J
Copper	**7.5**		**ug/L**	**1**	6.0	3.2	3/1/2019 15:48	J
Iron	**1700**		**ug/L**	**1**	200	100	3/1/2019 15:48	J
Lead	**15**		**ug/L**	**1**	6.0	2.9	3/1/2019 15:48	J
Magnesium	**5.2**		**mg/L**	**2**	0.40	0.17	3/5/2019 12:31	J
Nickel	**8.5**	**I**	**ug/L**	**1**	10	6.0	3/1/2019 15:48	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2019 15:48	J
Total Hardness (as CaCO3)	**150**		**mg/L**	**2**	0.32	0.21	3/5/2019 12:31	J
Vanadium	**9.2**		**ug/L**	**1**	4.0	1.0	3/1/2019 15:48	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2019 15:48	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**1.4**		**ug/L**	**1**	0.70	0.11	2/28/2019 19:48	J
Selenium	**0.64**	**I**	**ug/L**	**1**	5.0	0.58	2/28/2019 19:48	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/28/2019 19:48	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.034**	**I**	**ug/L**	**1**	0.10	0.011	3/4/2019 15:04	J
Microbiology								
Analysis Desc: Fecal Coliform,SM9223D,Water	Analytical Method: COLILERT-18 (Fecal Coliforms)							
Coliform Fecal	**85**		**MPN/100 mL**	**10**	10	10	2/25/2019 14:12	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354036** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-3** Date Collected: 02/25/19 09:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	3/1/2019 15:36	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 15:36	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 15:36	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	3/1/2019 15:36	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	3/1/2019 15:36	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 15:36	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	3/1/2019 15:36	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	3/1/2019 15:36	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 15:36	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 15:36	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	3/1/2019 15:36	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 15:36	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	3/1/2019 15:36	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	3/1/2019 15:36	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	3/1/2019 15:36	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	3/1/2019 15:36	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	3/1/2019 15:36	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 15:36	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	3/1/2019 15:36	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	3/1/2019 15:36	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	3/1/2019 15:36	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 15:36	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	3/1/2019 15:36	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 15:36	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 15:36	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 15:36	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 15:36	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 15:36	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 15:36	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	3/1/2019 15:36	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 15:36	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 15:36	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 15:36	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	3/1/2019 15:36	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 15:36	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 15:36	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354036** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-3** Date Collected: 02/25/19 09:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 15:36	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 15:36	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	3/1/2019 15:36	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	3/1/2019 15:36	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 15:36	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	3/1/2019 15:36	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 15:36	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 15:36	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 15:36	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 15:36	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	3/1/2019 15:36	J
1,2-Dichloroethane-d4 (S)	**116**		**%**	**1**	70-128		3/1/2019 15:36	
Toluene-d8 (S)	**102**		**%**	**1**	77-119		3/1/2019 15:36	
Bromofluorobenzene (S)	**120**		**%**	**1**	86-123		3/1/2019 15:36	
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	3/1/2019 15:36	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	3/1/2019 15:36	J
1,2-Dichloroethane-d4 (S)	**96**		**%**	**1**	77-125		3/1/2019 15:36	
Toluene-d8 (S)	**107**		**%**	**1**	80-121		3/1/2019 15:36	
Bromofluorobenzene (S)	**101**		**%**	**1**	80-129		3/1/2019 15:36	
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**6.7**		**mg/L**	**1**	0.40	0.18	3/5/2019 16:12	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0**	**U**	**mg/L**	**1**	0.050		2/28/2019 09:17	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate (as N)	**3.8**	**I**	**mg/L**	**10**	5.0	0.50	2/26/2019 14:17	M
Nitrate + Nitrite	**4.6**	**I**	**mg/L**	**10**	5.0	0.50	2/26/2019 14:17	M
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.11**		**mg/L**	**1**	0.010	0.0080	2/28/2019 11:46	G

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354036** Date Received: 02/25/19 13:20 Matrix: Water
Sample ID: **SW-3** Date Collected: 02/25/19 09:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**2.2**		**mg/L**	**1**	0.10	0.085	3/1/2019 10:20	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.12**		**mg/L**	**1**	0.10	0.055	3/1/2019 10:20	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**78**		**mg/L**	**1**	20	7.3	2/28/2019 12:38	J
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Chlorophyll A	**2.5**	**U**	**mg/m3**	**1**	5.0	2.5	3/5/2019 13:00	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**320**		**mg/L**	**1**	10	10	2/28/2019 11:30	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**25**		**mg/L**	**1**	2.0	1.0	2/26/2019 14:35	J
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**2.0**	**U**	**mg/L**	**1**	2.0	2.0	2/27/2019 06:19	J
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**16**		**mg/L**	**1**	1.0	0.42	2/27/2019 11:53	G

Lab ID: **J1902354037** Date Received: 02/25/19 13:20 Matrix: Water
Sample ID: **SW-B** Date Collected: 02/25/19 08:30

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							

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354037** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-B** Date Collected: 02/25/19 08:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Temperature	**11.7**		**°C**	**1**			2/28/2019 09:17	J^
pH	**7.73**		**SU**	**1**			2/28/2019 09:17	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	3/1/2019 15:53	J
Barium	**8.6**		**ug/L**	**1**	2.0	0.83	3/1/2019 15:53	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2019 15:53	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2019 15:53	J
Calcium	**16**		**mg/L**	**1**	0.20	0.082	3/1/2019 15:53	J
Chromium	**1.6**	**U**	**ug/L**	**1**	3.0	1.6	3/1/2019 15:53	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2019 15:53	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	3/1/2019 15:53	J
Iron	**100**	**U**	**ug/L**	**1**	200	100	3/1/2019 15:53	J
Lead	**2.9**	**U**	**ug/L**	**1**	6.0	2.9	3/1/2019 15:53	J
Magnesium	**0.82**		**mg/L**	**1**	0.20	0.085	3/1/2019 15:53	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2019 15:53	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2019 15:53	J
Total Hardness (as CaCO3)	**43**		**mg/L**	**1**	0.16	0.10	3/1/2019 15:53	J
Vanadium	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	3/1/2019 15:53	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2019 15:53	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	2/28/2019 19:52	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/28/2019 19:52	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/28/2019 19:52	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	3/4/2019 15:14	J
Microbiology								
Analysis Desc: Fecal Coliform,SM9223D,Water	Analytical Method: COLILERT-18 (Fecal Coliforms)							
Coliform Fecal	**156**		**MPN/100 mL**	**10**	10	10	2/25/2019 14:12	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354037** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-B** Date Collected: 02/25/19 08:30

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	3/1/2019 16:06	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 16:06	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 16:06	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	3/1/2019 16:06	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	3/1/2019 16:06	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 16:06	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	3/1/2019 16:06	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	3/1/2019 16:06	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 16:06	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 16:06	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	3/1/2019 16:06	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 16:06	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	3/1/2019 16:06	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	3/1/2019 16:06	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	3/1/2019 16:06	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	3/1/2019 16:06	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	3/1/2019 16:06	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 16:06	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	3/1/2019 16:06	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	3/1/2019 16:06	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	3/1/2019 16:06	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 16:06	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	3/1/2019 16:06	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 16:06	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 16:06	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 16:06	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 16:06	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 16:06	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 16:06	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	3/1/2019 16:06	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 16:06	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 16:06	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 16:06	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	3/1/2019 16:06	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 16:06	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 16:06	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354037** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-B** Date Collected: 02/25/19 08:30

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	3/1/2019 16:06	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 16:06	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	3/1/2019 16:06	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	3/1/2019 16:06	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 16:06	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	3/1/2019 16:06	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 16:06	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 16:06	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 16:06	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 16:06	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	3/1/2019 16:06	J
1,2-Dichloroethane-d4 (S)	**118**		**%**	**1**	70-128		3/1/2019 16:06	
Toluene-d8 (S)	**103**		**%**	**1**	77-119		3/1/2019 16:06	
Bromofluorobenzene (S)	**123**		**%**	**1**	86-123		3/1/2019 16:06	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	3/1/2019 16:06	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	3/1/2019 16:06	J
1,2-Dichloroethane-d4 (S)	**98**		**%**	**1**	77-125		3/1/2019 16:06	
Toluene-d8 (S)	**108**		**%**	**1**	80-121		3/1/2019 16:06	
Bromofluorobenzene (S)	**104**		**%**	**1**	80-129		3/1/2019 16:06	
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**0.18**	**U**	**mg/L**	**1**	0.40	0.18	3/5/2019 16:13	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.00011**	**U**	**mg/L**	**1**	0.050	0.00011	2/28/2019 09:18	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate (as N)	**0.50**	**U**	**mg/L**	**10**	5.0	0.50	2/26/2019 14:31	M
Nitrate + Nitrite	**0.50**	**U**	**mg/L**	**10**	5.0	0.50	2/26/2019 14:31	M
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.0080**	**U**	**mg/L**	**1**	0.010	0.0080	2/28/2019 11:46	G

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354037** Date Received: 02/25/19 13:20 Matrix: Water
Sample ID: **SW-B** Date Collected: 02/25/19 08:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**0.13**		**mg/L**	**1**	0.10	0.085	3/1/2019 10:20	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.055**	**U**	**mg/L**	**1**	0.10	0.055	3/1/2019 10:20	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**20**	**I**	**mg/L**	**1**	20	7.3	2/28/2019 12:38	J
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Chlorophyll A	**2.5**	**U**	**mg/m3**	**1**	5.0	2.5	3/5/2019 13:00	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**83**		**mg/L**	**1**	10	10	2/28/2019 11:30	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**1.0**	**U**	**mg/L**	**1**	2.0	1.0	2/26/2019 14:35	J
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**2.0**	**U**	**mg/L**	**1**	2.0	2.0	2/27/2019 06:16	J
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**3.2**		**mg/L**	**1**	1.0	0.42	2/27/2019 11:53	G

Lab ID: **J1902354038** Date Received: 02/25/19 13:20 Matrix: Water
Sample ID: **SW-4** Date Collected: 02/25/19 08:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354038** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-4** Date Collected: 02/25/19 08:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Temperature	**19**		**°C**	**1**			2/28/2019 09:18	J^
pH	**7.32**		**SU**	**1**			2/28/2019 09:18	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	3/1/2019 15:57	J
Barium	**82**		**ug/L**	**1**	2.0	0.83	3/1/2019 15:57	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2019 15:57	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2019 15:57	J
Calcium	**33**		**mg/L**	**1**	0.20	0.082	3/1/2019 15:57	J
Chromium	**18**		**ug/L**	**1**	3.0	1.6	3/1/2019 15:57	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2019 15:57	J
Copper	**6.8**		**ug/L**	**1**	6.0	3.2	3/1/2019 15:57	J
Iron	**2300**		**ug/L**	**1**	200	100	3/1/2019 15:57	J
Lead	**19**		**ug/L**	**1**	6.0	2.9	3/1/2019 15:57	J
Magnesium	**3.1**		**mg/L**	**1**	0.20	0.085	3/1/2019 15:57	J
Nickel	**7.9**	**I**	**ug/L**	**1**	10	6.0	3/1/2019 15:57	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2019 15:57	J
Total Hardness (as CaCO3)	**95**		**mg/L**	**1**	0.16	0.10	3/1/2019 15:57	J
Vanadium	**33**		**ug/L**	**1**	4.0	1.0	3/1/2019 15:57	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2019 15:57	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	2/28/2019 19:56	J
Selenium	**2.9**	**U**	**ug/L**	**5**	25	2.9	3/4/2019 13:40	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/28/2019 19:56	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.14**		**ug/L**	**1**	0.10	0.011	3/4/2019 15:18	J
Microbiology								
Analysis Desc: Fecal Coliform,SM9223D,Water	Analytical Method: COLILERT-18 (Fecal Coliforms)							
Coliform Fecal	**216**		**MPN/100 mL**	**10**	10	10	2/25/2019 14:12	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354038** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-4** Date Collected: 02/25/19 08:00

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	3/1/2019 16:42	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 16:42	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 16:42	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	3/1/2019 16:42	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	3/1/2019 16:42	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 16:42	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	3/1/2019 16:42	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	3/1/2019 16:42	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 16:42	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 16:42	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	3/1/2019 16:42	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 16:42	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	3/1/2019 16:42	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	3/1/2019 16:42	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	3/1/2019 16:42	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	3/1/2019 16:42	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	3/1/2019 16:42	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 16:42	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	3/1/2019 16:42	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	3/1/2019 16:42	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	3/1/2019 16:42	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 16:42	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	3/1/2019 16:42	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 16:42	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 16:42	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 16:42	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 16:42	J
Chloromethane	**29**		**ug/L**	**1**	1.0	0.21	3/1/2019 16:42	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 16:42	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	3/1/2019 16:42	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 16:42	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 16:42	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 16:42	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	3/1/2019 16:42	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 16:42	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 16:42	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354038** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-4** Date Collected: 02/25/19 08:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 16:42	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 16:42	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	3/1/2019 16:42	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	3/1/2019 16:42	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 16:42	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	3/1/2019 16:42	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 16:42	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 16:42	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 16:42	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 16:42	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	3/1/2019 16:42	J
1,2-Dichloroethane-d4 (S)	**117**		**%**	**1**	70-128		3/1/2019 16:42	
Toluene-d8 (S)	**102**		**%**	**1**	77-119		3/1/2019 16:42	
Bromofluorobenzene (S)	**119**		**%**	**1**	86-123		3/1/2019 16:42	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	3/1/2019 16:42	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	3/1/2019 16:42	J
1,2-Dichloroethane-d4 (S)	**96**		**%**	**1**	77-125		3/1/2019 16:42	
Toluene-d8 (S)	**107**		**%**	**1**	80-121		3/1/2019 16:42	
Bromofluorobenzene (S)	**101**		**%**	**1**	80-129		3/1/2019 16:42	
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**3.4**		**mg/L**	**1**	0.40	0.18	3/5/2019 16:14	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.0012**	**I**	**mg/L**	**1**	0.050	0.000074	2/28/2019 09:18	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate (as N)	**2.0**	**I**	**mg/L**	**10**	5.0	0.50	2/26/2019 14:45	M
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.13**		**mg/L**	**1**	0.010	0.0080	2/28/2019 11:46	G
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354038** Date Received: 02/25/19 13:20 Matrix: Water
Sample ID: **SW-4** Date Collected: 02/25/19 08:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Kjeldahl Nitrogen	**1.8**		**mg/L**	**1**	0.10	0.085	3/1/2019 10:20	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.44**		**mg/L**	**1**	0.10	0.055	3/1/2019 10:20	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**160**		**mg/L**	**1**	20	7.3	2/28/2019 12:38	J
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Chlorophyll A	**2.5**	**U**	**mg/m3**	**1**	5.0	2.5	3/5/2019 13:00	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**370**		**mg/L**	**1**	10	10	2/28/2019 11:30	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**33**		**mg/L**	**1**	2.0	1.0	2/26/2019 14:35	J
Analysis Desc: Nitrate+Nitrite,SM4500NO3F,W	Analytical Method: SM 4500NO3-F							
Nitrate + Nitrite	**1.6**		**mg/L**	**10**	0.1	0.04	2/17/2019 11:40	G
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**24**	**U,K**	**mg/L**	**12**	24	24	2/27/2019 06:11	J
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**10**		**mg/L**	**1**	1.0	0.42	2/27/2019 11:53	G

Lab ID: **J1902354039** Date Received: 02/25/19 13:20 Matrix: Water
Sample ID: **SW-7** Date Collected: 02/25/19 07:22

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354039** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-7** Date Collected: 02/25/19 07:22

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Temperature	**13.8**		**°C**	**1**			2/28/2019 09:18	J^
pH	**7.22**		**SU**	**1**			2/28/2019 09:18	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	3/1/2019 16:11	J
Barium	**26**		**ug/L**	**1**	2.0	0.83	3/1/2019 16:11	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2019 16:11	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2019 16:11	J
Calcium	**12**		**mg/L**	**1**	0.20	0.082	3/1/2019 16:11	J
Chromium	**5.2**		**ug/L**	**1**	3.0	1.6	3/1/2019 16:11	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2019 16:11	J
Copper	**3.2**	**U**	**ug/L**	**1**	6.0	3.2	3/1/2019 16:11	J
Iron	**2800**		**ug/L**	**1**	200	100	3/1/2019 16:11	J
Lead	**4.8**	**I**	**ug/L**	**1**	6.0	2.9	3/1/2019 16:11	J
Magnesium	**2.3**		**mg/L**	**1**	0.20	0.085	3/1/2019 16:11	J
Nickel	**6.0**	**U**	**ug/L**	**1**	10	6.0	3/1/2019 16:11	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2019 16:11	J
Total Hardness (as CaCO3)	**40**		**mg/L**	**1**	0.16	0.10	3/1/2019 16:11	J
Vanadium	**7.5**		**ug/L**	**1**	4.0	1.0	3/1/2019 16:11	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2019 16:11	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	2/28/2019 20:00	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	2/28/2019 20:00	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/28/2019 20:00	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	3/4/2019 15:21	J
Microbiology								
Analysis Desc: Fecal Coliform,SM9223D,Water	Analytical Method: COLILERT-18 (Fecal Coliforms)							

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354039** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-7** Date Collected: 02/25/19 07:22

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Coliform Fecal	**63**		**MPN/100 mL**	**10**	10	10	2/25/2019 14:12	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	3/1/2019 17:12	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 17:12	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 17:12	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	3/1/2019 17:12	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	3/1/2019 17:12	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 17:12	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	3/1/2019 17:12	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	3/1/2019 17:12	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 17:12	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 17:12	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	3/1/2019 17:12	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 17:12	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	3/1/2019 17:12	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	3/1/2019 17:12	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	3/1/2019 17:12	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	3/1/2019 17:12	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	3/1/2019 17:12	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 17:12	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	3/1/2019 17:12	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	3/1/2019 17:12	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	3/1/2019 17:12	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 17:12	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	3/1/2019 17:12	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 17:12	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 17:12	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 17:12	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 17:12	J
Chloromethane	**22**		**ug/L**	**1**	1.0	0.21	3/1/2019 17:12	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 17:12	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	3/1/2019 17:12	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 17:12	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 17:12	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 17:12	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	3/1/2019 17:12	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354039** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-7** Date Collected: 02/25/19 07:22

