Water Quality Monitoring Report
Second 2020 Semi-Annual Event

Trail Ridge Landfill

Trail Ridge Landfill, Inc.

October 21, 2020

PREPARED FOR:

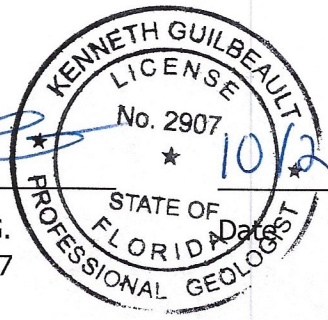
Trail Ridge Landfill, Inc.
5110 US Highway 301
Baldwin, FL 32234

PREPARED BY:

Carlson Environmental Consultants
305 South Main Street
Monroe, North Carolina 28112

STATEMENT OF GEOLOGIC REVIEW

In general accordance with Chapter 62-701, Florida Administrative Code (F.A.C.), Solid Waste Management Facilities, this Groundwater Monitoring Report – Semi-Annual Monitoring Event – August 2020 for the Trail Ridge Landfill, located in Baldwin, Florida, has been reviewed, signed and sealed by a registered Professional Geologist in the State of Florida, and is consistent with standard principles related to groundwater monitoring



10/21/2020

Ken E. Guilbeault, P.G. Date
Florida License # 2907

CEC

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Florida Department of Environmental Protection

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

DEP Form # 62-701 900(31), F A C
Form Title Water Quality Monitoring Certification
Effective Date January 6, 2010
Incorporated in Rule 62-701 510(9), F A C

WATER QUALITY MONITORING CERTIFICATION

PART I GENERAL INFORMATION

(1) Facility Name Trailridge Landfill, Inc.

Address 5110 U.S. Highway 301

City Baldwin, FL Zip 32234 County Duval

Telephone Number ( )

(2) WACS Facility ID 33628

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

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

Address 5110 U.S. Highway 301

City Baldwin, FL Zip 32234 County Duval

Telephone Number (904) 748-6006

Email address (if available) eparker1@wm.com

CERTIFICATION

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

10/19/20 (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 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 mods 0013493-028-SO-MM and 0013493-029-SO-MM issued April 5, 2019 and September 16, 2019 respectively. The Permit expires on June 16, 2034. The Site is an active municipal solid waste landfill that serves the City of Jacksonville, Duval County, and Northeast Florida.

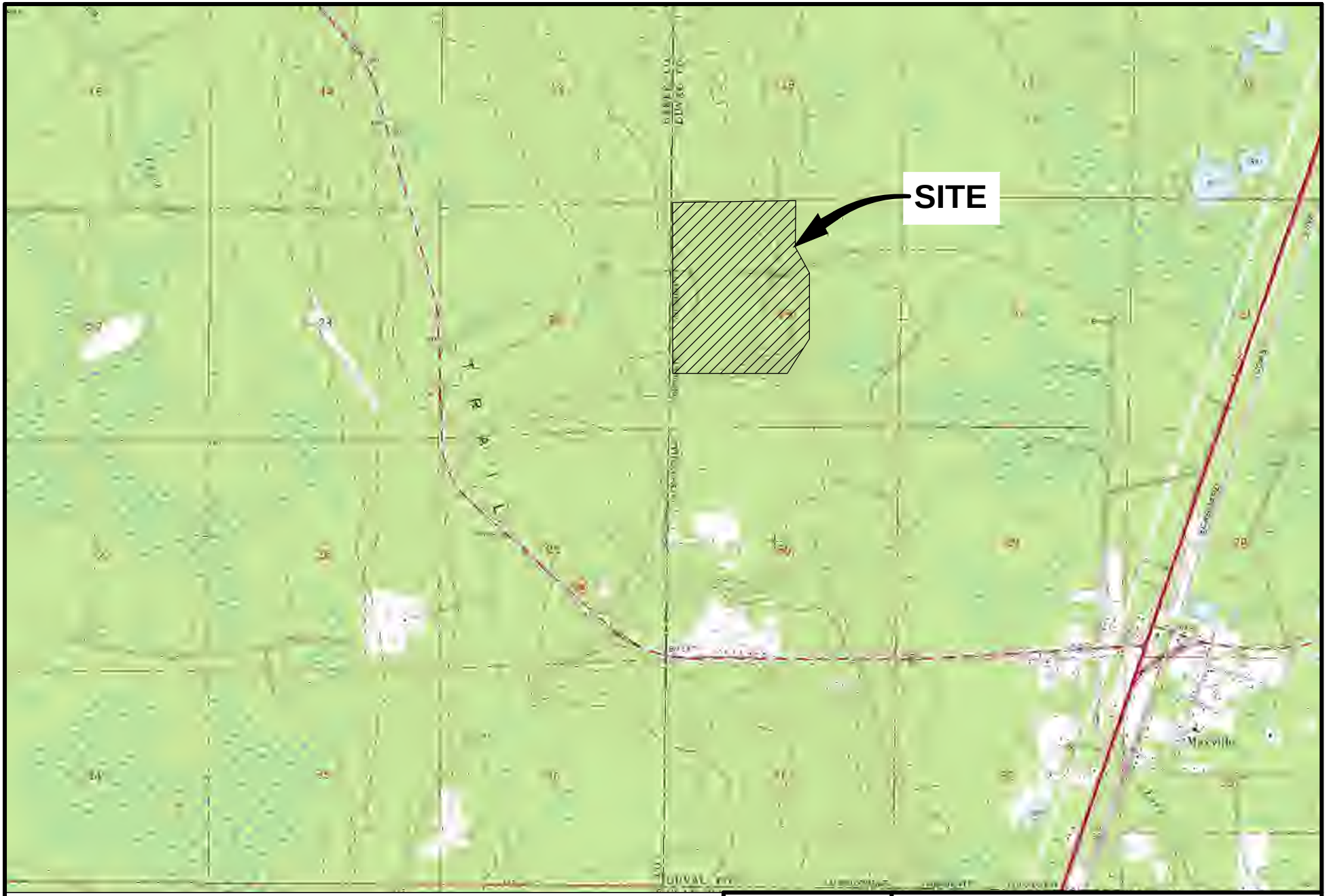
Carlson Environmental Consultants, PC (CEC) has been retained to report the results of semi-annual groundwater and surface water monitoring at the Site in accordance with the Water Quality Monitoring Plan (Appendix 3) of the referenced permit.

This report presents the methods and findings of the second 2020 semi-annual groundwater monitoring event conducted on August 10, 11, and 12, 2020 with a limited resample event conducted September 21, 2020 (Appendix A). An electronic data deliverable (EDD) of the results in "ADaPT format" is attached as Appendix B. This EDD has been verified as uploadable into the latest version of ADaPT.

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.

1.1 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 (Figure 2). As of this report, waste has been placed in Phases 1-6 only. The stormwater management system for Phases 6-14 has been completed, although vegetation is still filling in for this area. A site location map is provided in Figure 1.



NOTES:

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

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GRAPHIC SCALE (FEET)

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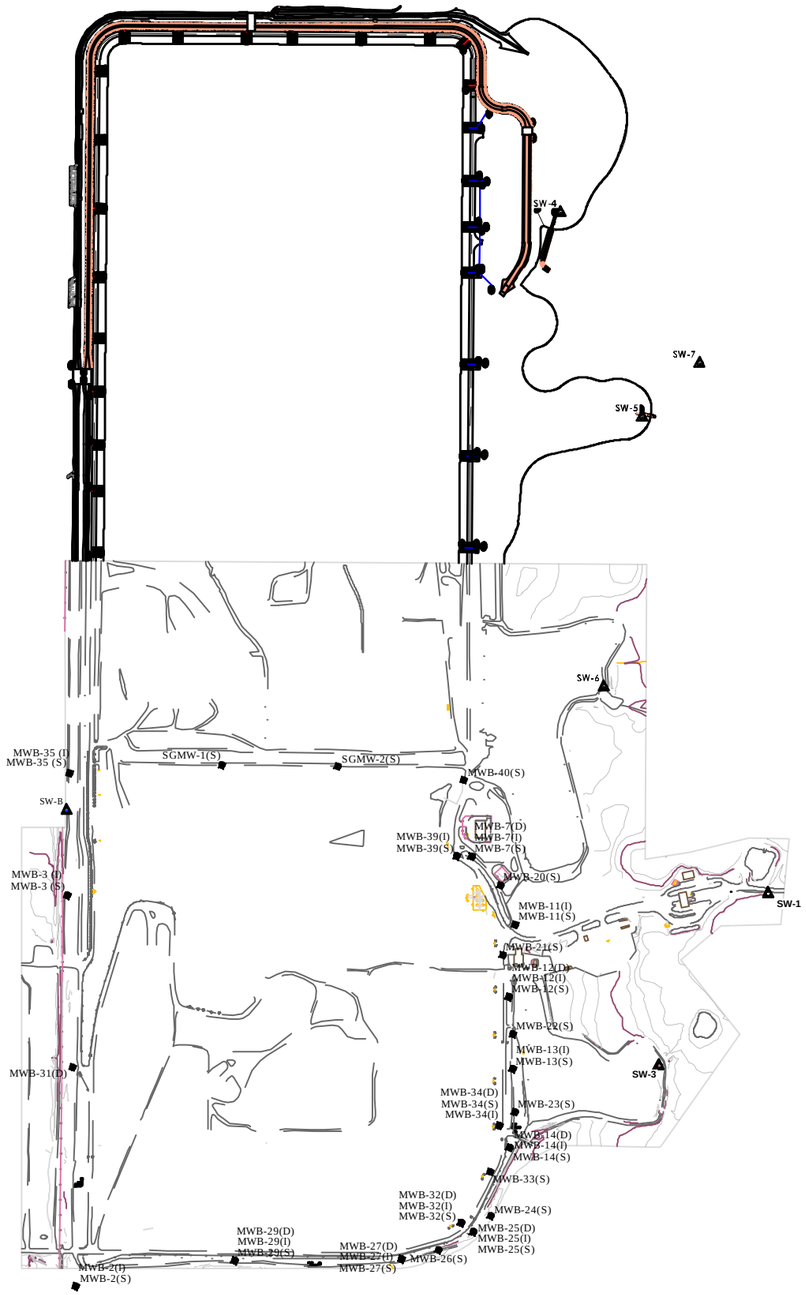
FIGURE 1:
SITE LOCATION
TRAIL RIDGE LANDFILL
JACKSONVILLE, FL



LEGEND

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

NOTES:

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

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

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GRAPHIC SCALE (FEET)

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

2 GROUNDWATER ELEVATION DATA

For this semi-annual report, CEC performed the groundwater flow assessment of the surficial aquifer using groundwater depth to water measurements obtained on August 10, 2020. ProTech field personnel measured water levels in Site monitoring wells 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 1 lists the monitoring locations, depths to water, and groundwater elevations.

2.1 Groundwater Elevations and Flow Directions

CEC calculated groundwater elevations based on water levels measured on August 10, 2020, 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.

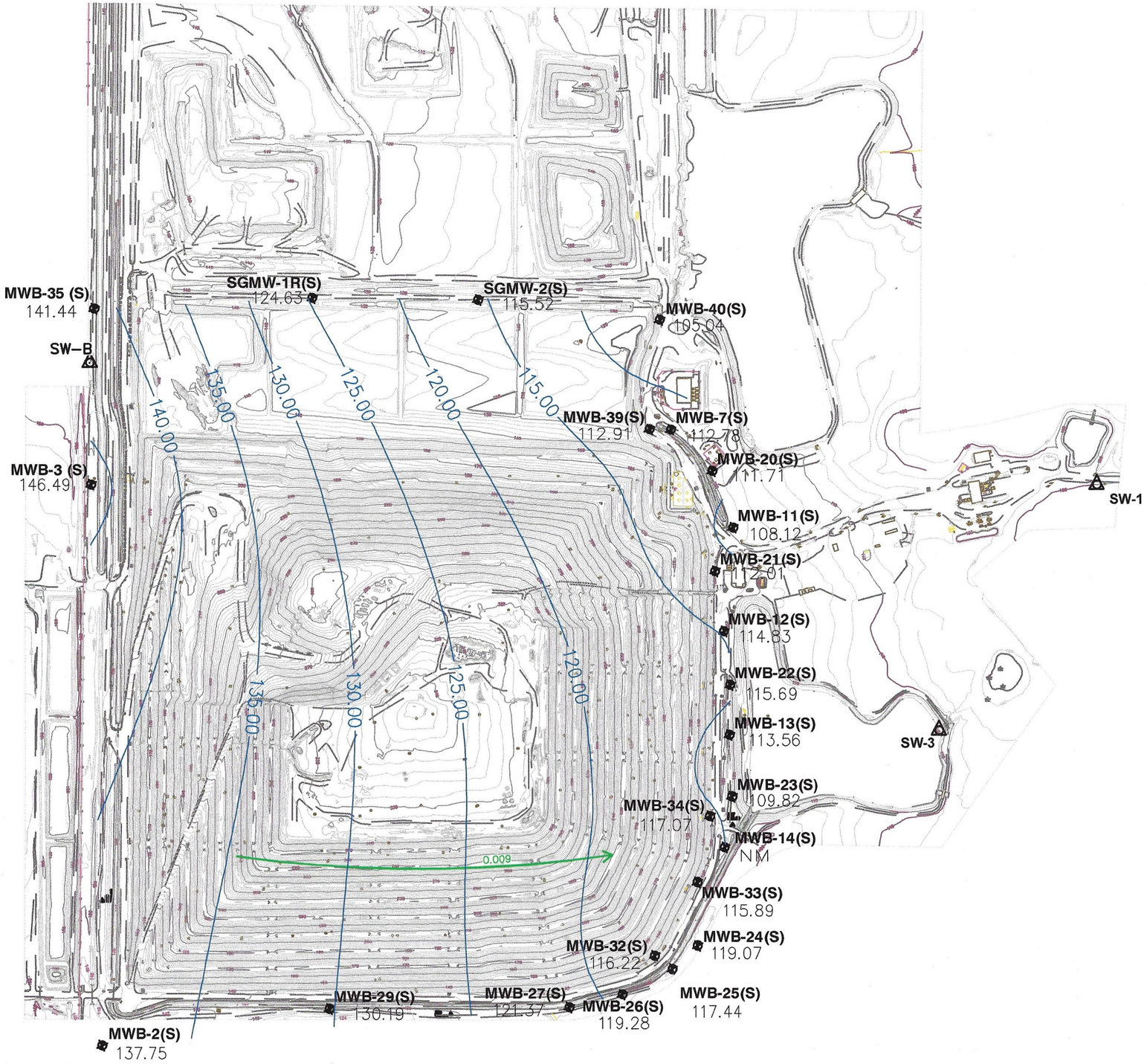
Table 1 - Water Level Measurements
Trail Ridge Landfill, Jacksonville, Florida
August 2020

Well ID	TOC Elevation	Depth to Water	Groundwater Elevation
	(ft MSL)	(ft BTOC)	(ft MSL)
Shallow Wells			
MWB-2(S)	146.64	8.89	137.75
MWB-3(S)	154.38	7.89	146.49
MWB-7(S)	123.29	10.51	112.78
MWB-11(S)	120.81	12.69	108.12
MWB-12(S)	124.63	9.8	114.83
MWB-13(S)	126.05	12.49	113.56
MWB-14(S)	126.05	NM	NM
MWB-20(S)	121.01	9.30	111.71
MWB-21(S)	122.84	10.83	112.01
MWB-22(S)	126.97	11.28	115.69
MWB-23(S)	125.34	15.52	109.82
MWB-24(S)	126.04	6.97	119.07
MWB-25(S)	125.22	7.78	117.44
MWB-26(S)	126.55	7.27	119.28
MWB-27(S)	128.42	7.05	121.37
MWB-29(S)	138.02	7.83	130.19
MWB-32(S)	124.64	8.42	116.22
MWB-33(S)	125.90	10.01	115.89
MWB-34(S)	125.78	8.71	117.07
MWB-35(S)	147.79	6.35	141.44
MWB-39(S)	126.85	13.94	112.91
MWB-40(S)	115.41	10.37	105.04
SGMW-1(S)R	140.30	15.67	124.63
SGMW-2(S)	130.55	15.03	115.52
Intermediate Wells			
MWB-2(I)	145.73	11.36	134.37
MWB-3(I)	151.86	13.93	137.93
MWB-7(I)	121.53	7.92	113.61
MWB-11(IR)	120.43	15.75	104.68
MWB-12(I)	124.62	9.65	114.97
MWB-13(I)	125.98	18.08	107.90
MWB-14(I)	125.92	11.28	114.64
MWB-25(I)	124.03	7.17	116.86
MWB-27(I)	128.63	8.22	120.41
MWB-29(I)	138.08	8.17	129.91
MWB-32(I)	124.79	8.78	116.01
MWB-34(I)	125.80	9.97	115.83
MWB-35(I)	147.93	8.54	139.39
MWB-39(I)	126.76	12.68	114.08
Deep Wells			
MWB-7(D)	121.65	4.08	117.57
MWB-12(D)	124.56	7.61	116.95
MWB-14(D)	125.87	11.3	114.57
MWB-25(D)	124.64	7.78	116.86
MWB-27(D)	128.88	8.6	120.28
MWB-29(D)	138.18	8.27	129.91
MWB-31(D)	156.15	18.9	137.25
MWB-32(D)	124.93	9.08	115.85
MWB-34(D)	125.92	10.19	115.73

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 10, 2020. Top of casing elevations based on groundwater well survey data provided in August 2017 by Golder, CDM, Pro-Tech, and CEC 2018.



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)
- 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.

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GRAPHIC SCALE (FEET)

KENNETH GUILBEAULT LICENSE No. 2907 STATE OF FLORIDA PROFESSIONAL GEOLOGIST

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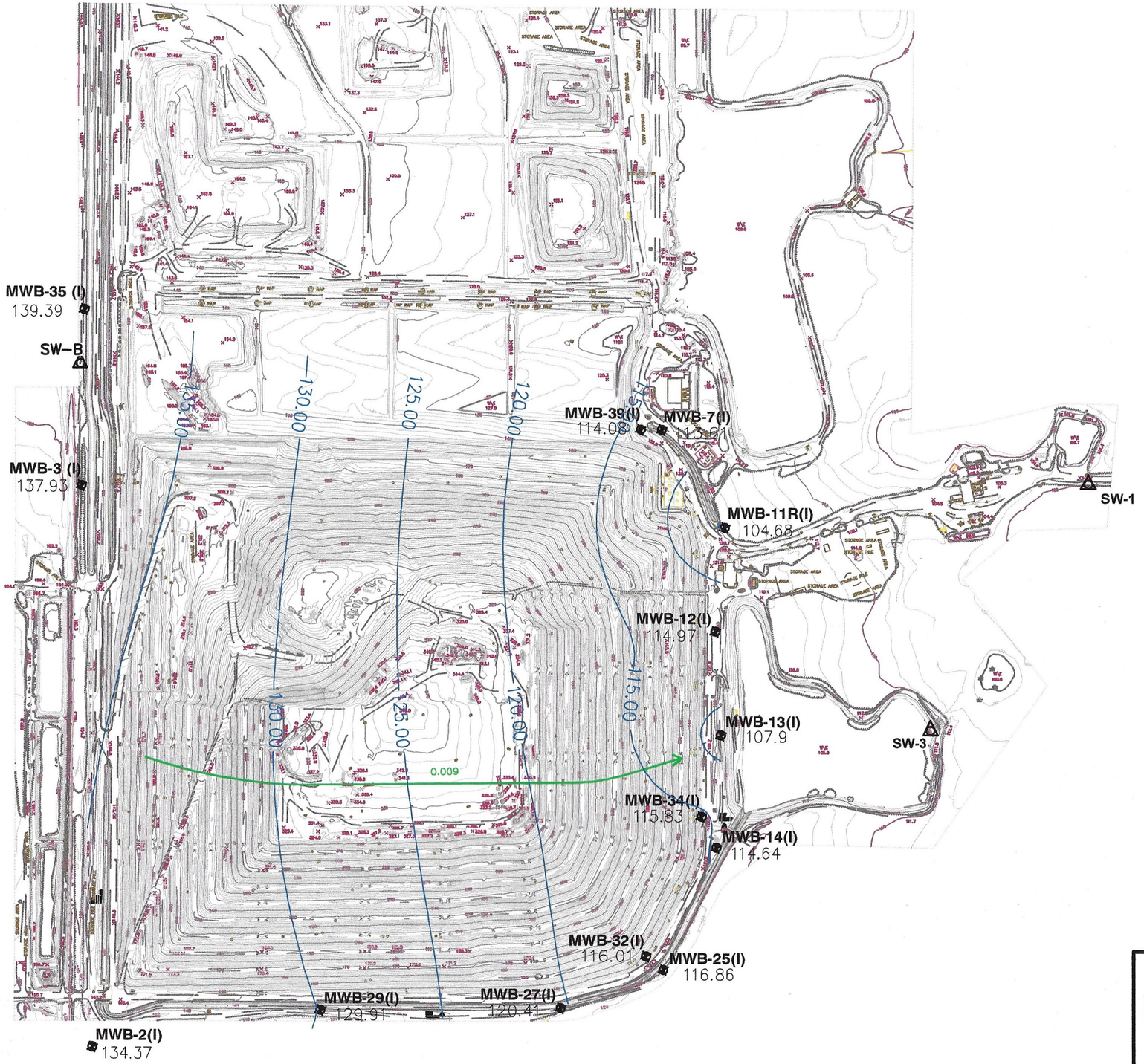
FIGURE 3:
SHALLOW WELLS
POTENTIOMETRIC MAP 08/10/2020
TRAIL RIDGE LANDFILL
JACKSONVILLE, FL



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)
- 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.

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GRAPHIC SCALE (FEET)

KENNETH GUILBEAULT
LICENSE
No. 2907
STATE OF
FLORIDA
PROFESSIONAL GEOLOGIST

10/21/20

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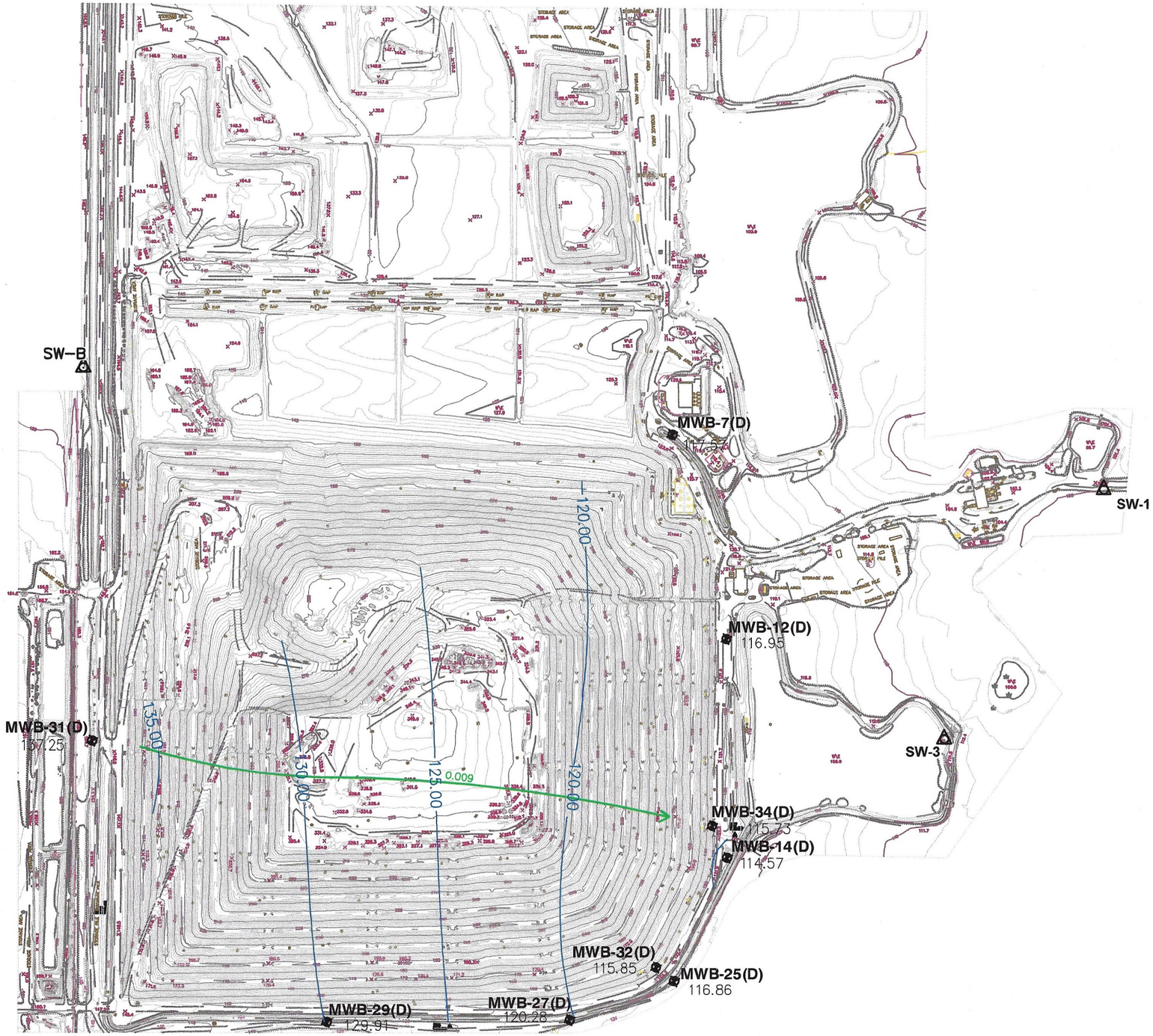
FIGURE 4:
INTERMEDIATE WELLS
POTENTIOMETRIC MAP 08/10/2020
TRAIL RIDGE LANDFILL
JACKSONVILLE, FL



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)
- 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.