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 17:12	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 17:12	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 17:12	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 17:12	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	3/1/2019 17:12	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	3/1/2019 17:12	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 17:12	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	3/1/2019 17:12	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 17:12	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 17:12	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 17:12	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 17:12	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	3/1/2019 17:12	J
1,2-Dichloroethane-d4 (S)	**118**		**%**	**1**	70-128		3/1/2019 17:12	
Toluene-d8 (S)	**101**		**%**	**1**	77-119		3/1/2019 17:12	
Bromofluorobenzene (S)	**120**		**%**	**1**	86-123		3/1/2019 17:12	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	3/1/2019 17:12	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	3/1/2019 17:12	J
1,2-Dichloroethane-d4 (S)	**97**		**%**	**1**	77-125		3/1/2019 17:12	
Toluene-d8 (S)	**106**		**%**	**1**	80-121		3/1/2019 17:12	
Bromofluorobenzene (S)	**102**		**%**	**1**	80-129		3/1/2019 17:12	
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**0.99**		**mg/L**	**1**	0.40	0.18	3/5/2019 16:17	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.00029**	**I**	**mg/L**	**1**	0.050	0.000040	2/28/2019 09:19	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate (as N)	**0.50**	**U**	**mg/L**	**10**	5.0	0.50	2/26/2019 15:00	M
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.06**		**mg/L**	**1**	0.010	0.0080	2/28/2019 11:46	G

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354039** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-7** Date Collected: 02/25/19 07:22

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**0.90**		**mg/L**	**1**	0.10	0.085	3/1/2019 10:20	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.14**		**mg/L**	**1**	0.10	0.055	3/1/2019 10:20	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**74**		**mg/L**	**1**	20	7.3	2/28/2019 12:38	J
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Chlorophyll A	**2.5**	**U**	**mg/m3**	**1**	5.0	2.5	3/5/2019 13:00	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**160**		**mg/L**	**1**	10	10	2/28/2019 11:30	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**23**		**mg/L**	**1**	2.0	1.0	2/26/2019 14:35	J
Analysis Desc: Nitrate+Nitrite,SM4500NO3F,W	Analytical Method: SM 4500NO3-F							
Nitrate + Nitrite	**0.088**	**I**	**mg/L**	**10**	0.1	0.04	2/17/2019 11:40	G
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**2.0**	**U**	**mg/L**	**1**	2.0	2.0	2/27/2019 06:03	J
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**16**		**mg/L**	**1**	1.0	0.42	2/27/2019 11:53	G

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354040** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-5** Date Collected: 02/25/19 06:55

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							
Temperature	**19.8**		**°C**	**1**			2/28/2019 09:19	J^
pH	**7.56**		**SU**	**1**			2/28/2019 09:19	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	3/1/2019 16:15	J
Barium	**84**		**ug/L**	**1**	2.0	0.83	3/1/2019 16:15	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2019 16:15	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2019 16:15	J
Calcium	**34**		**mg/L**	**1**	0.20	0.082	3/1/2019 16:15	J
Chromium	**18**		**ug/L**	**1**	3.0	1.6	3/1/2019 16:15	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2019 16:15	J
Copper	**6.3**		**ug/L**	**1**	6.0	3.2	3/1/2019 16:15	J
Iron	**2300**		**ug/L**	**1**	200	100	3/1/2019 16:15	J
Lead	**18**		**ug/L**	**1**	6.0	2.9	3/1/2019 16:15	J
Magnesium	**3.2**		**mg/L**	**1**	0.20	0.085	3/1/2019 16:15	J
Nickel	**8.3**	**I**	**ug/L**	**1**	10	6.0	3/1/2019 16:15	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2019 16:15	J
Total Hardness (as CaCO3)	**98**		**mg/L**	**1**	0.16	0.10	3/1/2019 16:15	J
Vanadium	**34**		**ug/L**	**1**	4.0	1.0	3/1/2019 16:15	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2019 16:15	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	2/28/2019 20:04	J
Selenium	**2.9**	**U**	**ug/L**	**5**	25	2.9	3/4/2019 13:44	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/28/2019 20:04	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.13**		**ug/L**	**1**	0.10	0.011	3/4/2019 15:24	J
Microbiology								
Analysis Desc: Fecal Coliform,SM9223D,Water	Analytical Method: COLILERT-18 (Fecal Coliforms)							

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354040** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-5** Date Collected: 02/25/19 06:55

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Coliform Fecal	**86**		**MPN/100 mL**	**10**	10	10	2/25/2019 14:12	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	3/1/2019 17:48	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 17:48	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 17:48	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	3/1/2019 17:48	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	3/1/2019 17:48	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 17:48	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	3/1/2019 17:48	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	3/1/2019 17:48	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 17:48	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 17:48	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	3/1/2019 17:48	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 17:48	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	3/1/2019 17:48	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	3/1/2019 17:48	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	3/1/2019 17:48	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	3/1/2019 17:48	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	3/1/2019 17:48	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 17:48	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	3/1/2019 17:48	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	3/1/2019 17:48	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	3/1/2019 17:48	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 17:48	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	3/1/2019 17:48	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 17:48	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 17:48	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 17:48	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 17:48	J
Chloromethane	**24**		**ug/L**	**1**	1.0	0.21	3/1/2019 17:48	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 17:48	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	3/1/2019 17:48	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 17:48	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 17:48	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 17:48	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	3/1/2019 17:48	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354040** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-5** Date Collected: 02/25/19 06:55

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 17:48	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 17:48	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 17:48	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 17:48	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	3/1/2019 17:48	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	3/1/2019 17:48	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 17:48	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	3/1/2019 17:48	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 17:48	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 17:48	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 17:48	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 17:48	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	3/1/2019 17:48	J
1,2-Dichloroethane-d4 (S)	**119**		**%**	**1**	70-128		3/1/2019 17:48	
Toluene-d8 (S)	**102**		**%**	**1**	77-119		3/1/2019 17:48	
Bromofluorobenzene (S)	**121**		**%**	**1**	86-123		3/1/2019 17:48	
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	3/1/2019 17:48	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	3/1/2019 17:48	J
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	77-125		3/1/2019 17:48	
Toluene-d8 (S)	**107**		**%**	**1**	80-121		3/1/2019 17:48	
Bromofluorobenzene (S)	**102**		**%**	**1**	80-129		3/1/2019 17:48	
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**3.8**		**mg/L**	**1**	0.40	0.18	3/5/2019 16:17	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.0020**	**I**	**mg/L**	**1**	0.050	0.00014	2/28/2019 09:20	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate (as N)	**2.0**	**I**	**mg/L**	**10**	5.0	0.50	2/26/2019 16:27	M
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.12**		**mg/L**	**1**	0.010	0.0080	2/28/2019 11:46	G

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354040** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-5** Date Collected: 02/25/19 06:55

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**2.0**		**mg/L**	**1**	0.10	0.085	3/1/2019 10:20	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.46**		**mg/L**	**1**	0.10	0.055	3/1/2019 10:20	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**120**		**mg/L**	**5**	100	37	2/28/2019 12:38	J
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Chlorophyll A	**2.5**	**U**	**mg/m3**	**1**	5.0	2.5	3/5/2019 13:00	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**390**		**mg/L**	**1**	10	10	2/28/2019 11:30	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**35**		**mg/L**	**1**	2.0	1.0	2/26/2019 14:35	J
Analysis Desc: Nitrate+Nitrite,SM4500NO3F,W	Analytical Method: SM 4500NO3-F							
Nitrate + Nitrite	**1.8**		**mg/L**	**10**	0.1	0.04	2/27/2019 11:40	G
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**24**	**U,K**	**mg/L**	**12**	24	24	2/27/2019 05:54	J
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**11**		**mg/L**	**1**	1.0	0.42	2/27/2019 11:53	G

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354041** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-6** Date Collected: 02/25/19 06:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Temperature	**18.2**		**°C**	**1**			2/28/2019 09:20	J^
pH	**6.83**		**SU**	**1**			2/28/2019 09:20	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	3/1/2019 16:19	J
Barium	**94**		**ug/L**	**1**	2.0	0.83	3/1/2019 16:19	J
Beryllium	**0.40**	**U**	**ug/L**	**1**	0.80	0.40	3/1/2019 16:19	J
Cadmium	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	3/1/2019 16:19	J
Calcium	**33**		**mg/L**	**1**	0.20	0.082	3/1/2019 16:19	J
Chromium	**19**		**ug/L**	**1**	3.0	1.6	3/1/2019 16:19	J
Cobalt	**1.9**	**U**	**ug/L**	**1**	4.0	1.9	3/1/2019 16:19	J
Copper	**6.2**		**ug/L**	**1**	6.0	3.2	3/1/2019 16:19	J
Iron	**2400**		**ug/L**	**1**	200	100	3/1/2019 16:19	J
Lead	**18**		**ug/L**	**1**	6.0	2.9	3/1/2019 16:19	J
Magnesium	**3.3**		**mg/L**	**1**	0.20	0.085	3/1/2019 16:19	J
Nickel	**9.2**	**I**	**ug/L**	**1**	10	6.0	3/1/2019 16:19	J
Silver	**9.6**	**U**	**ug/L**	**1**	20	9.6	3/1/2019 16:19	J
Total Hardness (as CaCO3)	**95**		**mg/L**	**1**	0.16	0.10	3/1/2019 16:19	J
Vanadium	**35**		**ug/L**	**1**	4.0	1.0	3/1/2019 16:19	J
Zinc	**33**	**U**	**ug/L**	**1**	60	33	3/1/2019 16:19	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.36**	**I**	**ug/L**	**1**	0.70	0.11	2/28/2019 20:08	J
Selenium	**2.9**	**U**	**ug/L**	**5**	25	2.9	3/4/2019 13:48	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	2/28/2019 20:08	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.14**		**ug/L**	**1**	0.10	0.011	3/4/2019 15:27	J
Microbiology								
Analysis Desc: Fecal Coliform,SM9223D,Water	Analytical Method: COLILERT-18 (Fecal Coliforms)							

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354041** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-6** Date Collected: 02/25/19 06:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Coliform Fecal	**231**		**MPN/100 mL**	**10**	10	10	2/25/2019 14:12	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	3/1/2019 18:18	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 18:18	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 18:18	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	3/1/2019 18:18	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	3/1/2019 18:18	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 18:18	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	3/1/2019 18:18	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	3/1/2019 18:18	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 18:18	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 18:18	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	3/1/2019 18:18	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 18:18	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	3/1/2019 18:18	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	3/1/2019 18:18	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	3/1/2019 18:18	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	3/1/2019 18:18	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	3/1/2019 18:18	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 18:18	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	3/1/2019 18:18	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	3/1/2019 18:18	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	3/1/2019 18:18	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 18:18	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	3/1/2019 18:18	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 18:18	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 18:18	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 18:18	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 18:18	J
Chloromethane	**22**		**ug/L**	**1**	1.0	0.21	3/1/2019 18:18	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 18:18	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	3/1/2019 18:18	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 18:18	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 18:18	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 18:18	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	3/1/2019 18:18	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354041** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-6** Date Collected: 02/25/19 06:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 18:18	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 18:18	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 18:18	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 18:18	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	3/1/2019 18:18	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	3/1/2019 18:18	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 18:18	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	3/1/2019 18:18	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 18:18	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 18:18	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 18:18	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 18:18	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	3/1/2019 18:18	J
1,2-Dichloroethane-d4 (S)	**119**		**%**	**1**	70-128		3/1/2019 18:18	
Toluene-d8 (S)	**103**		**%**	**1**	77-119		3/1/2019 18:18	
Bromofluorobenzene (S)	**119**		**%**	**1**	86-123		3/1/2019 18:18	
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	3/1/2019 18:18	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	3/1/2019 18:18	J
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	77-125		3/1/2019 18:18	
Toluene-d8 (S)	**107**		**%**	**1**	80-121		3/1/2019 18:18	
Bromofluorobenzene (S)	**101**		**%**	**1**	80-129		3/1/2019 18:18	
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**3.7**		**mg/L**	**1**	0.40	0.18	3/5/2019 16:18	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.00045**	**I**	**mg/L**	**1**	0.050	0.000023	2/28/2019 09:20	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate (as N)	**2.1**	**I**	**mg/L**	**10**	5.0	0.50	2/26/2019 16:41	M
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.16**		**mg/L**	**1**	0.010	0.0080	2/28/2019 11:46	G

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354041** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **SW-6** Date Collected: 02/25/19 06:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**2.0**		**mg/L**	**1**	0.10	0.085	3/1/2019 10:20	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.44**		**mg/L**	**1**	0.10	0.055	3/1/2019 10:20	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**170**		**mg/L**	**5**	100	37	2/28/2019 12:38	J
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Chlorophyll A	**2.5**	**U**	**mg/m3**	**1**	5.0	2.5	3/5/2019 13:00	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**380**		**mg/L**	**1**	10	10	2/28/2019 11:30	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**35**		**mg/L**	**1**	2.0	1.0	2/26/2019 14:35	J
Analysis Desc: Nitrate+Nitrite,SM4500NO3F,W	Analytical Method: SM 4500NO3-F							
Nitrate + Nitrite	**1.8**		**mg/L**	**10**	0.1	0.04	2/27/2019 11:40	G
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**18**		**mg/L**	**1**	2.0	2.0	2/27/2019 05:44	J
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**10**		**mg/L**	**1**	1.0	0.42	2/27/2019 11:53	G

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354042** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **TRIP-4** Date Collected: 02/25/19 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	3/1/2019 18:54	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 18:54	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 18:54	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	3/1/2019 18:54	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	3/1/2019 18:54	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 18:54	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	3/1/2019 18:54	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	3/1/2019 18:54	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 18:54	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 18:54	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	3/1/2019 18:54	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	3/1/2019 18:54	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	3/1/2019 18:54	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	3/1/2019 18:54	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	3/1/2019 18:54	J
Acetone	**5.3**		**ug/L**	**1**	5.0	2.1	3/1/2019 18:54	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	3/1/2019 18:54	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 18:54	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	3/1/2019 18:54	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	3/1/2019 18:54	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	3/1/2019 18:54	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 18:54	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	3/1/2019 18:54	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 18:54	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 18:54	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 18:54	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	3/1/2019 18:54	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 18:54	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	3/1/2019 18:54	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	3/1/2019 18:54	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 18:54	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 18:54	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 18:54	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	3/1/2019 18:54	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 18:54	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	3/1/2019 18:54	J

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ANALYTICAL RESULTS

Workorder: J1902354 Trail Ridge Landfill

Lab ID: **J1902354042** Date Received: 02/25/19 13:20 Matrix: Water

Sample ID: **TRIP-4** Date Collected: 02/25/19 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	3/1/2019 18:54	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	3/1/2019 18:54	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	3/1/2019 18:54	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	3/1/2019 18:54	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 18:54	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	3/1/2019 18:54	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	3/1/2019 18:54	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	3/1/2019 18:54	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	3/1/2019 18:54	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	3/1/2019 18:54	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	3/1/2019 18:54	J
1,2-Dichloroethane-d4 (S)	**117**		**%**	**1**	70-128		3/1/2019 18:54	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		3/1/2019 18:54	
Bromofluorobenzene (S)	**120**		**%**	**1**	86-123		3/1/2019 18:54	
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	3/1/2019 18:54	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	3/1/2019 18:54	J
1,2-Dichloroethane-d4 (S)	**97**		**%**	**1**	77-125		3/1/2019 18:54	
Toluene-d8 (S)	**104**		**%**	**1**	80-121		3/1/2019 18:54	
Bromofluorobenzene (S)	**102**		**%**	**1**	80-129		3/1/2019 18:54	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: J1902354 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.
K	Off-scale low. Actual value is known to be less than the value given.

LAB QUALIFIERS

G	DOH Certification #E82001(AEL-G)(FL NELAC Certification)
J	DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)
J^	Not Certified
M	DOH Certification #E82535(AEL-M)(FL NELAC Certification)

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

QC Batch: WCAj/4266 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: J1902354001, J1902354002, J1902354003, J1902354004, J1902354005, J1902354007, J1902354008, J1902354009,

METHOD BLANK: 3007421

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

LABORATORY CONTROL SAMPLE: 3007422

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	300	330	110	85-115	

SAMPLE DUPLICATE: 3007423 Original: J1902330004

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	960	970	1	10	

QC Batch: WCAg/5461 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Prepared:

Associated Lab Samples: J1902354001, J1902354002, J1902354003, J1902354004, J1902354005, J1902354007, J1902354008, J1902354009,

METHOD BLANK: 3008265

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Chloride	mg/L	0.50	0.50	U
Nitrate (as N)	mg/L	0.011	0.011	U

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3008264

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Chloride	mg/L	50	49	99	90-110	
Nitrate (as N)	mg/L	5	4.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3007546 3007547 Original: J1902354005

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Chloride	mg/L	5.4	50	55	55	99	98	90-110	0	10	
Nitrate (as N)	mg/L	0	5	4.8	4.8	97	96	90-110	1	10	

QC Batch: WCAg/5462 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Prepared:

Associated Lab Samples: J1902354006, J1902354012, J1902354013, J1902354015, J1902354016, J1902354017, J1902354018, J1902354019,

METHOD BLANK: 3007554

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Chloride	mg/L	0.50	0.50	U
Nitrate (as N)	mg/L	0.011	0.011	U

LABORATORY CONTROL SAMPLE: 3007553

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Chloride	mg/L	50	48	97	90-110	
Nitrate (as N)	mg/L	5	4.8	97	90-110	

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3007555 3007556 Original: J1902354006

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Chloride	mg/L	5.1	50	54	54	98	99	90-110	0	10	
Nitrate (as N)	mg/L	0	5	4.8	4.8	97	97	90-110	0	10	

QC Batch: WCAg/5463 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Prepared:
Associated Lab Samples: J1902354022, J1902354023

METHOD BLANK: 3007560

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Chloride	mg/L	0.50	0.50	U
Nitrate (as N)	mg/L	0.011	0.011	U

LABORATORY CONTROL SAMPLE: 3007559

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Chloride	mg/L	50	48	96	90-110	
Nitrate (as N)	mg/L	5	4.8	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3007561 3007562 Original: J1902354022

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Chloride	mg/L	8.1	50	58	58	100	100	90-110	0	10	
Nitrate (as N)	mg/L	0.011	5	4.8	4.8	97	97	90-110	0	10	

QC Batch: WCAj/4280 Analysis Method: SM 2540 C
QC Batch Method: SM 2540 C Prepared:
Associated Lab Samples: J1902354006, J1902354012, J1902354013, J1902354015, J1902354016, J1902354017, J1902354018, J1902354019,

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

METHOD BLANK: 3008680

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

LABORATORY CONTROL SAMPLE: 3008681

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	330	340	105	85-115	

SAMPLE DUPLICATE: 3008682 Original: J1902397008

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	240	260	9	10	

QC Batch: DGMj/2954 Analysis Method: SW-846 6010

QC Batch Method: SW-846 3010A Prepared: 02/26/2019 03:30

Associated Lab Samples: J1902354001, J1902354002, J1902354003, J1902354004, J1902354005, J1902354006, J1902354007, J1902354008,

METHOD BLANK: 3008776

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
Cadmium	ug/L	0.45	0.45	U
Cobalt	ug/L	1.9	1.9	U
Chromium	ug/L	1.6	1.6	U
Iron	ug/L	100	100	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	1.0	1.0	U
Zinc	ug/L	33	33	U

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

METHOD BLANK: 3008776

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Copper	ug/L	3.2	3.2	U

LABORATORY CONTROL SAMPLE: 3008777

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Silver	ug/L	200	220	108	80-120	
Arsenic	ug/L	2000	2000	100	80-120	
Barium	ug/L	20	21	104	80-120	
Beryllium	ug/L	10	11	106	80-120	
Cadmium	ug/L	20	20	100	80-120	
Cobalt	ug/L	40	42	106	80-120	
Chromium	ug/L	40	44	111	80-120	
Copper	ug/L	80	90	113	80-120	
Iron	ug/L	2000	2200	112	80-120	
Sodium	mg/L	7	7.7	110	80-120	
Nickel	ug/L	120	130	106	80-120	
Lead	ug/L	60	64	108	80-120	
Vanadium	ug/L	20	23	114	80-120	
Zinc	ug/L	1000	1000	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3008778 3008779 Original: J1902354001

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	200	200	210	102	103	75-125	0	20	
Arsenic	ug/L	0	2000	1900	1900	96	97	75-125	1	20	
Barium	ug/L	49	20	69	67	101	94	75-125	2	20	
Beryllium	ug/L	0.5	10	10	10	97	97	75-125	0	20	
Cadmium	ug/L	0	20	19	19	97	97	75-125	1	20	
Cobalt	ug/L	0	40	41	41	102	102	75-125	0	20	
Chromium	ug/L	0.3	40	43	42	107	105	75-125	3	20	
Copper	ug/L	5.8	80	86	86	100	100	75-125	0	20	
Iron	ug/L	280	2000	2400	2400	107	104	75-125	2	20	
Sodium	mg/L	3.6	7	11	11	104	100	75-125	3	20	
Nickel	ug/L	3.3	120	130	120	109	104	75-125	5	20	

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3008778 3008779 Original: J1902354001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Lead	ug/L	8	60	65	65	95	95	75-125	0	20	
Vanadium	ug/L	0.9	20	22	21	110	107	75-125	3	20	
Zinc	ug/L	19	1000	980	990	98	99	75-125	0	20	

QC Batch: DGMj/2955 Analysis Method: SW-846 6010

QC Batch Method: SW-846 3010A Prepared: 02/26/2019 03:30

Associated Lab Samples: J1902354018, J1902354019, J1902354020, J1902354021, J1902354022, J1902354023

METHOD BLANK: 3008780

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
Cadmium	ug/L	0.45	0.45	U
Cobalt	ug/L	1.9	1.9	U
Chromium	ug/L	1.6	1.6	U
Iron	ug/L	100	100	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
Zinc	ug/L	33	33	U

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Copper	ug/L	3.2	3.2	U
Vanadium	ug/L	1.0	1.0	U

LABORATORY CONTROL SAMPLE: 3008781

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Silver	ug/L	200	220	109	80-120	
Arsenic	ug/L	2000	2000	99	80-120	

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3008781

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	20	21	103	80-120	
Beryllium	ug/L	10	11	106	80-120	
Cadmium	ug/L	20	20	99	80-120	
Cobalt	ug/L	40	42	106	80-120	
Chromium	ug/L	40	45	113	80-120	
Copper	ug/L	80	89	111	80-120	
Iron	ug/L	2000	2200	112	80-120	
Sodium	mg/L	7	7.7	109	80-120	
Nickel	ug/L	120	130	106	80-120	
Lead	ug/L	60	63	106	80-120	
Vanadium	ug/L	20	22	108	80-120	
Zinc	ug/L	1000	1000	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3008782 3008783 Original: J1902349001

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	200	180	210	92	105	75-125	13	20	
Arsenic	ug/L	1.5	2000	1700	2000	84	99	75-125	17	20	
Barium	ug/L	37	20	48	57	57	99	75-125	16	20	
Beryllium	ug/L	0.5	10	9.0	11	85	101	75-125	16	20	
Cadmium	ug/L	0.3	20	17	20	84	99	75-125	17	20	
Cobalt	ug/L	0.5	40	35	41	88	104	75-125	16	20	
Chromium	ug/L	1.7	40	38	46	92	111	75-125	18	20	
Copper	ug/L	46	80	110	130	79	102	75-125	15	20	
Iron	ug/L	570	2000	2300	2700	87	108	75-125	17	20	
Sodium	mg/L	12	7	17	20	64	104	75-125	16	20	
Nickel	ug/L	4	120	110	130	89	106	75-125	17	20	
Lead	ug/L	8.4	60	62	67	89	97	75-125	8	20	
Vanadium	ug/L	8.8	20	26	30	84	107	75-125	16	20	
Zinc	ug/L	130	1000	980	1100	85	102	75-125	15	20	

QC Batch: DGMj/2957 Analysis Method: SW-846 6020

QC Batch Method: SW-846 3010A Prepared: 02/26/2019 03:30

Associated Lab Samples: J1902354007, J1902354008, J1902354009, J1902354010, J1902354011, J1902354012, J1902354013, J1902354018,

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

METHOD BLANK: 3008870

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: 3008871

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Selenium	ug/L	50	43	87	80-120	
Antimony	ug/L	50	49	98	80-120	
Thallium	ug/L	50	73	146	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3008872 3008873 Original: J1902354007

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Selenium	ug/L	4	50	49	48	90	87	75-125	2	20	
Antimony	ug/L	0.4	50	49	50	97	99	75-125	2	20	
Thallium	ug/L	0.0023	50	41	41	82	82	75-125	0	20	

QC Batch: WCAj/4291 Analysis Method: SM 2540D

QC Batch Method: SM 2540D Prepared:

Associated Lab Samples: J1902354035, J1902354036, J1902354037, J1902354038, J1902354039, J1902354040, J1902354041

METHOD BLANK: 3009838

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

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3009839

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	100	93	93	85-115	

SAMPLE DUPLICATE: 3009840 Original: J1902378001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	58	62	7	10	

QC Batch: WCAj/4294 Analysis Method: SM 5210B

QC Batch Method: SM 5210B Prepared:

Associated Lab Samples: J1902354035, J1902354036, J1902354037, J1902354038, J1902354039, J1902354040, J1902354041

METHOD BLANK: 3010766

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

LABORATORY CONTROL SAMPLE: 3010767

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Biochemical Oxygen Demand	mg/L	200	190	95	84.6-115.4	

SAMPLE DUPLICATE: 3015608 Original: J1902354041

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Biochemical Oxygen Demand	mg/L	18	24	15	20	

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

QC Batch: MICj/2251 Analysis Method: COLILERT-18 (Fecal Coliforms)
QC Batch Method: COLILERT-18 (Fecal Coliforms) Prepared:
Associated Lab Samples: J1902354035, J1902354036, J1902354037, J1902354038, J1902354039, J1902354040, J1902354041

METHOD BLANK: 3010813

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

METHOD BLANK: 3010814

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

QC Batch: WCAg/5521 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Prepared:
Associated Lab Samples: J1902354002, J1902354003, J1902354004, J1902354005, J1902354006, J1902354008

METHOD BLANK: 3010905

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

LABORATORY CONTROL SAMPLE: 3010906

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.6	0.50	83	90-110	

LABORATORY CONTROL SAMPLE: 3010907

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3010907

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ammonia (N)	mg/L	0.2	0.18	92	90-110	

QC Batch: WCAg/5522 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Prepared:
Associated Lab Samples: J1902354009, J1902354011, J1902354013, J1902354015, J1902354016, J1902354017, J1902354018, J1902354019

METHOD BLANK: 3010913

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

LABORATORY CONTROL SAMPLE: 3010914

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.6	0.48	81	90-110	

LABORATORY CONTROL SAMPLE: 3010915

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.2	0.18	91	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3010916 3010917 Original: J1902354009

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	0.12	0.6	0.50	0.50	62	62	90-110	0	10	

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

QC Batch: WCAg/5523 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Prepared:
Associated Lab Samples: J1902354022, J1902354023

METHOD BLANK: 3010919

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

LABORATORY CONTROL SAMPLE: 3010920

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.6	0.50	84	90-110	

LABORATORY CONTROL SAMPLE: 3010921

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.2	0.19	95	90-110	

QC Batch: WCAg/5526 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Prepared:
Associated Lab Samples: J1902354001, J1902354007, J1902354010, J1902354012, J1902354020, J1902354021

METHOD BLANK: 3010940

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

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3010941

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.6	0.50	82	90-110	

LABORATORY CONTROL SAMPLE: 3010942

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.2	0.20	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3010943 3010944 Original: J1902209001

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	45	0.6	120	120	12200	11800	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3010945 3010946 Original: J1902354020

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	1.6	0.6	3.5	3.5	302	304	90-110	0	10	

QC Batch: DGMj/2975 Analysis Method: SW-846 6020

QC Batch Method: SW-846 3010A Prepared: 02/28/2019 03:30

Associated Lab Samples: J1902354025, J1902354026, J1902354027, J1902354028, J1902354029, J1902354030, J1902354035, J1902354036,

METHOD BLANK: 3011492

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: J1902354 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3011493

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Selenium	ug/L	50	46	92	80-120	
Antimony	ug/L	50	48	96	80-120	
Thallium	ug/L	50	43	86	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3011494 3011495 Original: J1902354025

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Selenium	ug/L	0.16	50	44	45	88	89	75-125	1	20	
Antimony	ug/L	0.2	50	49	49	98	99	75-125	1	20	
Thallium	ug/L	0.015	50	44	44	87	88	75-125	1	20	

QC Batch: WCAg/5545 Analysis Method: SM 4500NO3-F
QC Batch Method: SM 4500NO3-F Prepared:
Associated Lab Samples: J1902354040, J1902354041

METHOD BLANK: 3011911

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Nitrate + Nitrite	mg/L	0.004	0.004	U

LABORATORY CONTROL SAMPLE: 3011912

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Nitrate + Nitrite	mg/L	0.2	0.20	100	90-110	

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3011913

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Nitrate + Nitrite	mg/L	0.5	0.49	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3011914 3011915 Original: J1902426001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Nitrate + Nitrite	mg/L	0.047	4	4.1	4.1	101	100	90-110	1	10	

QC Batch: WCAg/5549 Analysis Method: SM 4500NO3-F
QC Batch Method: SM 4500NO3-F Prepared:
Associated Lab Samples: J1902354038, J1902354039

METHOD BLANK: 3011942

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Nitrate + Nitrite	mg/L	0.004	0.004	U

LABORATORY CONTROL SAMPLE: 3011943

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Nitrate + Nitrite	mg/L	0.2	0.21	106	90-110	

LABORATORY CONTROL SAMPLE: 3011944

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Nitrate + Nitrite	mg/L	0.5	0.52	105	90-110	

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

QC Batch: WCAj/4306 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: J1902354025, J1902354030, J1902354034, J1902354035, J1902354036, J1902354037, J1902354038, J1902354039,

METHOD BLANK: 3012167

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

LABORATORY CONTROL SAMPLE: 3012168

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	330	360	109	85-115	

SAMPLE DUPLICATE: 3012648 Original: J1902433001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	120	130	3	10	

QC Batch: WCAg/5557 Analysis Method: SM 5310B

QC Batch Method: SM 5310B Prepared:

Associated Lab Samples: J1902354035, J1902354036, J1902354037, J1902354038, J1902354039, J1902354040, J1902354041

METHOD BLANK: 3012357

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Organic Carbon	mg/L	0.42	0.42	U

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3012359

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Organic Carbon	mg/L	10	9.8	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3012360 3012361 Original: G1901517002

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	20	25	42	44	85	94	90-110	5	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3012362 3012363 Original: J1902354037

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	3.2	25	26	27	91	94	90-110	3	10	

QC Batch: WCAj/4309 Analysis Method: EPA 410.4

QC Batch Method: EPA 410.4 Prepared:

Associated Lab Samples: J1902354035, J1902354036, J1902354037, J1902354038, J1902354039, J1902354040, J1902354041

METHOD BLANK: 3012653

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

LABORATORY CONTROL SAMPLE: 3012654

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

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3012655 3012656 Original: J1902354037

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	20	500	510	520	99	99	90-110	0	10	

QC Batch: DGMj/2983 Analysis Method: SW-846 6010

QC Batch Method: SW-846 3010A Prepared: 03/01/2019 03:30

Associated Lab Samples: J1902354025, J1902354026, J1902354027, J1902354028, J1902354029, J1902354030, J1902354032, J1902354033,

METHOD BLANK: 3012716

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	1.0	1.0	U
Zinc	ug/L	33	33	U

LABORATORY CONTROL SAMPLE: 3012717

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Silver	ug/L	200	200	101	80-120	
Arsenic	ug/L	2000	2100	105	80-120	
Barium	ug/L	20	20	103	80-120	
Beryllium	ug/L	10	9.9	99	80-120	
Calcium	mg/L	2	2.1	103	80-120	

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3012717

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium	ug/L	20	20	102	80-120	
Cobalt	ug/L	40	42	105	80-120	
Chromium	ug/L	40	40	100	80-120	
Copper	ug/L	80	86	108	80-120	
Iron	ug/L	2000	2100	106	80-120	
Magnesium	mg/L	2	2.1	105	80-120	
Sodium	mg/L	7	7.0	99	80-120	
Nickel	ug/L	120	130	109	80-120	
Lead	ug/L	60	62	103	80-120	
Vanadium	ug/L	20	20	100	80-120	
Zinc	ug/L	1000	1000	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3012718 3012719 Original: J1902354025

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	200	190	190	97	97	75-125	1	20	
Arsenic	ug/L	0	2000	2000	1900	98	97	75-125	2	20	
Barium	ug/L	82	20	100	100	94	87	75-125	1	20	
Beryllium	ug/L	0.1	10	9.6	9.6	96	96	75-125	0	20	
Calcium	mg/L	1.7	2	3.6	3.5	97	94	75-125	1	20	
Cadmium	ug/L	0	20	20	19	98	97	75-125	1	20	
Cobalt	ug/L	0.2	40	41	40	102	101	75-125	1	20	
Chromium	ug/L	0.4	40	39	40	99	100	75-125	2	20	
Copper	ug/L	1.2	80	81	80	101	100	75-125	0	20	
Iron	ug/L	690	2000	2700	2800	98	107	75-125	7	20	
Magnesium	mg/L	1.1	2	3.1	3.0	99	96	75-125	1	20	
Sodium	mg/L	4.1	7	11	11	95	94	75-125	1	20	
Nickel	ug/L	1.6	120	120	120	103	102	75-125	2	20	
Lead	ug/L	3.1	60	61	63	97	99	75-125	2	20	
Vanadium	ug/L	1.5	20	20	21	95	99	75-125	3	20	
Zinc	ug/L	4.9	1000	980	970	98	97	75-125	1	20	

QC Batch: WCAg/5564 Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1 Prepared:

Associated Lab Samples: J1902354025, J1902354026, J1902354027

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

METHOD BLANK: 3013245

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

LABORATORY CONTROL SAMPLE: 3013246

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.52	105	90-110	

LABORATORY CONTROL SAMPLE: 3013247

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.2	0.22	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013248 3013249 Original: J1902433001

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	0.16	0.4	0.57	0.57	102	100	90-110	1	10	

QC Batch: WCAg/5565 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Prepared:
Associated Lab Samples: J1902354032, J1902354033, J1902354034, J1902354035, J1902354036, J1902354037

METHOD BLANK: 3013253

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

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3013254

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.52	103	90-110	

LABORATORY CONTROL SAMPLE: 3013255

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.2	0.20	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013256 3013257 Original: J1902354032

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	0.1	0.4	0.52	0.52	105	104	90-110	1	10	

QC Batch: WCAg/5566 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Prepared:
Associated Lab Samples: J1902354038, J1902354039, J1902354040, J1902354041

METHOD BLANK: 3013287

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

LABORATORY CONTROL SAMPLE: 3013288

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.52	105	90-110	

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3013289

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.2	0.18	90	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013290 3013291 Original: J1902354038

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	0.13	0.4	0.57	0.57	108	110	90-110	1	10	

QC Batch: WCAg/5568 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Prepared:
Associated Lab Samples: J1902354028, J1902354029, J1902354030

METHOD BLANK: 3013311

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

LABORATORY CONTROL SAMPLE: 3013312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.50	100	90-110	

LABORATORY CONTROL SAMPLE: 3013313

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.2	0.20	100	90-110	

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

QC Batch: WCAm/5081 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Prepared:
Associated Lab Samples: J1902354025, J1902354026, J1902354027, J1902354028, J1902354029, J1902354030, J1902354032, J1902354033,

METHOD BLANK: 3013658

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

LABORATORY CONTROL SAMPLE: 3013659

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Chloride	mg/L	25	25	99	90-110	
Nitrate (as N)	mg/L	2.5	2.4	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013660 3013661 Original: J1902354026

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Chloride	mg/L	15	250	260	260	97	97		0		
Nitrate (as N)	mg/L	0	25	24	24	98	97		0		

QC Batch: WCAm/5082 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Prepared:
Associated Lab Samples: J1902354035, J1902354036, J1902354037, J1902354038, J1902354039

METHOD BLANK: 3013666

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Nitrate (as N)	mg/L	0.050	0.050	U
Nitrate + Nitrite	mg/L	0.050	0.050	U

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3013667

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Nitrate (as N)	mg/L	2.5	2.4	96	90-110	
Nitrate + Nitrite	mg/L	5	4.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013668 3013669 Original: J1902433002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Nitrate (as N)	mg/L	3	25	26	26	94	93		1		Q
Nitrate + Nitrite	mg/L	3	50	50	50	94	94		0		Q

QC Batch: WCAm/5083 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Prepared:
Associated Lab Samples: J1902354040, J1902354041

METHOD BLANK: 3013674

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Nitrate (as N)	mg/L	0.050	0.050	U

LABORATORY CONTROL SAMPLE: 3013675

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Nitrate (as N)	mg/L	2.5	2.5	100	90-110	

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013676 3013677 Original: J1902472001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Nitrate (as N)	mg/L	0	25	23	24	94	95		2		

QC Batch: WCAg/5572 Analysis Method: EPA 351.2
QC Batch Method: Copper Sulfate Digestion Prepared: 02/28/2019 16:35
Associated Lab Samples: J1902354035, J1902354036, J1902354037, J1902354038, J1902354039, J1902354040

METHOD BLANK: 3013770

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Kjeldahl Nitrogen	mg/L	0.085	0.085	U

METHOD BLANK: 3013771

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Phosphorus (as P)	mg/L	0.055	0.055	U

LABORATORY CONTROL SAMPLE: 3013772

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Kjeldahl Nitrogen	mg/L	1	1.1	108	90-110	

LABORATORY CONTROL SAMPLE: 3013773

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Phosphorus (as P)	mg/L	1	0.90	90	80-120	

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013774 3013776 Original: G1901517007

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	3.2	1	4.3	4.5	116	132	90-110	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013775 3013777 Original: G1901517007