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GRAPHIC SCALE (FEET)

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No. 2907
STATE OF FLORIDA
PROFESSIONAL GEOLOGIST

10/21/2020

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FIGURE 5:
DEEP WELLS
POTENTIOMETRIC MAP 08/10/2020
TRAIL RIDGE LANDFILL
JACKSONVILLE, FL

3 MONITORING PROGRAM

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. Semi-annual reporting of the results of groundwater and surface water sampling is performed in accordance with the Site's solid waste permit, water quality monitoring plan, and rule 62-701.510 (8)(a).

3.1 Groundwater Monitoring Program

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. Additionally, there are eighteen (18) piezometers screened at the shallow (S), intermediate (I), and deep (D) depths within the uppermost surficial aquifer used for monitoring groundwater levels at the site. The background and compliance wells are listed in Table 2. Table 3 lists the construction detail summary for the monitoring wells and piezometers comprising the monitoring system.

Table 2 Active Surficial Aquifer Monitoring Wells
at the Trail Ridge Landfill

Upper Surficial Aquifer Zone	Intermediate Surficial Aquifer Zone	Deep Surficial Aquifer Zone
Background Monitoring Wells		
MWB-2S	MWB-2I	
MWB-3S	MWB-3I	
Compliance/Detection Monitoring Wells		
MWB-11S	MWB-11IR	
MWB-12S	MWB-12I	
MWB-13S	MWB-13I	
MWB-20S		
MWB-21S		
MWB-22S		
MWB-27S	MWB-27I	
MWB-29S	MWB-29I	
MWB-32S	MWB-32I	
MWB-33S		
MWB-34S	MWB-34I	
MWB-35S	MWB-35I	
MWB-39S	MWB-39I	
MWB-40S		
SGMW-1SR		
SGMW-2S		
Piezometers (Water Level Only)		
MWB-7S	MWB-7I	MWB-7D
		MWB-12D
MWB-14S	MWB-14I	MWB-14D
MWB-23S		
MWB-24S		
MWB-25S	MWB-25I	MWB-25I
MWB-26S		
		MWB-27D
		MWB-29D
		MWB-31D
		MWB-32D
		MWB-34D

Notes:

1. Wells listed on a single row of the table are located in a single cluster of wells.

Table 3 - Existing Monitoring Well Details
Trail Ridge Landfill, Jacksonville, FL

Well ID	Well Designation[1]	Monitored Phase[1]	Approximate State Plane Coordinates (ft)[1]		Well Diameter[1]	Total Well Depth[1]	Top of Casing Elevation (ft TOC)[2]	Well Screen Interval[2]
			Easting (X)	Northing (Y)	(in)	(ft bls)	(ft msl)	(ft below TOC)
MWB-2(S)	Background	Phases 3/4/5	324,826	2,141,385	2	17.5	146.64	5.04-20.4
MWB-3(S)	Background	Phases 1/2	324,772	2,143,945	2	18	154.38	5.54-20.54
MWB-7(S)	Water Levels Only		327,418	2,144,201	2	16.5	123.29	4.19-19.19
MWB-11(S)	Compliance	Phase I	327,704	2,143,755	2	18	120.81	5.31-20.31
MWB-12(S)	Compliance	Phase I	327,662	2,143,281	2	25	124.63	11.73-26.73
MWB-13(S)	Compliance	Phase 3/4	327,688	2,142,808	2	24.6	126.05	11.56-26.56
MWB-14(S)	Water Levels Only		327,667	2,142,295	2	16.5	126.05	4.15-19.15
MWB-20(S)	Compliance	Phase I	327,608	2,144,012	2	18	121.01	5.11-20.11
MWB-21(S)	Compliance	Phase I	327,621	2,143,556	2	18	122.84	4.84-19.84
MWB-22(S)	Compliance	Phase I	327,690	2,143,036	2	25	126.97	12.47-27.47
MWB-23(S)	Water Levels Only		327,701	2,142,527	2	25	125.34	12.84-27.84
MWB-24(S)	Water Levels Only		327,543	2,141,846	2	16.5	126.04	5.34-20.34
MWB-25(S)	Water Levels Only		327,428	2,141,740	2	17.2	125.22	5.32-20.32
MWB-26(S)	Water Levels Only		327,201	2,141,623	2	16.5	126.55	3.65-18.65
MWB-27(S)	Compliance	Phase 5	326,960	2,141,564	2	16.3	128.42	3.32-18.32
MWB-29(S)	Compliance	Phase 5	325,866	2,141,554	2	16.5	138.02	4.02-19.02
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	56.19-61.69
MWB-3(I)	Background	Phases 1/2	324,788	2,143,973	2	60	151.86	55.56-60.86
MWB-7(I)	Water Levels Only		327,425	2,144,196	2	63.3	121.53	59.82-65.12
MWB-11(I)	Compliance	Phase I	327,687	2,143,758	2	60	120.43	56.4-61.9
MWB-12(I)	Compliance	Phase I	327,664	2,143,273	2	69.6	124.62	65.92-71.42
MWB-13(I)	Compliance	Phase 3/4	327,687	2,142,802	2	58.6	125.98	55.48-60.48
MWB-14(I)	Water Levels Only		327,668	2,142,306	2	60	125.92	57.52-62.52
MWB-25(I)	Water Levels Only		327,442	2,141,746	2	58.3	124.03	55.23-60.23
MWB-27(I)	Compliance	Phase 5	326,945	2,141,567	2	60.1	128.63	57.23-62.23
MWB-29(I)	Compliance	Phase 5	325,871	2,141,554	2	60	138.08	57.68-62.68
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	111.63-116.63
MWB-12(D)	Water Levels Only						124.56	109.28-114.68
MWB-14(D)	Water Levels Only					111.47[3]	125.87	103.47-108.47
MWB-25(D)	Water Levels Only						124.64	103.54-108.54
MWB-27(D)	Water Levels Only						128.88	104.78-109.78
MWB-29(D)	Water Levels Only						138.18	106.78-111.78
MWB-31(D)	Water Levels Only						156.15	126.65-131.65
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.

The current permit requires semi-annual sampling of the background and detection shallow zone monitoring wells for the field and laboratory parameters listed below.

Field Parameters

- Static Water Level (before purging)
- Specific Conductivity
- pH
- Dissolved Oxygen
- Turbidity
- Temperature
- Color and sheens by observation
- ORP

Laboratory Parameters

- Chlorides
- Nitrate
- Total Dissolved Solids (TDS)
- Iron
- Sodium
- Mercury
- Ammonia – N, Total
- Parameters listed in the 1991 version of 40 CFR 258, Appendix I

The current permit requires semi-annual sampling of the background and detection intermediate zone monitoring wells for the field and laboratory parameters listed below.

Field Parameters

- Static Water Level (before purging)
- Specific Conductivity
- pH
- Dissolved Oxygen
- Turbidity
- Temperature
- ORP

Laboratory Parameters

- Chlorides
- Nitrate
- Total Dissolved Solids (TDS)
- Iron
- Sodium
- Ammonia – N, Total

If the results of the analysis for the intermediate zone monitoring wells indicates that leachate is impacting groundwater (elevated concentrations of the sampled constituents), then the well(s) in question will be sampled in the next sampling event for the parameters listed in 62-701-510 (7)(a), FAC.

3.2 Surface Water Monitoring Program

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 2). 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.

The current permit requires semi-annual sampling of the surface water locations for the field and laboratory parameters listed below.

Field Parameters

- Static Water Level (before purging)
- Specific Conductivity
- pH
- Dissolved Oxygen
- Turbidity
- Temperature
- Color and sheens by observation
- ORP

Laboratory Parameters

- Unionized Ammonia as N
- Total Hardness as CaCO3
- Biochemical Oxygen Demand (BOD_5)
- Copper
- Iron
- Mercury
- Nitrate/Nitrogen
- Zinc
- Total Dissolved Solids (TDS)
- Total Organic Carbon (TOC)
- Fecal Coliform
- Total Phosphorus
- Chlorophyll-a
- Total Nitrogen
- Chemical Oxygen Demand (COD)
- Total Suspended Solids (TSS)
- Parameters listed in the 1991 version of 40 CFR 258, Appendix I

3.3 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 and surface water samples for laboratory analysis from monitoring locations listed in Sections 3.1 and 3.2 on August 10, 11, and 12, 2020, with a limited resample event conducted September 21, 2020.

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 August 12, 2020, surface water samples were collected from the surface water monitoring points using a laboratory-provided container. Instrument calibration records (FD 9000-8) and completed groundwater sampling logs (FD 9000-24) are provided along with the laboratory report in Appendix A.

Advanced Environmental Laboratories, Inc. (AEL), a Florida-certified laboratory (DOH Certification #E82001[AEL-G] and #E82574[AEL-JAX] [FL NELAC Certification]) analyzed groundwater and surface water samples collected in August 10, 11, and 12, 2020, with a limited resample event conducted on September 21, 2020 for the parameters identified in Section II and Section III, respectively, of the facility permit Water Quality Monitoring Plan.

4 WATER QUALITY MONITORING RESULTS

This section summarizes the results of the groundwater and surface water quality sampling for the first semi-annual sampling event performed August 10, 11, and 12, 2020, with a limited resample event conducted on September 21, 2020 .

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

ProTech field personnel submitted the samples with trip blanks in coolers containing volatile organic compound (VOC) samples to AEL 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 QA/QC results for the laboratory reports associated with groundwater and surface water monitoring points from AEL Report J2010933 are summarized below:

- Several analytes were detected between method detection limits (MDLs) and practical quantitation limits (PQLs); these detections were qualified with an "I."
- Method Blank 3577171 (MB) contained a low level of Antimony above the Method Detection Limit (MDL), but below the Method Reporting Limit (MRL). The associated samples did not contain the analyte in question above the Method Detection Limit (MDL); therefore, the presence of Antimony in the MB had no adverse effects on the data.
- The upper control criterion was exceeded for several target analytes in Continuing Calibration Verification (CCV) standards for analytical batch 1374, indicating increased sensitivity. The client samples reported in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.
- The upper control criterion was exceeded for several target analytes in low level Continuing Calibration Verification (LLCCV) standards for analytical batch 1374, indicating increased sensitivity. The client samples reported in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.
- Due to non-target background analytes present, the proper quantitaion of the internal standard in J2010933026, J2010926001, G2007792001 was obstructed. In order to separate out and return the internal standard to within acceptance limits, this sample was analyzed at a dilution.
- The Continuing Calibration Blank (CCB) associated with batch 1384 contained low levels of Lead and Copper above the Method Detection Limit (MDL). The associated samples did not contain the analyte in question above the Method Detection Limit (MDL); therefore, the presence of Lead and Copper in the CCB had no adverse effects on the data.
- The matrix spike recoveries of Vinyl Chloride and 1,1-Dichloroethylene for J2010933002 were outside control criteria due to matrix interference in the sample. Recovery in the LCS was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential high bias in this matrix. The affected sample is qualified to indicate matrix interference.
- The spike recovery of 1,1-Dichloroethylene for the LCSD was outside the upper control criterion. The analyte in question was not detected in the associated client samples. The

error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.

- The matrix spike recoveries of NH3 for J2010933022 were outside control criteria. Recoveries in the LCS and %RPD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was required.
- The matrix spike recoveries of TKN for J2010933036 were outside control criteria. Recovery in the LCS was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential high bias in this matrix.
- The matrix spike recovery duplicate of TKN for G2008021005 was outside control criteria. Recoveries in the LCS, MS and %RPD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was required.
- The MS recovery of Nitrate for J2010933005 was outside control criteria. Recoveries in the LCS and LCSD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential high bias in this matrix. The offending analytes were not detected in the client sample. No further corrective action is required.
- The RPD for the following analyte(s) in the DUPLICATE analyses of J2010933013 was outside control criteria: Total Dissolved Solids. Failing RPD indicates inconsistency in the parent sample matrix. All spike recoveries in the associated LCS were within acceptable limits, indicating the analytical batch was in control. No further corrective action was needed.
- Other QA/QC issues were not identified; therefore, the remaining results from the February 2020 event are considered acceptable without qualification.

4.2 Surficial Aquifer Groundwater Quality

The groundwater quality detections and exceedances of the primary or secondary drinking water standards (PDWS or SDWS) are summarized in Tables 4 and 5. In accordance with Chapter 62-701, FAC, groundwater results were compared to their respective PDWS or SDWS established in Chapter 62-550, FAC and incorporated via reference in Chapter 62-520, FAC. For this routine groundwater monitoring report, groundwater cleanup target levels (GCTLs) in Rule 62-777, FAC, were used for constituents that do not have a PDWS or SDWS to evaluate if a parameter is significantly above background levels. GCTLs are used as a screening tool for potential anomalies in the concentration data that may require further consideration or review. Appendix A includes the laboratory analytical data and field forms.

4.2.1 Metals Exceedances

Chromium, iron, lead, and nickel at some wells exceeded the applicable standards. These parameters are discussed below.

4.2.1.1 Chromium

The chromium concentration in detection well MWB-13S (120 μg/L) exceeded the PDWS of 100 μg/L during the August 2020 monitoring event. This concentration was not consistent with historical concentrations and the well was scheduled to be resampled to confirm the detection. On September 21, 2020, detection well MWB-13S was resampled for chromium.

Table 4. Summary of Shallow Groundwater Quality Analytical Results (Detected Parameters Only)
Trail Ridge Landfill, August 2020

Parameter	Units	MCL	Standard	MWB-2S	MWB-03S	MWB-11S	MWB-12S	MWB-13S	MWB-13S	MWB-20S	MWB-21S	MWB-22S	MWB-27S	MWB-29S	MWB-32S	MWB-33S	MWB-34S	MWB-35S	MWB-39S	MWB-40S	MWB-40S	SGMW-1SR	SGMW-1SR	SGMW-2S
Volatile Organic Compounds									Resample												Resample		Resample	
Acetone	ug/L	NS	NS	2.3 **I**	2.1 **U**	2.6 **I**	8.1	2.1 **U**	---	4.6 **I**	2.4 **I**	2.1 **I**	2.1 **U**	2.1 **U**	2.1 **U**	2.1 **U**	2.4 **I**	2.3 **I**	4.3 **I**	5.6	---	2.6 **I**	---	2.5 **I**
Benzene	ug/L	1	PDWS	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**	0.6 **I**	0.16 **U**	---	0.16 **U**	---	0.16 **U**
cis-1,2-Dichloroethene	ug/L	70	PDWS	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**	0.41 **I**	0.24 **U**	---	0.24 **U**	---	0.24 **U**
Tetrachloroethene	ug/L	3	PDWS	1.9	3	2.6	3	2	---	1.6	2.5	2.8	0.36 **U**	1.9	2	2.4	0.36 **U**	2.8	2.3	2	---	2	---	2.3
Vinyl Chloride	ug/L	1	PDWS	0.2 **U**	0.2 **U**	0.2 **U**	0.2 **U,J**	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**	1.4	0.2 **U**	---	0.2 **U**	---	0.2 **U**
Metals																					---			
Antimony	ug/L	6	PDWS	0.11 **U**	0.11 **U**	0.11 **U**	0.54 **I**	0.25 **I**	---	0.11 **U**	0.11 **U**	0.11 **U**	0.11 **U**	0.11 **U**	0.11 **U**	0.35 **I**	1.3	0.11 **U**	0.11 **U**	0.2 **I**	---	0.11 **U**	---	0.11 **U**
Barium	ug/L	2000	PDWS	5.5 **I**	17	52	3 **U**	6.6 **I**	---	4.9 **I**	48	3 **U**	8 **I**	12	16	7 **I**	6.8 **I**	3 **U**	22	130	---	290	---	64
Chromium	ug/L	100	PDWS	5 **U**	5 **U**	5 **U**	5 **U**	120	63	5.2 **I**	5 **U**	5 **U**	5 **U**	5 **U**	5 **U**	5 **U**	5 **U**	5 **U**	5 **U**	5.2 **I**	---	29	---	5 **U**
Cobalt	ug/L	NS	NS	1 **U**	1 **U**	1 **U**	1 **U**	2.7 **I**	---	1 **U**	1 **U**	1 **U**	1 **U**	1 **U**	1 **U**	1 **U**	1 **U**	1 **U**	1 **U**	1 **U**	---	1.5 **I**	---	1 **U**
Iron	ug/L	300	SDWS	370 **I**	1200	1100	310 **I**	1900	---	200 **U**	1700	200 **U**	260 **I**	440 **I**	400 **I**	290 **I**	1100	200 **U**	740 **I**	1000	---	1300	---	550 **I**
Lead	ug/L	15	PDWS	17	3.5 **I**	9.5 **I**	3 **U**	4.3 **I**	---	3.9 **I**	5.7 **I**	3 **U**	5.3 **I**	4.2 **I**	5 **I**	3 **U**	3 **U**	3 **U**	3 **U**	3.2 **I**	---	19	---	8.8 **I**
Mercury	ug/L	2	PDWS	0.059 **I**	0.011 **U**	0.011 **U**	0.011 **U**	0.011 **U**	---	0.021 **I**	0.011 **U**	0.019 **I**	0.034 **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**	---	0.011 **U**
Nickel	ug/L	100	PDWS	10 **U**	10 **U**	10 **U**	10 **U**	210	98	10 **U**	10 **U**	10 **U**	10 **U**	10 **U**	10 **U**	10 **U**	10 **U**	10 **U**	10 **U**	10 **I**	---	110	110	10 **U**
Selenium	ug/L	50	PDWS	0.58 **U**	0.58 **U**	0.58 **U**	5.8	2.3 **I**	---	1.5 **I**	0.58 **U**	0.58 **U**	1.3 **I**	0.58 **U**	0.86 **I**	1.6 **I**	2.8 **I**	0.58 **U**	0.58 **U**	5.8 **U**	---	0.58 **U**	---	0.58 **U**
Sodium	mg/L	160	PDWS	1.2 **I**	6.1	19	22	78	---	58	11	45	20	10	5.7	12	140	2.4 **I**	44	130	---	53	---	3.5
Vanadium	ug/L	NS	NS	2.4 **I**	2.4 **I**	4.3 **I**	63	28	---	13	2.8 **I**	2.5 **I**	14	4.4 **I**	9.6	31	110	2.7 **I**	3.5 **I**	4.5 **I**	---	7.3 **I**	---	2 **U**
General Chemistry																					---			
Ammonia (N)	mg/L	NS	NS	0.035 **U**	0.07 **I,J**	0.13	0.035 **U**	0.035 **U**	---	2	1.9	0.035 **U**	0.25	0.17	0.53	0.3	0.035 **U**	0.035 **U**	3.1	8.2	---	0.035 **U**	---	0.035 **U**
Chloride	mg/L	250	SDWS	2 **U**	13	38	35	180	---	61	23	66	27	16	8	13	400	2.1 **I**	96	270	390	120	---	3.9 **I**
Nitrate (N)	mg/L	10	PDWS	0.2 **U**	0.2 **U**	0.2 **U**	0.2 **U**	0.4 **U**	---	0.2 **U**	0.2 **U**	0.2 **U**	0.2 **U**	0.2 **U**	0.2 **U**	0.2 **U**	9.8	0.2 **U**	0.2 **U**	0.4 **U**	---	0.35 **I**	---	0.2 **U**
Residues- Filterable (TDS)	mg/L	500	SDWS	95	59	160	260	560	470	320	120	350	210	100	120	210	1100	73	12	580	860	450	---	25
Field Parameters																								
Dissolved Oxygen	mg/L	NS	NS	2.5	1	0.4	1.1	1.4	1.3	0.3	0.5	0.2	0.5	0.9	0.1	0.1	0.2	0.1	0.3	0.1	0.1	1.3	1.2	0.2
pH	SU	6.5-8.5	SDWS	4.7	4.18	4	5.8	5.88	5.81	4.86	4.8	6.01	5.72	4.84	5.18	5.67	6.44	4.7	4.96	4.92	5.04	5.46	5.52	4.86
Specific Conductance	umhos/cm	NS	NS	70	117	238	346	668	708	321	199	546	277	157	179	284	1612	80	402	955	1331	288	299	92
Temperature, Water	Deg C	NS	NS	25.1	24.1	23.6	26.3	29.6	22.4	28.1	27.9	26.4	26	27.5	24.1	24.7	28.8	25.3	27.5	25.6	24.6	25.5	24.1	24.6
Turbidity	NTU	NS	NS	21.01	4.04	4.75	7.22	6.3	6.7	9.38	4.14	3.73	12.5	4.47	17.04	4.66	4.72	5.84	8.46	4.37	4.11	98.63	88.44	5.97

Notes:
1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. Groundwater Clean-Up Target Level (62-777 F.A.C.) are used for screening purposes only to evaluate if a parameter is significantly above background levels.
4. NS = No numeric standard has been set for this analyte.
5. mg/L = milligrams per liter
6. ug/L = micrograms per liter
7. NTU = nephelometric turbidity units
8. umhos/cm = micromhos per centimeter
9. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
10. deg C = degrees Celsius
11. U = Analyte concentration was below the laboratory detection limit (value shown).
12. I = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
13. V = Analyte was detected in the sample and associated method blank.

Table 5. Summary of Intermediate Groundwater Quality Analytical Results (Detected Parameters Only)
Trail Ridge Landfill, August 2020

Parameter	Units	MCL	Standard	MWB-2I	MWB-03I	MWB-11IR	MWB-12I	MWB-13I	MWB-27I	MWB-29I	MWB-32I	MWB-34I	MWB-35I	MWB-39I
Volatile Organic Compounds														
Acetone	ug/L	NS	NS	---	---	---	---	---	---	---	---	---	---	---
Benzene	ug/L	1	PDWS	---	---	---	---	---	---	---	---	---	---	---
cis-1,2-Dichloroethene	ug/L	70	PDWS	---	---	---	---	---	---	---	---	---	---	---
Tetrachloroethene	ug/L	3	PDWS	---	---	---	---	---	---	---	---	---	---	---
Vinyl Chloride	ug/L	1	PDWS	---	---	---	---	---	---	---	---	---	---	---
Metals														
Antimony	ug/L	6	PDWS	---	---	---	---	---	---	---	---	---	---	---
Barium	ug/L	2000	PDWS	---	---	---	---	---	---	---	---	---	---	---
Chromium	ug/L	100	PDWS	---	---	---	---	---	---	---	---	---	---	---
Cobalt	ug/L	NS	NS	---	---	---	---	---	---	---	---	---	---	---
Iron	ug/L	300	SDWS	320 **I**	740 **I**	290 **I**	360 **I**	290 **I**	370 **I**	370 **I**	200 **U**	350 **I**	350 **I**	200 **U**
Lead	ug/L	15	PDWS	---	---	---	---	---	---	---	---	---	---	---
Mercury	ug/L	2	PDWS	---	---	---	---	---	---	---	---	---	---	---
Nickel	ug/L	100	PDWS	---	---	---	---	---	---	---	---	---	---	---
Selenium	ug/L	50	PDWS	---	---	---	---	---	---	---	---	---	---	---
Sodium	mg/L	160	PDWS	4.3	3.3	3 **I**	3.2 **I**	3.3	3.3	3.7	3 **I**	3.2	2.3 **I**	3 **I**
Vanadium	ug/L	NS	NS	---	---	---	---	---	---	---	---	---	---	---
General Chemistry														
Ammonia (N)	mg/L	NS	NS	0.035 **U**	0.035 **U**	0.035 **U**	0.035 **U**	0.035 **U**	0.035 **U**	0.035 **U**	0.035 **U**	0.035 **U**	0.05 **I**	0.05 **I**
Chloride	mg/L	250	SDWS	6.6 **I**	5.8 **I**	4.5 **I**	4.4 **I**	4.3 **I**	4.5 **I**	5.1 **I**	4.2 **I**	4.4 **I**	2.1 **I**	4.3 **I**
Nitrate (N)	mg/L	10	PDWS	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**
Residues- Filterable (TDS)	mg/L	500	SDWS	32	46	38	52	42 **J**	59	51	42	53	46	49
Field Parameters														
Dissolved Oxygen	mg/L	NS	NS	0.3	0.4	0.1	0.1	0.1	0.4	0.4	0.2	0.3	0.1	0.1
pH	SU	6.5-8.5	SDWS	4.56	4.33	4.59	4.99	4.94	5.22	4.9	5.04	4.98	4.64	4.83
Specific Conductance	umhos/cm	NS	NS	85	86	80	86	82	96	86	89	86	84	84
Temperature, Water	Deg C	NS	NS	23.6	23.1	24.9	25.7	27.3	23.6	26.4	22.8	27.6	22.6	26.2
Turbidity	NTU	NS	NS	2.97	3.05	4.28	3.27	4.09	3.79	9.8	6.11	4.72	3.18	4.17

Notes:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. Groundwater Clean-Up Target Level (62-777 F.A.C.) are used for screening purposes only to evaluate if a parameter is significantly above background levels.
4. NS = No numeric standard has been set for this analyte.
5. mg/L = milligrams per liter
6. ug/L = micrograms per liter
7. NTU = nephelometric turbidity units
8. umhos/cm = micromhos per centimeter
9. Yellow shaded values indicate parameter concentrations exceed primary, secondary drinking water standards, or groundwater cleanup target levels.
10. deg C = degrees Celsius
11. U = Analyte concentration was below the laboratory detection limit (value shown).
12. I = Analyte concentration was between the laboratory detection limit and laboratory practical quantitation limit.
13. V = Analyte was detected in the sample and associated method blank.

Chromium was not detected above the PDWS of 100 μg/L during the resample event at MWB-13S (63 μg/L). The result of the initial monitoring event was not confirmed.