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	6.4	1	7.8	8.1	145	173	80-120	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013778 3013780 Original: J1902354037

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	0.13	1	1.1	1.1	99	100	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013779 3013781 Original: J1902354037

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	0.054	1	0.84	0.87	84	87	80-120	4	20	

QC Batch: WCAg/5572 Analysis Method: EPA 365.4

QC Batch Method: Copper Sulfate Digestion Prepared: 02/28/2019 16:35

Associated Lab Samples: J1902354035, J1902354036, J1902354037, J1902354038, J1902354039, J1902354040

METHOD BLANK: 3013770

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Kjeldahl Nitrogen	mg/L	0.085	0.085	U

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

METHOD BLANK: 3013771

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Phosphorus (as P)	mg/L	0.055	0.055	U

LABORATORY CONTROL SAMPLE: 3013772

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Kjeldahl Nitrogen	mg/L	1	1.1	108	90-110	

LABORATORY CONTROL SAMPLE: 3013773

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Phosphorus (as P)	mg/L	1	0.90	90	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013774 3013776 Original: G1901517007

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	3.2	1	4.3	4.5	116	132	90-110	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013775 3013777 Original: G1901517007

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	6.4	1	7.8	8.1	145	173	80-120	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013778 3013780 Original: J1902354037

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	0.13	1	1.1	1.1	99	100	90-110	1	20	

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013779 3013781 Original: J1902354037

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	0.054	1	0.84	0.87	84	87	80-120	4	20	

QC Batch: WCAg/5573 Analysis Method: EPA 351.2
QC Batch Method: Copper Sulfate Digestion Prepared: 02/28/2019 16:35
Associated Lab Samples: J1902354041

METHOD BLANK: 3013785

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Kjeldahl Nitrogen	mg/L	0.085	0.085	U

METHOD BLANK: 3013786

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Phosphorus (as P)	mg/L	0.055	0.055	U

LABORATORY CONTROL SAMPLE: 3013787

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Kjeldahl Nitrogen	mg/L	1	1.0	100	90-110	

LABORATORY CONTROL SAMPLE: 3013788

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Phosphorus (as P)	mg/L	1	0.92	92	80-120	

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013789 3013791 Original: J1902540004

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	0.066	1	1.1	0.96	108	96	90-110	12	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013790 3013792 Original: J1902540004

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	0.024	1	0.85	0.88	85	88	80-120	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013793 3013794 Original: A1901719003

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	0.7	1	1.8	1.8	106	115	90-110	5	20	

QC Batch: WCAg/5573 Analysis Method: EPA 365.4
QC Batch Method: Copper Sulfate Digestion Prepared: 02/28/2019 16:35
Associated Lab Samples: J1902354041

METHOD BLANK: 3013785

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Kjeldahl Nitrogen	mg/L	0.085	0.085	U

METHOD BLANK: 3013786

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Phosphorus (as P)	mg/L	0.055	0.055	U

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3013787

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Kjeldahl Nitrogen	mg/L	1	1.0	100	90-110	

LABORATORY CONTROL SAMPLE: 3013788

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Phosphorus (as P)	mg/L	1	0.92	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013789 3013791 Original: J1902540004

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	0.066	1	1.1	0.96	108	96	90-110	12	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013790 3013792 Original: J1902540004

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	0.024	1	0.85	0.88	85	88	80-120	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013793 3013794 Original: A1901719003

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	0.7	1	1.8	1.8	106	115	90-110	5	20	

QC Batch: MSVj/3126 Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B Prepared: 02/28/2019 11:24

Associated Lab Samples: J1902354007, J1902354008, J1902354009, J1902354010, J1902354011, J1902354012, J1902354013, J1902354014,

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

METHOD BLANK: 3013860

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
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

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

METHOD BLANK: 3013860

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
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)	%	105	77-119	
Bromofluorobenzene (S)	%	112	86-123	

LABORATORY CONTROL SAMPLE & LCSD: 3013861 3013862

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Chloromethane	ug/L	20	21	18	105	88		18		
Vinyl Chloride	ug/L	20	20	17	101	85	70-130	17	20	
Bromomethane	ug/L	20	15	12	73	58		22		
Chloroethane	ug/L	20	21	19	103	96		7		
Trichlorofluoromethane	ug/L	20	22	19	111	97		13		
Acetone	ug/L	20	23	23	117	115		2		
1,1-Dichloroethylene	ug/L	20	22	20	108	101	70-130	7	20	
Iodomethane (Methyl Iodide)	ug/L	20	23	16	115	81		35		
Acrylonitrile	ug/L	20	24	20	118	98		19		
Methylene Chloride	ug/L	20	25	21	123	105		16		
Carbon Disulfide	ug/L	20	22	19	110	95		14		
trans-1,2-Dichloroethylene	ug/L	20	20	19	101	95		7		
1,1-Dichloroethane	ug/L	20	22	20	109	101		8		
Vinyl Acetate	ug/L	20	23	20	117	99		17		
2-Butanone (MEK)	ug/L	20	22	20	112	98		13		
cis-1,2-Dichloroethylene	ug/L	20	22	20	109	99	70-130	10	20	
Bromochloromethane	ug/L	20	23	21	117	105		11		
Chloroform	ug/L	20	23	20	114	102	70-130	11	20	
1,2-Dichloroethane	ug/L	20	22	20	110	101		8		
1,1,1-Trichloroethane	ug/L	20	22	20	111	99		12		
Carbon Tetrachloride	ug/L	20	24	23	119	117		1		
Benzene	ug/L	20	22	19	112	97	70-130	15	20	
Dibromomethane	ug/L	20	21	20	107	100		7		
1,2-Dichloropropane	ug/L	20	22	20	109	101		8		
Trichloroethene	ug/L	20	22	20	109	98	70-130	11	20	
Bromodichloromethane	ug/L	20	22	20	112	100		11		
cis-1,3-Dichloropropene	ug/L	20	23	19	115	94		21		
4-Methyl-2-pentanone (MIBK)	ug/L	20	23	20	115	98		16		
trans-1,3-Dichloropropylene	ug/L	20	23	19	115	95		19		
1,1,2-Trichloroethane	ug/L	20	22	20	111	98		12		

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE & LCSD: 3013861 3013862

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Toluene	ug/L	20	22	20	112	102	70-130	9	20	
2-Hexanone	ug/L	20	24	20	121	101		17		
Dibromochloromethane	ug/L	20	22	21	112	103		8		
Ethylene Dibromide (EDB)	ug/L	20	23	20	116	101		13		
Tetrachloroethylene (PCE)	ug/L	20	23	20	113	99	70-130	13	20	
1,1,1,2-Tetrachloroethane	ug/L	20	22	20	112	101		11		
Chlorobenzene	ug/L	20	23	20	116	100	70-130	15	20	
Ethylbenzene	ug/L	20	23	21	115	103	70-130	11	20	
Bromoform	ug/L	20	22	19	109	95		14		
Styrene	ug/L	20	24	21	120	104		14		
1,1,2,2-Tetrachloroethane	ug/L	20	23	21	117	103		13		
1,2,3-Trichloropropane	ug/L	20	24	20	122	98		22		
1,4-Dichlorobenzene	ug/L	20	23	22	115	108		6		
1,2-Dichlorobenzene	ug/L	20	24	23	120	113	70-130	6	20	
1,2-Dibromo-3-Chloropropane	ug/L	20	25	22	126	109		14		
Xylene (Total)	ug/L	60	69	63	116	104	70-130	10	20	
1,2-Dichloroethane-d4 (S)	%				104	106	70-128	2		
Toluene-d8 (S)	%				104	105	77-119	0		
Bromofluorobenzene (S)	%				95	102	86-123	7		

MATRIX SPIKE SAMPLE: 3013863 Original: J1902354008

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Chloromethane	ug/L	0	20	19	93		
Vinyl Chloride	ug/L	0	20	17	87	70-130	
Bromomethane	ug/L	0	20	15	73		
Chloroethane	ug/L	0	20	20	98		
Trichlorofluoromethane	ug/L	0	20	20	101		
Acetone	ug/L	1.7	20	21	105		
1,1-Dichloroethylene	ug/L	0	20	21	104	70-130	
Iodomethane (Methyl Iodide)	ug/L	0	20	23	115		
Acrylonitrile	ug/L	0	20	20	102		
Methylene Chloride	ug/L	0	20	22	108		
Carbon Disulfide	ug/L	0	20	20	101		
trans-1,2-Dichloroethylene	ug/L	0	20	19	97		
1,1-Dichloroethane	ug/L	0	20	21	106		
Vinyl Acetate	ug/L	0	20	14	71		
2-Butanone (MEK)	ug/L	0	20	21	103		

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 3013863 Original: J1902354008

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethylene	ug/L	0	20	21	104	70-130	
Bromochloromethane	ug/L	0	20	22	112		
Chloroform	ug/L	0	20	21	107	70-130	
1,2-Dichloroethane	ug/L	0	20	21	106		
1,1,1-Trichloroethane	ug/L	0	20	21	105		
Carbon Tetrachloride	ug/L	0	20	24	122		
Benzene	ug/L	0	20	21	104	70-130	
Dibromomethane	ug/L	0	20	20	101		
1,2-Dichloropropane	ug/L	0	20	21	105		
Trichloroethene	ug/L	0	20	20	100	70-130	
Bromodichloromethane	ug/L	0	20	21	104		
cis-1,3-Dichloropropene	ug/L	0	20	21	103		
4-Methyl-2-pentanone (MIBK)	ug/L	0	20	21	105		
trans-1,3-Dichloropropylene	ug/L	0	20	20	100		
1,1,2-Trichloroethane	ug/L	0	20	21	104		
Toluene	ug/L	0	20	21	107	70-130	
2-Hexanone	ug/L	0	20	22	108		
Dibromochloromethane	ug/L	0	20	22	109		
Ethylene Dibromide (EDB)	ug/L	0	20	21	107		
Tetrachloroethylene (PCE)	ug/L	0	20	21	103	70-130	
1,1,1,2-Tetrachloroethane	ug/L	0	20	22	109		
Chlorobenzene	ug/L	0	20	22	108	70-130	
Ethylbenzene	ug/L	0	20	22	109	70-130	
Bromoform	ug/L	0	20	21	103		
Styrene	ug/L	0	20	22	112		
1,1,2,2-Tetrachloroethane	ug/L	0	20	22	112		
1,2,3-Trichloropropane	ug/L	0	20	21	107		
1,4-Dichlorobenzene	ug/L	0	20	22	112		
1,2-Dichlorobenzene	ug/L	0	20	23	117	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	20	24	119		
Xylene (Total)	ug/L	0	60	66	110	70-130	
1,2-Dichloroethane-d4 (S)	%	110			105	70-128	
Toluene-d8 (S)	%	104			105	77-119	
Bromofluorobenzene (S)	%	115			99	86-123	

QC Batch: MSVj/3128 Analysis Method: SW-846 8260B (SIM)

QC Batch Method: SW-846 5030B Prepared: 02/28/2019 11:24

Associated Lab Samples: J1902354007, J1902354008, J1902354009, J1902354010, J1902354011, J1902354012, J1902354013, J1902354014,

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

METHOD BLANK: 3013864

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)	%	86	77-125	
Toluene-d8 (S)	%	110	80-121	
Bromofluorobenzene (S)	%	95	80-129	

LABORATORY CONTROL SAMPLE & LCSD: 3013865 3013866

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	0.95	0.88	119	110	70-130	8	30	
1,2-Dibromo-3-Chloropropane	ug/L	0.8	0.94	0.86	118	108	70-130	9	30	
1,2-Dichloroethane-d4 (S)	%				89	94	77-125	6		
Toluene-d8 (S)	%				108	113	80-121	4		
Bromofluorobenzene (S)	%				95	101	80-129	6		

MATRIX SPIKE SAMPLE: 3013867 Original: J1902354007

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Ethylene Dibromide (EDB)	ug/L	0	0.8	0.85	106	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	0.8	0.85	106	70-130	
1,2-Dichloroethane-d4 (S)	%	88			93	77-125	
Toluene-d8 (S)	%	111			110	80-121	
Bromofluorobenzene (S)	%	95			99	80-129	

QC Batch: DGMj/2990 Analysis Method: SW-846 7470A

QC Batch Method: SW-846 7470A Prepared: 03/01/2019 11:30

Associated Lab Samples: J1902354007, J1902354008, J1902354009, J1902354010, J1902354011, J1902354012, J1902354013, J1902354018,

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

METHOD BLANK: 3013910

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

LABORATORY CONTROL SAMPLE: 3013911

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Mercury	ug/L	2	1.9	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013912 3013913 Original: S1900379001

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	98	97	80-120	1	20	

QC Batch: DGMj/2991 Analysis Method: SW-846 7470A
QC Batch Method: SW-846 7470A Prepared: 03/04/2019 11:00
Associated Lab Samples: J1902354022, J1902354023, J1902354025, J1902354026, J1902354027, J1902354028, J1902354029, J1902354030,

METHOD BLANK: 3013917

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

LABORATORY CONTROL SAMPLE: 3013918

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

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013919 3013920 Original: J1902354022

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	1.9	2.0	97	99	80-120	2	20	

QC Batch: MSVj/3134 Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B Prepared: 03/01/2019 10:36

Associated Lab Samples: J1902354030, J1902354031, J1902354035, J1902354036, J1902354037, J1902354038, J1902354039, J1902354040,

METHOD BLANK: 3014889

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

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

METHOD BLANK: 3014889

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
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
1,2-Dichloroethane-d4 (S)	%	116	70-128	
Toluene-d8 (S)	%	104	77-119	
Bromofluorobenzene (S)	%	121	86-123	

LABORATORY CONTROL SAMPLE & LCSD: 3014890 3014891

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Chloromethane	ug/L	20	20	19	98	95		3		
Vinyl Chloride	ug/L	20	20	19	102	96	70-130	6	20	
Bromomethane	ug/L	20	16	16	79	81		3		
Chloroethane	ug/L	20	22	20	108	102		7		
Trichlorofluoromethane	ug/L	20	22	21	112	103		9		
Acetone	ug/L	20	25	26	126	130		3		
1,1-Dichloroethylene	ug/L	20	23	22	115	111	70-130	4	20	
Iodomethane (Methyl Iodide)	ug/L	20	19	20	94	98		5		
Acrylonitrile	ug/L	20	22	22	111	109		2		
Methylene Chloride	ug/L	20	23	22	114	108		5		
Carbon Disulfide	ug/L	20	21	20	106	98		8		
trans-1,2-Dichloroethylene	ug/L	20	22	20	109	102		6		
1,1-Dichloroethane	ug/L	20	23	22	115	109		5		

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE & LCSD: 3014890 3014891

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Vinyl Acetate	ug/L	20	26	20	130	99		27		
2-Butanone (MEK)	ug/L	20	22	22	112	109		3		
cis-1,2-Dichloroethylene	ug/L	20	23	22	117	109	70-130	7	20	
Bromochloromethane	ug/L	20	23	21	115	103		11		
Chloroform	ug/L	20	23	22	115	108	70-130	6	20	
1,2-Dichloroethane	ug/L	20	23	23	117	114		3		
1,1,1-Trichloroethane	ug/L	20	22	21	110	106		3		
Carbon Tetrachloride	ug/L	20	26	25	129	123		5		
Benzene	ug/L	20	21	20	107	101	70-130	6	20	
Dibromomethane	ug/L	20	22	21	111	106		5		
1,2-Dichloropropane	ug/L	20	23	22	113	110		3		
Trichloroethene	ug/L	20	21	21	106	105	70-130	1	20	
Bromodichloromethane	ug/L	20	22	21	112	107		4		
cis-1,3-Dichloropropene	ug/L	20	21	20	106	99		7		
4-Methyl-2-pentanone (MIBK)	ug/L	20	22	22	110	111		1		
trans-1,3-Dichloropropylene	ug/L	20	21	20	105	99		6		
1,1,2-Trichloroethane	ug/L	20	21	21	107	106		1		
Toluene	ug/L	20	22	21	109	105	70-130	4	20	
2-Hexanone	ug/L	20	22	22	108	110		2		
Dibromochloromethane	ug/L	20	22	21	109	107		2		
Ethylene Dibromide (EDB)	ug/L	20	21	21	106	103		3		
Tetrachloroethylene (PCE)	ug/L	20	20	20	102	100	70-130	2	20	
1,1,1,2-Tetrachloroethane	ug/L	20	22	21	108	106		2		
Chlorobenzene	ug/L	20	21	21	106	105	70-130	1	20	
Ethylbenzene	ug/L	20	22	21	109	107	70-130	2	20	
Bromoform	ug/L	20	21	20	104	102		2		
Styrene	ug/L	20	22	21	108	105		2		
1,1,2,2-Tetrachloroethane	ug/L	20	22	22	112	109		3		
1,2,3-Trichloropropane	ug/L	20	21	21	107	105		2		
1,4-Dichlorobenzene	ug/L	20	22	22	109	108		1		
1,2-Dichlorobenzene	ug/L	20	23	22	115	111	70-130	3	20	
1,2-Dibromo-3-Chloropropane	ug/L	20	24	24	119	118		1		
Xylene (Total)	ug/L	60	68	66	113	109	70-130	3	20	
1,2-Dichloroethane-d4 (S)	%				112	112	70-128	0		
Toluene-d8 (S)	%				102	101	77-119	1		
Bromofluorobenzene (S)	%				101	99	86-123	2		

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 3014892 Original: J1902354037

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Chloromethane	ug/L	0	20	18	90		
Vinyl Chloride	ug/L	0	20	17	86	70-130	
Bromomethane	ug/L	0	20	15	75		
Chloroethane	ug/L	0	20	19	94		
Trichlorofluoromethane	ug/L	0	20	18	91		
Acetone	ug/L	2	20	24	118		
1,1-Dichloroethylene	ug/L	0	20	20	100	70-130	
Iodomethane (Methyl Iodide)	ug/L	0	20	19	95		
Acrylonitrile	ug/L	0	20	20	100		
Methylene Chloride	ug/L	0	20	19	96		
Carbon Disulfide	ug/L	0	20	18	91		
trans-1,2-Dichloroethylene	ug/L	0	20	19	96		
1,1-Dichloroethane	ug/L	0	20	21	104		
Vinyl Acetate	ug/L	0	20	12	61		
2-Butanone (MEK)	ug/L	0	20	20	101		
cis-1,2-Dichloroethylene	ug/L	0	20	20	101	70-130	
Bromochloromethane	ug/L	0	20	20	100		
Chloroform	ug/L	0	20	20	101	70-130	
1,2-Dichloroethane	ug/L	0	20	21	106		
1,1,1-Trichloroethane	ug/L	0	20	20	99		
Carbon Tetrachloride	ug/L	0	20	22	109		
Benzene	ug/L	0	20	19	94	70-130	
Dibromomethane	ug/L	0	20	20	98		
1,2-Dichloropropane	ug/L	0	20	20	101		
Trichloroethene	ug/L	0	20	19	93	70-130	
Bromodichloromethane	ug/L	0	20	20	101		
cis-1,3-Dichloropropene	ug/L	0	20	18	91		
4-Methyl-2-pentanone (MIBK)	ug/L	0	20	20	101		
trans-1,3-Dichloropropylene	ug/L	0	20	18	92		
1,1,2-Trichloroethane	ug/L	0	20	20	99		
Toluene	ug/L	0	20	19	97	70-130	
2-Hexanone	ug/L	0	20	20	101		
Dibromochloromethane	ug/L	0	20	20	100		
Ethylene Dibromide (EDB)	ug/L	0	20	19	95		
Tetrachloroethylene (PCE)	ug/L	0	20	17	86	70-130	
1,1,1,2-Tetrachloroethane	ug/L	0	20	19	96		
Chlorobenzene	ug/L	0	20	19	96	70-130	
Ethylbenzene	ug/L	0	20	19	96	70-130	
Bromoform	ug/L	0	20	19	96		
Styrene	ug/L	0	20	19	96		
1,1,2,2-Tetrachloroethane	ug/L	0	20	21	104		

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 3014892 Original: J1902354037

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2,3-Trichloropropane	ug/L	0	20	20	99		
1,4-Dichlorobenzene	ug/L	0	20	19	97		
1,2-Dichlorobenzene	ug/L	0	20	21	103	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	20	23	114		
Xylene (Total)	ug/L	0	60	59	98	70-130	
1,2-Dichloroethane-d4 (S)	%	118			113	70-128	
Toluene-d8 (S)	%	103			102	77-119	
Bromofluorobenzene (S)	%	123			102	86-123	

QC Batch: MSVj/3136 Analysis Method: SW-846 8260B (SIM)

QC Batch Method: SW-846 5030B Prepared: 03/01/2019 10:36

Associated Lab Samples: J1902354030, J1902354031, J1902354035, J1902354036, J1902354037, J1902354038, J1902354039, J1902354040,

METHOD BLANK: 3014897

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)	%	96	77-125	
Toluene-d8 (S)	%	109	80-121	
Bromofluorobenzene (S)	%	103	80-129	

LABORATORY CONTROL SAMPLE & LCSD: 3014898 3014899

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	0.88	0.67	110	84	70-130	27	30	
1,2-Dibromo-3-Chloropropane	ug/L	0.8	0.84	0.67	105	84	70-130	23	30	
1,2-Dichloroethane-d4 (S)	%				96	97	77-125	1		
Toluene-d8 (S)	%				109	106	80-121	3		
Bromofluorobenzene (S)	%				102	102	80-129	0		

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 3014900 Original: J1902354035

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Ethylene Dibromide (EDB)	ug/L	0	0.8	0.75	94	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	0.8	0.80	100	70-130	
1,2-Dichloroethane-d4 (S)	%	97			100	77-125	
Toluene-d8 (S)	%	107			105	80-121	
Bromofluorobenzene (S)	%	104			101	80-129	

QC Batch: WCAg/5623 Analysis Method: SM 10200 H

QC Batch Method: SM 10200 H Prepared:

Associated Lab Samples: J1902354035, J1902354036, J1902354037, J1902354038, J1902354039, J1902354040, J1902354041

METHOD BLANK: 3016990

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Chlorophyll A	mg/m3	2.5	2.5	U

METHOD BLANK: 3017057

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Chlorophyll A	mg/m3	2.5	2.5	U

SAMPLE DUPLICATE: 3016991 Original: J1902354035

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Chlorophyll A	mg/m3	2.5U	2.5	0	35	

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QUALITY CONTROL DATA

Workorder: J1902354 Trail Ridge Landfill

SAMPLE DUPLICATE: 3017058 Original: G1901492001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Chlorophyll A	mg/m3	2.5U	2.5	0	35	

QUALITY CONTROL DATA QUALIFIERS

Workorder: J1902354 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
Q	Missed Hold Time
[]	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1902354 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1902354001	MWB-12I			SM 2540 C	WCAj/4266
J1902354002	MWB-13I			SM 2540 C	WCAj/4266
J1902354003	MWB-27I			SM 2540 C	WCAj/4266
J1902354004	MWB-29I			SM 2540 C	WCAj/4266
J1902354005	MWB-2I			SM 2540 C	WCAj/4266
J1902354007	MWB-12S			SM 2540 C	WCAj/4266
J1902354008	MWB-22S			SM 2540 C	WCAj/4266
J1902354009	MWB-13S			SM 2540 C	WCAj/4266
J1902354010	MWB-27S			SM 2540 C	WCAj/4266
J1902354011	MWB-29S			SM 2540 C	WCAj/4266
J1902354001	MWB-12I			EPA 300.0	WCAg/5461
J1902354002	MWB-13I			EPA 300.0	WCAg/5461
J1902354003	MWB-27I			EPA 300.0	WCAg/5461
J1902354004	MWB-29I			EPA 300.0	WCAg/5461
J1902354005	MWB-2I			EPA 300.0	WCAg/5461
J1902354007	MWB-12S			EPA 300.0	WCAg/5461
J1902354008	MWB-22S			EPA 300.0	WCAg/5461
J1902354009	MWB-13S			EPA 300.0	WCAg/5461
J1902354010	MWB-27S			EPA 300.0	WCAg/5461
J1902354011	MWB-29S			EPA 300.0	WCAg/5461
J1902354006	MWB-3I			EPA 300.0	WCAg/5462
J1902354012	MWB-2S			EPA 300.0	WCAg/5462
J1902354013	MWB-3S			EPA 300.0	WCAg/5462
J1902354015	MWB-11I (R)			EPA 300.0	WCAg/5462
J1902354016	MWB-34I			EPA 300.0	WCAg/5462
J1902354017	MWB-32I			EPA 300.0	WCAg/5462
J1902354018	MWB-20S			EPA 300.0	WCAg/5462
J1902354019	MWB-11S			EPA 300.0	WCAg/5462
J1902354020	MWB-21S			EPA 300.0	WCAg/5462
J1902354021	MWB-34S			EPA 300.0	WCAg/5462
J1902354022	MWB-33S			EPA 300.0	WCAg/5463

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1902354 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1902354023	MWB-32S			EPA 300.0	WCAg/5463
J1902354006	MWB-3I			SM 2540 C	WCAj/4280
J1902354012	MWB-2S			SM 2540 C	WCAj/4280
J1902354013	MWB-3S			SM 2540 C	WCAj/4280
J1902354015	MWB-11I (R)			SM 2540 C	WCAj/4280
J1902354016	MWB-34I			SM 2540 C	WCAj/4280
J1902354017	MWB-32I			SM 2540 C	WCAj/4280
J1902354018	MWB-20S			SM 2540 C	WCAj/4280
J1902354019	MWB-11S			SM 2540 C	WCAj/4280
J1902354020	MWB-21S			SM 2540 C	WCAj/4280
J1902354021	MWB-34S			SM 2540 C	WCAj/4280
J1902354022	MWB-33S			SM 2540 C	WCAj/4280
J1902354023	MWB-32S			SM 2540 C	WCAj/4280
J1902354026	SGMW-1S(R)			SM 2540 C	WCAj/4280
J1902354027	MWB-35S			SM 2540 C	WCAj/4280
J1902354028	MWB-40S			SM 2540 C	WCAj/4280
J1902354029	MWB-39S			SM 2540 C	WCAj/4280
J1902354032	MWB-35I			SM 2540 C	WCAj/4280
J1902354033	MWB-39I			SM 2540 C	WCAj/4280
J1902354001	MWB-12I	SW-846 3010A	DGMj/2954	SW-846 6010	ICPj/1761
J1902354002	MWB-13I	SW-846 3010A	DGMj/2954	SW-846 6010	ICPj/1761
J1902354003	MWB-27I	SW-846 3010A	DGMj/2954	SW-846 6010	ICPj/1761
J1902354004	MWB-29I	SW-846 3010A	DGMj/2954	SW-846 6010	ICPj/1761
J1902354005	MWB-2I	SW-846 3010A	DGMj/2954	SW-846 6010	ICPj/1761
J1902354006	MWB-3I	SW-846 3010A	DGMj/2954	SW-846 6010	ICPj/1761
J1902354007	MWB-12S	SW-846 3010A	DGMj/2954	SW-846 6010	ICPj/1761
J1902354008	MWB-22S	SW-846 3010A	DGMj/2954	SW-846 6010	ICPj/1761
J1902354009	MWB-13S	SW-846 3010A	DGMj/2954	SW-846 6010	ICPj/1761
J1902354010	MWB-27S	SW-846 3010A	DGMj/2954	SW-846 6010	ICPj/1761
J1902354011	MWB-29S	SW-846 3010A	DGMj/2954	SW-846 6010	ICPj/1761
J1902354012	MWB-2S	SW-846 3010A	DGMj/2954	SW-846 6010	ICPj/1761
J1902354013	MWB-3S	SW-846 3010A	DGMj/2954	SW-846 6010	ICPj/1761

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1902354 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1902354015	MWB-11I (R)	SW-846 3010A	DGMj/2954	SW-846 6010	ICPj/1761
J1902354016	MWB-34I	SW-846 3010A	DGMj/2954	SW-846 6010	ICPj/1761
J1902354017	MWB-32I	SW-846 3010A	DGMj/2954	SW-846 6010	ICPj/1761
J1902354018	MWB-20S	SW-846 3010A	DGMj/2955	SW-846 6010	ICPj/1760
J1902354019	MWB-11S	SW-846 3010A	DGMj/2955	SW-846 6010	ICPj/1760
J1902354020	MWB-21S	SW-846 3010A	DGMj/2955	SW-846 6010	ICPj/1760
J1902354021	MWB-34S	SW-846 3010A	DGMj/2955	SW-846 6010	ICPj/1760
J1902354022	MWB-33S	SW-846 3010A	DGMj/2955	SW-846 6010	ICPj/1760
J1902354023	MWB-32S	SW-846 3010A	DGMj/2955	SW-846 6010	ICPj/1760
J1902354007	MWB-12S	SW-846 3010A	DGMj/2957	SW-846 6020	ICMj/1754
J1902354008	MWB-22S	SW-846 3010A	DGMj/2957	SW-846 6020	ICMj/1754
J1902354009	MWB-13S	SW-846 3010A	DGMj/2957	SW-846 6020	ICMj/1754
J1902354010	MWB-27S	SW-846 3010A	DGMj/2957	SW-846 6020	ICMj/1754
J1902354011	MWB-29S	SW-846 3010A	DGMj/2957	SW-846 6020	ICMj/1754
J1902354012	MWB-2S	SW-846 3010A	DGMj/2957	SW-846 6020	ICMj/1754
J1902354013	MWB-3S	SW-846 3010A	DGMj/2957	SW-846 6020	ICMj/1754
J1902354018	MWB-20S	SW-846 3010A	DGMj/2957	SW-846 6020	ICMj/1754
J1902354019	MWB-11S	SW-846 3010A	DGMj/2957	SW-846 6020	ICMj/1754
J1902354020	MWB-21S	SW-846 3010A	DGMj/2957	SW-846 6020	ICMj/1754
J1902354021	MWB-34S	SW-846 3010A	DGMj/2957	SW-846 6020	ICMj/1754
J1902354022	MWB-33S	SW-846 3010A	DGMj/2957	SW-846 6020	ICMj/1754
J1902354023	MWB-32S	SW-846 3010A	DGMj/2957	SW-846 6020	ICMj/1754
J1902354035	SW-1			SM 2540D	WCAj/4291
J1902354036	SW-3			SM 2540D	WCAj/4291
J1902354037	SW-B			SM 2540D	WCAj/4291
J1902354038	SW-4			SM 2540D	WCAj/4291
J1902354039	SW-7			SM 2540D	WCAj/4291
J1902354040	SW-5			SM 2540D	WCAj/4291
J1902354041	SW-6			SM 2540D	WCAj/4291

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1902354 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1902354035	SW-1			SM 5210B	WCAj/4294
J1902354036	SW-3			SM 5210B	WCAj/4294
J1902354037	SW-B			SM 5210B	WCAj/4294
J1902354038	SW-4			SM 5210B	WCAj/4294
J1902354039	SW-7			SM 5210B	WCAj/4294
J1902354040	SW-5			SM 5210B	WCAj/4294
J1902354041	SW-6			SM 5210B	WCAj/4294
J1902354035	SW-1			COLILERT-18 (Fecal Coliforms)	MICj/2251
J1902354036	SW-3			COLILERT-18 (Fecal Coliforms)	MICj/2251
J1902354037	SW-B			COLILERT-18 (Fecal Coliforms)	MICj/2251
J1902354038	SW-4			COLILERT-18 (Fecal Coliforms)	MICj/2251
J1902354039	SW-7			COLILERT-18 (Fecal Coliforms)	MICj/2251
J1902354040	SW-5			COLILERT-18 (Fecal Coliforms)	MICj/2251
J1902354041	SW-6			COLILERT-18 (Fecal Coliforms)	MICj/2251
J1902354002	MWB-13I			EPA 350.1	WCAg/5521
J1902354003	MWB-27I			EPA 350.1	WCAg/5521
J1902354004	MWB-29I			EPA 350.1	WCAg/5521
J1902354005	MWB-2I			EPA 350.1	WCAg/5521
J1902354006	MWB-3I			EPA 350.1	WCAg/5521
J1902354008	MWB-22S			EPA 350.1	WCAg/5521
J1902354009	MWB-13S			EPA 350.1	WCAg/5522
J1902354011	MWB-29S			EPA 350.1	WCAg/5522
J1902354013	MWB-3S			EPA 350.1	WCAg/5522
J1902354015	MWB-11I (R)			EPA 350.1	WCAg/5522
J1902354016	MWB-34I			EPA 350.1	WCAg/5522
J1902354017	MWB-32I			EPA 350.1	WCAg/5522
J1902354018	MWB-20S			EPA 350.1	WCAg/5522
J1902354019	MWB-11S			EPA 350.1	WCAg/5522

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1902354 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1902354022	MWB-33S			EPA 350.1	WCAg/5523
J1902354023	MWB-32S			EPA 350.1	WCAg/5523
J1902354001	MWB-12I			EPA 350.1	WCAg/5526
J1902354007	MWB-12S			EPA 350.1	WCAg/5526
J1902354010	MWB-27S			EPA 350.1	WCAg/5526
J1902354012	MWB-2S			EPA 350.1	WCAg/5526
J1902354020	MWB-21S			EPA 350.1	WCAg/5526
J1902354021	MWB-34S			EPA 350.1	WCAg/5526
J1902354025	SGMW-2S	SW-846 3010A	DGMj/2975	SW-846 6020	ICMj/1762
J1902354026	SGMW-1S(R)	SW-846 3010A	DGMj/2975	SW-846 6020	ICMj/1762
J1902354027	MWB-35S	SW-846 3010A	DGMj/2975	SW-846 6020	ICMj/1762
J1902354028	MWB-40S	SW-846 3010A	DGMj/2975	SW-846 6020	ICMj/1762
J1902354029	MWB-39S	SW-846 3010A	DGMj/2975	SW-846 6020	ICMj/1762
J1902354030	EQUIPMENT BLANK	SW-846 3010A	DGMj/2975	SW-846 6020	ICMj/1762
J1902354035	SW-1	SW-846 3010A	DGMj/2975	SW-846 6020	ICMj/1762
J1902354036	SW-3	SW-846 3010A	DGMj/2975	SW-846 6020	ICMj/1762
J1902354037	SW-B	SW-846 3010A	DGMj/2975	SW-846 6020	ICMj/1762
J1902354038	SW-4	SW-846 3010A	DGMj/2975	SW-846 6020	ICMj/1762
J1902354039	SW-7	SW-846 3010A	DGMj/2975	SW-846 6020	ICMj/1762
J1902354040	SW-5	SW-846 3010A	DGMj/2975	SW-846 6020	ICMj/1762
J1902354041	SW-6	SW-846 3010A	DGMj/2975	SW-846 6020	ICMj/1762
J1902354040	SW-5			SM 4500NO3-F	WCAg/5545
J1902354041	SW-6			SM 4500NO3-F	WCAg/5545
J1902354038	SW-4			SM 4500NO3-F	WCAg/5549
J1902354039	SW-7			SM 4500NO3-F	WCAg/5549
J1902354025	SGMW-2S			SM 2540 C	WCAj/4306
J1902354030	EQUIPMENT BLANK			SM 2540 C	WCAj/4306
J1902354034	EQUIPMENT BLANK			SM 2540 C	WCAj/4306

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1902354 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1902354035	SW-1			SM 2540 C	WCAj/4306
J1902354036	SW-3			SM 2540 C	WCAj/4306
J1902354037	SW-B			SM 2540 C	WCAj/4306
J1902354038	SW-4			SM 2540 C	WCAj/4306
J1902354039	SW-7			SM 2540 C	WCAj/4306
J1902354040	SW-5			SM 2540 C	WCAj/4306
J1902354041	SW-6			SM 2540 C	WCAj/4306
J1902354035	SW-1			SM 5310B	WCAg/5557
J1902354036	SW-3			SM 5310B	WCAg/5557
J1902354037	SW-B			SM 5310B	WCAg/5557
J1902354038	SW-4			SM 5310B	WCAg/5557
J1902354039	SW-7			SM 5310B	WCAg/5557
J1902354040	SW-5			SM 5310B	WCAg/5557
J1902354041	SW-6			SM 5310B	WCAg/5557
J1902354035	SW-1			EPA 410.4	WCAj/4309
J1902354036	SW-3			EPA 410.4	WCAj/4309
J1902354037	SW-B			EPA 410.4	WCAj/4309
J1902354038	SW-4			EPA 410.4	WCAj/4309
J1902354039	SW-7			EPA 410.4	WCAj/4309
J1902354040	SW-5			EPA 410.4	WCAj/4309
J1902354041	SW-6			EPA 410.4	WCAj/4309
J1902354025	SGMW-2S	SW-846 3010A	DGMj/2983	SW-846 6010	ICPj/1769
J1902354026	SGMW-1S(R)	SW-846 3010A	DGMj/2983	SW-846 6010	ICPj/1769
J1902354027	MWB-35S	SW-846 3010A	DGMj/2983	SW-846 6010	ICPj/1769
J1902354028	MWB-40S	SW-846 3010A	DGMj/2983	SW-846 6010	ICPj/1769
J1902354029	MWB-39S	SW-846 3010A	DGMj/2983	SW-846 6010	ICPj/1769
J1902354030	EQUIPMENT BLANK	SW-846 3010A	DGMj/2983	SW-846 6010	ICPj/1769
J1902354032	MWB-35I	SW-846 3010A	DGMj/2983	SW-846 6010	ICPj/1769
J1902354033	MWB-39I	SW-846 3010A	DGMj/2983	SW-846 6010	ICPj/1769
J1902354034	EQUIPMENT BLANK	SW-846 3010A	DGMj/2983	SW-846 6010	ICPj/1769
J1902354035	SW-1	SW-846 3010A	DGMj/2983	SW-846 6010	ICPj/1769