4.2.1.2 Iron

The concentration of iron in the groundwater at the Site in the shallow and intermediate surficial aquifer ranged from non-detected to 1,900 micrograms per liter (μg/L) during the second 2020 semi-annual sampling event. Detectable iron concentrations exceeded the SDWS of 300 μg/L in:

- Background monitoring wells MWB-2S, MWB-2I, MWB-3S, and MWB-3I
- Shallow Wells: MWB-11S, MWB-12S, MWB-13S, MWB-21S, MWB-29S, MWB-32S, MWB-34S, MWB-39S, MWB-40S, SGMW-1SR, and SGMW-2S
- Intermediate Wells: MWB-12I, MWB-27I, MWB-29I, MWB-34I, and MWB-35I

The iron exceedances during the August 2020 sampling event were consistent with historical data. Based on this data, it appears that the presence of iron in the groundwater at most wells is not directly related to the landfill operations, but is related to the dissolution of naturally-occurring iron from the soil.

4.2.1.3 Lead

Lead was detected above the PDWS of 15 μg/L in background monitoring well MWB-2S (17 μg/L) and detection well SGMW-1SR (19 μg/L). MWB-2S is a background monitoring well. Lead has been detected in the past at MWB-2S.

The lead at detection well SGMW-1SR appears to have been impacted by elevated turbidity in the monitoring well during sampling (98.3 NTU). This very shallow, side-gradient well within the permitted waste footprint is installed in muck and turbidity has intermittently been elevated along with metal exceedances. This monitoring well is scheduled to be abandoned within the next year for construction of the next cell (Phase VII).

4.2.1.4 Nickel

The nickel concentration in detection wells MWB-13S (210 μg/L) and SGMW-1SR (110 μg/L) exceeded the PDWS of 100 μg/L during the August 2020 monitoring event. These concentrations were not consistent with historical concentrations and the wells were scheduled to be resampled to confirm the detections. On September 21, 2020, detection wells MWB-13S and SGMW-1SR were resampled for nickel. Nickel was not detected above the PDWS of 100 μg/L during the resample event at MWB-13S (98 μg/L). The results of the initial monitoring event at MWB-13S were not confirmed. Nickel was detected slightly above the PDWS of 100 μg/L during the resample event at SGMW-1SR (110 μg/L). The results of the initial monitoring event at SGMW-1SR were confirmed. CEC notified FDEP of the exceedance on October 12, 2020.

The nickel at detection well SGMW-1SR appears to have been impacted by elevated turbidity in the monitoring well during sampling (98.3 NTU) and resampling (88.4 NTU). This very shallow, side-gradient well within the permitted waste footprint is installed in muck and turbidity has intermittently been elevated along with metal exceedances. This monitoring well is scheduled to be abandoned within the next year for construction of the next cell (Phase VII).

4.2.1.5 Vanadium

Vanadium was detected in detection wells MWB-12S (63 µg/L) and MWB-34S (110 µg/L). The detection for MWB-12S and MWB-34S were consistent with historical concentrations

4.2.2 Inorganic Parameters Exceedances

Chloride, TDS, and pH at some wells exceeded the applicable standards. These parameters are discussed below.

4.2.2.1 Chloride

The FDEP SDWS of 250 mg/L for chloride was exceeded at detection wells MWB-34S (400 mg/L) and MWB-40S (270 mg/L). The MWB-40S concentration was not consistent with historical concentrations and the well was scheduled to be resampled to confirm the detections. On September 21, 2020, detection well MWB-40S was resampled for chloride. Chloride was detected above the SDWS of 250 mg/L during the resample event at MWB-40S (390 mg/L). The results of the initial monitoring event at MWB-40S were confirmed. CEC notified FDEP of the exceedance on October 12, 2020.

Based on the results a field evaluation was conducted in the area of MWB-39S and MWB-40S. During the evaluation two liquid seeps were noted in areas adjacent to MWB-39S and MWB-40S on the slide slope terraces. A French-drain was quickly installed connecting the two seeps and then a sump and pump were installed to remove the liquid. The sump was connected to the leachate force main. There is no evidence these seeps affected other wells at this time and no additional seeps were noted during the evaluation. There is no evidence this release has affected any other wells at this time, including the intermediate well MWB-39I in the same location as MWB-39S, and thus the impacts remain contained to a small area. TRL proposes to monitor MWB-39S and MWB-40S to ensure no other wells are impacted and concentrations decline.

Monitoring well MWB-34S continues to show minor impacts with elevated chloride that exceed the SDWS. 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-34I in the same location, and thus the impacts remain contained to a small area. TRL proposes to monitor MWB-34S to ensure no other wells are impacted and concentrations decline.

4.2.2.2 TDS

The FDEP SDWS of 500 mg/L for total dissolved solids (TDS) was exceeded at detection well MWB-13S (560 mg/L), MWB-34S (1,100 mg/L), and MWB-40S (580 mg/L). The SDWS exceedance for TDS at MWB-34S has been historically detected and reported to FDEP. The TDS concentrations at MWB-13S and MWB-40S were not consistent with historical concentrations and the wells were scheduled to be resampled to confirm the detections. On September 21, 2020, detection wells MWB-13S and MWB-40S were resampled for TDS. TDS was not detected above the SDWS during the resample event at MBW-13S (470 mg/L). The result of the initial monitoring event at MWB-13S was not confirmed. TDS was detected above the SDWS of 500 mg/L during

the resample event at MWB-40S (860 mg/L). The result of the initial monitoring event at MWB-40S was confirmed. CEC notified FDEP of the exceedance on October 12, 2020.

Based on the results a field evaluation was conducted in the area of MWB-39S and MWB-40S (discussed above). Two liquid seeps were discovered and repairs were made quickly. There is no evidence these seeps affected other wells at this time and no additional seeps were noted during the evaluation. There is no evidence this release has affected any other wells at this time, including the intermediate well MWB-39I in the same location as MWB-39S, and thus the impacts remain contained to a small area. TRL proposes to monitor MWB-39S and MWB-40S to ensure no other wells are impacted and concentrations decline.

The TDS concentration in MWB-34S continued an overall decreasing trend since 2017. This well continues to show minor impacts with elevated TDS that exceed the SDWS. 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-34I in the same location, and thus the impacts remain contained to a small area. TRL proposes to monitor MWB-34S to ensure no other wells are impacted and concentrations continue to decline.

4.2.2.3 pH

The FDEP SDWS range of 6.5 units to 8.5 units for pH was not met at background monitoring wells or detection monitoring wells during the second semi-annual 2020 sampling event.

Low groundwater pH in this region is the result of low pH in precipitation, rapid recharge, and little buffering capacity of the surficial sands. The pH levels observed at the Site are characteristic of the groundwater in this region of Florida.

4.2.3 Organic Parameters Exceedances

4.2.3.1 Vinyl chloride

Vinyl chloride was detected in monitoring well MWB-39S (1.4 μg/L) at the PDWS of 1 μg/L. The concentration of vinyl chloride in the sample collected from MWB-39S is not considered to exceed the PDWS based on the rounding method described in FDEP Rounding Analytical Data for Site Rehabilitation Completion memorandum dated November 17, 2011.

4.2.3.1 Other Detected Volatile Organic Compounds

During the second semi-annual 2020 monitoring event there were some low level volatile organic compound (VOC) detections below FDEP water quality standards for the following parameters: acetone, benzene, cis-1,2-dichloroethene, and tetrachloroethene (see Table 4). These compounds will continue to be monitored to confirm that concentrations remain below their respective regulatory standards.

4.3 Surface Water Quality

Surface water analytical results were compared to Class III WQS. Standards are provided in Tables 6 and 7. In some cases, F.A.C. Chapter 62-302.530 requires calculations for Class III standards based on sample hardness.

4.3.1 Metals Exceedances

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.

Surface water standards for metals were not exceeded at the surface water sampling locations during the second semi-annual 2020 monitoring event.

4.3.2 General Chemistry Exceedances

Ammonia and dissolved oxygen at some surface water locations exceeded the applicable standards. These parameters are discussed below.

4.3.2.1 Ammonia

Ammonia was detected above the calculated Class III WQS 1.67 mg/L at surface water location SW-3 (1.9 mg/L). The ammonia at SW-3 is a first-time exceedance. The ammonia concentration at SW-3 was not consistent with historical concentrations and the surface water location was scheduled to be resampled to confirm the detections. On September 21, 2020, surface water location SW-3 was resampled for ammonia. Ammonia was detected slightly above the calculated Class III WQS 2.7 mg/L during the resample event at SW-3 (2.8 mg/L). The result of the initial monitoring event at SW-3 was confirmed. CEC notified FDEP of the exceedance on October 12, 2020.

4.3.2.2 Dissolved Oxygen

Dissolved oxygen was detected below the Class III WQS of greater than 5 mg/L at surface water locations SW-3 (4.7 mg/L), SW-6 (0.4 mg/L), and SW-7 (4.6 mg/L). These concentrations are consistent with historical data. Surface water points have historically been below this threshold on a sporadic basis.

Table 6. Summary of Surface Water Quality Analytical Results (Detected Parameters Only)
Trail Ridge Landfill, August 2020

Parameter	MCL	Units	SW-1	SW-3	SW-3	SW-4	SW-5	SW-6	SW-7	SW-B
Volatile Organic Compounds					**Resample**					
Acetone	1700	ug/L	2.1 **U**	2.1 **U**	---	3.6 **I**	2.1 **U**	2.1 **U**	3.3 **I**	3.1 **I**
Chloroform	470.8	ug/L	0.18 **U**	0.18 **U**	---	0.41 **I**	0.18 **U**	0.18 **U**	0.18 **U**	0.18 **U**
Tetrachloroethene	8.85	ug/L	3.5	0.65 **I**	---	0.97 **I**	2.1	2.5	2.3	2.3
Metals										
Antimony	4300	ug/L	1.6	2.3	---	1.1	0.24 **I**	0.65 **I**	0.23 **I**	0.11 **U**
Barium	NS	ug/L	31	28	---	12 **I**	6.1 **I**	12	19	10 **I**
Iron	1000	ug/L	390 **I**	270 **I**	---	200 **U**	200 **U**	200 **U**	1000	200 **U**
Lead	See Below	ug/L	6.1 **I**	6.7 **I**	---	3 **U**	3 **U**	3 **U**	5 **I**	3 **U**
Calculated Lead MCL	Calculated	ug/L	3.6	4.9	---	1.7	2.2	2.2	1.5	1
Magnesium	NS	mg/L	3.8	4.5	---	1.4	2	2.9	1.7	0.68
Selenium	5	ug/L	0.6 **I**	0.58 **U**	---	0.58 **U**	0.58 **U**	0.58 **U**	0.58 **U**	0.58 **U**
Vanadium	NS	ug/L	5 **I**	6.5 **I**	---	2.7 **I**	2.8 **I**	4.3 **I**	3.6 **I**	2 **U**
General Chemistry										
Ammonia (N)	See Below	mg/L	0.84	1.9	2.8	0.035 **U**	0.035 **U**	0.035 **U**	0.04 **I**	0.035 **U**
Calculated TAN Criteria	Calculated	mg/L	2.42	1.67	2.7	--	--	--	3.05	--
BOD	NS	mg/L	2.9	4	---	2 **U**	5.7	10	2.6	2 **U**
Calcium	NS	mg/L	38	50	---	22	27	26	19	15
Carbon- Total Organic	NS	mg/L	23	22	---	8.1	12	20	19	3.5
Corrected Chlorophyll A	NS	mg/M3	10	19	---	2.5 **U**	53	77	3.2	2.5 **U**
COD	NS	mg/L	89	83	---	36	53	110	72	17 **I**
Fecal Coliform	NS	MPN/100 mL	6870	15500	---	52	85	62	128	1110
Total Hardness (as CaCO3)	NS	mg/L	110	140	---	62	75	76	54	40
Nitrogen- Total Kjeldahl	NS	mg/L	2.6	4.2	---	0.4 **U**	1.3	6.5	0.69 **I**	0.4 **U,J**
Total Nitrogen	NS	mg/L	2.6	4.2	---	0.12 **U**	1.3	6.5	0.69	0.12 **U**
Residues- Filterable (TDS)	NS	mg/L	280	290	---	88	130	190	110	69
Residues- Nonfilterable (TSS)	NS	mg/L	47	8.7	---	3.7	16	64	9.7	1 **U**
Unionized Ammonia	NS	mg/L	0.016 **I**	0.075	---	0.0012 **U**	0.0020 **U**	0.0070 **U**	0.00037 **I**	0.0010 **U**
Field Parameters										
Dissolved Oxygen	>5.0	mg/L	5.5	4.7	3.9	6.5	6.2	0.4	4.6	5.2
pH	6.0-8.5	SU	7.4	7.64	7.41	7.61	7.81	8.43	7.14	7.59
Specific Conductance	1275	umhos/cm	391	446	461	185	236	288	159	141
Temperature, Water	NS	Deg C	26.9	29.3	25.1	28.4	29	28.7	25.8	26.7
Turbidity	29	NTU	12.45	28.06	13.48	7.51	13.27	28.44	9.33	3.81

Notes:

1. Parameter MCL is a Surface Water Criterion (Chapter 62-302 F.A.C.).
2. **I** = Analyte detected below quantitation limits.
3. U = Analyte concentration was below the laboratory detection limit (value shown).
4. Turbidity MCL is 29 NTUs over background levels. For comparison purposes, a background turbidity of 0 NTU was assumed in this table. However it is known that upgradient industrial properties contribute a high sediment load to Ponds 3 and 4 through run-on to the expansion area of the Trail Ridge property.
5. MCL = Maximum Contamination Level.
6. Yellow shaded values indicate
7. mg/L = milligrams per liter.
8. ug/L = micrograms per liter.
9. umhos/cm = micromhos/centimeter
10. NTU = nephelometric turbidity units.
11. NS = No numeric standard has been set for this analyte.
12. Parameter MCL is calculated by the following formula: Pb < e^(1.273*[ln Hardness]-4.705).
13. Parameter MCL is calculated by the following formula: TAN < 2.5*(0.8876*((0.0278/(1+10^(7.688-pH)))+(1.1994/(1+10^(pH-7.688))))*2.126*10^(0.028*(20-temp)))))))

Table 7 - Surface Water Quality Standard Calculations
Trail Ridge Landfill, Jacksonville, Florida
August 2020

Parameter	Units	WQS Class I & Class III	SW-1		SW-3		SW-4		SW-5		SW-6		SW-7		SW-B		
			110		140		62		75		76		54		40		Total Hardness [1]
			4.70		4.94		4.13		4.32		4.33		3.99		3.69		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 ≤ $e^{(0.7409[lnH]-4.719)}$	0.5 U	0.3	0.5 U	0.3	0.5 U	0.2	0.5 U	0.2	0.5 U	0.2	0.5 U	0.2	0.5 U	0.1	
Chromium	ug/L	Measured ≤ $e^{(0.819[lnH]+0.6848)}$	**5 U**	93	**5 U**	114	**5 U**	58	5 U	68	**5 U**	69	**5 U**	52	5 U	41	
Copper	ug/L	Measured ≤ $e^{(0.8545[lnH]-1.702)}$	10 U	10.1	**10 U**	12.4	10 U	6.2	10 U	7.3	**10 U**	7.4	10 U	5.5	10 U	4.3	
Lead	ug/L	Measured ≤ $e^{(1.273[lnH]- 4.705)}$	6.1 I	3.6	**6.7 I**	4.9	3 U	1.7	3 U	2.2	3 U	2.2	5 I	1.5	3 U	1.0	
Nickel	ug/L	Measured ≤ $e^{(0.846[lnH]+0.0584)}$	10 U	57	**10 U**	69	**10 U**	35	10 U	41	10 U	41	10 U	31	10 U	24	
Zinc	ug/L	Measured ≤ $e^{(0.8473[lnH]+0.884)}$	50 U	130	50 U	159	50 U	80	50 U	94	50 U	95	50 U	71	50 U	55	

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.

U - Not Detected.

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

[NS]- Not Sampled (Dry)

5 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.

The analytical results from analysis of the groundwater samples shows the following:

- The chromium concentration in detection well MWB-13S exceeded the PDWS during the August 2020 monitoring event. This concentration was not consistent with historical concentrations and the well was scheduled to be re-sample to confirm the detection. On September 21, 2020, detection well MBW-13S was resampled for chromium. The result of the initial monitoring event was not confirmed.
- The iron exceedances during the February 2020 sampling event were consistent with historical data. Based on this data, it appears that the presence of iron in the groundwater at most wells is not directly related to the landfill operations, but is related to the dissolution of naturally-occurring iron from the soil.
- Lead was detected above the PDWS in background monitoring well MWB-2S (and detection well SGMW-1SR. MWB-2S is a background monitoring well and lead has been detected in the past at MWB-2S. The lead at detection well SGMW-1SR appears to have been impacted by elevated turbidity in the monitoring well during sampling (98.3 NTU). This very shallow, side-gradient well within the permitted waste footprint is installed in muck and turbidity has intermittently been elevated along with metal exceedances. This monitoring well is scheduled to be abandoned within the next year for construction of the next cell (Phase VII).
- The nickel concentration in detection wells MWB-13S and SGMW-1SR exceeded the PDWS during the August 2020 monitoring event. These concentrations were not consistent with historical concentrations and the wells were scheduled to be re-sample to confirm the detections. On September 21, 2020, detection wells MWB-13S and SGMW-1SR were resampled for nickel. Nickel was not detected above the PDWS during the resample event at MWB-13S. The result of the initial monitoring event at MWB-13S was not confirmed. Nickel was detected slightly above the PDWS during the resample event at SGMW-1SR. The results of the initial monitoring event at SGMW-1SR were confirmed. The nickel at detection well SGMW-1SR appears to have been impacted by elevated turbidity in the monitoring well during sampling and resampling. This very shallow, side-gradient well within the permitted waste footprint is installed in muck and turbidity has intermittently been elevated along with metal exceedances. This monitoring well is scheduled to be abandoned within the next year for construction of the next cell (Phase VII).
- Vanadium was detected in detection wells MWB-12S and MWB-34S. The detections at MWB-13S and MWB-34S were consistent with historical concentrations.
- The FDEP SDWS for chloride was exceeded at detection wells MWB-34S and MWB-40S. The MWB-40S concentration was not consistent with historical concentrations and the well was scheduled to be resampled on September 21, 2020. Chloride was detected slightly above the SDWS during the resample event at MWB-40S, therefore, the result of the initial monitoring event at MWB-40S was confirmed.

  - Based on the results a field evaluation was conducted in the area of MWB-39S and MWB-40S (discussed above). Two liquid seeps were discovered and repairs were made quickly. There is no evidence these seeps affected other wells at this time and no additional seeps were noted during the evaluation. There is no evidence this release has affected any other wells at this time, including the intermediate well MWB-39I in the same location as MWB-39S, and thus the impacts remain contained to a small area. TRL proposes to monitor MWB-39S and MWB-40S to ensure no other wells are impacted and concentrations decline.
  - Monitoring well MWB-34S continues to show minor impacts with elevated chloride that exceed the SDWS. 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-34I in the same location, and thus the impacts remain contained to a small area. TRL proposes to monitor MWB-34S to ensure no other wells are impacted and concentrations decline.

- The FDEP SDWS for TDS was exceeded at detection wells MWB-13S, MWB-34S, and MWB-40S.
  - The TDS concentration in MWB-34S continued an overall decreasing trend since 2017. The TDS exceedances at MWB-34S were attributed to a leachate release that occurred in January 2017 which was quickly repaired. There is no evidence this release has affected any other wells at this time, including the intermediate well MWB-34I in the same location, and thus the impacts remain contained to a small area.
  - The TDS concentrations at MWB-13S and MWB-40S were not consistent with historical concentrations and the wells were scheduled to be re-sample on September 21, 2020. TDS was not detected above the SDWS during the resample event at MBW-13S, therefore, the result was not confirmed. TDS was detected above the SDWS during the resample event at MWB-40S, therefore the result was confirmed. Based on the results a field evaluation was conducted in the area of MWB-39S and MWB-40S (discussed above). Two liquid seeps were discovered and repairs were made quickly. There is no evidence these seeps affected other wells at this time and no additional seeps were noted during the evaluation. There is no evidence this release has affected any other wells at this time, including the intermediate well MWB-39I in the same location as MWB-39S, and thus the impacts remain contained to a small area. TRL proposes to monitor MWB-39S and MWB-40S to ensure no other wells are impacted and concentrations decline.
- The FDEP SDWS range of 6.5 units to 8.5 units for pH was not met at background monitoring wells or detection monitoring wells during the second semi-annual 2020 sampling event. The low pH levels in select monitoring wells are attributed to Florida's ambient groundwater quality characteristics due to low pH rainfall, rapid recharge, and the limited buffering capability of Florida's sandy soils.

- Vinyl chloride was detected in monitoring well MWB-39S at the PDWS. The concentration of vinyl chloride in the sample collected from MWB-39S is not considered to exceed the PDWS based on the rounding method described in FDEP Rounding Analytical Data for Site Rehabilitation Completion memorandum dated November 17, 2011.

The analytical results from analysis of the surface water samples shows the following:

- Ammonia was detected above the calculated Class III WQS at surface water location SW-3. The ammonia at SW-3 is a first-time exceedance and was not consistent with historical concentrations. The surface water location was scheduled to be resampled to confirm the detections on September 21, 2020. Ammonia was detected slightly above the calculated Class III WQS during the resample event at SW-3 and the result of the initial monitoring event at SW-3 was confirmed.
- Dissolved oxygen was detected below the Class III WQS at surface water locations SW-3, SW-6, and SW-7. These concentrations are consistent with historical data. Surface water points have historically been below this threshold on a sporadic basis.

Detection monitoring should continue as outlined in the WQMP. The next sampling event should be conducted prior to March 30, 2021, per the facility's permit and is currently scheduled for February 2021.

APPENDIX A

LABORATORY ANALYTICAL RESULTS AND FIELD FORMS

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

August 26, 2020

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

RE: Workorder: J2010933 Trail Ridge Landfill

Dear Eric Fuller:

Enclosed are the analytical results for sample(s) received by the laboratory between Monday, August 10, 2020 and Wednesday, August 12, 2020. 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

NELAP Accredited E82574

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

SAMPLE SUMMARY

Workorder: J2010933 Trail Ridge Landfill

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J2010933001	MWB-22 (S)	Water	8/10/2020 08:17	8/10/2020 17:15
J2010933002	MWB-12 (S)	Water	8/10/2020 07:41	8/10/2020 17:15
J2010933003	MWB-13 (S)	Water	8/10/2020 09:21	8/10/2020 17:15
J2010933004	MWB-27 (S)	Water	8/10/2020 10:29	8/10/2020 17:15
J2010933005	MWB-29 (S)	Water	8/10/2020 11:31	8/10/2020 17:15
J2010933006	MWB-2 (S)	Water	8/10/2020 12:34	8/10/2020 17:15
J2010933007	MWB-20 (S)	Water	8/10/2020 13:05	8/10/2020 17:15
J2010933008	MWB-21 (S)	Water	8/10/2020 13:38	8/10/2020 17:15
J2010933009	MWB-34 (S)	Water	8/10/2020 14:41	8/10/2020 17:15
J2010933010	Trip Blank	Water	8/10/2020 07:11	8/10/2020 17:15
J2010933011	MWB-39 (S)	Water	8/10/2020 15:50	8/10/2020 17:15
J2010933012	MWB-12 (I)	Water	8/10/2020 07:11	8/10/2020 17:15
J2010933013	MWB-13 (I)	Water	8/10/2020 08:51	8/10/2020 17:15
J2010933014	MWB-27 (I)	Water	8/10/2020 09:55	8/10/2020 17:15
J2010933015	MWB-29 (I)	Water	8/10/2020 11:01	8/10/2020 17:15
J2010933016	MWB-2 (I)	Water	8/10/2020 12:04	8/10/2020 17:15
J2010933017	MWB-34 (I)	Water	8/10/2020 14:11	8/10/2020 17:15
J2010933018	MWB-39 (I)	Water	8/10/2020 15:20	8/10/2020 17:15
J2010933019	MWB-33 (S)	Water	8/11/2020 06:58	8/11/2020 16:25
J2010933020	MWB-32 (S)	Water	8/11/2020 08:01	8/11/2020 16:25
J2010933021	MWB-11 (S)	Water	8/11/2020 09:08	8/11/2020 16:25
J2010933022	MWB-03 (S)	Water	8/11/2020 09:45	8/11/2020 16:25
J2010933023	MWB-35 (S)	Water	8/11/2020 11:21	8/11/2020 16:25
J2010933024	SGMW-1 (S)R	Water	8/11/2020 11:57	8/11/2020 16:25
J2010933025	SGMW-2 (S)	Water	8/11/2020 12:28	8/11/2020 16:25
J2010933026	MWB-40 (S)	Water	8/11/2020 13:05	8/11/2020 16:25
J2010933027	Equipment Blank	Water	8/11/2020 13:21	8/11/2020 16:25
J2010933028	Trip Blank	Water	8/11/2020 06:58	8/11/2020 16:25
J2010933029	MWB-32 (I)	Water	8/11/2020 07:31	8/11/2020 16:25
J2010933030	MWB-11 (I)R	Water	8/11/2020 08:38	8/11/2020 16:25
J2010933031	MWB-03 (I)	Water	8/11/2020 10:17	8/11/2020 16:25
J2010933032	MWB-35 (I)	Water	8/11/2020 10:51	8/11/2020 16:25
J2010933033	Equipment Blank	Water	8/11/2020 13:21	8/11/2020 16:25
J2010933034	SW-1	Water	8/12/2020 09:21	8/12/2020 10:45
J2010933035	SW-3	Water	8/12/2020 08:51	8/12/2020 10:45

CERTIFICATE OF ANALYSIS

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

SAMPLE SUMMARY

Workorder: J2010933 Trail Ridge Landfill

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J2010933036	SW-B	Water	8/12/2020 08:21	8/12/2020 10:45
J2010933037	SW-4	Water	8/12/2020 07:51	8/12/2020 10:45
J2010933038	SW-7	Water	8/12/2020 07:30	8/12/2020 10:45
J2010933039	SW-5	Water	8/12/2020 06:51	8/12/2020 10:45
J2010933040	SW-6	Water	8/12/2020 06:31	8/12/2020 10:45
J2010933041	TRIP	Water	8/12/2020 00:00	8/12/2020 10:45