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1902354 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1902354036	SW-3	SW-846 3010A	DGMj/2983	SW-846 6010	ICPj/1769
J1902354037	SW-B	SW-846 3010A	DGMj/2983	SW-846 6010	ICPj/1769
J1902354038	SW-4	SW-846 3010A	DGMj/2983	SW-846 6010	ICPj/1769
J1902354039	SW-7	SW-846 3010A	DGMj/2983	SW-846 6010	ICPj/1769
J1902354040	SW-5	SW-846 3010A	DGMj/2983	SW-846 6010	ICPj/1769
J1902354041	SW-6	SW-846 3010A	DGMj/2983	SW-846 6010	ICPj/1769
J1902354025	SGMW-2S			EPA 350.1	WCAg/5564
J1902354026	SGMW-1S(R)			EPA 350.1	WCAg/5564
J1902354027	MWB-35S			EPA 350.1	WCAg/5564
J1902354032	MWB-35I			EPA 350.1	WCAg/5565
J1902354033	MWB-39I			EPA 350.1	WCAg/5565
J1902354034	EQUIPMENT BLANK			EPA 350.1	WCAg/5565
J1902354035	SW-1			EPA 350.1	WCAg/5565
J1902354036	SW-3			EPA 350.1	WCAg/5565
J1902354037	SW-B			EPA 350.1	WCAg/5565
J1902354038	SW-4			EPA 350.1	WCAg/5566
J1902354039	SW-7			EPA 350.1	WCAg/5566
J1902354040	SW-5			EPA 350.1	WCAg/5566
J1902354041	SW-6			EPA 350.1	WCAg/5566
J1902354028	MWB-40S			EPA 350.1	WCAg/5568
J1902354029	MWB-39S			EPA 350.1	WCAg/5568
J1902354030	EQUIPMENT BLANK			EPA 350.1	WCAg/5568
J1902354025	SGMW-2S			EPA 300.0	WCAm/5081
J1902354026	SGMW-1S(R)			EPA 300.0	WCAm/5081
J1902354027	MWB-35S			EPA 300.0	WCAm/5081
J1902354028	MWB-40S			EPA 300.0	WCAm/5081
J1902354029	MWB-39S			EPA 300.0	WCAm/5081
J1902354030	EQUIPMENT BLANK			EPA 300.0	WCAm/5081

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1902354 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1902354032	MWB-35I			EPA 300.0	WCAm/5081
J1902354033	MWB-39I			EPA 300.0	WCAm/5081
J1902354034	EQUIPMENT BLANK			EPA 300.0	WCAm/5081
J1902354035	SW-1			EPA 300.0	WCAm/5082
J1902354036	SW-3			EPA 300.0	WCAm/5082
J1902354037	SW-B			EPA 300.0	WCAm/5082
J1902354038	SW-4			EPA 300.0	WCAm/5082
J1902354039	SW-7			EPA 300.0	WCAm/5082
J1902354040	SW-5			EPA 300.0	WCAm/5083
J1902354041	SW-6			EPA 300.0	WCAm/5083
J1902354035	SW-1	Copper Sulfate Digestion	WCAg/5572	EPA 365.4	WCAg/5607
J1902354036	SW-3	Copper Sulfate Digestion	WCAg/5572	EPA 365.4	WCAg/5607
J1902354037	SW-B	Copper Sulfate Digestion	WCAg/5572	EPA 365.4	WCAg/5607
J1902354038	SW-4	Copper Sulfate Digestion	WCAg/5572	EPA 365.4	WCAg/5607
J1902354039	SW-7	Copper Sulfate Digestion	WCAg/5572	EPA 365.4	WCAg/5607
J1902354040	SW-5	Copper Sulfate Digestion	WCAg/5572	EPA 365.4	WCAg/5607
J1902354035	SW-1	Copper Sulfate Digestion	WCAg/5572	EPA 351.2	WCAg/5608
J1902354036	SW-3	Copper Sulfate Digestion	WCAg/5572	EPA 351.2	WCAg/5608
J1902354037	SW-B	Copper Sulfate Digestion	WCAg/5572	EPA 351.2	WCAg/5608
J1902354038	SW-4	Copper Sulfate Digestion	WCAg/5572	EPA 351.2	WCAg/5608
J1902354039	SW-7	Copper Sulfate Digestion	WCAg/5572	EPA 351.2	WCAg/5608
J1902354040	SW-5	Copper Sulfate Digestion	WCAg/5572	EPA 351.2	WCAg/5608
J1902354041	SW-6	Copper Sulfate Digestion	WCAg/5573	EPA 351.2	WCAg/5609
J1902354041	SW-6	Copper Sulfate Digestion	WCAg/5573	EPA 365.4	WCAg/5610
J1902354007	MWB-12S	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354008	MWB-22S	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354009	MWB-13S	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354010	MWB-27S	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1902354 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1902354011	MWB-29S	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354012	MWB-2S	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354013	MWB-3S	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354014	TRIP BLANK-1	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354018	MWB-20S	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354019	MWB-11S	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354020	MWB-21S	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354021	MWB-34S	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354022	MWB-33S	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354023	MWB-32S	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354024	TRIP BLANK-2	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354025	SGMW-2S	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354026	SGMW-1S(R)	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354027	MWB-35S	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354028	MWB-40S	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354029	MWB-39S	SW-846 5030B	MSVj/3126	SW-846 8260B	MSVj/3127
J1902354007	MWB-12S	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354008	MWB-22S	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354009	MWB-13S	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354010	MWB-27S	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354011	MWB-29S	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354012	MWB-2S	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354013	MWB-3S	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354014	TRIP BLANK-1	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354018	MWB-20S	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354019	MWB-11S	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354020	MWB-21S	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354021	MWB-34S	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354022	MWB-33S	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354023	MWB-32S	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354024	TRIP BLANK-2	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354025	SGMW-2S	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354026	SGMW-1S(R)	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1902354 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1902354027	MWB-35S	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354028	MWB-40S	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354029	MWB-39S	SW-846 5030B	MSVj/3128	SW-846 8260B (SIM)	MSVj/3129
J1902354007	MWB-12S	SW-846 7470A	DGMj/2990	SW-846 7470A	CVAj/1430
J1902354008	MWB-22S	SW-846 7470A	DGMj/2990	SW-846 7470A	CVAj/1430
J1902354009	MWB-13S	SW-846 7470A	DGMj/2990	SW-846 7470A	CVAj/1430
J1902354010	MWB-27S	SW-846 7470A	DGMj/2990	SW-846 7470A	CVAj/1430
J1902354011	MWB-29S	SW-846 7470A	DGMj/2990	SW-846 7470A	CVAj/1430
J1902354012	MWB-2S	SW-846 7470A	DGMj/2990	SW-846 7470A	CVAj/1430
J1902354013	MWB-3S	SW-846 7470A	DGMj/2990	SW-846 7470A	CVAj/1430
J1902354018	MWB-20S	SW-846 7470A	DGMj/2990	SW-846 7470A	CVAj/1430
J1902354019	MWB-11S	SW-846 7470A	DGMj/2990	SW-846 7470A	CVAj/1430
J1902354020	MWB-21S	SW-846 7470A	DGMj/2990	SW-846 7470A	CVAj/1430
J1902354021	MWB-34S	SW-846 7470A	DGMj/2990	SW-846 7470A	CVAj/1430
J1902354022	MWB-33S	SW-846 7470A	DGMj/2991	SW-846 7470A	CVAj/1431
J1902354023	MWB-32S	SW-846 7470A	DGMj/2991	SW-846 7470A	CVAj/1431
J1902354025	SGMW-2S	SW-846 7470A	DGMj/2991	SW-846 7470A	CVAj/1431
J1902354026	SGMW-1S(R)	SW-846 7470A	DGMj/2991	SW-846 7470A	CVAj/1431
J1902354027	MWB-35S	SW-846 7470A	DGMj/2991	SW-846 7470A	CVAj/1431
J1902354028	MWB-40S	SW-846 7470A	DGMj/2991	SW-846 7470A	CVAj/1431
J1902354029	MWB-39S	SW-846 7470A	DGMj/2991	SW-846 7470A	CVAj/1431
J1902354030	EQUIPMENT BLANK	SW-846 7470A	DGMj/2991	SW-846 7470A	CVAj/1431
J1902354035	SW-1	SW-846 7470A	DGMj/2991	SW-846 7470A	CVAj/1431
J1902354036	SW-3	SW-846 7470A	DGMj/2991	SW-846 7470A	CVAj/1431
J1902354037	SW-B	SW-846 7470A	DGMj/2991	SW-846 7470A	CVAj/1431
J1902354038	SW-4	SW-846 7470A	DGMj/2991	SW-846 7470A	CVAj/1431
J1902354039	SW-7	SW-846 7470A	DGMj/2991	SW-846 7470A	CVAj/1431
J1902354040	SW-5	SW-846 7470A	DGMj/2991	SW-846 7470A	CVAj/1431
J1902354041	SW-6	SW-846 7470A	DGMj/2991	SW-846 7470A	CVAj/1431
J1902354030	EQUIPMENT BLANK	SW-846 5030B	MSVj/3134	SW-846 8260B	MSVj/3135
J1902354031	TRIP BLANK-3	SW-846 5030B	MSVj/3134	SW-846 8260B	MSVj/3135

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1902354 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1902354035	SW-1	SW-846 5030B	MSVj/3134	SW-846 8260B	MSVj/3135
J1902354036	SW-3	SW-846 5030B	MSVj/3134	SW-846 8260B	MSVj/3135
J1902354037	SW-B	SW-846 5030B	MSVj/3134	SW-846 8260B	MSVj/3135
J1902354038	SW-4	SW-846 5030B	MSVj/3134	SW-846 8260B	MSVj/3135
J1902354039	SW-7	SW-846 5030B	MSVj/3134	SW-846 8260B	MSVj/3135
J1902354040	SW-5	SW-846 5030B	MSVj/3134	SW-846 8260B	MSVj/3135
J1902354041	SW-6	SW-846 5030B	MSVj/3134	SW-846 8260B	MSVj/3135
J1902354042	TRIP-4	SW-846 5030B	MSVj/3134	SW-846 8260B	MSVj/3135
J1902354030	EQUIPMENT BLANK	SW-846 5030B	MSVj/3136	SW-846 8260B (SIM)	MSVj/3137
J1902354031	TRIP BLANK-3	SW-846 5030B	MSVj/3136	SW-846 8260B (SIM)	MSVj/3137
J1902354035	SW-1	SW-846 5030B	MSVj/3136	SW-846 8260B (SIM)	MSVj/3137
J1902354036	SW-3	SW-846 5030B	MSVj/3136	SW-846 8260B (SIM)	MSVj/3137
J1902354037	SW-B	SW-846 5030B	MSVj/3136	SW-846 8260B (SIM)	MSVj/3137
J1902354038	SW-4	SW-846 5030B	MSVj/3136	SW-846 8260B (SIM)	MSVj/3137
J1902354039	SW-7	SW-846 5030B	MSVj/3136	SW-846 8260B (SIM)	MSVj/3137
J1902354040	SW-5	SW-846 5030B	MSVj/3136	SW-846 8260B (SIM)	MSVj/3137
J1902354041	SW-6	SW-846 5030B	MSVj/3136	SW-846 8260B (SIM)	MSVj/3137
J1902354042	TRIP-4	SW-846 5030B	MSVj/3136	SW-846 8260B (SIM)	MSVj/3137
J1902354035	SW-1			SM 10200 H	WCAg/5623
J1902354036	SW-3			SM 10200 H	WCAg/5623
J1902354037	SW-B			SM 10200 H	WCAg/5623
J1902354038	SW-4			SM 10200 H	WCAg/5623
J1902354039	SW-7			SM 10200 H	WCAg/5623
J1902354040	SW-5			SM 10200 H	WCAg/5623
J1902354041	SW-6			SM 10200 H	WCAg/5623
J1902354035	SW-1	Calculation	CLCg/	Calculation	CLCg/
J1902354035	SW-1	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J1902354035	SW-1	Field Measurements	FLDj/	Field Measurements	FLDj/
J1902354036	SW-3	Calculation	CLCg/	Calculation	CLCg/
J1902354036	SW-3	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J1902354036	SW-3	Field Measurements	FLDj/	Field Measurements	FLDj/

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1902354 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1902354037	SW-B	Calculation	CLCg/	Calculation	CLCg/
J1902354037	SW-B	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J1902354037	SW-B	Field Measurements	FLDj/	Field Measurements	FLDj/
J1902354038	SW-4	Calculation	CLCg/	Calculation	CLCg/
J1902354038	SW-4	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J1902354038	SW-4	Field Measurements	FLDj/	Field Measurements	FLDj/
J1902354039	SW-7	Calculation	CLCg/	Calculation	CLCg/
J1902354039	SW-7	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J1902354039	SW-7	Field Measurements	FLDj/	Field Measurements	FLDj/
J1902354040	SW-5	Calculation	CLCg/	Calculation	CLCg/
J1902354040	SW-5	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J1902354040	SW-5	Field Measurements	FLDj/	Field Measurements	FLDj/
J1902354041	SW-6	Calculation	CLCg/	Calculation	CLCg/
J1902354041	SW-6	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J1902354041	SW-6	Field Measurements	FLDj/	Field Measurements	FLDj/

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* J 1 9 0 2 3 5 4 *

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	PRESERVATION	BOTTLE SIZE & TYPE	ANALYSIS REQUIRED: Fe,Na by 6010 (250mL poly, HNO3)	nitrate/chloride 300.0 (125mL poly, None)	TDS SM2540C (500 poly, None)	ammonia-N 350.1 (250 poly, H2SO4)	LABORATORY I.D. NUMBER
	MWB-12I	G	2-20	0731	W	3			1	1	✓	1	001
	MWB-13I	G	2-20	0910	W	3			1	1	✓	1	002
	MWB-27I	G	2-20	1012	W	3			1	1	✓	1	003
	MWB-29I	G	2-20	1116	W	3			1	1	✓	1	004
	MWB-2I	G	2-20	1218	W	3			1	1	✓	1	005
	MWB-3I	G	2-20	1357	W	3			1	1	✓	1	006

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		2-20-19	1555		2/20/19	1555
2		2/21/19	1040		2-21-19	10:40
3						

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

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* J 1 9 0 2 3 5 4 *

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	250mL poly						LABORATORY I.D. NUMBER
								ANALYSIS REQUIRED										
								App I + EDB 8260/8260SIM	App I + Na,Fe,Hg 6010/6020/7470	nitrate/chloride 300.0	TDS SM2540C	ammonia-N 350.1						
								HCl / DI	HNO3	None	None	H2SO4						
	MWB-12S	G	2-20	0801	W	6		3	1	1	✓	1						007
	MWB-22S	G	2-20	0836	W	6		3	1	1	✓	1						008
	MWB-13S	G	2-20	0938	W	6		3	1	1	✓	1						009
	MWB-27S	G	2-20	1041	W	6		3	1	1	✓	1						010
	MWB-29S	G	2-20	1144	W	6		3	1	1	✓	1						011
	MWB-2S	G	2-20	1250	W	6		3	1	1	✓	1						012
	MWB-3S	G	2-20	1325	W	6		3	1	1	✓	1						013
	TRIP BLANK-1	G	2.20	—	W	3		3										014

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

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

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

Temperature when received 4 (in degrees celcius)

Form revised 2/8/08

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

	Relinquished by:	Date	Time	Received by:	Date	Time
1		2-20-19	1555	GPR	2/20/19	1555
	GPR	2/21/19	1040		2-21-19	10:40

FOR DRINKING WATER USE:

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

Contact Person: _____ Phone : _____

Supplier of Water: _____

Site-Address:

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Page 1 of 1 LAB NUMBER: J1902354

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

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO COUNT	PRESERVATION		250mL poly Fe,Na by 6010 HNO3	125mL poly nitrate/chloride 300.0 None	500mL poly TDS SM2540C None	250mL poly ammonia-N 350.1 H2SO4	LABORATORY I.D. NUMBER
	MWB-11I(R)	G	2-21	0826	W	3			1	1	✓	1	015
	MWB-34I	G	2-21	0932	W	3			1	1	✓	1	016
	MWB-32I	G	2-21	1109	W	3			1	1	✓	1	017

ANALYSIS REQUIRED — BOTTLE SIZE & TYPE

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

	Relinquished by:	Date	Time	Received by:	Date	Time
1		2-21-19	1245		2/21/19	1248
2		2/21/19	1325		2/21/19	1325
3					2-21-19	13:25
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: J1902354

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 (BOTTLE SIZE & TYPE: 3X40mL VOA vials; PRESERVATION: HCl / DI)	App I + Na,Fe,Hg 6010/6020/7470 (500mL poly; HNO3)	nitrate/chloride 300.0 (125mL poly; None)	TDS SM2540C (500mL poly; None)	ammonia-N 350.1 (250mL poly; H2SO4)	LABORATORY I.D. NUMBER
	MWB-20S	G	2-21	0723	W	6		3	1	1	✓	1	018
	MWB-11S	G	2-21	0755	W	6		3	1	1	✓	1	019
	MWB-21S	G	2-21	0900	W	6		3	1	1	✓	1	020
	MWB-34S	G	2-21	1001	W	6		3	1	1	✓	1	021
	MWB-33S	G	2-21	1035	W	6		3	1	1	✓	1	022
	MWB-32S	G	2-21	1140	W	6		3	1	1	✓	1	023
	TRIP BLANK - 2	G	2-21	-	W	3		3					024

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		2-21-19	1245		2/21/19	1247
2	AEL-COURIER	2-21-19	13:25		2-21-19	13:25
3						
4						

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

Friday, March 15, 2019 11:38:07 AM

LAB NUMBER: J1902354

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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	BOTTLE SIZE & TYPE: 3X40mL VOA vials	500mL poly	125mL poly	500mL poly	250mL poly						LABORATORY I.D. NUMBER
								ANALYSIS REQUIRED: App I + EDB 8260/8260SIM	App I + Na,Fe,Hg 6010/6020/7470	nitrate/chloride 300.0	TDS SM2540C	ammonia-N 350.1						
								HCl / DI	HNO3	None	None	H2SO4						
	SGMW-2S	G	2-22-19	1047	W	6		3	1	1	✓	1						025
	SGMW-1S(R)	G	2-22-19	1013	W	6		3	1	1	✓	1						026
	MWB-35S	G	2-22-19	0936	W	6		3	1	1	✓	1						027
	MWB-40S	G	2-22-19	0818	W	6		3	1	1	✓	1						028
	MWB-39S	G	2-22-19	0942	W	6		3	1	1	✓	1						029
	EQUIPMENT BLANK	G	2-22-19	1115	W	6		3	1	1	✓	1						030
	TRIP BLANK-3	G	2-22-19	—	W	3		3										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 = (H_2SO_4) N = (HNO_3) 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		2-22-19	1305		2/22/19	1305
2		2/22/19	1445		2-22-19	14:45
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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Page 1 of 1 LAB NUMBER: J1902354

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CLIENT NAME:	CITY OF JACKSONVILLE	PROJECT NAME:	Trail Ridge Landfill
ADDRESS:	214 North Hogan Street, 10th Floor	P.O. NUMBER/PROJECT NUMBER:	608372:4
	Jacksonville, FL 32202	PROJECT LOCATION:	
PHONE:	(904)-255-7513	REMARKS/SPECIAL INSTRUCTIONS:	Ground Water 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

BOTTLE SIZE & TYPE		250mL poly	125mL poly	500mL poly	250mL poly						
		Fe,Na by 6010	nitrate/chloride 300.0	TDS SM2540C	ammonia-N 350.1						LABORATORY I.D. NUMBER
PRESERVATION		HNO3	None	None	H2SO4						

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT											
	MWB-35I	G	2-22-19	0901	W	3		1	1	✓	1						032
	MWB-39I	G	2-22-19	0713	W	3		1	1	✓	1						033
	EQUIPMENT BLANK	G	2-22-19	1115	W	3		1	1	✓	1						034

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_____(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		2.22.19	1305		2/22/19	1305
2		2/23/19	1445			
3						
4						

FOR DRINKING WATER USE:

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

Contact Person:_____ Phone :_____

Supplier of Water:_____

Site-Address:_____

Friday, March 15, 2019 11:38:07 AM
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LAB NUMBER J1902354

Advanced Environmental Laboratories, Inc.

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

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	Surface Water
FAX:			CEC Contact: Jim Chrisiansen
CONTACT:	Eric B. Fuller		
SAMPLED BY:	DANNY ARMOUR		33628,TRAIL RIDGE LANDFILL, INC. (ADaPT)
TURN AROUND TIME	☒ STANDARD ☐ RUSH		AEL Jax Profile: 30178, Line 5

SAMPLE ID	SAMPLE DESCRIPTION	Grab / Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. CONT.	PRESERVATION	BOTTLE SIZE & TYPE: 3X40mL VOA vials	500mL poly	500mL poly	1L poly	250mL poly	2X40mL VOA vials	125mL poly	1 L poly	1 L amber	100mL Cup	LABORATORY I.D. NUMBER
								ANALYSIS REQUIRED: App I + EDB 8260/8260SIM	App I + Fe,Hg,hardness	nitrate 300.0 / TDS 2540C	TSS SM2540D	Nox/TKN/TN/TP/NH3/ un-NH3	TOC 5310B	COD 410.4	BOD 5210B	chlorophyll-a 10200H	Fecal 9222D	
								HCl	HNO3	None	None	H2SO4	HCl	H2SO4	None	None 24 hrs	NaThio 0 hr	
	SW-1	G	2-25	0940	W	10		3	1	1	✓	✓	2	1	✓	1	1	035
	SW-3	G	2-25	0915	W	10		3	1	1	✓	✓	2	1	✓	1	1	036
	SW-B	G	2-25	0830	W	10		3	1	1	✓	✓	2	1	✓	1	1	037
	SW-4	G	2-25	0800	W	10		3	1	1	✓	✓	2	1	✓	1	1	038
	SW-7	G	2-25	0722	W	10		3	1	1	✓	✓	2	1	✓	1	1	039
	SW-5	G	2-25	0655	W	10		3	1	1	✓	✓	2	1	✓	1	1	040
	SW-6	G	2-25	0640	W	10		3	1	1	✓	✓	2	1	✓	1	1	041
	TRIP -4	G	2-25	—	W	3		3										042

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		2-25-19	1000	GDC	2/25/19	1000
2	GDC	2/25/19	1320		2/25/19	13:20
3						
4						

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

Friday, March 15, 2019 11:38:07 AM

Advanced Environmental Labs Inc

Client: City of Jacksonville Project name: Trail Ridge Landfill

Date/Time Rcvd: 2-21-19 10:40 Log-In request number: J1902354

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)

Split 300.0 into a 125p to send to Miami

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

Advanced Environmental Labs Inc

Client: City of Jacksonville Project name: Trail Ridge Landfill

Date/Time Rcvd: 2-21-19 13:25 Log-In request number: J1902354

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)

Trip Blank-2 vials have borderline headspace (-024)

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

Advanced Environmental Labs Inc

Client: City of Jacksonville Project name: Trail Ridge Landfill

Date/Time Rcvd: 2-22-19 14:45 Log-In request number: J1902354

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

Advanced Environmental Labs Inc

Client: City of Jacksonville Project name: Trail Ridge Landfill

Date/Time Rcvd: 2-25-19 13:20 Log-In request number: J1902354

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)

ILP received for all wet chem (unpreserved) tests. split 1/2 125mL container for IC to GNV.

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: MWIB12S | SAMPLE ID: | DATE: 2-20-19

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): 9.99 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 124.63 | GROUNDWATER ELEVATION (ft NGVD): 114.64

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: 0741 | PURGING ENDED AT: 0801 | 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
0751	1.70	1.70	0.17	11.47	5.77	20.3	310	1.3	6.89	148		
0754	0.51	2.21	0.17	11.47	5.79	20.3	306	1.3	6.96	150		
0757	0.51	2.72	0.17	11.48	5.82	20.3	309	1.3	6.85	150		
0800	0.51	3.23	0.17	11.48	5.81	20.3	307	1.3	6.71	151	YELLOW TAN 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: DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0801 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 19.50 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present YES (NO)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2). optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

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

WELL NO: MWB22S | SAMPLE ID: | DATE: 2-20-19

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): 11.51 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 126.97 | GROUNDWATER ELEVATION (ft NGVD): 115.46

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: 0816 | PURGING ENDED AT: 0836 | 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
0826	1.90	1.90	0.19	11.79	5.96	20.8	772	0.3	3.17	140		
0829	0.57	2.47	0.19	11.79	5.99	21.0	770	0.3	2.77	137		
0832	0.57	3.04	0.19	11.79	6.00	21.0	771	0.3	2.70	135		
0835	0.57	3.61	0.19	11.79	5.99	20.9	770	0.3	2.66	134	NONE	
											TO VERY	
											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: DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0836 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 21.00 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE 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: 2-20-19

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): 12.81 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 126.06 | GROUNDWATER ELEVATION (ft NGVD): 113.25

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: 0918 | PURGING ENDED AT: 0938 | 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
0928	1.80	1.80	0.18	14.29	5.85	20.7	643	1.2	4.94	146		
0931	0.54	2.34	0.18	14.30	5.86	20.7	646	1.3	5.60	145		
0934	0.54	2.88	0.18	14.30	5.87	20.6	648	1.3	4.22	144		
0937	0.54	3.42	0.18	14.30	5.87	20.6	649	1.3	3.69	144	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; 6" = 1.02; 8" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0938 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 21.56 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present YES (NO)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

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

WELL NO: MW1B27S | SAMPLE ID: | DATE: 3-20-19

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): 7.26 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 128.42 | GROUNDWATER ELEVATION (ft NGVD): 121.16

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 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: 1021 | PURGING ENDED AT: 1041 | 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
1031	1.50	1.50	0.15	7.48	5.61	19.1	146	0.6	12.83	142		
1034	0.45	1.95	0.15	7.48	5.63	19.1	146	0.7	11.93	142		
1037	0.45	2.40	0.15	7.48	5.63	19.1	146	0.6	10.76	142		
1040	0.45	2.85	0.15	7.48	5.64	19.1	145	0.6	10.55	142	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./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 / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1041 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 13.50 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present YES (NO)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2). optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

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

WELL NO: MWB29S | SAMPLE ID: | DATE: 2-20-19

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): 8.21 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 138.02 | GROUNDWATER ELEVATION (ft NGVD): 129.81

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: 1124 | PURGING ENDED AT: 1144 | 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
1134	1.60	1.60	0.16	8.35	4.34	18.9	60	1.1	1.72	197		
1137	0.48	2.08	0.16	8.36	4.34	19.0	61	1.1	2.10	198		
1140	0.48	2.56	0.16	8.36	4.33	19.0	62	1.0	2.44	198		
1143	0.48	3.04	0.16	8.36	4.34	19.0	63	1.1	2.59	198	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: AN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1144 | 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 CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present YES (NO)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2). optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

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

WELL NO: MWB2S | SAMPLE ID: | DATE: 2-20-19

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): 7.49 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 146.64 | GROUNDWATER ELEVATION (ft NGVD): 139.15

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 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: 1230 | PURGING ENDED AT: 1250 | 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
1240	1.70	1.70	0.17	8.66	4.76	22.8	31	2.3	41.77	147		
1243	0.51	2.21	0.17	8.67	4.73	22.7	30	2.3	40.60	149		
1246	0.51	2.72	0.17	8.67	4.71	22.7	30	2.3	34.16	148		
1249	0.51	3.23	0.17	8.67	4.72	22.7	29	2.3	33.63	149	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: DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1250 | 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: MWB3S | SAMPLE ID: | DATE: 2-20-19

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): 7.64 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 154.38 | GROUNDWATER ELEVATION (ft NGVD): 146.74

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: 1305 | PURGING ENDED AT: 1325 | 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
1315	1.70	1.70	0.17	7.88	4.25	20.0	66	1.0	6.45	183		
1318	0.51	2.21	0.17	7.88	4.25	19.8	66	1.0	5.29	184		
1321	0.51	2.72	0.17	7.88	4.25	19.8	67	1.0	4.22	183		
1324	0.51	3.23	0.17	7.88	4.25	19.8	67	1.0	4.61	183	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: DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1325 | 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: MWB12I | SAMPLE ID: | DATE: 2-20-19

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): 9.82 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 124.62 | GROUNDWATER ELEVATION (ft NGVD): 114.80

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): 66.5D | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 66.5D | PURGING INITIATED AT: 0711 | PURGING ENDED AT: 0731 | 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
0721	2.70	2.70	0.27	9.85	4.94	24.5	44	0.1	3.63	170		
0724	0.81	3.51	0.27	9.86	4.96	24.4	44	0.1	3.39	168		
0727	0.81	4.32	0.27	9.86	4.97	24.4	44	0.1	2.85	166		
0730	0.81	5.13	0.27	9.86	4.98	24.5	44	0.1	2.45	165	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: DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0731 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 66.5D | 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: MWB13I | SAMPLE ID: | DATE: 2-20-19

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): 16.98 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 125.98 | GROUNDWATER ELEVATION (ft NGVD): 109.00

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

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

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 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: 0850 | PURGING ENDED AT: 0910 | TOTAL VOLUME PURGED (gallons): 4.80

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
0900	2.40	2.40	0.24	17.39	4.98	25.0	42	0.1	3.25	139		
0903	0.72	3.12	0.24	17.39	5.00	25.1	42	0.1	3.16	137		
0906	0.72	3.84	0.24	17.39	5.00	25.1	42	0.1	3.51	139		
0909	0.72	4.56	0.24	17.40	4.99	25.1	42	0.1	3.43	138	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: DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0910 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 55.40 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present: YES (NO)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2). optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

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

WELL NO: MWB27I | SAMPLE ID: | DATE: 7-20-19

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): 8.02 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 128.63 | GROUNDWATER ELEVATION (ft NGVD): 120.61

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: 0952 | PURGING ENDED AT: 1012 | 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
1002	2.50	2.50	0.25	8.05	5.26	20.9	57	0.3	3.38	98		
1005	0.75	3.25	0.25	8.05	5.26	20.9	57	0.4	4.46	98		
1008	0.75	4.00	0.25	8.05	5.27	21.0	57	0.3	4.68	95		
1011	0.75	4.75	0.25	8.05	5.25	21.0	57	0.4	4.13	95	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: DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1012 | 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: MW329I | SAMPLE ID: | DATE: 2-20-19

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): 7.72 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 138.08 | GROUNDWATER ELEVATION (ft NGVD): 130.36

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: 1056 | PURGING ENDED AT: 1116 | 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
1106	2.50	2.50	0.25	7.76	4.82	23.6	45	0.6	11.86	143		
1109	0.75	3.25	0.25	7.76	4.84	23.6	45	0.6	11.45	144		
1112	0.75	4.00	0.25	7.76	4.83	23.7	45	0.6	11.68	145		
1115	0.75	4.75	0.25	7.77	4.82	23.7	45	0.6	11.64	145	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 / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1116 | SAMPLING ENDED AT: NR

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 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: 2-20-19

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): 10.90 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 145.73 | GROUNDWATER ELEVATION (ft NGVD): 134.83

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: 1158 | PURGING ENDED AT: 1218 | 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
1208	2.50	2.50	0.25	10.94	4.49	21.4	42	0.2	2.53	172		
1211	0.75	3.25	0.25	10.94	4.50	21.4	42	0.2	2.66	170		
1214	0.75	4.00	0.25	10.95	4.50	21.5	42	0.2	2.86	168		
1217	0.95	4.75	0.25	10.95	4.50	21.4	42	0.2	1.94	167	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 / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1218 | 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: MWB3I | SAMPLE ID: | DATE: 2.20.19

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): 14.11 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 151.86 | GROUNDWATER ELEVATION (ft NGVD): 137.75

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

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

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 62.00 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: 1337 | PURGING ENDED AT: 1357 | 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
1347	2.60	2.60	0.26	15.13	4.34	21.6	45	0.5	2.84	190		
1350	0.78	3.38	0.26	15.13	4.35	21.6	44	0.5	2.70	188		
1353	0.78	4.16	0.26	15.13	4.34	21.7	45	0.5	2.02	185		
1356	0.78	4.94	0.26	15.13	4.37	21.7	44	0.5	1.69	184	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: DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1357 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 57.00 | 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: MWB32I | SAMPLE ID: | DATE: 2-21-19

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): 8.73 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 124.79 | GROUNDWATER ELEVATION (ft NGVD): 116.06

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 64.56 feet) + 0.05 gallons = 0.74 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 59.56 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 59.56 | PURGING INITIATED AT: 1049 | PURGING ENDED AT: 1109 | 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
1059	2.50	2.50	0.25	8.84	5.04	22.6	46	0.3	8.84	195		
1102	0.75	3.25	0.25	8.84	5.05	22.6	46	0.3	8.56	194		
1105	0.75	4.00	0.25	8.84	5.05	22.6	46	0.3	8.88	195		
1108	0.75	4.75	0.25	8.84	5.04	22.6	46	0.3	8.72	195	SLT.	
											WHITISH	
											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: DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1109 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 59.56 | 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: MWB34I | SAMPLE ID: | DATE: 2-21-19

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): 10.00 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 125.80 | GROUNDWATER ELEVATION (ft NGVD): 115.80

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: 0912 | PURGING ENDED AT: 0932 | TOTAL VOLUME PURGED (gallons): 4.80

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
0922	2.40	2.40	0.24	10.02	5.00	25.7	46	0.3	4.51	149		
0925	0.72	3.12	0.24	10.02	5.01	25.7	46	0.4	4.64	150		
0928	0.72	3.84	0.24	10.03	5.01	25.7	46	0.4	4.92	149		
0931	0.72	4.56	0.24	10.03	5.01	25.7	46	0.3	4.89	147	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: DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0932 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 48.95 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present YES (NO)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

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

WELL NO: MWB11I (R) | SAMPLE ID: | DATE: 2-21-19

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): 16.53 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 120.43 | GROUNDWATER ELEVATION (ft NGVD): 103.90

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: 0806 | PURGING ENDED AT: 0826 | TOTAL VOLUME PURGED (gallons): 4.80

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
0816	2.40	2.40	0.24	16.66	4.52	23.8	38	0.2	3.19	121		
0819	0.72	3.12	0.24	16.66	4.52	23.9	37	0.1	4.01	117		
0822	0.72	3.84	0.24	16.66	4.53	23.9	37	0.1	3.25	115		
0825	0.72	4.56	0.24	16.66	4.54	23.9	37	0.1	3.78	114	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: DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0826 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 50.00 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present: YES (NO)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

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

WELL NO: MWB32S | SAMPLE ID: | DATE: 2-21-19

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): 8.37 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 124.64 | GROUNDWATER ELEVATION (ft NGVD): 116.27

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)

= 0.3 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: 1120 | PURGING ENDED AT: 1140 | 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
1130	1.70	1.70	0.17	8.96	5.25	23.1	139	0.2	4.19	120		
1133	0.51	2.21	0.17	8.96	5.23	23.1	140	0.2	5.03	121		
1136	0.51	2.72	0.17	8.96	5.19	23.0	140	0.2	4.86	121		
1139	0.51	3.23	0.17	8.96	5.17	23.0	139	0.2	4.21	123	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: DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1140 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 14.90 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:

Sheen Present YES (NO)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2). optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

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

WELL NO: MWB33S | SAMPLE ID: | DATE: 2-21-19

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): 10.08 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 125.90 | GROUNDWATER ELEVATION (ft NGVD): 115.82

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

= (20.30 feet - 10.08 feet) X 0.163 gallons/foot = 1.67 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: 1014 | PURGING ENDED AT: 1035 | TOTAL VOLUME PURGED (gallons): 3.36

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	1.76	1.76	0.16	10.19	5.56	23.1	187	0.2	3.14	145		
1028	0.48	2.24	0.16	10.20	5.58	23.0	189	0.2	3.43	145		
1031	0.48	2.72	0.16	10.21	5.59	23.1	191	0.1	3.07	146		
1034	0.48	3.20	0.16	10.21	5.60	23.1	192	0.1	2.99	145	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: DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1035 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 15.30 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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: 2-21-19

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): 8.71 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 125.78 | GROUNDWATER ELEVATION (ft NGVD): 117.07

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

= (18.36 feet - 8.71 feet) X 0.163 gallons/foot = 1.57 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: 0941 | PURGING ENDED AT: 1001 | 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
0951	1.60	1.60	0.16	10.44	6.37	22.6	1009	0.1	5.03	119		
0954	0.48	2.08	0.16	10.44	6.34	22.8	1011	0.1	6.16	115		
0957	0.48	2.56	0.16	10.44	6.36	22.9	1011	0.1	6.46	113		
1000	0.48	3.04	0.16	10.44	6.38	22.8	1011	0.1	5.76	112	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: DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1001 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 13.36 | 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: MWB21S | SAMPLE ID: | DATE: 2-21-19

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): 10.73 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 122.84 | GROUNDWATER ELEVATION (ft NGVD): 112.11