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933001** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-22 (S)** Date Collected: 08/10/20 08:17

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:06	J
Barium	**3.0**	**U**	**ug/L**	**1**	12	3.0	8/13/2020 17:06	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 17:06	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 17:06	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/13/2020 17:06	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/13/2020 17:06	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:06	J
Iron	**200**	**U**	**ug/L**	**1**	800	200	8/13/2020 17:06	J
Lead	**3.0**	**U**	**ug/L**	**1**	12	3.0	8/13/2020 17:06	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:06	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:06	J
Sodium	**45**		**mg/L**	**1**	3.2	0.80	8/13/2020 17:06	J
Vanadium	**2.5**	**I**	**ug/L**	**1**	8.0	2.0	8/13/2020 17:06	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 17:06	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.11**	**U**	**ug/L**	**1**	0.70	0.11	8/14/2020 12:12	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/13/2020 21:41	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/13/2020 21:41	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.019**	**I**	**ug/L**	**1**	0.10	0.011	8/11/2020 15:19	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/11/2020 21:03	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2020 21:03	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 21:03	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/11/2020 21:03	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/11/2020 21:03	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 21:03	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/11/2020 21:03	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933001** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-22 (S)** Date Collected: 08/10/20 08:17

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	8/11/2020 21:03	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 21:03	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 21:03	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/11/2020 21:03	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2020 21:03	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/11/2020 21:03	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/11/2020 21:03	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/11/2020 21:03	J
Acetone	**2.1**	**I**	**ug/L**	**1**	5.0	2.1	8/11/2020 21:03	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/11/2020 21:03	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 21:03	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/11/2020 21:03	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/11/2020 21:03	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/11/2020 21:03	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2020 21:03	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/11/2020 21:03	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/11/2020 21:03	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 21:03	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2020 21:03	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 21:03	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 21:03	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2020 21:03	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/11/2020 21:03	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2020 21:03	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 21:03	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 21:03	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/11/2020 21:03	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 21:03	J
Tetrachloroethylene (PCE)	**2.8**		**ug/L**	**1**	1.0	0.36	8/11/2020 21:03	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 21:03	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2020 21:03	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/11/2020 21:03	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/11/2020 21:03	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 21:03	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/11/2020 21:03	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2020 21:03	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 21:03	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 21:03	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 21:03	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/11/2020 21:03	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933001** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-22 (S)** Date Collected: 08/10/20 08:17

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**113**		**%**	**1**	70-128		8/11/2020 21:03	
Toluene-d8 (S)	**101**		**%**	**1**	77-119		8/11/2020 21:03	
Bromofluorobenzene (S)	**114**		**%**	**1**	86-123		8/11/2020 21:03	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/11/2020 21:03	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/11/2020 21:03	J
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	77-125		8/11/2020 21:03	
Toluene-d8 (S)	**103**		**%**	**1**	80-121		8/11/2020 21:03	
Bromofluorobenzene (S)	**106**		**%**	**1**	80-129		8/11/2020 21:03	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**66**		**mg/L**	**1**	8.0	2.0	8/11/2020 13:21	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/11/2020 13:21	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 13:46	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**350**		**mg/L**	**1**	10	10	8/12/2020 11:10	J

Lab ID: **J2010933002** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-12 (S)** Date Collected: 08/10/20 07:41

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	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:31	J
Barium	**3.0**	**U**	**ug/L**	**1**	12	3.0	8/13/2020 17:31	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 17:31	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933002** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-12 (S)** Date Collected: 08/10/20 07:41

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 17:31	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/13/2020 17:31	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/13/2020 17:31	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:31	J
Iron	**310**	**I**	**ug/L**	**1**	800	200	8/13/2020 17:31	J
Lead	**3.0**	**U**	**ug/L**	**1**	12	3.0	8/13/2020 17:31	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:31	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:31	J
Sodium	**22**		**mg/L**	**1**	3.2	0.80	8/13/2020 17:31	J
Vanadium	**63**		**ug/L**	**1**	8.0	2.0	8/13/2020 17:31	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 17:31	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.54**	**I**	**ug/L**	**1**	0.70	0.11	8/14/2020 12:18	J
Selenium	**5.8**		**ug/L**	**1**	5.0	0.58	8/13/2020 21:47	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/13/2020 21:47	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/11/2020 15:36	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/11/2020 21:32	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2020 21:32	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 21:32	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/11/2020 21:32	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/11/2020 21:32	J
1,1-Dichloroethylene	**0.18**	**U,J4**	**ug/L**	**1**	1.0	0.18	8/11/2020 21:32	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/11/2020 21:32	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/11/2020 21:32	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 21:32	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 21:32	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/11/2020 21:32	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2020 21:32	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/11/2020 21:32	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/11/2020 21:32	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933002** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-12 (S)** Date Collected: 08/10/20 07:41

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/11/2020 21:32	J
Acetone	**8.1**		**ug/L**	**1**	5.0	2.1	8/11/2020 21:32	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/11/2020 21:32	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 21:32	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/11/2020 21:32	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/11/2020 21:32	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/11/2020 21:32	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2020 21:32	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/11/2020 21:32	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/11/2020 21:32	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 21:32	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2020 21:32	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 21:32	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 21:32	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2020 21:32	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/11/2020 21:32	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2020 21:32	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 21:32	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 21:32	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/11/2020 21:32	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 21:32	J
Tetrachloroethylene (PCE)	**3.0**		**ug/L**	**1**	1.0	0.36	8/11/2020 21:32	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 21:32	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2020 21:32	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/11/2020 21:32	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/11/2020 21:32	J
Vinyl Chloride	**0.20**	**U,J4**	**ug/L**	**1**	1.0	0.20	8/11/2020 21:32	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/11/2020 21:32	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2020 21:32	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 21:32	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 21:32	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 21:32	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/11/2020 21:32	J
1,2-Dichloroethane-d4 (S)	**112**		**%**	**1**	70-128		8/11/2020 21:32	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		8/11/2020 21:32	
Bromofluorobenzene (S)	**108**		**%**	**1**	86-123		8/11/2020 21:32	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/11/2020 21:32	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933002** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-12 (S)** Date Collected: 08/10/20 07:41

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/11/2020 21:32	J
1,2-Dichloroethane-d4 (S)	**98**		**%**	**1**	77-125		8/11/2020 21:32	
Toluene-d8 (S)	**102**		**%**	**1**	80-121		8/11/2020 21:32	
Bromofluorobenzene (S)	**101**		**%**	**1**	80-129		8/11/2020 21:32	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**35**		**mg/L**	**1**	8.0	2.0	8/11/2020 13:00	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/11/2020 13:00	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 13:50	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**260**		**mg/L**	**1**	10	10	8/12/2020 11:10	J

Lab ID: **J2010933003** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-13 (S)** Date Collected: 08/10/20 09:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:34	J
Barium	**6.6**	**I**	**ug/L**	**1**	12	3.0	8/13/2020 17:34	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 17:34	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 17:34	J
Chromium	**120**		**ug/L**	**1**	20	5.0	8/13/2020 17:34	J
Cobalt	**2.7**	**I**	**ug/L**	**1**	4.0	1.0	8/13/2020 17:34	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:34	J
Iron	**1900**		**ug/L**	**1**	800	200	8/13/2020 17:34	J
Lead	**4.3**	**I**	**ug/L**	**1**	12	3.0	8/13/2020 17:34	J
Nickel	**210**		**ug/L**	**1**	40	10	8/13/2020 17:34	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:34	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933003** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-13 (S)** Date Collected: 08/10/20 09:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Sodium	**78**		**mg/L**	**1**	3.2	0.80	8/13/2020 17:34	J
Vanadium	**28**		**ug/L**	**1**	8.0	2.0	8/13/2020 17:34	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 17:34	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.25**	**I**	**ug/L**	**1**	0.70	0.11	8/14/2020 12:23	J
Selenium	**2.3**	**I**	**ug/L**	**1**	5.0	0.58	8/13/2020 22:06	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/13/2020 22:06	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	8/11/2020 15:39	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/11/2020 22:01	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2020 22:01	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 22:01	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/11/2020 22:01	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/11/2020 22:01	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 22:01	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/11/2020 22:01	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/11/2020 22:01	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 22:01	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 22:01	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/11/2020 22:01	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2020 22:01	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/11/2020 22:01	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/11/2020 22:01	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/11/2020 22:01	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/11/2020 22:01	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/11/2020 22:01	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 22:01	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/11/2020 22:01	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/11/2020 22:01	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/11/2020 22:01	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2020 22:01	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933003** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-13 (S)** Date Collected: 08/10/20 09:21

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	8/11/2020 22:01	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/11/2020 22:01	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 22:01	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2020 22:01	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 22:01	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 22:01	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2020 22:01	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/11/2020 22:01	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2020 22:01	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 22:01	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 22:01	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/11/2020 22:01	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 22:01	J
Tetrachloroethylene (PCE)	**2.0**		**ug/L**	**1**	1.0	0.36	8/11/2020 22:01	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 22:01	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2020 22:01	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/11/2020 22:01	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/11/2020 22:01	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 22:01	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/11/2020 22:01	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2020 22:01	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 22:01	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 22:01	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 22:01	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/11/2020 22:01	J
1,2-Dichloroethane-d4 (S)	**112**		**%**	**1**	70-128		8/11/2020 22:01	
Toluene-d8 (S)	**103**		**%**	**1**	77-119		8/11/2020 22:01	
Bromofluorobenzene (S)	**112**		**%**	**1**	86-123		8/11/2020 22:01	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/11/2020 22:01	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/11/2020 22:01	J
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	77-125		8/11/2020 22:01	
Toluene-d8 (S)	**105**		**%**	**1**	80-121		8/11/2020 22:01	
Bromofluorobenzene (S)	**104**		**%**	**1**	80-129		8/11/2020 22:01	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933003** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-13 (S)** Date Collected: 08/10/20 09:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chloride	**180**		**mg/L**	**2**	16	4.0	8/11/2020 14:04	J
Nitrate (as N)	**0.40**	**U**	**mg/L**	**2**	1.6	0.40	8/11/2020 14:04	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 13:51	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**560**		**mg/L**	**1**	10	10	8/12/2020 11:10	J

Lab ID: **J2010933004** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-27 (S)** Date Collected: 08/10/20 10:29

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:38	J
Barium	**8.0**	**I**	**ug/L**	**1**	12	3.0	8/13/2020 17:38	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 17:38	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 17:38	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/13/2020 17:38	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/13/2020 17:38	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:38	J
Iron	**260**	**I**	**ug/L**	**1**	800	200	8/13/2020 17:38	J
Lead	**5.3**	**I**	**ug/L**	**1**	12	3.0	8/13/2020 17:38	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:38	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:38	J
Sodium	**20**		**mg/L**	**1**	3.2	0.80	8/13/2020 17:38	J
Vanadium	**14**		**ug/L**	**1**	8.0	2.0	8/13/2020 17:38	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 17:38	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	8/13/2020 22:13	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933004** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-27 (S)** Date Collected: 08/10/20 10:29

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Selenium	**1.3**	**I**	**ug/L**	**1**	5.0	0.58	8/13/2020 22:13	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/13/2020 22:13	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	8/11/2020 15:42	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/11/2020 22:30	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2020 22:30	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 22:30	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/11/2020 22:30	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/11/2020 22:30	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 22:30	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/11/2020 22:30	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/11/2020 22:30	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 22:30	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 22:30	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/11/2020 22:30	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2020 22:30	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/11/2020 22:30	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/11/2020 22:30	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/11/2020 22:30	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/11/2020 22:30	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/11/2020 22:30	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 22:30	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/11/2020 22:30	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/11/2020 22:30	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/11/2020 22:30	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2020 22:30	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/11/2020 22:30	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/11/2020 22:30	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 22:30	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2020 22:30	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 22:30	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 22:30	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2020 22:30	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933004** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-27 (S)** Date Collected: 08/10/20 10:29

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/11/2020 22:30	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2020 22:30	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 22:30	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 22:30	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/11/2020 22:30	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 22:30	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/11/2020 22:30	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 22:30	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2020 22:30	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/11/2020 22:30	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/11/2020 22:30	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 22:30	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/11/2020 22:30	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2020 22:30	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 22:30	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 22:30	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 22:30	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/11/2020 22:30	J
1,2-Dichloroethane-d4 (S)	**114**		**%**	**1**	70-128		8/11/2020 22:30	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		8/11/2020 22:30	
Bromofluorobenzene (S)	**109**		**%**	**1**	86-123		8/11/2020 22:30	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/11/2020 22:30	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/11/2020 22:30	J
1,2-Dichloroethane-d4 (S)	**101**		**%**	**1**	77-125		8/11/2020 22:30	
Toluene-d8 (S)	**102**		**%**	**1**	80-121		8/11/2020 22:30	
Bromofluorobenzene (S)	**101**		**%**	**1**	80-129		8/11/2020 22:30	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**27**		**mg/L**	**1**	8.0	2.0	8/11/2020 14:48	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/11/2020 14:48	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.25**		**mg/L**	**2**	0.080	0.035	8/18/2020 13:52	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933004** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-27 (S)** Date Collected: 08/10/20 10:29

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Dissolved Solids	**210**		**mg/L**	**1**	10	10	8/12/2020 11:10	J

Lab ID: **J2010933005** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-29 (S)** Date Collected: 08/10/20 11:31

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							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:41	J
Barium	**12**		**ug/L**	**1**	12	3.0	8/13/2020 17:41	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 17:41	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 17:41	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/13/2020 17:41	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/13/2020 17:41	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:41	J
Iron	**440**	**I**	**ug/L**	**1**	800	200	8/13/2020 17:41	J
Lead	**4.2**	**I**	**ug/L**	**1**	12	3.0	8/13/2020 17:41	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:41	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:41	J
Sodium	**10**		**mg/L**	**1**	3.2	0.80	8/13/2020 17:41	J
Vanadium	**4.4**	**I**	**ug/L**	**1**	8.0	2.0	8/13/2020 17:41	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 17:41	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	8/13/2020 22:19	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/13/2020 22:19	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/13/2020 22:19	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/11/2020 15:45	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933005** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-29 (S)** Date Collected: 08/10/20 11:31

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/11/2020 22:59	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2020 22:59	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 22:59	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/11/2020 22:59	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/11/2020 22:59	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 22:59	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/11/2020 22:59	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/11/2020 22:59	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 22:59	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 22:59	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/11/2020 22:59	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2020 22:59	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/11/2020 22:59	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/11/2020 22:59	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/11/2020 22:59	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/11/2020 22:59	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/11/2020 22:59	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 22:59	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/11/2020 22:59	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/11/2020 22:59	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/11/2020 22:59	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2020 22:59	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/11/2020 22:59	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/11/2020 22:59	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 22:59	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2020 22:59	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 22:59	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 22:59	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2020 22:59	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/11/2020 22:59	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2020 22:59	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 22:59	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 22:59	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/11/2020 22:59	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 22:59	J
Tetrachloroethylene (PCE)	**1.9**		**ug/L**	**1**	1.0	0.36	8/11/2020 22:59	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933005** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-29 (S)** Date Collected: 08/10/20 11:31

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 22:59	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2020 22:59	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/11/2020 22:59	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/11/2020 22:59	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 22:59	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/11/2020 22:59	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2020 22:59	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 22:59	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 22:59	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 22:59	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/11/2020 22:59	J
1,2-Dichloroethane-d4 (S)	**112**		**%**	**1**	70-128		8/11/2020 22:59	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		8/11/2020 22:59	
Bromofluorobenzene (S)	**108**		**%**	**1**	86-123		8/11/2020 22:59	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/11/2020 22:59	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/11/2020 22:59	J
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	77-125		8/11/2020 22:59	
Toluene-d8 (S)	**102**		**%**	**1**	80-121		8/11/2020 22:59	
Bromofluorobenzene (S)	**100**		**%**	**1**	80-129		8/11/2020 22:59	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**16**		**mg/L**	**1**	8.0	2.0	8/11/2020 16:14	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/11/2020 16:14	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.17**		**mg/L**	**2**	0.080	0.035	8/18/2020 13:53	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**100**		**mg/L**	**1**	10	10	8/12/2020 11:10	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933006** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-2 (S)** Date Collected: 08/10/20 12:34

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:45	J
Barium	**5.5**	**I**	**ug/L**	**1**	12	3.0	8/13/2020 17:45	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 17:45	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 17:45	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/13/2020 17:45	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/13/2020 17:45	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:45	J
Iron	**370**	**I**	**ug/L**	**1**	800	200	8/13/2020 17:45	J
Lead	**17**		**ug/L**	**1**	12	3.0	8/13/2020 17:45	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:45	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:45	J
Sodium	**1.2**	**I**	**mg/L**	**1**	3.2	0.80	8/13/2020 17:45	J
Vanadium	**2.4**	**I**	**ug/L**	**1**	8.0	2.0	8/13/2020 17:45	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 17:45	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	8/13/2020 22:25	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/13/2020 22:25	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/13/2020 22:25	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.059**	**I**	**ug/L**	**1**	0.10	0.011	8/11/2020 15:48	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/11/2020 23:28	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2020 23:28	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 23:28	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/11/2020 23:28	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/11/2020 23:28	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 23:28	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/11/2020 23:28	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933006** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-2 (S)** Date Collected: 08/10/20 12:34

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	8/11/2020 23:28	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 23:28	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 23:28	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/11/2020 23:28	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2020 23:28	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/11/2020 23:28	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/11/2020 23:28	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/11/2020 23:28	J
Acetone	**2.3**	**I**	**ug/L**	**1**	5.0	2.1	8/11/2020 23:28	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/11/2020 23:28	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 23:28	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/11/2020 23:28	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/11/2020 23:28	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/11/2020 23:28	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2020 23:28	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/11/2020 23:28	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/11/2020 23:28	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 23:28	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2020 23:28	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 23:28	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 23:28	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2020 23:28	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/11/2020 23:28	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2020 23:28	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 23:28	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 23:28	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/11/2020 23:28	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 23:28	J
Tetrachloroethylene (PCE)	**1.9**		**ug/L**	**1**	1.0	0.36	8/11/2020 23:28	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 23:28	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2020 23:28	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/11/2020 23:28	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/11/2020 23:28	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 23:28	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/11/2020 23:28	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2020 23:28	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 23:28	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 23:28	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 23:28	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/11/2020 23:28	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933006** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-2 (S)** Date Collected: 08/10/20 12:34

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**114**		**%**	**1**	70-128		8/11/2020 23:28	
Toluene-d8 (S)	**101**		**%**	**1**	77-119		8/11/2020 23:28	
Bromofluorobenzene (S)	**110**		**%**	**1**	86-123		8/11/2020 23:28	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/11/2020 23:28	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/11/2020 23:28	J
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	77-125		8/11/2020 23:28	
Toluene-d8 (S)	**104**		**%**	**1**	80-121		8/11/2020 23:28	
Bromofluorobenzene (S)	**103**		**%**	**1**	80-129		8/11/2020 23:28	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**2.0**	**U**	**mg/L**	**1**	8.0	2.0	8/11/2020 17:19	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/11/2020 17:19	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 13:55	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**95**		**mg/L**	**1**	10	10	8/13/2020 15:20	J

Lab ID: **J2010933007** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-20 (S)** Date Collected: 08/10/20 13:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:49	J
Barium	**4.9**	**I**	**ug/L**	**1**	12	3.0	8/13/2020 17:49	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 17:49	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933007** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-20 (S)** Date Collected: 08/10/20 13:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 17:49	J
Chromium	**5.2**	**I**	**ug/L**	**1**	20	5.0	8/13/2020 17:49	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/13/2020 17:49	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:49	J
Iron	**200**	**U**	**ug/L**	**1**	800	200	8/13/2020 17:49	J
Lead	**3.9**	**I**	**ug/L**	**1**	12	3.0	8/13/2020 17:49	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:49	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:49	J
Sodium	**58**		**mg/L**	**1**	3.2	0.80	8/13/2020 17:49	J
Vanadium	**13**		**ug/L**	**1**	8.0	2.0	8/13/2020 17:49	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 17:49	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	8/13/2020 22:31	J
Selenium	**1.5**	**I**	**ug/L**	**1**	5.0	0.58	8/13/2020 22:31	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/13/2020 22:31	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.021**	**I**	**ug/L**	**1**	0.10	0.011	8/11/2020 15:58	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/11/2020 23:57	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2020 23:57	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 23:57	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/11/2020 23:57	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/11/2020 23:57	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 23:57	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/11/2020 23:57	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/11/2020 23:57	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 23:57	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 23:57	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/11/2020 23:57	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2020 23:57	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/11/2020 23:57	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/11/2020 23:57	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933007** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-20 (S)** Date Collected: 08/10/20 13:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/11/2020 23:57	J
Acetone	**4.6**	**I**	**ug/L**	**1**	5.0	2.1	8/11/2020 23:57	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/11/2020 23:57	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 23:57	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/11/2020 23:57	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/11/2020 23:57	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/11/2020 23:57	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2020 23:57	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/11/2020 23:57	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/11/2020 23:57	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 23:57	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2020 23:57	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 23:57	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 23:57	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2020 23:57	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/11/2020 23:57	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2020 23:57	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 23:57	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 23:57	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/11/2020 23:57	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 23:57	J
Tetrachloroethylene (PCE)	**1.6**		**ug/L**	**1**	1.0	0.36	8/11/2020 23:57	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 23:57	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2020 23:57	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/11/2020 23:57	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/11/2020 23:57	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 23:57	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/11/2020 23:57	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2020 23:57	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 23:57	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 23:57	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 23:57	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/11/2020 23:57	J
1,2-Dichloroethane-d4 (S)	**114**		**%**	**1**	70-128		8/11/2020 23:57	
Toluene-d8 (S)	**102**		**%**	**1**	77-119		8/11/2020 23:57	
Bromofluorobenzene (S)	**114**		**%**	**1**	86-123		8/11/2020 23:57	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/11/2020 23:57	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933007** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-20 (S)** Date Collected: 08/10/20 13:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/11/2020 23:57	J
1,2-Dichloroethane-d4 (S)	**101**		**%**	**1**	77-125		8/11/2020 23:57	
Toluene-d8 (S)	**105**		**%**	**1**	80-121		8/11/2020 23:57	
Bromofluorobenzene (S)	**106**		**%**	**1**	80-129		8/11/2020 23:57	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**61**		**mg/L**	**1**	8.0	2.0	8/11/2020 17:40	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/11/2020 17:40	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**2.0**		**mg/L**	**2**	0.080	0.035	8/18/2020 13:56	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**320**		**mg/L**	**1**	10	10	8/13/2020 15:20	J

Lab ID: **J2010933008** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-21 (S)** Date Collected: 08/10/20 13:38

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	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:52	J
Barium	**48**		**ug/L**	**1**	12	3.0	8/13/2020 17:52	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 17:52	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 17:52	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/13/2020 17:52	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/13/2020 17:52	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:52	J
Iron	**1700**		**ug/L**	**1**	800	200	8/13/2020 17:52	J
Lead	**5.7**	**I**	**ug/L**	**1**	12	3.0	8/13/2020 17:52	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:52	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:52	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933008** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-21 (S)** Date Collected: 08/10/20 13:38

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Sodium	**11**		**mg/L**	**1**	3.2	0.80	8/13/2020 17:52	J
Vanadium	**2.8**	**I**	**ug/L**	**1**	8.0	2.0	8/13/2020 17:52	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 17:52	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	8/14/2020 12:29	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/13/2020 22:50	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/13/2020 22:50	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/11/2020 16:01	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/12/2020 00:26	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/12/2020 00:26	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 00:26	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/12/2020 00:26	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/12/2020 00:26	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/12/2020 00:26	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/12/2020 00:26	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/12/2020 00:26	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/12/2020 00:26	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/12/2020 00:26	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/12/2020 00:26	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/12/2020 00:26	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/12/2020 00:26	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/12/2020 00:26	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/12/2020 00:26	J
Acetone	**2.4**	**I**	**ug/L**	**1**	5.0	2.1	8/12/2020 00:26	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/12/2020 00:26	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/12/2020 00:26	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/12/2020 00:26	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/12/2020 00:26	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/12/2020 00:26	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/12/2020 00:26	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933008** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-21 (S)** Date Collected: 08/10/20 13:38

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	8/12/2020 00:26	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/12/2020 00:26	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/12/2020 00:26	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/12/2020 00:26	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/12/2020 00:26	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/12/2020 00:26	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/12/2020 00:26	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/12/2020 00:26	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/12/2020 00:26	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 00:26	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/12/2020 00:26	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/12/2020 00:26	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/12/2020 00:26	J
Tetrachloroethylene (PCE)	**2.5**		**ug/L**	**1**	1.0	0.36	8/12/2020 00:26	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/12/2020 00:26	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/12/2020 00:26	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/12/2020 00:26	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/12/2020 00:26	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 00:26	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/12/2020 00:26	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/12/2020 00:26	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/12/2020 00:26	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 00:26	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/12/2020 00:26	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/12/2020 00:26	J
1,2-Dichloroethane-d4 (S)	**113**		**%**	**1**	70-128		8/12/2020 00:26	
Toluene-d8 (S)	**101**		**%**	**1**	77-119		8/12/2020 00:26	
Bromofluorobenzene (S)	**111**		**%**	**1**	86-123		8/12/2020 00:26	
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	8/12/2020 00:26	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/12/2020 00:26	J
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	77-125		8/12/2020 00:26	
Toluene-d8 (S)	**103**		**%**	**1**	80-121		8/12/2020 00:26	
Bromofluorobenzene (S)	**103**		**%**	**1**	80-129		8/12/2020 00:26	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933008** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-21 (S)** Date Collected: 08/10/20 13:38