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

= (18.00 feet - 10.73 feet) X 0.163 gallons/foot = 1.19 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: 0840 | PURGING ENDED AT: 0906 | 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
0850	1.60	1.60	0.16	10.99	4.85	22.7	138	0.7	4.71	114		
0853	0.48	2.08	0.16	11.00	4.85	22.8	136	0.6	4.08	112		
0856	0.48	2.56	0.16	11.00	4.86	22.7	136	0.6	4.93	111		
0859	0.48	3.04	0.16	11.00	4.86	22.7	136	0.6	4.63	110	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 / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0900 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 13.00 | 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: MW113 | SAMPLE ID: | DATE: 2-21-19

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): 11.21 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 120.81 | GROUNDWATER ELEVATION (ft NGVD): 109.60

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

= (19.50 feet - 11.21 feet) X 0.163 gallons/foot = 1.35 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): 14.50 | PURGING INITIATED AT: 0735 | PURGING ENDED AT: 0755 | 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
0745	1.60	1.60	0.16	11.32	3.95	21.1	130	0.5	6.60	237		
0748	0.48	2.08	0.16	11.33	3.95	21.1	131	0.5	5.23	238		
0751	0.48	2.56	0.16	11.33	3.95	21.1	130	0.5	5.16	239		
0754	0.48	3.04	0.16	11.33	3.96	21.1	130	0.5	4.90	240	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: DAN ARMOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0755 | 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			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: MWB20S | SAMPLE ID: | DATE: 2-21-19

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): 9.63 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 121.01 | GROUNDWATER ELEVATION (ft NGVD): 111.38

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: 0703 | PURGING ENDED AT: 0723 | 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
0713	1.60	1.60	0.16	9.93	4.42	21.4	233	0.4	12.26	151		
0716	0.48	2.08	0.16	9.93	4.42	21.4	237	0.4	10.47	147		
0719	0.48	2.56	0.16	9.93	4.44	21.5	235	0.4	11.48	145		
0722	0.48	3.04	0.16	9.94	4.45	21.4	237	0.4	11.84	143	VERY 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./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 / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0723 | 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: EQUIPMENT BLANK	SAMPLE ID:		DATE: 2-22-19

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
1115	NA	NA	NA	NA	6.82	21.4	9	1.0	0.00	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./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: 1115	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y N NA TUBING Y N (replaced)			DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
(*)	SEE SAMPLE L-D-L 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: MWB-39I | SAMPLE ID: | DATE: 2-22-19

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): 13.66 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): ~~NA~~ 126.76 | GROUNDWATER ELEVATION (ft NGVD): NA 113.10

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: 0653 | PURGING ENDED AT: 0713 | TOTAL VOLUME PURGED (gallons): 2.60

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
0703	1.30	1.30	0.13	15.03	4.93	22.3	46	0.0	3.16	184		
0706	0.39	1.69	0.13	15.03	4.92	22.4	46	0.0	2.90	182		
0709	0.39	2.08	0.13	15.03	4.90	22.3	46	0.0	3.36	181		
0712	0.39	2.47	0.13	15.03	4.89	22.3	46	0.0	2.65	180	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 / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0713 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 55.88 | TUBING MATERIAL CODE: PE | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y (N) | TUBING Y N (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			
(S)	SEE SAMPLE L-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present YES (NO)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MW3-35I	SAMPLE ID:		DATE: 2-22-19

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): 9.06		PURGE PUMP TYPE OR BAILER: PP
WELL ELEVATION TOC (ft NGVD): NA 147.93			GROUNDWATER ELEVATION (ft NGVD): NA 138.87		

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):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):
58.40	58.40	0840	0901		2.94

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
0851	1.54	1.54	0.14	9.63	4.64	20.9	46	0.1	2.21	173		
0854	0.42	1.96	0.14	9.64	4.62	21.0	46	0.2	2.45	173		
0857	0.42	2.38	0.14	9.64	4.61	21.0	46	0.1	3.08	173		
0900	0.42	2.80	0.14	9.64	4.60	21.0	47	0.1	2.27	172	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:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:		SAMPLING ENDED AT:
DANNY ARMOUR / PRO-TECH		0901		NR

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

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			
(N)	SEE SAMPLE L-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present YES (NO)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Form FD 9000-24

GROUNDWATER SAMPLING LOG

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

WELL NO: MW8-395 | SAMPLE ID: | DATE: 2-22-19

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): 14.10 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): ~~NA~~ 126.85 | GROUNDWATER ELEVATION (ft NGVD): ~~NA~~ 112.75

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

= (18.90 feet - 14.10 feet) X 0.163 gallons/foot = 0.78 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: 0723 | PURGING ENDED AT: 0742 | TOTAL VOLUME PURGED (gallons): 1.90

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
0732	0.90	0.90	0.1	14.32	5.50	20.6	429	0.3	2.29	21		
0735	0.30	1.20	0.1	14.32	5.50	20.6	427	0.2	2.39	24		
0738	0.30	1.50	0.1	14.33	5.51	20.5	425	0.3	2.35	25		
0741	0.30	1.80	0.1	14.33	5.51	20.6	427	0.3	2.16	24	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 / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0742 | 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			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			
(D)	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-40S | SAMPLE ID: | DATE: 2-22-19

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 1/4 | WELL SCREEN INTERVAL DEPTH: 8.5 feet to 18.5 feet | STATIC DEPTH TO WATER (feet): 10.97 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): NA 115.41 | GROUNDWATER ELEVATION (ft NGVD): NA 104.44

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

= (18.52 feet - 10.97 feet) X 0.163 gallons/foot = 1.23 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: 0758 | PURGING ENDED AT: 0818 | TOTAL VOLUME PURGED (gallons): 2.60

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
0808	1.30	1.30	0.13	11.06	4.71	20.1	361	0.0	6.52	17		
0811	0.39	1.69	0.13	11.06	4.71	20.1	362	0.0	6.14	16		
0814	0.39	2.08	0.13	11.06	4.72	20.1	358	0.0	6.32	17		
0817	0.39	2.47	0.13	11.06	4.71	20.1	356	0.0	6.39	18	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 / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0818 | 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
(S)	SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present YES (NO)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB-35S	SAMPLE ID:		DATE: 2-22-19

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): 7.17	PURGE PUMP TYPE OR BAILER: PP
WELL ELEVATION TOC (ft NGVD): N/A 147.79			GROUNDWATER ELEVATION (ft NGVD): N/A 140.62	

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

= (17.50 feet - 7.17 feet) X 0.163 gallons/foot = 1.68 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: 0913	PURGING ENDED AT: 0936		TOTAL VOLUME PURGED (gallons): 3.22

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
0926	1.82	1.82	0.14	7.50	4.40	18.4	31	0.2	6.76	191		
0929	0.42	2.24	0.14	7.50	4.40	18.4	31	0.2	6.38	190		
0932	0.42	2.66	0.14	7.50	4.41	18.4	31	0.1	6.24	190		
0935	0.42	3.08	0.14	7.51	4.42	18.4	31	0.1	6.82	189	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" = 0.0008; 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 / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0936	SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 17.00	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y N (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			
(N)	SEE SAMPLE L-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present YES (NO)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	TRAIL RIDGE		SITE LOCATION:	JACKSONVILLE, FL	
WELL NO:	SGMW-1SR	SAMPLE ID:			DATE: 2.22.19

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	1/4	WELL SCREEN INTERVAL DEPTH:	8.2 feet to 18.2 feet	STATIC DEPTH TO WATER (feet):	16.24	PURGE PUMP TYPE OR BAILER:	PP

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)
= (18.20 feet – 16.24 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 18.20 feet) + 0.05 gallons = 0.10 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	18.10	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	18.10	PURGING INITIATED AT:	0953	PURGING ENDED AT:	1013	TOTAL VOLUME PURGED (gallons):	1.40

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
1003	0.70	0.70	0.07	17.34	5.28	21.1	137	1.3	116.8	70		
1006	0.21	0.91	0.07	17.35	5.29	21.0	135	1.3	125.5	72		
1009	0.21	1.12	0.07	17.35	5.32	21.0	137	1.3	130.2	74		
1012	0.21	1.33	0.07	17.35	5.32	21.0	134	1.3	127.4	75	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:	DANNY ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT:	1013	SAMPLING ENDED AT:	NR
PUMP OR TUBING DEPTH IN WELL (feet):	18.10	TUBING MATERIAL CODE:	PE	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:		FILTER SIZE:	
FIELD DECONTAMINATION: PUMP	Y (N)	TUBING	Y N (replaced)	DUPLICATE:	Y (N)		

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SGMW-25	SAMPLE ID:		DATE: 2-22-19

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 114.81		

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: 1029	PURGING ENDED AT: 1047		TOTAL VOLUME PURGED (gallons): 1.60

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
1037	0.80	0.80	0.08	16.18	4.87	22.2	59	0.1	13.12	64		
1040	0.24	1.04	0.08	16.18	4.87	22.2	58	0.1	9.59	64		
1043	0.24	1.28	0.08	16.18	4.88	22.2	58	0.1	8.61	64		
1046	0.24	1.52	0.08	16.18	4.87	22.2	58	0.1	9.25	63	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./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 / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1047		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 17.50	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:		FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y N (replaced)		DUPLICATE: Y (N)	

SAMPLE 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)	SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present YES (NO)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SW-6	SAMPLE ID:		DATE: 2-25-19

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
0640	NA	NA	NA	NA	6.83	18.2	223	6.4	172.7	204	BROWN	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR BLAINE GRISSOM / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0640		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:		FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y N NA TUBING Y N (replaced)			DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
(*)	SEE SAMPLE I.D.-6 AND			BOTTLE ORDER			WORKSHEET		

REMARKS: SHEEN: NO SW-6 = SURFACE WATER POINT - NO FLOW TAKEN FROM POND

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: 2-25-19

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
0655	NA	NA	NA	NA	7.56	19.8	213	6.5	171.1	171	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: DAN ARMOUR BLAINE GRISSOM / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0655	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		

REMARKS: SHEEN: NO SW-5 = SURFACE WATER POINT NO FLOW TAKEN FROM POND

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: 2-25-19

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
0722	NA	NA	NA	NA	7.22	13.8	108	5.7	41.45	153	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./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: 0722	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y N NA TUBING Y N (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
(*)	SEE SAMPLE I.D.'S 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: 2-25-19

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
0800	NA	NA	NA	NA	7.32	19.0	220	7.3	182.7	151	BROWN	

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./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: 0800		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			
(SW)	SEE SAMPLE L-D-L AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO SW-4 = SURFACE WATER POINT - TAKEN AT WEIR OUTFLOW

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SW-B	SAMPLE ID:		DATE: 2-25-19

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
0830	NA	NA	NA	NA	7.73	11.7	111	4.8	3.15	149	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: DAN ARMOUR, BLAINE GRISSOM / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0830		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:		FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y N NA TUBING Y N (replaced)			DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
(*)	SEE SAMPLE L-D-L AND			BOTTLE ORDER			WORKSHEET		

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

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SW-3	SAMPLE ID:		DATE: 2-25-19

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
0915	NA	NA	NA	NA	7.54	18.3	472	4.3	16.77	146	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./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0915	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: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SW-1	SAMPLE ID:		DATE: 2-25-19

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
0940	NA	NA	NA	NA	7.38	13.8	214	6.8	14.09	124	LT.	
											Amber	
											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, BEN RAMJEAWAN / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0940		SAMPLING ENDED AT: NA
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y N NA	TUBING Y N (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	L-O-C	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

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

April 5, 2019

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

RE: Workorder: J1903974 Trail Ridge Landfill

Dear Eric Fuller:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, April 01, 2019. 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,

Jerry Allen - Project Manager
JAllen@aellab.com

Enclosures

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SAMPLE SUMMARY

Workorder: J1903974 Trail Ridge Landfill

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1903974001	MW-39s	Water	3/28/2019 09:11	4/1/2019 08:30
J1903974002	MW-40s	Water	3/28/2019 09:45	4/1/2019 08:30

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ANALYTICAL RESULTS

Workorder: J1903974 Trail Ridge Landfill

Lab ID: **J1903974001** Date Received: 04/01/19 08:30 Matrix: Water
Sample ID: **MW-39s** Date Collected: 03/28/19 09:11

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							
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	4/2/2019 13:35	J
1,2-Dichloroethane-d4 (S)	**106**		**%**	**1**	70-128		4/2/2019 13:35	
Toluene-d8 (S)	**82**		**%**	**1**	77-119		4/2/2019 13:35	
Bromofluorobenzene (S)	**107**		**%**	**1**	86-123		4/2/2019 13:35	

Lab ID: **J1903974002** Date Received: 04/01/19 08:30 Matrix: Water
Sample ID: **MW-40s** Date Collected: 03/28/19 09:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
2-Butanone (MEK)	**300**		**ug/L**	**5**	25	2.2	4/4/2019 00:13	J
2-Hexanone	**7.3**		**ug/L**	**1**	5.0	0.71	4/2/2019 14:04	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	5.0	0.47	4/2/2019 14:04	J
Acetone	**360**		**ug/L**	**5**	25	10	4/4/2019 00:13	J
Toluene	**4.2**		**ug/L**	**1**	1.0	0.23	4/2/2019 14:04	J
1,2-Dichloroethane-d4 (S)	**104**		**%**	**1**	70-128		4/2/2019 14:04	
Toluene-d8 (S)	**83**		**%**	**1**	77-119		4/2/2019 14:04	
Bromofluorobenzene (S)	**105**		**%**	**1**	86-123		4/2/2019 14:04	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: J1903974 Trail Ridge Landfill

PARAMETER QUALIFIERS

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

LAB QUALIFIERS

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

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QUALITY CONTROL DATA

Workorder: J1903974 Trail Ridge Landfill

QC Batch: MSVj/3314 Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B Prepared: 04/02/2019 10:06

Associated Lab Samples: J1903974001, J1903974002

METHOD BLANK: 3048862

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Acetone	ug/L	2.1	2.1	U
2-Butanone (MEK)	ug/L	0.43	0.43	U
4-Methyl-2-pentanone (MIBK)	ug/L	0.47	0.47	U
Toluene	ug/L	0.23	0.23	U
2-Hexanone	ug/L	0.71	0.71	U
1,2-Dichloroethane-d4 (S)	%	104	70-128	
Toluene-d8 (S)	%	84	77-119	
Bromofluorobenzene (S)	%	104	86-123	

LABORATORY CONTROL SAMPLE & LCSD: 3048863 3048864

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Acetone	ug/L	20	23	23	117	115		2		
2-Butanone (MEK)	ug/L	20	22	23	108	113		4		
4-Methyl-2-pentanone (MIBK)	ug/L	20	23	25	113	123		8		
Toluene	ug/L	20	19	21	96	104	70-130	8	20	
2-Hexanone	ug/L	20	19	20	96	101		6		
1,2-Dichloroethane-d4 (S)	%				103	105	70-128	2		
Toluene-d8 (S)	%				86	85	77-119	1		
Bromofluorobenzene (S)	%				103	104	86-123	0		

MATRIX SPIKE SAMPLE: 3048865 Original: J1903994002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Acetone	ug/L			25			
2-Butanone (MEK)	ug/L			25			
4-Methyl-2-pentanone (MIBK)	ug/L			27			
Toluene	ug/L	0	20	22	108	70-130	
2-Hexanone	ug/L			22			

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QUALITY CONTROL DATA

Workorder: J1903974 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 3048865 Original: J1903994002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%				103	70-128	
Toluene-d8 (S)	%				85	77-119	
Bromofluorobenzene (S)	%				100	86-123	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1903974 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1903974001	MW-39s	SW-846 5030B	MSVj/3314	SW-846 8260B	MSVj/3315
J1903974002	MW-40s	SW-846 5030B	MSVj/3314	SW-846 8260B	MSVj/3315

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☐ 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

J1903974

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:	GW / SW CEC Contact: Jim Chrisiansen
FAX:			
CONTACT:	Eric B. Fuller		
SAMPLED BY:			33628,TRAIL RIDGE LANDFILL, INC. (ADaPT)
TURN AROUND TIME:	☐ STANDARD _____ ☐ RUSH _____		AEL Jax Profile: 30178, Line 6

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	BOTTLE SIZE & TYPE / ANALYSIS REQUIRED: 8260	LABORATORY I.D. NUMBER
	MW-39S	G	3-28	0911	W	3		3	
	MW-40S	G	3-28	0945	W	3		3	

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		3-28-19	1010		3/28/19	1510
2	GDC	3/29/19	1730		4.1.19	0830
3						
4						

FOR DRINKING WATER USE:

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

Contact Person:_____ Phone :_____

Supplier of Water:_____

Site-Address:_____

Friday, April 05, 2019 11:03:25 AM

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	TRAIL RIDGE		SITE LOCATION:	JACKSONVILLE, FL	
WELL NO:	MW-405	SAMPLE ID:		DATE:	3-28-19

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):	10.88	PURGE PUMP TYPE OR BAILER:	PP

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)
= (18.52 feet − 10.88 feet) X 0.163 gallons/foot = 1.25 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:	0925	PURGING ENDED AT:	0945		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
0935	1.40	1.40	0.14	11.04	4.80	19.9	433	0.1	6.63	31		
0938	0.42	1.82	0.14	11.04	4.80	20.0	428	0.1	6.62	29		
0941	0.42	2.24	0.14	11.04	4.80	20.0	424	0.1	6.63	29		
0944	0.42	2.66	0.14	11.05	4.81	20.0	423	0.1	6.71	29	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:	DANNY ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT:	0945	SAMPLING ENDED AT:	NA
PUMP OR TUBING DEPTH IN WELL (feet):	18.00	TUBING MATERIAL CODE:	PE	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:		FILTER SIZE:	
FIELD DECONTAMINATION: PUMP Y (N)		TUBING Y N (replaced)		DUPLICATE: Y (N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (~~mL~~ L per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	3	CG	40 ml HCl	40 ml	-	-	8260B	0.14	RFPP

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE FL	
WELL NO: MW-39S	SAMPLE ID:		DATE: 3-28-19

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): 14.30		PURGE PUMP TYPE OR BAILER: PP
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)
= (18.90 feet – 14.30 feet) X 0.163 gallons/foot = 0.75 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: 0851	PURGING ENDED AT: 0911		TOTAL VOLUME PURGED (gallons): 2.00

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
0901	1.00	1.00	0.10	14.60	5.42	19.9	441	0.6	6.61	161		
0904	0.30	1.30	0.10	14.60	5.46	19.9	441	0.5	6.14	158		
0907	0.30	1.60	0.10	14.60	5.45	19.9	438	0.5	6.74	155		
0910	0.30	1.90	0.10	14.60	5.45	19.9	438	0.5	6.39	153	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: DANNY ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0911	SAMPLING ENDED AT: NA
PUMP OR TUBING DEPTH IN WELL (feet): 18.00	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE 0.1 (mL per minute)	SAMPLING EQUIPMENT CODE
	3	CG	40ml	NONE / HCl	-	-	8260B	0.1	RFPP

REMARKS:
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