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chloride	**23**		**mg/L**	**1**	8.0	2.0	8/11/2020 18:02	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/11/2020 18:02	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**1.9**		**mg/L**	**2**	0.080	0.035	8/18/2020 13:57	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**120**		**mg/L**	**1**	10	10	8/13/2020 15:20	J

Lab ID: **J2010933009** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-34 (S)** Date Collected: 08/10/20 14:41

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	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:56	J
Barium	**6.8**	**I**	**ug/L**	**1**	12	3.0	8/13/2020 17:56	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 17:56	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 17:56	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/13/2020 17:56	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/13/2020 17:56	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:56	J
Iron	**1100**		**ug/L**	**1**	800	200	8/13/2020 17:56	J
Lead	**3.0**	**U**	**ug/L**	**1**	12	3.0	8/13/2020 17:56	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:56	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:56	J
Sodium	**140**		**mg/L**	**1**	3.2	0.80	8/13/2020 17:56	J
Vanadium	**110**		**ug/L**	**1**	8.0	2.0	8/13/2020 17:56	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 17:56	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**1.3**		**ug/L**	**1**	0.70	0.11	8/14/2020 12:33	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933009** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-34 (S)** Date Collected: 08/10/20 14:41

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Selenium	**2.8**	**I**	**ug/L**	**1**	5.0	0.58	8/13/2020 22:57	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/13/2020 22:57	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/11/2020 16:04	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/12/2020 00:55	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/12/2020 00:55	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 00:55	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/12/2020 00:55	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/12/2020 00:55	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/12/2020 00:55	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/12/2020 00:55	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/12/2020 00:55	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/12/2020 00:55	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/12/2020 00:55	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/12/2020 00:55	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/12/2020 00:55	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/12/2020 00:55	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/12/2020 00:55	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/12/2020 00:55	J
Acetone	**2.4**	**I**	**ug/L**	**1**	5.0	2.1	8/12/2020 00:55	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/12/2020 00:55	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/12/2020 00:55	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/12/2020 00:55	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/12/2020 00:55	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/12/2020 00:55	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/12/2020 00:55	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/12/2020 00:55	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/12/2020 00:55	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/12/2020 00:55	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/12/2020 00:55	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/12/2020 00:55	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/12/2020 00:55	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/12/2020 00:55	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933009** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-34 (S)** Date Collected: 08/10/20 14:41

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	8/12/2020 00:55	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/12/2020 00:55	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 00:55	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/12/2020 00:55	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/12/2020 00:55	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/12/2020 00:55	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/12/2020 00:55	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/12/2020 00:55	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/12/2020 00:55	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/12/2020 00:55	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/12/2020 00:55	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 00:55	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/12/2020 00:55	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/12/2020 00:55	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/12/2020 00:55	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 00:55	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/12/2020 00:55	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/12/2020 00:55	J
1,2-Dichloroethane-d4 (S)	**114**		**%**	**1**	70-128		8/12/2020 00:55	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		8/12/2020 00:55	
Bromofluorobenzene (S)	**109**		**%**	**1**	86-123		8/12/2020 00:55	
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	8/12/2020 00:55	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/12/2020 00:55	J
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	77-125		8/12/2020 00:55	
Toluene-d8 (S)	**102**		**%**	**1**	80-121		8/12/2020 00:55	
Bromofluorobenzene (S)	**102**		**%**	**1**	80-129		8/12/2020 00:55	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**400**		**mg/L**	**5**	40	10	8/12/2020 09:02	J
Nitrate (as N)	**9.8**		**mg/L**	**5**	4.0	1.0	8/12/2020 09:02	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 13:58	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933009** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-34 (S)** Date Collected: 08/10/20 14:41

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Dissolved Solids	**1100**		**mg/L**	**1**	10	10	8/17/2020 13:55	J

Lab ID: **J2010933010** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **Trip Blank** Date Collected: 08/10/20 07:11

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/11/2020 19:37	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2020 19:37	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 19:37	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/11/2020 19:37	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/11/2020 19:37	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 19:37	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/11/2020 19:37	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/11/2020 19:37	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 19:37	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 19:37	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/11/2020 19:37	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/11/2020 19:37	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/11/2020 19:37	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/11/2020 19:37	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/11/2020 19:37	J
Acetone	**3.8**	**I**	**ug/L**	**1**	5.0	2.1	8/13/2020 12:16	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/11/2020 19:37	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 19:37	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/11/2020 19:37	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/11/2020 19:37	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/11/2020 19:37	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2020 19:37	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/12/2020 20:25	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/11/2020 19:37	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 19:37	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2020 19:37	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933010** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **Trip Blank** Date Collected: 08/10/20 07:11

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/11/2020 19:37	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 19:37	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/11/2020 19:37	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/11/2020 19:37	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2020 19:37	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 19:37	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 19:37	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/11/2020 19:37	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 19:37	J
Tetrachloroethylene (PCE)	**0.80**	**I**	**ug/L**	**1**	1.0	0.36	8/13/2020 12:16	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/11/2020 19:37	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/11/2020 19:37	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/11/2020 19:37	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/11/2020 19:37	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 19:37	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/11/2020 19:37	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/11/2020 19:37	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/11/2020 19:37	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/11/2020 19:37	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/11/2020 19:37	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/11/2020 19:37	J
1,2-Dichloroethane-d4 (S)	**112**		**%**	**1**	70-128		8/11/2020 19:37	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		8/11/2020 19:37	
Bromofluorobenzene (S)	**111**		**%**	**1**	86-123		8/11/2020 19:37	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/11/2020 19:37	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/11/2020 19:37	J
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	77-125		8/11/2020 19:37	
Toluene-d8 (S)	**103**		**%**	**1**	80-121		8/11/2020 19:37	
Bromofluorobenzene (S)	**103**		**%**	**1**	80-129		8/11/2020 19:37	

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933011** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-39 (S)** Date Collected: 08/10/20 15:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:59	J
Barium	**22**		**ug/L**	**1**	12	3.0	8/13/2020 17:59	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 17:59	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 17:59	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/13/2020 17:59	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/13/2020 17:59	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:59	J
Iron	**740**	**I**	**ug/L**	**1**	800	200	8/13/2020 17:59	J
Lead	**3.0**	**U**	**ug/L**	**1**	12	3.0	8/13/2020 17:59	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 17:59	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 17:59	J
Sodium	**44**		**mg/L**	**1**	3.2	0.80	8/13/2020 17:59	J
Vanadium	**3.5**	**I**	**ug/L**	**1**	8.0	2.0	8/13/2020 17:59	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 17:59	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	8/13/2020 23:03	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/13/2020 23:03	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/13/2020 23:03	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/11/2020 16:08	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/12/2020 01:24	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/12/2020 01:24	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 01:24	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/12/2020 01:24	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/12/2020 01:24	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/12/2020 01:24	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/12/2020 01:24	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933011** Date Received: 08/10/20 17:15 Matrix: Water

Sample ID: **MWB-39 (S)** Date Collected: 08/10/20 15:50

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	8/12/2020 01:24	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/12/2020 01:24	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/12/2020 01:24	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/12/2020 01:24	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/12/2020 01:24	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/12/2020 01:24	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/12/2020 01:24	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/12/2020 01:24	J
Acetone	**4.3**	**I**	**ug/L**	**1**	5.0	2.1	8/12/2020 01:24	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/12/2020 01:24	J
Benzene	**0.60**	**I**	**ug/L**	**1**	1.0	0.16	8/12/2020 01:24	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/12/2020 01:24	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/12/2020 01:24	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/12/2020 01:24	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/12/2020 01:24	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/12/2020 01:24	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/12/2020 01:24	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/12/2020 01:24	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/12/2020 01:24	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/12/2020 01:24	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/12/2020 01:24	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/12/2020 01:24	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/12/2020 01:24	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/12/2020 01:24	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 01:24	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/12/2020 01:24	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/12/2020 01:24	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/12/2020 01:24	J
Tetrachloroethylene (PCE)	**2.3**		**ug/L**	**1**	1.0	0.36	8/12/2020 01:24	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/12/2020 01:24	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/12/2020 01:24	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/12/2020 01:24	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/12/2020 01:24	J
Vinyl Chloride	**1.4**		**ug/L**	**1**	1.0	0.20	8/12/2020 01:24	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/12/2020 01:24	J
cis-1,2-Dichloroethylene	**0.41**	**I**	**ug/L**	**1**	1.0	0.24	8/12/2020 01:24	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/12/2020 01:24	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 01:24	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/12/2020 01:24	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/12/2020 01:24	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933011** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-39 (S)** Date Collected: 08/10/20 15:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**113**		**%**	**1**	70-128		8/12/2020 01:24	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		8/12/2020 01:24	
Bromofluorobenzene (S)	**109**		**%**	**1**	86-123		8/12/2020 01:24	
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	8/12/2020 01:24	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/12/2020 01:24	J
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	77-125		8/12/2020 01:24	
Toluene-d8 (S)	**101**		**%**	**1**	80-121		8/12/2020 01:24	
Bromofluorobenzene (S)	**102**		**%**	**1**	80-129		8/12/2020 01:24	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**96**		**mg/L**	**1**	8.0	2.0	8/11/2020 19:28	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/11/2020 19:28	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**3.1**		**mg/L**	**4**	0.16	0.070	8/18/2020 16:51	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**12**		**mg/L**	**1**	10	10	8/13/2020 15:20	J

Lab ID: **J2010933012** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-12 (I)** Date Collected: 08/10/20 07:11

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**360**	**I**	**ug/L**	**1**	800	200	8/13/2020 18:10	J
Sodium	**3.2**	**I**	**mg/L**	**1**	3.2	0.80	8/13/2020 18:10	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933012** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-12 (I)** Date Collected: 08/10/20 07:11

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4.4**	**I**	**mg/L**	**1**	8.0	2.0	8/11/2020 12:38	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/11/2020 12:38	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 14:33	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**52**		**mg/L**	**1**	10	10	8/13/2020 15:20	J

Lab ID: **J2010933013** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-13 (I)** Date Collected: 08/10/20 08:51

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**290**	**I**	**ug/L**	**1**	800	200	8/13/2020 18:14	J
Sodium	**3.3**		**mg/L**	**1**	3.2	0.80	8/13/2020 18:14	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4.3**	**I**	**mg/L**	**1**	8.0	2.0	8/11/2020 13:43	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/11/2020 13:43	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 14:37	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**42**	**J4**	**mg/L**	**1**	10	10	8/13/2020 15:20	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933014** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-27 (I)** Date Collected: 08/10/20 09:55

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**370**	**I**	**ug/L**	**1**	800	200	8/13/2020 18:17	J
Sodium	**3.3**		**mg/L**	**1**	3.2	0.80	8/13/2020 18:17	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4.5**	**I**	**mg/L**	**1**	8.0	2.0	8/11/2020 14:26	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/11/2020 14:26	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 14:38	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**59**		**mg/L**	**1**	10	10	8/13/2020 15:20	J

Lab ID: **J2010933015** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-29 (I)** Date Collected: 08/10/20 11:01

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	**370**	**I**	**ug/L**	**1**	800	200	8/13/2020 18:21	J
Sodium	**3.7**		**mg/L**	**1**	3.2	0.80	8/13/2020 18:21	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.1**	**I**	**mg/L**	**1**	8.0	2.0	8/11/2020 15:09	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/11/2020 15:09	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933015** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-29 (I)** Date Collected: 08/10/20 11:01

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)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 14:39	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**51**		**mg/L**	**1**	10	10	8/13/2020 15:20	J

Lab ID: **J2010933016** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-2 (I)** Date Collected: 08/10/20 12:04

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	**320**	**I**	**ug/L**	**1**	800	200	8/13/2020 18:24	J
Sodium	**4.3**		**mg/L**	**1**	3.2	0.80	8/13/2020 18:24	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**6.6**	**I**	**mg/L**	**1**	8.0	2.0	8/11/2020 16:57	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/11/2020 16:57	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 14:40	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**32**		**mg/L**	**1**	10	10	8/13/2020 15:20	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933017** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-34 (I)** Date Collected: 08/10/20 14:11

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**350**	**I**	**ug/L**	**1**	800	200	8/13/2020 18:28	J
Sodium	**3.2**		**mg/L**	**1**	3.2	0.80	8/13/2020 18:28	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4.4**	**I**	**mg/L**	**1**	8.0	2.0	8/11/2020 18:23	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/11/2020 18:23	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 14:41	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**53**		**mg/L**	**1**	10	10	8/13/2020 15:20	J

Lab ID: **J2010933018** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-39 (I)** Date Collected: 08/10/20 15:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**200**	**U**	**ug/L**	**1**	800	200	8/13/2020 18:32	J
Sodium	**3.0**	**I**	**mg/L**	**1**	3.2	0.80	8/13/2020 18:32	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4.3**	**I**	**mg/L**	**1**	8.0	2.0	8/11/2020 19:07	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/11/2020 19:07	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933018** Date Received: 08/10/20 17:15 Matrix: Water
Sample ID: **MWB-39 (I)** Date Collected: 08/10/20 15:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.05**	**I**	**mg/L**	**2**	0.080	0.035	8/18/2020 14:42	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**49**		**mg/L**	**1**	10	10	8/13/2020 15:20	J

Lab ID: **J2010933019** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **MWB-33 (S)** Date Collected: 08/11/20 06:58

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 15:15	J
Barium	**7.0**	**I**	**ug/L**	**1**	12	3.0	8/13/2020 15:15	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 15:15	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 15:15	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/13/2020 15:15	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/13/2020 15:15	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 15:15	J
Iron	**290**	**I**	**ug/L**	**1**	800	200	8/13/2020 15:15	J
Lead	**3.0**	**U**	**ug/L**	**1**	12	3.0	8/13/2020 15:15	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 15:15	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 15:15	J
Sodium	**12**		**mg/L**	**1**	3.2	0.80	8/13/2020 15:15	J
Vanadium	**31**		**ug/L**	**1**	8.0	2.0	8/13/2020 15:15	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 15:15	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.35**	**I**	**ug/L**	**1**	0.70	0.11	8/17/2020 10:57	J
Selenium	**1.6**	**I**	**ug/L**	**1**	5.0	0.58	8/14/2020 00:44	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/17/2020 10:57	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933019** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **MWB-33 (S)** Date Collected: 08/11/20 06:58

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/13/2020 15:14	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/12/2020 23:47	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/12/2020 23:47	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 23:47	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/12/2020 23:47	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/12/2020 23:47	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/12/2020 23:47	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/12/2020 23:47	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/12/2020 23:47	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/12/2020 23:47	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/12/2020 23:47	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/12/2020 23:47	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/12/2020 23:47	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/12/2020 23:47	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/12/2020 23:47	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/12/2020 23:47	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/12/2020 23:47	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/12/2020 23:47	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/12/2020 23:47	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/12/2020 23:47	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/12/2020 23:47	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/12/2020 23:47	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/12/2020 23:47	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/12/2020 23:47	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/12/2020 23:47	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/12/2020 23:47	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/12/2020 23:47	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/12/2020 23:47	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/12/2020 23:47	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/12/2020 23:47	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/12/2020 23:47	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/12/2020 23:47	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 23:47	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933019** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **MWB-33 (S)** Date Collected: 08/11/20 06:58

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/12/2020 23:47	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/12/2020 23:47	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/12/2020 23:47	J
Tetrachloroethylene (PCE)	**2.4**		**ug/L**	**1**	1.0	0.36	8/12/2020 23:47	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/12/2020 23:47	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/12/2020 23:47	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/12/2020 23:47	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/12/2020 23:47	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 23:47	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/12/2020 23:47	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/12/2020 23:47	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/12/2020 23:47	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 23:47	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/12/2020 23:47	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/12/2020 23:47	J
1,2-Dichloroethane-d4 (S)	**114**		**%**	**1**	70-128		8/12/2020 23:47	
Toluene-d8 (S)	**101**		**%**	**1**	77-119		8/12/2020 23:47	
Bromofluorobenzene (S)	**107**		**%**	**1**	86-123		8/12/2020 23:47	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/12/2020 23:47	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/12/2020 23:47	J
1,2-Dichloroethane-d4 (S)	**101**		**%**	**1**	77-125		8/12/2020 23:47	
Toluene-d8 (S)	**103**		**%**	**1**	80-121		8/12/2020 23:47	
Bromofluorobenzene (S)	**100**		**%**	**1**	80-129		8/12/2020 23:47	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**13**		**mg/L**	**1**	8.0	2.0	8/12/2020 16:55	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/12/2020 16:55	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.30**		**mg/L**	**2**	0.080	0.035	8/18/2020 14:44	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**210**		**mg/L**	**1**	10	10	8/13/2020 15:20	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933020** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **MWB-32 (S)** Date Collected: 08/11/20 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	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 15:40	J
Barium	**16**		**ug/L**	**1**	12	3.0	8/13/2020 15:40	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 15:40	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 15:40	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/13/2020 15:40	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/13/2020 15:40	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 15:40	J
Iron	**400**	**I**	**ug/L**	**1**	800	200	8/13/2020 15:40	J
Lead	**5.0**	**I**	**ug/L**	**1**	12	3.0	8/13/2020 15:40	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 15:40	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 15:40	J
Sodium	**5.7**		**mg/L**	**1**	3.2	0.80	8/13/2020 15:40	J
Vanadium	**9.6**		**ug/L**	**1**	8.0	2.0	8/13/2020 15:40	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 15:40	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	8/17/2020 11:03	J
Selenium	**0.86**	**I**	**ug/L**	**1**	5.0	0.58	8/14/2020 01:16	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/17/2020 11:03	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/13/2020 15:30	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/13/2020 00:16	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 00:16	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 00:16	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/13/2020 00:16	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/13/2020 00:16	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 00:16	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/13/2020 00:16	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933020** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **MWB-32 (S)** Date Collected: 08/11/20 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	8/13/2020 00:16	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 00:16	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 00:16	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/13/2020 00:16	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 00:16	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/13/2020 00:16	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/13/2020 00:16	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/13/2020 00:16	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/13/2020 00:16	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/13/2020 00:16	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 00:16	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/13/2020 00:16	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/13/2020 00:16	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/13/2020 00:16	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 00:16	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/13/2020 00:16	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/13/2020 00:16	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 00:16	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 00:16	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 00:16	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 00:16	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 00:16	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/13/2020 00:16	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 00:16	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 00:16	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 00:16	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/13/2020 00:16	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 00:16	J
Tetrachloroethylene (PCE)	**2.0**		**ug/L**	**1**	1.0	0.36	8/13/2020 00:16	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 00:16	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 00:16	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/13/2020 00:16	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/13/2020 00:16	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 00:16	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/13/2020 00:16	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 00:16	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 00:16	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 00:16	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 00:16	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/13/2020 00:16	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933020** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **MWB-32 (S)** Date Collected: 08/11/20 08:01

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**115**		**%**	**1**	70-128		8/13/2020 00:16	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		8/13/2020 00:16	
Bromofluorobenzene (S)	**112**		**%**	**1**	86-123		8/13/2020 00:16	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/13/2020 00:16	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/13/2020 00:16	J
1,2-Dichloroethane-d4 (S)	**101**		**%**	**1**	77-125		8/13/2020 00:16	
Toluene-d8 (S)	**101**		**%**	**1**	80-121		8/13/2020 00:16	
Bromofluorobenzene (S)	**103**		**%**	**1**	80-129		8/13/2020 00:16	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**8.0**		**mg/L**	**1**	8.0	2.0	8/12/2020 17:38	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/12/2020 17:38	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.53**		**mg/L**	**2**	0.080	0.035	8/18/2020 14:45	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**120**		**mg/L**	**1**	10	10	8/13/2020 15:20	J

Lab ID: **J2010933021** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **MWB-11 (S)** Date Collected: 08/11/20 09:08

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 15:43	J
Barium	**52**		**ug/L**	**1**	12	3.0	8/13/2020 15:43	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 15:43	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933021** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **MWB-11 (S)** Date Collected: 08/11/20 09:08

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 15:43	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/13/2020 15:43	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/13/2020 15:43	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 15:43	J
Iron	**1100**		**ug/L**	**1**	800	200	8/13/2020 15:43	J
Lead	**9.5**	**I**	**ug/L**	**1**	12	3.0	8/13/2020 15:43	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 15:43	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 15:43	J
Sodium	**19**		**mg/L**	**1**	3.2	0.80	8/13/2020 15:43	J
Vanadium	**4.3**	**I**	**ug/L**	**1**	8.0	2.0	8/13/2020 15:43	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 15:43	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	8/17/2020 11:09	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/14/2020 01:22	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/14/2020 01:22	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/13/2020 15:40	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/13/2020 00:45	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 00:45	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 00:45	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/13/2020 00:45	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/13/2020 00:45	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 00:45	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/13/2020 00:45	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/13/2020 00:45	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 00:45	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 00:45	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/13/2020 00:45	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 00:45	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/13/2020 00:45	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/13/2020 00:45	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933021** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **MWB-11 (S)** Date Collected: 08/11/20 09:08

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/13/2020 00:45	J
Acetone	**2.6**	**I**	**ug/L**	**1**	5.0	2.1	8/13/2020 00:45	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/13/2020 00:45	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 00:45	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/13/2020 00:45	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/13/2020 00:45	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/13/2020 00:45	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 00:45	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/13/2020 00:45	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/13/2020 00:45	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 00:45	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 00:45	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 00:45	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 00:45	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 00:45	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/13/2020 00:45	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 00:45	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 00:45	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 00:45	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/13/2020 00:45	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 00:45	J
Tetrachloroethylene (PCE)	**2.6**		**ug/L**	**1**	1.0	0.36	8/13/2020 00:45	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 00:45	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 00:45	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/13/2020 00:45	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/13/2020 00:45	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 00:45	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/13/2020 00:45	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 00:45	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 00:45	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 00:45	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 00:45	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/13/2020 00:45	J
1,2-Dichloroethane-d4 (S)	**109**		**%**	**1**	70-128		8/13/2020 00:45	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		8/13/2020 00:45	
Bromofluorobenzene (S)	**111**		**%**	**1**	86-123		8/13/2020 00:45	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/13/2020 00:45	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933021** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **MWB-11 (S)** Date Collected: 08/11/20 09:08

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/13/2020 00:45	J
1,2-Dichloroethane-d4 (S)	**97**		**%**	**1**	77-125		8/13/2020 00:45	
Toluene-d8 (S)	**101**		**%**	**1**	80-121		8/13/2020 00:45	
Bromofluorobenzene (S)	**104**		**%**	**1**	80-129		8/13/2020 00:45	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**38**		**mg/L**	**1**	8.0	2.0	8/12/2020 19:04	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/12/2020 19:04	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.13**		**mg/L**	**2**	0.080	0.035	8/18/2020 14:46	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**160**		**mg/L**	**1**	10	10	8/13/2020 15:20	J

Lab ID: **J2010933022** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **MWB-03 (S)** Date Collected: 08/11/20 09:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 15:47	J
Barium	**17**		**ug/L**	**1**	12	3.0	8/13/2020 15:47	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 15:47	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 15:47	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/13/2020 15:47	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/13/2020 15:47	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 15:47	J
Iron	**1200**		**ug/L**	**1**	800	200	8/13/2020 15:47	J
Lead	**3.5**	**I**	**ug/L**	**1**	12	3.0	8/13/2020 15:47	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 15:47	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 15:47	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933022** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **MWB-03 (S)** Date Collected: 08/11/20 09:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Sodium	**6.1**		**mg/L**	**1**	3.2	0.80	8/13/2020 15:47	J
Vanadium	**2.4**	**I**	**ug/L**	**1**	8.0	2.0	8/13/2020 15:47	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 15:47	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	8/14/2020 01:28	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/14/2020 01:28	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/14/2020 01:28	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	8/13/2020 15:43	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/13/2020 01:14	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 01:14	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 01:14	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/13/2020 01:14	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/13/2020 01:14	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 01:14	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/13/2020 01:14	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/13/2020 01:14	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 01:14	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 01:14	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/13/2020 01:14	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 01:14	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/13/2020 01:14	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/13/2020 01:14	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/13/2020 01:14	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/13/2020 01:14	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/13/2020 01:14	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 01:14	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/13/2020 01:14	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/13/2020 01:14	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/13/2020 01:14	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 01:14	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933022** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **MWB-03 (S)** Date Collected: 08/11/20 09:45

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	8/13/2020 01:14	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/13/2020 01:14	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 01:14	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 01:14	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 01:14	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 01:14	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 01:14	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/13/2020 01:14	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 01:14	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 01:14	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 01:14	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/13/2020 01:14	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 01:14	J
Tetrachloroethylene (PCE)	**3.0**		**ug/L**	**1**	1.0	0.36	8/13/2020 01:14	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 01:14	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 01:14	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/13/2020 01:14	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/13/2020 01:14	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 01:14	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/13/2020 01:14	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 01:14	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 01:14	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 01:14	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 01:14	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/13/2020 01:14	J
1,2-Dichloroethane-d4 (S)	**116**		**%**	**1**	70-128		8/13/2020 01:14	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		8/13/2020 01:14	
Bromofluorobenzene (S)	**109**		**%**	**1**	86-123		8/13/2020 01:14	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/13/2020 01:14	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/13/2020 01:14	J
1,2-Dichloroethane-d4 (S)	**102**		**%**	**1**	77-125		8/13/2020 01:14	
Toluene-d8 (S)	**101**		**%**	**1**	80-121		8/13/2020 01:14	
Bromofluorobenzene (S)	**101**		**%**	**1**	80-129		8/13/2020 01:14	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933022** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **MWB-03 (S)** Date Collected: 08/11/20 09:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chloride	**13**		**mg/L**	**1**	8.0	2.0	8/12/2020 19:47	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/12/2020 19:47	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.07**	**I,J4**	**mg/L**	**2**	0.080	0.035	8/18/2020 14:55	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**59**		**mg/L**	**1**	10	10	8/13/2020 15:20	J

Lab ID: **J2010933023** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **MWB-35 (S)** Date Collected: 08/11/20 11:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 15:50	J
Barium	**3.0**	**U**	**ug/L**	**1**	12	3.0	8/13/2020 15:50	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 15:50	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 15:50	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/13/2020 15:50	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/13/2020 15:50	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 15:50	J
Iron	**200**	**U**	**ug/L**	**1**	800	200	8/13/2020 15:50	J
Lead	**3.0**	**U**	**ug/L**	**1**	12	3.0	8/13/2020 15:50	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 15:50	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 15:50	J
Sodium	**2.4**	**I**	**mg/L**	**1**	3.2	0.80	8/13/2020 15:50	J
Vanadium	**2.7**	**I**	**ug/L**	**1**	8.0	2.0	8/13/2020 15:50	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 15:50	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.11**	**U**	**ug/L**	**1**	0.70	0.11	8/14/2020 01:35	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933023** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **MWB-35 (S)** Date Collected: 08/11/20 11:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/14/2020 01:35	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/14/2020 01:35	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	8/13/2020 15:47	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/13/2020 01:43	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 01:43	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 01:43	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/13/2020 01:43	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/13/2020 01:43	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 01:43	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/13/2020 01:43	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/13/2020 01:43	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 01:43	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 01:43	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/13/2020 01:43	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 01:43	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/13/2020 01:43	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/13/2020 01:43	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/13/2020 01:43	J
Acetone	**2.3**	**I**	**ug/L**	**1**	5.0	2.1	8/13/2020 01:43	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/13/2020 01:43	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 01:43	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/13/2020 01:43	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/13/2020 01:43	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/13/2020 01:43	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 01:43	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/13/2020 01:43	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/13/2020 01:43	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 01:43	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 01:43	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 01:43	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 01:43	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 01:43	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933023** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **MWB-35 (S)** Date Collected: 08/11/20 11:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/13/2020 01:43	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 01:43	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 01:43	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 01:43	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/13/2020 01:43	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 01:43	J
Tetrachloroethylene (PCE)	**2.8**		**ug/L**	**1**	1.0	0.36	8/13/2020 01:43	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 01:43	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 01:43	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/13/2020 01:43	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/13/2020 01:43	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 01:43	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/13/2020 01:43	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 01:43	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 01:43	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 01:43	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 01:43	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/13/2020 01:43	J
1,2-Dichloroethane-d4 (S)	**112**		**%**	**1**	70-128		8/13/2020 01:43	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		8/13/2020 01:43	
Bromofluorobenzene (S)	**111**		**%**	**1**	86-123		8/13/2020 01:43	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/13/2020 01:43	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/13/2020 01:43	J
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	77-125		8/13/2020 01:43	
Toluene-d8 (S)	**102**		**%**	**1**	80-121		8/13/2020 01:43	
Bromofluorobenzene (S)	**103**		**%**	**1**	80-129		8/13/2020 01:43	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**2.1**	**I**	**mg/L**	**1**	8.0	2.0	8/12/2020 20:52	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/12/2020 20:52	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 14:59	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933023** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **MWB-35 (S)** Date Collected: 08/11/20 11:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Dissolved Solids	**73**		**mg/L**	**1**	10	10	8/13/2020 15:20	J

Lab ID: **J2010933024** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **SGMW-1 (S)R** Date Collected: 08/11/20 11:57

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							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 15:54	J
Barium	**290**		**ug/L**	**1**	12	3.0	8/13/2020 15:54	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 15:54	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 15:54	J
Chromium	**29**		**ug/L**	**1**	20	5.0	8/13/2020 15:54	J
Cobalt	**1.5**	**I**	**ug/L**	**1**	4.0	1.0	8/13/2020 15:54	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 15:54	J
Iron	**1300**		**ug/L**	**1**	800	200	8/13/2020 15:54	J
Lead	**19**		**ug/L**	**1**	12	3.0	8/13/2020 15:54	J
Nickel	**110**		**ug/L**	**1**	40	10	8/13/2020 15:54	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 15:54	J
Sodium	**53**		**mg/L**	**1**	3.2	0.80	8/13/2020 15:54	J
Vanadium	**7.3**	**I**	**ug/L**	**1**	8.0	2.0	8/13/2020 15:54	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 15:54	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	8/14/2020 01:41	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/14/2020 01:41	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/14/2020 01:41	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/13/2020 15:50	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933024** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **SGMW-1 (S)R** Date Collected: 08/11/20 11:57

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/13/2020 02:12	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 02:12	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 02:12	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/13/2020 02:12	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/13/2020 02:12	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 02:12	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/13/2020 02:12	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/13/2020 02:12	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 02:12	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 02:12	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/13/2020 02:12	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 02:12	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/13/2020 02:12	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/13/2020 02:12	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/13/2020 02:12	J
Acetone	**2.6**	**I**	**ug/L**	**1**	5.0	2.1	8/13/2020 02:12	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/13/2020 02:12	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 02:12	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/13/2020 02:12	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/13/2020 02:12	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/13/2020 02:12	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 02:12	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/13/2020 02:12	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/13/2020 02:12	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 02:12	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 02:12	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 02:12	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 02:12	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 02:12	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/13/2020 02:12	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 02:12	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 02:12	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 02:12	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/13/2020 02:12	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 02:12	J
Tetrachloroethylene (PCE)	**2.0**		**ug/L**	**1**	1.0	0.36	8/13/2020 02:12	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933024** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **SGMW-1 (S)R** Date Collected: 08/11/20 11:57

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 02:12	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 02:12	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/13/2020 02:12	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/13/2020 02:12	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 02:12	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/13/2020 02:12	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 02:12	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 02:12	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 02:12	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 02:12	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/13/2020 02:12	J
1,2-Dichloroethane-d4 (S)	**113**		**%**	**1**	70-128		8/13/2020 02:12	
Toluene-d8 (S)	**98**		**%**	**1**	77-119		8/13/2020 02:12	
Bromofluorobenzene (S)	**105**		**%**	**1**	86-123		8/13/2020 02:12	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/13/2020 02:12	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/13/2020 02:12	J
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	77-125		8/13/2020 02:12	
Toluene-d8 (S)	**100**		**%**	**1**	80-121		8/13/2020 02:12	
Bromofluorobenzene (S)	**98**		**%**	**1**	80-129		8/13/2020 02:12	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**120**		**mg/L**	**1**	8.0	2.0	8/12/2020 21:14	J
Nitrate (as N)	**0.35**	**I**	**mg/L**	**1**	0.80	0.20	8/12/2020 21:14	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 15:00	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**450**		**mg/L**	**1**	10	10	8/13/2020 15:20	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933025** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **SGMW-2 (S)** Date Collected: 08/11/20 12:28

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 15:58	J
Barium	**64**		**ug/L**	**1**	12	3.0	8/13/2020 15:58	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 15:58	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 15:58	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/13/2020 15:58	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/13/2020 15:58	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 15:58	J
Iron	**550**	**I**	**ug/L**	**1**	800	200	8/13/2020 15:58	J
Lead	**8.8**	**I**	**ug/L**	**1**	12	3.0	8/13/2020 15:58	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 15:58	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 15:58	J
Sodium	**3.5**		**mg/L**	**1**	3.2	0.80	8/13/2020 15:58	J
Vanadium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 15:58	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 15:58	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	8/17/2020 11:14	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/14/2020 02:00	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/14/2020 02:00	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	8/13/2020 15:53	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/13/2020 02:41	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 02:41	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 02:41	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/13/2020 02:41	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/13/2020 02:41	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 02:41	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/13/2020 02:41	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933025** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **SGMW-2 (S)** Date Collected: 08/11/20 12:28

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	8/13/2020 02:41	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 02:41	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 02:41	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/13/2020 02:41	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 02:41	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/13/2020 02:41	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/13/2020 02:41	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/13/2020 02:41	J
Acetone	**2.5**	**I**	**ug/L**	**1**	5.0	2.1	8/13/2020 02:41	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/13/2020 02:41	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 02:41	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/13/2020 02:41	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/13/2020 02:41	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/13/2020 02:41	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 02:41	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/13/2020 02:41	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/13/2020 02:41	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 02:41	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 02:41	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 02:41	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 02:41	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 02:41	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/13/2020 02:41	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 02:41	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 02:41	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 02:41	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/13/2020 02:41	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 02:41	J
Tetrachloroethylene (PCE)	**2.3**		**ug/L**	**1**	1.0	0.36	8/13/2020 02:41	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 02:41	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 02:41	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/13/2020 02:41	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/13/2020 02:41	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 02:41	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/13/2020 02:41	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 02:41	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 02:41	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 02:41	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 02:41	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/13/2020 02:41	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933025** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **SGMW-2 (S)** Date Collected: 08/11/20 12:28

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**114**		**%**	**1**	70-128		8/13/2020 02:41	
Toluene-d8 (S)	**97**		**%**	**1**	77-119		8/13/2020 02:41	
Bromofluorobenzene (S)	**108**		**%**	**1**	86-123		8/13/2020 02:41	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/13/2020 02:41	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/13/2020 02:41	J
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	77-125		8/13/2020 02:41	
Toluene-d8 (S)	**99**		**%**	**1**	80-121		8/13/2020 02:41	
Bromofluorobenzene (S)	**101**		**%**	**1**	80-129		8/13/2020 02:41	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**3.9**	**I**	**mg/L**	**1**	8.0	2.0	8/12/2020 21:35	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/12/2020 21:35	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 15:01	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**25**		**mg/L**	**1**	10	10	8/17/2020 13:55	J

Lab ID: **J2010933026** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **MWB-40 (S)** Date Collected: 08/11/20 13:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 16:08	J
Barium	**130**		**ug/L**	**1**	12	3.0	8/13/2020 16:08	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 16:08	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933026** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **MWB-40 (S)** Date Collected: 08/11/20 13:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 16:08	J
Chromium	**5.2**	**I**	**ug/L**	**1**	20	5.0	8/13/2020 16:08	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/13/2020 16:08	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 16:08	J
Iron	**1000**		**ug/L**	**1**	800	200	8/13/2020 16:08	J
Lead	**3.2**	**I**	**ug/L**	**1**	12	3.0	8/13/2020 16:08	J
Nickel	**10**	**I**	**ug/L**	**1**	40	10	8/13/2020 16:08	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 16:08	J
Sodium	**130**		**mg/L**	**1**	3.2	0.80	8/13/2020 16:08	J
Vanadium	**4.5**	**I**	**ug/L**	**1**	8.0	2.0	8/13/2020 16:08	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 16:08	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	8/17/2020 11:18	J
Selenium	**5.8**	**U**	**ug/L**	**10**	50	5.8	8/18/2020 16:59	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/14/2020 02:06	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	8/13/2020 15:56	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/13/2020 03:10	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 03:10	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 03:10	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/13/2020 03:10	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/13/2020 03:10	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 03:10	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/13/2020 03:10	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/13/2020 03:10	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 03:10	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 03:10	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/13/2020 03:10	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 03:10	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/13/2020 03:10	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/13/2020 03:10	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933026** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **MWB-40 (S)** Date Collected: 08/11/20 13:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/13/2020 03:10	J
Acetone	**5.6**		**ug/L**	**1**	5.0	2.1	8/13/2020 03:10	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/13/2020 03:10	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 03:10	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/13/2020 03:10	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/13/2020 03:10	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/13/2020 03:10	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 03:10	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/13/2020 03:10	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/13/2020 03:10	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 03:10	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 03:10	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 03:10	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 03:10	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 03:10	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/13/2020 03:10	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 03:10	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 03:10	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 03:10	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/13/2020 03:10	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 03:10	J
Tetrachloroethylene (PCE)	**2.0**		**ug/L**	**1**	1.0	0.36	8/13/2020 03:10	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 03:10	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 03:10	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/13/2020 03:10	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/13/2020 03:10	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 03:10	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/13/2020 03:10	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 03:10	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 03:10	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 03:10	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 03:10	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/13/2020 03:10	J
1,2-Dichloroethane-d4 (S)	**112**		**%**	**1**	70-128		8/13/2020 03:10	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		8/13/2020 03:10	
Bromofluorobenzene (S)	**107**		**%**	**1**	86-123		8/13/2020 03:10	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/13/2020 03:10	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933026** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **MWB-40 (S)** Date Collected: 08/11/20 13:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/13/2020 03:10	J
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	77-125		8/13/2020 03:10	
Toluene-d8 (S)	**102**		**%**	**1**	80-121		8/13/2020 03:10	
Bromofluorobenzene (S)	**100**		**%**	**1**	80-129		8/13/2020 03:10	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**270**		**mg/L**	**2**	16	4.0	8/12/2020 21:57	J
Nitrate (as N)	**0.40**	**U**	**mg/L**	**2**	1.6	0.40	8/12/2020 21:57	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**8.2**		**mg/L**	**10**	0.40	0.17	8/18/2020 16:52	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**580**		**mg/L**	**1**	10	10	8/17/2020 13:55	J

Lab ID: **J2010933027** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **Equipment Blank** Date Collected: 08/11/20 13:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 16:12	J
Barium	**3.0**	**U**	**ug/L**	**1**	12	3.0	8/13/2020 16:12	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 16:12	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/13/2020 16:12	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/13/2020 16:12	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/13/2020 16:12	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 16:12	J
Iron	**200**	**U**	**ug/L**	**1**	800	200	8/13/2020 16:12	J
Lead	**3.0**	**U**	**ug/L**	**1**	12	3.0	8/13/2020 16:12	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/13/2020 16:12	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/13/2020 16:12	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933027** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **Equipment Blank** Date Collected: 08/11/20 13:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Sodium	**0.80**	**U**	**mg/L**	**1**	3.2	0.80	8/13/2020 16:12	J
Vanadium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/13/2020 16:12	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/13/2020 16:12	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	8/14/2020 02:13	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/14/2020 02:13	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/14/2020 02:13	J
Analysis Desc: SW846 7470A Analysis,Water	Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A							
Mercury	**0.011**	**U**	**ug/L**	**1**	0.10	0.011	8/13/2020 16:00	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/13/2020 03:39	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 03:39	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 03:39	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/13/2020 03:39	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/13/2020 03:39	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 03:39	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/13/2020 03:39	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/13/2020 03:39	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 03:39	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 03:39	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/13/2020 03:39	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 03:39	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/13/2020 03:39	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/13/2020 03:39	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/13/2020 03:39	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/13/2020 03:39	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/13/2020 03:39	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 03:39	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/13/2020 03:39	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/13/2020 03:39	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/13/2020 03:39	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 03:39	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933027** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **Equipment Blank** Date Collected: 08/11/20 13:21

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	8/13/2020 03:39	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/13/2020 03:39	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 03:39	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 03:39	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 03:39	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 03:39	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 03:39	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/13/2020 03:39	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 03:39	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 03:39	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 03:39	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/13/2020 03:39	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 03:39	J
Tetrachloroethylene (PCE)	**1.7**		**ug/L**	**1**	1.0	0.36	8/13/2020 13:14	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 03:39	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 03:39	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/13/2020 03:39	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/13/2020 03:39	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 03:39	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/13/2020 03:39	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 03:39	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 03:39	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 03:39	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 03:39	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/13/2020 03:39	J
1,2-Dichloroethane-d4 (S)	**114**		**%**	**1**	70-128		8/13/2020 03:39	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		8/13/2020 03:39	
Bromofluorobenzene (S)	**112**		**%**	**1**	86-123		8/13/2020 03:39	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/13/2020 03:39	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/13/2020 03:39	J
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	77-125		8/13/2020 03:39	
Toluene-d8 (S)	**102**		**%**	**1**	80-121		8/13/2020 03:39	
Bromofluorobenzene (S)	**104**		**%**	**1**	80-129		8/13/2020 03:39	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933027** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **Equipment Blank** Date Collected: 08/11/20 13:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chloride	**2.0**	**U**	**mg/L**	**1**	8.0	2.0	8/12/2020 22:18	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/12/2020 22:18	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.017**	**U**	**mg/L**	**1**	0.040	0.017	8/18/2020 16:53	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**10**	**U**	**mg/L**	**1**	10	10	8/17/2020 13:55	J

Lab ID: **J2010933028** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **Trip Blank** Date Collected: 08/11/20 06:58

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/12/2020 23:18	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/12/2020 23:18	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 23:18	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/12/2020 23:18	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/12/2020 23:18	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/12/2020 23:18	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/12/2020 23:18	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/12/2020 23:18	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/12/2020 23:18	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/12/2020 23:18	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/12/2020 23:18	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/12/2020 23:18	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/12/2020 23:18	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/12/2020 23:18	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/12/2020 23:18	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/12/2020 23:18	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/12/2020 23:18	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/12/2020 23:18	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933028** Date Received: 08/11/20 16:25 Matrix: Water

Sample ID: **Trip Blank** Date Collected: 08/11/20 06:58

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/12/2020 23:18	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/12/2020 23:18	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/12/2020 23:18	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/12/2020 23:18	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/13/2020 12:45	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/12/2020 23:18	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/12/2020 23:18	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/12/2020 23:18	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/12/2020 23:18	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/12/2020 23:18	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/12/2020 23:18	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/12/2020 23:18	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/12/2020 23:18	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 23:18	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/12/2020 23:18	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/12/2020 23:18	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/12/2020 23:18	J
Tetrachloroethylene (PCE)	**0.82**	**I**	**ug/L**	**1**	1.0	0.36	8/16/2020 01:43	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/12/2020 23:18	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/12/2020 23:18	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/12/2020 23:18	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/12/2020 23:18	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 23:18	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/12/2020 23:18	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/12/2020 23:18	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/12/2020 23:18	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/12/2020 23:18	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/12/2020 23:18	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/12/2020 23:18	J
1,2-Dichloroethane-d4 (S)	**114**		**%**	**1**	70-128		8/12/2020 23:18	
Toluene-d8 (S)	**101**		**%**	**1**	77-119		8/12/2020 23:18	
Bromofluorobenzene (S)	**112**		**%**	**1**	86-123		8/12/2020 23:18	
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	8/12/2020 23:18	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/12/2020 23:18	J
1,2-Dichloroethane-d4 (S)	**101**		**%**	**1**	77-125		8/12/2020 23:18	
Toluene-d8 (S)	**103**		**%**	**1**	80-121		8/12/2020 23:18	
Bromofluorobenzene (S)	**104**		**%**	**1**	80-129		8/12/2020 23:18	

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933029** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **MWB-32 (I)** Date Collected: 08/11/20 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	**200**	**U**	**ug/L**	**1**	800	200	8/13/2020 16:15	J
Sodium	**3.0**	**I**	**mg/L**	**1**	3.2	0.80	8/13/2020 16:15	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4.2**	**I**	**mg/L**	**1**	8.0	2.0	8/12/2020 17:16	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/12/2020 17:16	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 15:05	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**42**		**mg/L**	**1**	10	10	8/14/2020 09:55	J

Lab ID: **J2010933030** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **MWB-11 (I)R** Date Collected: 08/11/20 08:38

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**290**	**I**	**ug/L**	**1**	800	200	8/13/2020 16:19	J
Sodium	**3.0**	**I**	**mg/L**	**1**	3.2	0.80	8/13/2020 16:19	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4.5**	**I**	**mg/L**	**1**	8.0	2.0	8/12/2020 18:43	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/12/2020 18:43	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933030** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **MWB-11 (I)R** Date Collected: 08/11/20 08:38

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)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 15:06	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**38**		**mg/L**	**1**	10	10	8/14/2020 09:55	J

Lab ID: **J2010933031** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **MWB-03 (I)** Date Collected: 08/11/20 10:17

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**740**	**I**	**ug/L**	**1**	800	200	8/13/2020 16:23	J
Sodium	**3.3**		**mg/L**	**1**	3.2	0.80	8/13/2020 16:23	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**5.8**	**I**	**mg/L**	**1**	8.0	2.0	8/12/2020 20:09	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/12/2020 20:09	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 15:07	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**46**		**mg/L**	**1**	10	10	8/14/2020 09:55	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933032** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **MWB-35 (I)** Date Collected: 08/11/20 10:51

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**350**	**I**	**ug/L**	**1**	800	200	8/13/2020 16:26	J
Sodium	**2.3**	**I**	**mg/L**	**1**	3.2	0.80	8/13/2020 16:26	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**2.1**	**I**	**mg/L**	**1**	8.0	2.0	8/12/2020 20:31	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/12/2020 20:31	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.05**	**I**	**mg/L**	**2**	0.080	0.035	8/18/2020 15:08	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**46**		**mg/L**	**1**	10	10	8/14/2020 09:55	J

Lab ID: **J2010933033** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **Equipment Blank** Date Collected: 08/11/20 13:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Iron	**200**	**U**	**ug/L**	**1**	800	200	8/13/2020 16:30	J
Sodium	**0.80**	**U**	**mg/L**	**1**	3.2	0.80	8/13/2020 16:30	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**2.0**	**U**	**mg/L**	**1**	8.0	2.0	8/12/2020 23:23	J
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/12/2020 23:23	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933033** Date Received: 08/11/20 16:25 Matrix: Water
Sample ID: **Equipment Blank** Date Collected: 08/11/20 13:21

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)	**0.017**	**U**	**mg/L**	**1**	0.040	0.017	8/18/2020 15:21	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**10**	**U**	**mg/L**	**1**	10	10	8/17/2020 13:55	J

Lab ID: **J2010933034** Date Received: 08/12/20 10:45 Matrix: Water
Sample ID: **SW-1** Date Collected: 08/12/20 09:21

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	**26.9**		**°C**	**1**			8/26/2020 10:23	J^
pH	**7.4**		**SU**	**1**			8/26/2020 10:23	J^
METALS								
Analysis Desc: EPA 245.1 Analysis,Water	Preparation Method: EPA 245.1 Analytical Method: EPA 245.1							
Mercury	**0.000011**	**U**	**mg/L**	**1**	0.00010	0.000011	8/18/2020 14:29	J
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/21/2020 12:39	J
Barium	**31**		**ug/L**	**1**	12	3.0	8/21/2020 12:39	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/21/2020 12:39	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/21/2020 12:39	J
Calcium	**38**		**mg/L**	**1**	0.80	0.20	8/21/2020 12:39	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/21/2020 12:39	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/21/2020 12:39	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/21/2020 12:39	J
Iron	**390**	**I**	**ug/L**	**1**	800	200	8/21/2020 12:39	J
Lead	**6.1**	**I**	**ug/L**	**1**	12	3.0	8/21/2020 12:39	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933034** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-1** Date Collected: 08/12/20 09:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Magnesium	**3.8**		**mg/L**	**1**	0.40	0.10	8/21/2020 12:39	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/21/2020 12:39	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/21/2020 12:39	J
Total Hardness (as CaCO3)	**110**		**mg/L**	**1**	0.16	0.10	8/21/2020 12:39	J
Vanadium	**5.0**	**I**	**ug/L**	**1**	8.0	2.0	8/21/2020 12:39	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/21/2020 12:39	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**1.6**		**ug/L**	**1**	0.70	0.11	8/21/2020 18:07	J
Selenium	**0.60**	**I**	**ug/L**	**1**	5.0	0.58	8/20/2020 03:15	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/20/2020 03:15	J
Microbiology								
Analysis Desc: Fecal Coliform,SM9223D,Water	Analytical Method: COLILERT-18 (Fecal Coliforms)							
Coliform Fecal	**6870**		**MPN/100 mL**	**10**	10	10	8/12/2020 14:25	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/13/2020 14:41	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 14:41	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 14:41	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/13/2020 14:41	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/13/2020 14:41	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 14:41	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/13/2020 14:41	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/13/2020 14:41	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 14:41	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 14:41	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/13/2020 14:41	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 14:41	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/13/2020 14:41	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/13/2020 14:41	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/13/2020 14:41	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/13/2020 14:41	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/13/2020 14:41	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933034** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-1** Date Collected: 08/12/20 09:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 14:41	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/13/2020 14:41	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/13/2020 14:41	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/13/2020 14:41	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 14:41	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/13/2020 14:41	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/13/2020 14:41	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 14:41	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 14:41	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 14:41	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 14:41	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 14:41	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/13/2020 14:41	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 14:41	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 14:41	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 14:41	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/13/2020 14:41	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 14:41	J
Tetrachloroethylene (PCE)	**3.5**		**ug/L**	**1**	1.0	0.36	8/13/2020 14:41	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 14:41	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 14:41	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/13/2020 14:41	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/13/2020 14:41	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 14:41	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/13/2020 14:41	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 14:41	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 14:41	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 14:41	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 14:41	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/13/2020 14:41	J
1,2-Dichloroethane-d4 (S)	**112**		**%**	**1**	70-128		8/13/2020 14:41	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		8/13/2020 14:41	
Bromofluorobenzene (S)	**111**		**%**	**1**	86-123		8/13/2020 14:41	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/13/2020 14:41	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/13/2020 14:41	J
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	77-125		8/13/2020 14:41	
Toluene-d8 (S)	**102**		**%**	**1**	80-121		8/13/2020 14:41	

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933034** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-1** Date Collected: 08/12/20 09:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	**104**		**%**	**1**	80-129		8/13/2020 14:41	
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**2.6**		**mg/L**	**1**	0.20	0.12	8/26/2020 12:39	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.016**	**I**	**mg/L**	**1**	0.050	0.00068	8/26/2020 10:24	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/13/2020 05:51	J
Nitrate + Nitrite	**0.40**	**U**	**mg/L**	**1**	1.6	0.40	8/13/2020 05:51	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.84**		**mg/L**	**2**	0.080	0.035	8/18/2020 15:17	G
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**2.6**		**mg/L**	**1**	1.0	0.40	8/19/2020 14:44	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.50**	**U**	**mg/L**	**1**	1.0	0.50	8/19/2020 14:44	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**89**		**mg/L**	**1**	20	10	8/14/2020 15:42	G
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Corrected Chlorophyll A	**10**	**1**	**mg/m3**	**1**	3.0	2.5	8/25/2020 11:45	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**280**		**mg/L**	**1**	10	10	8/17/2020 13:55	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**47**		**mg/L**	**1**	2.0	1.0	8/14/2020 14:35	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933034** Date Received: 08/12/20 10:45 Matrix: Water
Sample ID: **SW-1** Date Collected: 08/12/20 09:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**2.9**		**mg/L**	**1**	2.0	2.0	8/13/2020 13:34	J
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**23**		**mg/L**	**1**	2.0	1.0	8/18/2020 09:36	G

Lab ID: **J2010933035** Date Received: 08/12/20 10:45 Matrix: Water
Sample ID: **SW-3** Date Collected: 08/12/20 08:51

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	**29.3**		**°C**	**1**			8/26/2020 10:24	J^
pH	**7.64**		**SU**	**1**			8/26/2020 10:24	J^
METALS								
Analysis Desc: EPA 245.1 Analysis,Water	Preparation Method: EPA 245.1 Analytical Method: EPA 245.1							
Mercury	**0.000011**	**U**	**mg/L**	**1**	0.00010	0.000011	8/18/2020 14:52	J
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/21/2020 12:42	J
Barium	**28**		**ug/L**	**1**	12	3.0	8/21/2020 12:42	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/21/2020 12:42	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/21/2020 12:42	J
Calcium	**50**		**mg/L**	**1**	0.80	0.20	8/21/2020 12:42	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/21/2020 12:42	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/21/2020 12:42	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/21/2020 12:42	J
Iron	**270**	**I**	**ug/L**	**1**	800	200	8/21/2020 12:42	J
Lead	**6.7**	**I**	**ug/L**	**1**	12	3.0	8/21/2020 12:42	J
Magnesium	**4.5**		**mg/L**	**1**	0.40	0.10	8/21/2020 12:42	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933035** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-3** Date Collected: 08/12/20 08:51

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/21/2020 12:42	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/21/2020 12:42	J
Total Hardness (as CaCO3)	**140**		**mg/L**	**1**	0.16	0.10	8/21/2020 12:42	J
Vanadium	**6.5**	**I**	**ug/L**	**1**	8.0	2.0	8/21/2020 12:42	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/21/2020 12:42	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**2.3**		**ug/L**	**1**	0.70	0.11	8/21/2020 18:14	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/20/2020 03:21	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/20/2020 03:21	J
Microbiology								
Analysis Desc: Fecal Coliform,SM9223D,Water	Analytical Method: COLILERT-18 (Fecal Coliforms)							
Coliform Fecal	**15500**		**MPN/100 mL**	**10**	10	10	8/12/2020 14:25	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/13/2020 15:10	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 15:10	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 15:10	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/13/2020 15:10	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/13/2020 15:10	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 15:10	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/13/2020 15:10	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/13/2020 15:10	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 15:10	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 15:10	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/13/2020 15:10	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 15:10	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/13/2020 15:10	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/13/2020 15:10	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/13/2020 15:10	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/13/2020 15:10	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/13/2020 15:10	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 15:10	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933035** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-3** Date Collected: 08/12/20 08:51

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/13/2020 15:10	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/13/2020 15:10	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/13/2020 15:10	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 15:10	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/13/2020 15:10	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/13/2020 15:10	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 15:10	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 15:10	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 15:10	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 15:10	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 15:10	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/13/2020 15:10	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 15:10	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 15:10	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 15:10	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/13/2020 15:10	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 15:10	J
Tetrachloroethylene (PCE)	**0.65**	**I**	**ug/L**	**1**	1.0	0.36	8/13/2020 15:10	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 15:10	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 15:10	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/13/2020 15:10	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/13/2020 15:10	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 15:10	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/13/2020 15:10	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 15:10	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 15:10	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 15:10	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 15:10	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/13/2020 15:10	J
1,2-Dichloroethane-d4 (S)	**114**		**%**	**1**	70-128		8/13/2020 15:10	
Toluene-d8 (S)	**104**		**%**	**1**	77-119		8/13/2020 15:10	
Bromofluorobenzene (S)	**109**		**%**	**1**	86-123		8/13/2020 15:10	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/13/2020 15:10	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/13/2020 15:10	J
1,2-Dichloroethane-d4 (S)	**101**		**%**	**1**	77-125		8/13/2020 15:10	
Toluene-d8 (S)	**107**		**%**	**1**	80-121		8/13/2020 15:10	
Bromofluorobenzene (S)	**102**		**%**	**1**	80-129		8/13/2020 15:10	

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933035** Date Received: 08/12/20 10:45 Matrix: Water
Sample ID: **SW-3** Date Collected: 08/12/20 08:51

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
WET CHEMISTRY								
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**4.2**		**mg/L**	**1**	0.20	0.12	8/26/2020 12:39	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.075**		**mg/L**	**1**	0.050	0.0014	8/26/2020 10:24	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/13/2020 06:12	J
Nitrate + Nitrite	**0.40**	**U**	**mg/L**	**1**	1.6	0.40	8/13/2020 06:12	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**1.9**		**mg/L**	**2**	0.080	0.035	8/18/2020 15:22	G
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**4.2**		**mg/L**	**1**	1.0	0.40	8/19/2020 14:44	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.50**	**U**	**mg/L**	**1**	1.0	0.50	8/19/2020 14:44	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**83**		**mg/L**	**1**	20	10	8/14/2020 15:42	G
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Corrected Chlorophyll A	**19**		**mg/m3**	**1**	3.0	2.5	8/25/2020 11:45	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**290**		**mg/L**	**1**	10	10	8/17/2020 13:55	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**8.7**		**mg/L**	**1**	2.0	1.0	8/14/2020 14:35	J
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**4.0**		**mg/L**	**1**	2.0	2.0	8/13/2020 13:39	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933035** Date Received: 08/12/20 10:45 Matrix: Water
Sample ID: **SW-3** Date Collected: 08/12/20 08:51

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**22**		**mg/L**	**1**	2.0	1.0	8/18/2020 09:36	G

Lab ID: **J2010933036** Date Received: 08/12/20 10:45 Matrix: Water
Sample ID: **SW-B** Date Collected: 08/12/20 08:21

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	**26.7**		**°C**	**1**			8/26/2020 10:25	J^
pH	**7.59**		**SU**	**1**			8/26/2020 10:25	J^
METALS								
Analysis Desc: EPA 245.1 Analysis,Water	Preparation Method: EPA 245.1 Analytical Method: EPA 245.1							
Mercury	**0.000011**	**U**	**mg/L**	**1**	0.00010	0.000011	8/18/2020 14:55	J
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/21/2020 12:46	J
Barium	**10**	**I**	**ug/L**	**1**	12	3.0	8/21/2020 12:46	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/21/2020 12:46	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/21/2020 12:46	J
Calcium	**15**		**mg/L**	**1**	0.80	0.20	8/21/2020 12:46	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/21/2020 12:46	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/21/2020 12:46	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/21/2020 12:46	J
Iron	**200**	**U**	**ug/L**	**1**	800	200	8/21/2020 12:46	J
Lead	**3.0**	**U**	**ug/L**	**1**	12	3.0	8/21/2020 12:46	J
Magnesium	**0.68**		**mg/L**	**1**	0.40	0.10	8/21/2020 12:46	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/21/2020 12:46	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/21/2020 12:46	J
Total Hardness (as CaCO3)	**40**		**mg/L**	**1**	0.16	0.10	8/21/2020 12:46	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933036** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-B** Date Collected: 08/12/20 08:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vanadium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/21/2020 12:46	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/21/2020 12:46	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	8/21/2020 18:20	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/20/2020 03:40	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/20/2020 03:40	J
Microbiology								
Analysis Desc: Fecal Coliform,SM9223D,Water	Analytical Method: COLILERT-18 (Fecal Coliforms)							
Coliform Fecal	**1110**		**MPN/100 mL**	**10**	10	10	8/12/2020 14:25	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/13/2020 15:39	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 15:39	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 15:39	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/13/2020 15:39	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/13/2020 15:39	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 15:39	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/13/2020 15:39	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/13/2020 15:39	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 15:39	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 15:39	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/13/2020 15:39	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 15:39	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/13/2020 15:39	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/13/2020 15:39	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/13/2020 15:39	J
Acetone	**3.1**	**I**	**ug/L**	**1**	5.0	2.1	8/13/2020 15:39	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/13/2020 15:39	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 15:39	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/13/2020 15:39	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/13/2020 15:39	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/13/2020 15:39	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933036** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-B** Date Collected: 08/12/20 08:21

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	8/13/2020 15:39	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/13/2020 15:39	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/13/2020 15:39	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 15:39	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 15:39	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 15:39	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 15:39	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 15:39	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/13/2020 15:39	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 15:39	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 15:39	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 15:39	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/13/2020 15:39	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 15:39	J
Tetrachloroethylene (PCE)	**2.3**		**ug/L**	**1**	1.0	0.36	8/13/2020 15:39	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 15:39	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 15:39	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/13/2020 15:39	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/13/2020 15:39	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 15:39	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/13/2020 15:39	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 15:39	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 15:39	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 15:39	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 15:39	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/13/2020 15:39	J
1,2-Dichloroethane-d4 (S)	**112**		**%**	**1**	70-128		8/13/2020 15:39	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		8/13/2020 15:39	
Bromofluorobenzene (S)	**111**		**%**	**1**	86-123		8/13/2020 15:39	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/13/2020 15:39	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/13/2020 15:39	J
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	77-125		8/13/2020 15:39	
Toluene-d8 (S)	**103**		**%**	**1**	80-121		8/13/2020 15:39	
Bromofluorobenzene (S)	**103**		**%**	**1**	80-129		8/13/2020 15:39	

WET CHEMISTRY

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933036** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-B** Date Collected: 08/12/20 08:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**0.12**	**U**	**mg/L**	**1**	0.20	0.12	8/26/2020 12:39	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.0010**	**U**	**mg/L**	**1**	0.050	0.0010	8/26/2020 10:25	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/13/2020 06:34	J
Nitrate + Nitrite	**0.40**	**U**	**mg/L**	**1**	1.6	0.40	8/13/2020 06:34	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 15:23	G
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**0.40**	**U,J4**	**mg/L**	**1**	1.0	0.40	8/19/2020 14:44	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.50**	**U**	**mg/L**	**1**	1.0	0.50	8/19/2020 14:44	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**17**	**I**	**mg/L**	**1**	20	10	8/14/2020 15:42	G
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Corrected Chlorophyll A	**2.5**	**U**	**mg/m3**	**1**	3.0	2.5	8/25/2020 11:45	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**69**		**mg/L**	**1**	10	10	8/17/2020 13:55	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**1.0**	**U**	**mg/L**	**1**	2.0	1.0	8/14/2020 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	8/13/2020 13:41	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933036** Date Received: 08/12/20 10:45 Matrix: Water
Sample ID: **SW-B** Date Collected: 08/12/20 08:21

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**3.5**		**mg/L**	**1**	2.0	1.0	8/18/2020 09:36	G

Lab ID: **J2010933037** Date Received: 08/12/20 10:45 Matrix: Water
Sample ID: **SW-4** Date Collected: 08/12/20 07:51

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	**28.4**		**°C**	**1**			8/26/2020 10:25	J^
pH	**7.61**		**SU**	**1**			8/26/2020 10:25	J^
METALS								
Analysis Desc: EPA 245.1 Analysis,Water	Preparation Method: EPA 245.1 Analytical Method: EPA 245.1							
Mercury	**0.000011**	**U**	**mg/L**	**1**	0.00010	0.000011	8/18/2020 14:59	J
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/21/2020 12:49	J
Barium	**12**	**I**	**ug/L**	**1**	12	3.0	8/21/2020 12:49	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/21/2020 12:49	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/21/2020 12:49	J
Calcium	**22**		**mg/L**	**1**	0.80	0.20	8/21/2020 12:49	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/21/2020 12:49	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/21/2020 12:49	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/21/2020 12:49	J
Iron	**200**	**U**	**ug/L**	**1**	800	200	8/21/2020 12:49	J
Lead	**3.0**	**U**	**ug/L**	**1**	12	3.0	8/21/2020 12:49	J
Magnesium	**1.4**		**mg/L**	**1**	0.40	0.10	8/21/2020 12:49	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/21/2020 12:49	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/21/2020 12:49	J
Total Hardness (as CaCO3)	**62**		**mg/L**	**1**	0.16	0.10	8/21/2020 12:49	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933037** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-4** Date Collected: 08/12/20 07:51

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vanadium	**2.7**	**I**	**ug/L**	**1**	8.0	2.0	8/21/2020 12:49	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/21/2020 12:49	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**1.1**		**ug/L**	**1**	0.70	0.11	8/21/2020 18:39	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/20/2020 03:47	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/20/2020 03:47	J
Microbiology								
Analysis Desc: Fecal Coliform,SM9223D,Water	Analytical Method: COLILERT-18 (Fecal Coliforms)							
Coliform Fecal	**52**		**MPN/100 mL**	**10**	10	10	8/12/2020 14:25	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/13/2020 16:07	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 16:07	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 16:07	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/13/2020 16:07	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/13/2020 16:07	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 16:07	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/13/2020 16:07	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/13/2020 16:07	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 16:07	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 16:07	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/13/2020 16:07	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 16:07	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/13/2020 16:07	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/13/2020 16:07	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/13/2020 16:07	J
Acetone	**3.6**	**I**	**ug/L**	**1**	5.0	2.1	8/13/2020 16:07	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/13/2020 16:07	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 16:07	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/13/2020 16:07	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/13/2020 16:07	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/13/2020 16:07	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933037** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-4** Date Collected: 08/12/20 07:51

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	8/13/2020 16:07	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/13/2020 16:07	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/13/2020 16:07	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 16:07	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 16:07	J
Chloroform	**0.41**	**I**	**ug/L**	**1**	1.0	0.18	8/13/2020 16:07	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 16:07	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 16:07	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/13/2020 16:07	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 16:07	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 16:07	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 16:07	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/13/2020 16:07	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 16:07	J
Tetrachloroethylene (PCE)	**0.97**	**I**	**ug/L**	**1**	1.0	0.36	8/13/2020 16:07	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 16:07	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 16:07	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/13/2020 16:07	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/13/2020 16:07	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 16:07	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/13/2020 16:07	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 16:07	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 16:07	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 16:07	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 16:07	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/13/2020 16:07	J
1,2-Dichloroethane-d4 (S)	**113**		**%**	**1**	70-128		8/13/2020 16:07	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		8/13/2020 16:07	
Bromofluorobenzene (S)	**113**		**%**	**1**	86-123		8/13/2020 16:07	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/13/2020 16:07	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/13/2020 16:07	J
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	77-125		8/13/2020 16:07	
Toluene-d8 (S)	**102**		**%**	**1**	80-121		8/13/2020 16:07	
Bromofluorobenzene (S)	**105**		**%**	**1**	80-129		8/13/2020 16:07	

WET CHEMISTRY

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933037** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-4** Date Collected: 08/12/20 07:51

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**0.12**	**U**	**mg/L**	**1**	0.20	0.12	8/26/2020 12:38	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.0012**	**U**	**mg/L**	**1**	0.050	0.0012	8/26/2020 12:38	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/13/2020 07:17	J
Nitrate + Nitrite	**0.40**	**U**	**mg/L**	**1**	1.6	0.40	8/13/2020 07:17	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 15:24	G
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**0.40**	**U**	**mg/L**	**1**	1.0	0.40	8/19/2020 14:44	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.50**	**U**	**mg/L**	**1**	1.0	0.50	8/19/2020 14:44	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**36**		**mg/L**	**1**	20	10	8/14/2020 15:42	G
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Corrected Chlorophyll A	**2.5**	**U**	**mg/m3**	**1**	3.0	2.5	8/25/2020 11:45	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**88**		**mg/L**	**1**	10	10	8/17/2020 13:55	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**3.7**		**mg/L**	**1**	2.0	1.0	8/14/2020 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	8/13/2020 13:44	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933037** Date Received: 08/12/20 10:45 Matrix: Water
Sample ID: **SW-4** Date Collected: 08/12/20 07:51

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**8.1**		**mg/L**	**1**	2.0	1.0	8/21/2020 09:28	G

Lab ID: **J2010933038** Date Received: 08/12/20 10:45 Matrix: Water
Sample ID: **SW-7** Date Collected: 08/12/20 07:30

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							
Temperature	**25.8**		**°C**	**1**			8/26/2020 10:25	J^
pH	**7.14**		**SU**	**1**			8/26/2020 10:25	J^
METALS								
Analysis Desc: EPA 245.1 Analysis,Water	Preparation Method: EPA 245.1 Analytical Method: EPA 245.1							
Mercury	**0.000011**	**U**	**mg/L**	**1**	0.00010	0.000011	8/18/2020 15:02	J
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/21/2020 13:00	J
Barium	**19**		**ug/L**	**1**	12	3.0	8/21/2020 13:00	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/21/2020 13:00	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/21/2020 13:00	J
Calcium	**19**		**mg/L**	**1**	0.80	0.20	8/21/2020 13:00	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/21/2020 13:00	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/21/2020 13:00	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/21/2020 13:00	J
Iron	**1000**		**ug/L**	**1**	800	200	8/21/2020 13:00	J
Lead	**5.0**	**I**	**ug/L**	**1**	12	3.0	8/21/2020 13:00	J
Magnesium	**1.7**		**mg/L**	**1**	0.40	0.10	8/21/2020 13:00	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/21/2020 13:00	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/21/2020 13:00	J
Total Hardness (as CaCO3)	**54**		**mg/L**	**1**	0.16	0.10	8/21/2020 13:00	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933038** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-7** Date Collected: 08/12/20 07:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vanadium	**3.6**	**I**	**ug/L**	**1**	8.0	2.0	8/21/2020 13:00	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/21/2020 13:00	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	8/21/2020 18:45	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/20/2020 03:53	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/20/2020 03:53	J
Microbiology								
Analysis Desc: Fecal Coliform,SM9223D,Water	Analytical Method: COLILERT-18 (Fecal Coliforms)							
Coliform Fecal	**128**		**MPN/100 mL**	**10**	10	10	8/12/2020 14:25	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/13/2020 16:36	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 16:36	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 16:36	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/13/2020 16:36	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/13/2020 16:36	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 16:36	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/13/2020 16:36	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/13/2020 16:36	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 16:36	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 16:36	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/13/2020 16:36	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 16:36	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/13/2020 16:36	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/13/2020 16:36	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/13/2020 16:36	J
Acetone	**3.3**	**I**	**ug/L**	**1**	5.0	2.1	8/13/2020 16:36	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/13/2020 16:36	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 16:36	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/13/2020 16:36	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/13/2020 16:36	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/13/2020 16:36	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933038** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-7** Date Collected: 08/12/20 07:30

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	8/13/2020 16:36	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/13/2020 16:36	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/13/2020 16:36	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 16:36	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 16:36	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 16:36	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 16:36	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 16:36	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/13/2020 16:36	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 16:36	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 16:36	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 16:36	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/13/2020 16:36	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 16:36	J
Tetrachloroethylene (PCE)	**2.3**		**ug/L**	**1**	1.0	0.36	8/13/2020 16:36	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 16:36	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 16:36	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/13/2020 16:36	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/13/2020 16:36	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 16:36	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/13/2020 16:36	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 16:36	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 16:36	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 16:36	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 16:36	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/13/2020 16:36	J
1,2-Dichloroethane-d4 (S)	**113**		**%**	**1**	70-128		8/13/2020 16:36	
Toluene-d8 (S)	**101**		**%**	**1**	77-119		8/13/2020 16:36	
Bromofluorobenzene (S)	**114**		**%**	**1**	86-123		8/13/2020 16:36	
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	8/13/2020 16:36	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/13/2020 16:36	J
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	77-125		8/13/2020 16:36	
Toluene-d8 (S)	**104**		**%**	**1**	80-121		8/13/2020 16:36	
Bromofluorobenzene (S)	**106**		**%**	**1**	80-129		8/13/2020 16:36	

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933038** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-7** Date Collected: 08/12/20 07:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**0.69**		**mg/L**	**1**	0.20	0.12	8/26/2020 12:40	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.00037**	**I**	**mg/L**	**1**	0.050	0.00035	8/26/2020 10:26	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/13/2020 07:38	J
Nitrate + Nitrite	**0.40**	**U**	**mg/L**	**1**	1.6	0.40	8/13/2020 07:38	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.04**	**I**	**mg/L**	**2**	0.080	0.035	8/18/2020 15:26	G
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**0.69**	**I**	**mg/L**	**1**	1.0	0.40	8/19/2020 14:44	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.50**	**U**	**mg/L**	**1**	1.0	0.50	8/19/2020 14:44	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**72**		**mg/L**	**1**	20	10	8/14/2020 15:42	G
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Corrected Chlorophyll A	**3.2**		**mg/m3**	**1**	3.0	2.5	8/25/2020 11:45	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**110**		**mg/L**	**1**	10	10	8/17/2020 13:55	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**9.7**		**mg/L**	**1**	2.0	1.0	8/14/2020 14:35	J
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**2.6**		**mg/L**	**1**	2.0	2.0	8/13/2020 13:46	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933038** Date Received: 08/12/20 10:45 Matrix: Water
Sample ID: **SW-7** Date Collected: 08/12/20 07:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**19**		**mg/L**	**1**	2.0	1.0	8/21/2020 09:28	G

Lab ID: **J2010933039** Date Received: 08/12/20 10:45 Matrix: Water
Sample ID: **SW-5** Date Collected: 08/12/20 06:51

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	**29**		**°C**	**1**			8/26/2020 10:26	J^
pH	**7.81**		**SU**	**1**			8/26/2020 10:26	J^
METALS								
Analysis Desc: EPA 245.1 Analysis,Water	Preparation Method: EPA 245.1 Analytical Method: EPA 245.1							
Mercury	**0.000011**	**U**	**mg/L**	**1**	0.00010	0.000011	8/18/2020 15:05	J
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/21/2020 13:04	J
Barium	**6.1**	**I**	**ug/L**	**1**	12	3.0	8/21/2020 13:04	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/21/2020 13:04	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/21/2020 13:04	J
Calcium	**27**		**mg/L**	**1**	0.80	0.20	8/21/2020 13:04	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/21/2020 13:04	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/21/2020 13:04	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/21/2020 13:04	J
Iron	**200**	**U**	**ug/L**	**1**	800	200	8/21/2020 13:04	J
Lead	**3.0**	**U**	**ug/L**	**1**	12	3.0	8/21/2020 13:04	J
Magnesium	**2.0**		**mg/L**	**1**	0.40	0.10	8/21/2020 13:04	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/21/2020 13:04	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/21/2020 13:04	J
Total Hardness (as CaCO3)	**75**		**mg/L**	**1**	0.16	0.10	8/21/2020 13:04	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933039** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-5** Date Collected: 08/12/20 06:51

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vanadium	**2.8**	**I**	**ug/L**	**1**	8.0	2.0	8/21/2020 13:04	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/21/2020 13:04	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.24**	**I**	**ug/L**	**1**	0.70	0.11	8/21/2020 18:52	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/20/2020 04:25	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/20/2020 04:25	J
Microbiology								
Analysis Desc: Fecal Coliform,SM9223D,Water	Analytical Method: COLILERT-18 (Fecal Coliforms)							
Coliform Fecal	**85**		**MPN/100 mL**	**10**	10	10	8/12/2020 14:25	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/13/2020 17:05	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 17:05	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 17:05	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/13/2020 17:05	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/13/2020 17:05	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 17:05	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/13/2020 17:05	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/13/2020 17:05	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 17:05	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 17:05	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/13/2020 17:05	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 17:05	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/13/2020 17:05	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/13/2020 17:05	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/13/2020 17:05	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/13/2020 17:05	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/13/2020 17:05	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 17:05	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/13/2020 17:05	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/13/2020 17:05	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/13/2020 17:05	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933039** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-5** Date Collected: 08/12/20 06:51

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	8/13/2020 17:05	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/13/2020 17:05	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/13/2020 17:05	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 17:05	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 17:05	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 17:05	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 17:05	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 17:05	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/13/2020 17:05	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 17:05	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 17:05	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 17:05	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/13/2020 17:05	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 17:05	J
Tetrachloroethylene (PCE)	**2.1**		**ug/L**	**1**	1.0	0.36	8/13/2020 17:05	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 17:05	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 17:05	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/13/2020 17:05	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/13/2020 17:05	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 17:05	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/13/2020 17:05	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 17:05	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 17:05	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 17:05	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 17:05	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/13/2020 17:05	J
1,2-Dichloroethane-d4 (S)	**111**		**%**	**1**	70-128		8/13/2020 17:05	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		8/13/2020 17:05	
Bromofluorobenzene (S)	**111**		**%**	**1**	86-123		8/13/2020 17:05	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/13/2020 17:05	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/13/2020 17:05	J
1,2-Dichloroethane-d4 (S)	**98**		**%**	**1**	77-125		8/13/2020 17:05	
Toluene-d8 (S)	**101**		**%**	**1**	80-121		8/13/2020 17:05	
Bromofluorobenzene (S)	**103**		**%**	**1**	80-129		8/13/2020 17:05	

WET CHEMISTRY

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933039** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-5** Date Collected: 08/12/20 06:51

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**1.3**		**mg/L**	**1**	0.20	0.12	8/26/2020 12:40	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.0020**	**U**	**mg/L**	**1**	0.050	0.0020	8/26/2020 10:26	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/13/2020 08:43	J
Nitrate + Nitrite	**0.40**	**U**	**mg/L**	**1**	1.6	0.40	8/13/2020 08:43	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 15:27	G
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**1.3**		**mg/L**	**1**	1.0	0.40	8/19/2020 14:44	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.50**	**U**	**mg/L**	**1**	1.0	0.50	8/19/2020 14:44	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**53**		**mg/L**	**1**	20	10	8/14/2020 15:42	G
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Corrected Chlorophyll A	**53**		**mg/m3**	**1**	3.0	2.5	8/25/2020 11:45	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**130**		**mg/L**	**1**	10	10	8/17/2020 13:55	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**16**		**mg/L**	**1**	2.0	1.0	8/14/2020 14:35	J
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**5.7**		**mg/L**	**1**	2.0	2.0	8/13/2020 13:50	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933039** Date Received: 08/12/20 10:45 Matrix: Water
Sample ID: **SW-5** Date Collected: 08/12/20 06:51

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**12**		**mg/L**	**1**	2.0	1.0	8/21/2020 09:28	G

Lab ID: **J2010933040** Date Received: 08/12/20 10:45 Matrix: Water
Sample ID: **SW-6** Date Collected: 08/12/20 06:31

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	**28.7**		**°C**	**1**			8/26/2020 12:38	J^
pH	**8.43**		**SU**	**1**			8/26/2020 12:38	J^
METALS								
Analysis Desc: EPA 245.1 Analysis,Water	Preparation Method: EPA 245.1 Analytical Method: EPA 245.1							
Mercury	**0.000011**	**U**	**mg/L**	**1**	0.00010	0.000011	8/18/2020 15:08	J
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/21/2020 13:07	J
Barium	**12**		**ug/L**	**1**	12	3.0	8/21/2020 13:07	J
Beryllium	**2.0**	**U**	**ug/L**	**1**	8.0	2.0	8/21/2020 13:07	J
Cadmium	**0.50**	**U**	**ug/L**	**1**	2.0	0.50	8/21/2020 13:07	J
Calcium	**26**		**mg/L**	**1**	0.80	0.20	8/21/2020 13:07	J
Chromium	**5.0**	**U**	**ug/L**	**1**	20	5.0	8/21/2020 13:07	J
Cobalt	**1.0**	**U**	**ug/L**	**1**	4.0	1.0	8/21/2020 13:07	J
Copper	**10**	**U**	**ug/L**	**1**	40	10	8/21/2020 13:07	J
Iron	**200**	**U**	**ug/L**	**1**	800	200	8/21/2020 13:07	J
Lead	**3.0**	**U**	**ug/L**	**1**	12	3.0	8/21/2020 13:07	J
Magnesium	**2.9**		**mg/L**	**1**	0.40	0.10	8/21/2020 13:07	J
Nickel	**10**	**U**	**ug/L**	**1**	40	10	8/21/2020 13:07	J
Silver	**8.0**	**U**	**ug/L**	**1**	32	8.0	8/21/2020 13:07	J
Total Hardness (as CaCO3)	**76**		**mg/L**	**1**	0.16	0.10	8/21/2020 13:07	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933040** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-6** Date Collected: 08/12/20 06:31

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vanadium	**4.3**	**I**	**ug/L**	**1**	8.0	2.0	8/21/2020 13:07	J
Zinc	**50**	**U**	**ug/L**	**1**	200	50	8/21/2020 13:07	J
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Antimony	**0.65**	**I**	**ug/L**	**1**	0.70	0.11	8/21/2020 18:58	J
Selenium	**0.58**	**U**	**ug/L**	**1**	5.0	0.58	8/20/2020 04:31	J
Thallium	**0.057**	**U**	**ug/L**	**1**	0.20	0.057	8/20/2020 04:31	J
Microbiology								
Analysis Desc: Fecal Coliform,SM9223D,Water	Analytical Method: COLILERT-18 (Fecal Coliforms)							
Coliform Fecal	**62**		**MPN/100 mL**	**10**	10	10	8/12/2020 14:25	J
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/13/2020 17:34	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 17:34	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 17:34	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/13/2020 17:34	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/13/2020 17:34	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 17:34	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/13/2020 17:34	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/13/2020 17:34	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 17:34	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 17:34	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/13/2020 17:34	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 17:34	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/13/2020 17:34	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/13/2020 17:34	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/13/2020 17:34	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/13/2020 17:34	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/13/2020 17:34	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 17:34	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/13/2020 17:34	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/13/2020 17:34	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/13/2020 17:34	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933040** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-6** Date Collected: 08/12/20 06:31

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	8/13/2020 17:34	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/13/2020 17:34	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/13/2020 17:34	J
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 17:34	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 17:34	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 17:34	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 17:34	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 17:34	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/13/2020 17:34	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 17:34	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 17:34	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 17:34	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/13/2020 17:34	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 17:34	J
Tetrachloroethylene (PCE)	**2.5**		**ug/L**	**1**	1.0	0.36	8/13/2020 17:34	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 17:34	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 17:34	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/13/2020 17:34	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/13/2020 17:34	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 17:34	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/13/2020 17:34	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 17:34	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 17:34	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 17:34	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 17:34	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/13/2020 17:34	J
1,2-Dichloroethane-d4 (S)	**112**		**%**	**1**	70-128		8/13/2020 17:34	
Toluene-d8 (S)	**101**		**%**	**1**	77-119		8/13/2020 17:34	
Bromofluorobenzene (S)	**110**		**%**	**1**	86-123		8/13/2020 17:34	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/13/2020 17:34	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/13/2020 17:34	J
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	77-125		8/13/2020 17:34	
Toluene-d8 (S)	**104**		**%**	**1**	80-121		8/13/2020 17:34	
Bromofluorobenzene (S)	**103**		**%**	**1**	80-129		8/13/2020 17:34	

WET CHEMISTRY

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933040** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **SW-6** Date Collected: 08/12/20 06:31

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Total Nitrogen,Calculated,Water	Analytical Method: Calculation							
Total Nitrogen	**6.5**		**mg/L**	**1**	0.20	0.12	8/26/2020 12:39	G
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.0070**	**U**	**mg/L**	**1**	0.050	0.0070	8/26/2020 12:39	G
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Nitrate (as N)	**0.20**	**U**	**mg/L**	**1**	0.80	0.20	8/13/2020 09:05	J
Nitrate + Nitrite	**0.40**	**U**	**mg/L**	**1**	1.6	0.40	8/13/2020 09:05	J
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.035**	**U**	**mg/L**	**2**	0.080	0.035	8/18/2020 15:28	G
Analysis Desc: TKN,E351.2,Water	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 351.2							
Total Kjeldahl Nitrogen	**6.5**		**mg/L**	**2**	2.0	0.80	8/19/2020 14:44	G
Analysis Desc: Total Phosphorus,E365.4,Analysis	Preparation Method: Copper Sulfate Digestion Analytical Method: EPA 365.4							
Total Phosphorus (as P)	**0.50**	**U**	**mg/L**	**1**	1.0	0.50	8/19/2020 14:44	G
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**110**		**mg/L**	**1**	20	10	8/14/2020 15:42	G
Analysis Desc: Chlorophyll A,SM10200H,Water	Analytical Method: SM 10200 H							
Corrected Chlorophyll A	**77**		**mg/m3**	**1**	3.0	2.5	8/25/2020 11:45	G
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**190**		**mg/L**	**1**	10	10	8/17/2020 13:55	J
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**64**		**mg/L**	**1**	2.0	1.0	8/14/2020 14:35	J
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**10**		**mg/L**	**1**	2.0	2.0	8/13/2020 13:55	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933040** Date Received: 08/12/20 10:45 Matrix: Water
Sample ID: **SW-6** Date Collected: 08/12/20 06:31

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: TOC,SM5310B,Water	Analytical Method: SM 5310B							
Total Organic Carbon	**20**		**mg/L**	**1**	2.0	1.0	8/21/2020 09:28	G

Lab ID: **J2010933041** Date Received: 08/12/20 10:45 Matrix: Water
Sample ID: **TRIP** Date Collected: 08/12/20 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B VOCs 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	8/13/2020 13:43	J
1,1,1-Trichloroethane	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 13:43	J
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 13:43	J
1,1,2-Trichloroethane	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	8/13/2020 13:43	J
1,1-Dichloroethane	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	8/13/2020 13:43	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 13:43	J
1,2,3-Trichloropropane	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	8/13/2020 13:43	J
1,2-Dibromo-3-Chloropropane	**3.1**	**U**	**ug/L**	**1**	5.0	3.1	8/13/2020 13:43	J
1,2-Dichlorobenzene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 13:43	J
1,2-Dichloroethane	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 13:43	J
1,2-Dichloropropane	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	8/13/2020 13:43	J
1,4-Dichlorobenzene	**0.22**	**U**	**ug/L**	**1**	1.0	0.22	8/13/2020 13:43	J
2-Butanone (MEK)	**0.43**	**U**	**ug/L**	**1**	5.0	0.43	8/13/2020 13:43	J
2-Hexanone	**0.71**	**U**	**ug/L**	**1**	5.0	0.71	8/13/2020 13:43	J
4-Methyl-2-pentanone (MIBK)	**0.47**	**U**	**ug/L**	**1**	1.0	0.47	8/13/2020 13:43	J
Acetone	**2.1**	**U**	**ug/L**	**1**	5.0	2.1	8/16/2020 01:14	J
Acrylonitrile	**1.1**	**U**	**ug/L**	**1**	10	1.1	8/13/2020 13:43	J
Benzene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 13:43	J
Bromochloromethane	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	8/13/2020 13:43	J
Bromodichloromethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	8/13/2020 13:43	J
Bromoform	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	8/13/2020 13:43	J
Bromomethane	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 13:43	J
Carbon Disulfide	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	8/13/2020 13:43	J
Carbon Tetrachloride	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/13/2020 13:43	J

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ANALYTICAL RESULTS

Workorder: J2010933 Trail Ridge Landfill

Lab ID: **J2010933041** Date Received: 08/12/20 10:45 Matrix: Water

Sample ID: **TRIP** Date Collected: 08/12/20 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chlorobenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 13:43	J
Chloroethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 13:43	J
Chloroform	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	8/13/2020 13:43	J
Chloromethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 13:43	J
Dibromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	8/13/2020 13:43	J
Dibromomethane	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	8/13/2020 13:43	J
Ethylbenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 13:43	J
Ethylene Dibromide (EDB)	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 13:43	J
Iodomethane (Methyl Iodide)	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 13:43	J
Methylene Chloride	**2.5**	**U**	**ug/L**	**1**	5.0	2.5	8/13/2020 13:43	J
Styrene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 13:43	J
Tetrachloroethylene (PCE)	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	8/13/2020 13:43	J
Toluene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	8/13/2020 13:43	J
Trichloroethene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	8/13/2020 13:43	J
Trichlorofluoromethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	8/13/2020 13:43	J
Vinyl Acetate	**0.19**	**U**	**ug/L**	**1**	1.0	0.19	8/13/2020 13:43	J
Vinyl Chloride	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 13:43	J
Xylene (Total)	**0.53**	**U**	**ug/L**	**1**	2.0	0.53	8/13/2020 13:43	J
cis-1,2-Dichloroethylene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	8/13/2020 13:43	J
cis-1,3-Dichloropropene	**0.16**	**U**	**ug/L**	**1**	1.0	0.16	8/13/2020 13:43	J
trans-1,2-Dichloroethylene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	8/13/2020 13:43	J
trans-1,3-Dichloropropylene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	8/13/2020 13:43	J
trans-1,4-Dichloro-2-butene	**1.8**	**U**	**ug/L**	**1**	10	1.8	8/13/2020 13:43	J
1,2-Dichloroethane-d4 (S)	**115**		**%**	**1**	70-128		8/13/2020 13:43	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		8/13/2020 13:43	
Bromofluorobenzene (S)	**107**		**%**	**1**	86-123		8/13/2020 13:43	
Analysis Desc: 8260B SIM Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)							
1,2-Dibromo-3-Chloropropane	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	8/13/2020 13:43	J
Ethylene Dibromide (EDB)	**0.020**	**U**	**ug/L**	**1**	0.10	0.020	8/13/2020 13:43	J
1,2-Dichloroethane-d4 (S)	**102**		**%**	**1**	77-125		8/13/2020 13:43	
Toluene-d8 (S)	**102**		**%**	**1**	80-121		8/13/2020 13:43	
Bromofluorobenzene (S)	**100**		**%**	**1**	80-129		8/13/2020 13:43	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: J2010933 Trail Ridge Landfill

PARAMETER QUALIFIERS

U	The compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J4	Estimated Result
[1]	SAMPLES 34-40 FILTERED: 08/12/2020 15:18

LAB QUALIFIERS

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

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

QC Batch: DGMj/2025 Analysis Method: SW-846 7470A
QC Batch Method: SW-846 7470A Prepared: 08/11/2020 11:32
Associated Lab Samples: J2010933001, J2010933002, J2010933003, J2010933004, J2010933005, J2010933006, J2010933007, J2010933008,

METHOD BLANK: 3576468

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

LABORATORY CONTROL SAMPLE: 3576469

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Mercury	ug/L	2	2.0	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3576470 3576471 Original: J2010933001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Mercury	ug/L	0.019	2	2.2	2.1	107	104	80-120	4	20	

QC Batch: DGMj/2031 Analysis Method: SW-846 6020
QC Batch Method: SW-846 3010A Prepared: 08/12/2020 04:45
Associated Lab Samples: J2010933001, J2010933002, J2010933003, J2010933004, J2010933005, J2010933006, J2010933007, J2010933008,

METHOD BLANK: 3577171

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

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Antimony	ug/L	0.11	0.11	U

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

METHOD BLANK: 3577171

LABORATORY CONTROL SAMPLE: 3577172

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Selenium	ug/L	50	54	108	80-120	
Antimony	ug/L	50	53	106	80-120	
Thallium	ug/L	50	51	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3577173 3577174 Original: J2010933002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Selenium	ug/L	5.8	50	53	56	94	100	75-125	6	20	
Antimony	ug/L	0.54	50	56	56	111	110	75-125	1	20	
Thallium	ug/L	0.017	50	90	96	181	192	75-125	6	20	

QC Batch: MSVj/2322 Analysis Method: SW-846 8260B (SIM)

QC Batch Method: SW-846 5030B Prepared: 08/11/2020 17:12

Associated Lab Samples: J2010933001, J2010933002, J2010933003, J2010933004, J2010933005, J2010933006, J2010933007, J2010933008,

METHOD BLANK: 3578464

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)	%	100	77-125	
Toluene-d8 (S)	%	105	80-121	
Bromofluorobenzene (S)	%	103	80-129	

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE & LCSD: 3578465 3578466

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	0.79	0.79	99	99	70-130	0	30	
1,2-Dibromo-3-Chloropropane	ug/L	0.8	0.79	0.91	99	114	70-130	14	30	
1,2-Dichloroethane-d4 (S)	%				97	101	77-125	4		
Toluene-d8 (S)	%				103	105	80-121	1		
Bromofluorobenzene (S)	%				104	102	80-129	1		

MATRIX SPIKE SAMPLE: 3578467 Original: J2010933001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Ethylene Dibromide (EDB)	ug/L	0	0.8	0.78	98	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	0.8	0.90	113	70-130	
1,2-Dichloroethane-d4 (S)	%	100			99	77-125	
Toluene-d8 (S)	%	103			104	80-121	
Bromofluorobenzene (S)	%	106			105	80-129	

QC Batch: MSVj/2324 Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B Prepared: 08/11/2020 17:12

Associated Lab Samples: J2010933001, J2010933002, J2010933003, J2010933004, J2010933005, J2010933006, J2010933007, J2010933008,

METHOD BLANK: 3578471

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

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

METHOD BLANK: 3578471

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
trans-1,2-Dichloroethylene	ug/L	0.20	0.20	U
1,1-Dichloroethane	ug/L	0.14	0.14	U
Vinyl Acetate	ug/L	0.19	0.19	U
2-Butanone (MEK)	ug/L	0.43	0.43	U
cis-1,2-Dichloroethylene	ug/L	0.24	0.24	U
Bromochloromethane	ug/L	0.17	0.17	U
Chloroform	ug/L	0.18	0.18	U
1,2-Dichloroethane	ug/L	0.23	0.23	U
1,1,1-Trichloroethane	ug/L	0.22	0.22	U
Carbon Tetrachloride	ug/L	0.36	0.36	U
Benzene	ug/L	0.16	0.16	U
Dibromomethane	ug/L	0.26	0.26	U
1,2-Dichloropropane	ug/L	0.66	0.66	U
Trichloroethene	ug/L	0.29	0.29	U
Bromodichloromethane	ug/L	0.46	0.46	U
cis-1,3-Dichloropropene	ug/L	0.16	0.16	U
4-Methyl-2-pentanone (MIBK)	ug/L	0.47	0.47	U
trans-1,3-Dichloropropylene	ug/L	0.21	0.21	U
1,1,2-Trichloroethane	ug/L	0.30	0.30	U
Toluene	ug/L	0.23	0.23	U
2-Hexanone	ug/L	0.71	0.71	U
Dibromochloromethane	ug/L	0.33	0.33	U
Ethylene Dibromide (EDB)	ug/L	0.20	0.20	U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36	U
1,1,1,2-Tetrachloroethane	ug/L	0.54	0.54	U
Chlorobenzene	ug/L	0.21	0.21	U
Ethylbenzene	ug/L	0.24	0.24	U
Bromoform	ug/L	0.44	0.44	U
Styrene	ug/L	0.23	0.23	U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20	U
1,2,3-Trichloropropane	ug/L	0.91	0.91	U
1,4-Dichlorobenzene	ug/L	0.22	0.22	U
1,2-Dichlorobenzene	ug/L	0.18	0.18	U
1,2-Dibromo-3-Chloropropane	ug/L	3.1	3.1	U
trans-1,4-Dichloro-2-butene	ug/L	1.8	1.8	U
Xylene (Total)	ug/L	0.53	0.53	U
1,2-Dichloroethane-d4 (S)	%	113	70-128	
Toluene-d8 (S)	%	102	77-119	
Bromofluorobenzene (S)	%	110	86-123	

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE & LCSD: 3578472 3578473

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Chloromethane	ug/L	20	18	19	90	94		5		
Vinyl Chloride	ug/L	20	23	24	115	122	70-130	6	20	
Bromomethane	ug/L	20	20	21	98	104		7		
Chloroethane	ug/L	20	23	25	113	123		8		
Trichlorofluoromethane	ug/L	20	18	18	90	92		3		
Acetone	ug/L	20	20	21	102	106		4		
1,1-Dichloroethylene	ug/L	20	25	26	124	130	70-130	5	20	
Iodomethane (Methyl Iodide)	ug/L	20	16	19	81	95		15		
Acrylonitrile	ug/L	20	24	25	119	127		6		
Methylene Chloride	ug/L	20	21	23	107	113		6		
Carbon Disulfide	ug/L	20	25	28	127	138		8		
trans-1,2-Dichloroethylene	ug/L	20	24	25	119	123		3		
1,1-Dichloroethane	ug/L	20	21	22	107	111		4		
Vinyl Acetate	ug/L	20	15	15	77	77		1		
2-Butanone (MEK)	ug/L	20	18	19	92	96		5		
cis-1,2-Dichloroethylene	ug/L	20	22	22	109	111	70-130	2	20	
Bromochloromethane	ug/L	20	22	23	111	117		6		
Chloroform	ug/L	20	20	20	99	101	70-130	2	20	
1,2-Dichloroethane	ug/L	20	21	21	105	103		3		
1,1,1-Trichloroethane	ug/L	20	19	20	96	100		4		
Carbon Tetrachloride	ug/L	20	17	18	86	89		4		
Benzene	ug/L	20	20	21	100	103	70-130	3	20	
Dibromomethane	ug/L	20	20	21	101	103		2		
1,2-Dichloropropane	ug/L	20	21	22	105	108		3		
Trichloroethene	ug/L	20	18	19	92	97	70-130	5	20	
Bromodichloromethane	ug/L	20	19	20	95	98		3		
cis-1,3-Dichloropropene	ug/L	20	19	20	97	99		2		
4-Methyl-2-pentanone (MIBK)	ug/L	20	19	19	93	97		4		
trans-1,3-Dichloropropylene	ug/L	20	18	19	92	95		3		
1,1,2-Trichloroethane	ug/L	20	19	20	97	99		2		
Toluene	ug/L	20	20	20	100	101	70-130	1	20	
2-Hexanone	ug/L	20	20	20	98	101		3		
Dibromochloromethane	ug/L	20	19	19	95	97		2		
Ethylene Dibromide (EDB)	ug/L	20	19	20	95	99		3		
Tetrachloroethylene (PCE)	ug/L	20	17	18	87	88	70-130	1	20	
1,1,1,2-Tetrachloroethane	ug/L	20	17	17	86	87		1		
Chlorobenzene	ug/L	20	19	19	94	93	70-130	1	20	
Ethylbenzene	ug/L	20	20	20	98	99	70-130	1	20	
Bromoform	ug/L	20	18	19	91	96		5		
Styrene	ug/L	20	19	19	96	97		1		
1,1,2,2-Tetrachloroethane	ug/L	20	23	23	115	114		1		
1,2,3-Trichloropropane	ug/L	20	22	23	110	114		3		
1,4-Dichlorobenzene	ug/L	20	19	18	96	92		4		

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE & LCSD: 3578472 3578473

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
1,2-Dichlorobenzene	ug/L	20	19	19	95	95	70-130	0	20	
1,2-Dibromo-3-Chloropropane	ug/L	20	22	22	109	110		1		
Xylene (Total)	ug/L	60	58	59	97	99	70-130	2	20	
1,2-Dichloroethane-d4 (S)	%				113	116	70-128	2		
Toluene-d8 (S)	%				102	101	77-119	1		
Bromofluorobenzene (S)	%				107	101	86-123	5		

MATRIX SPIKE SAMPLE: 3578474 Original: J2010933002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Chloromethane	ug/L	0	20	22	112		
Vinyl Chloride	ug/L	0	20	27	133	70-130	
Bromomethane	ug/L	0	20	10	51		
Chloroethane	ug/L	0	20	28	140		
Trichlorofluoromethane	ug/L	0	20	21	107		
Acetone	ug/L	8.1	20	30	111		
1,1-Dichloroethylene	ug/L	0	20	30	149	70-130	
Iodomethane (Methyl Iodide)	ug/L	0	20	23	116		
Acrylonitrile	ug/L	0	20	29	143		
Methylene Chloride	ug/L	0	20	43	217		
Carbon Disulfide	ug/L	0	20	30	152		
trans-1,2-Dichloroethylene	ug/L	0	20	28	142		
1,1-Dichloroethane	ug/L	0	20	26	129		
Vinyl Acetate	ug/L	0	20	21	103		
2-Butanone (MEK)	ug/L	0	20	23	114		
cis-1,2-Dichloroethylene	ug/L	0	20	26	128	70-130	
Bromochloromethane	ug/L	0	20	27	136		
Chloroform	ug/L	0	20	24	120	70-130	
1,2-Dichloroethane	ug/L	0	20	25	125		
1,1,1-Trichloroethane	ug/L	0	20	23	116		
Carbon Tetrachloride	ug/L	0	20	21	106		
Benzene	ug/L	0	20	24	120	70-130	
Dibromomethane	ug/L	0	20	24	122		
1,2-Dichloropropane	ug/L	0	20	26	128		
Trichloroethene	ug/L	0	20	22	108	70-130	
Bromodichloromethane	ug/L	0	20	23	115		
cis-1,3-Dichloropropene	ug/L	0	20	23	114		
4-Methyl-2-pentanone (MIBK)	ug/L	0	20	23	116		

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 3578474 Original: J2010933002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
trans-1,3-Dichloropropylene	ug/L	0	20	22	109		
1,1,2-Trichloroethane	ug/L	0	20	23	115		
Toluene	ug/L	0	20	24	122	70-130	
2-Hexanone	ug/L	0	20	24	122		
Dibromochloromethane	ug/L	0	20	23	115		
Ethylene Dibromide (EDB)	ug/L	0	20	23	116		
Tetrachloroethylene (PCE)	ug/L	3	20	24	107	70-130	
1,1,1,2-Tetrachloroethane	ug/L	0	20	21	105		
Chlorobenzene	ug/L	0	20	23	113	70-130	
Ethylbenzene	ug/L	0	20	24	120	70-130	
Bromoform	ug/L	0	20	24	118		
Styrene	ug/L	0	20	23	116		
1,1,2,2-Tetrachloroethane	ug/L	0	20	28	140		
1,2,3-Trichloropropane	ug/L	0	20	26	130		
1,4-Dichlorobenzene	ug/L	0	20	23	114		
1,2-Dichlorobenzene	ug/L	0	20	22	111	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	20	25	126		
Xylene (Total)	ug/L	0	60	71	118	70-130	
1,2-Dichloroethane-d4 (S)	%	112			113	70-128	
Toluene-d8 (S)	%	100			102	77-119	
Bromofluorobenzene (S)	%	108			101	86-123	

QC Batch: WCAj/3080 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: J2010933001, J2010933002, J2010933003, J2010933004, J2010933005

METHOD BLANK: 3578635

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

LABORATORY CONTROL SAMPLE: 3578636

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

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3578636

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	300	101	85-115	

SAMPLE DUPLICATE: 3578939 Original: J2010933005

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	100	98	5	10	

QC Batch: DGMj/2040 Analysis Method: SW-846 6010

QC Batch Method: SW-846 3010A Prepared: 08/13/2020 04:40

Associated Lab Samples: J2010933019, J2010933020, J2010933021, J2010933022, J2010933023, J2010933024, J2010933025, J2010933026,

METHOD BLANK: 3579410

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Silver	ug/L	8.0	8.0	U
Arsenic	ug/L	8.0	8.0	U
Barium	ug/L	3.0	3.0	U
Beryllium	ug/L	2.0	2.0	U
Cadmium	ug/L	0.50	0.50	U
Cobalt	ug/L	1.0	1.0	U
Chromium	ug/L	5.0	5.0	U
Copper	ug/L	10	10	U
Iron	ug/L	200	200	U
Sodium	mg/L	0.80	0.80	U
Nickel	ug/L	10	10	U
Lead	ug/L	3.0	3.0	U
Vanadium	ug/L	2.0	2.0	U
Zinc	ug/L	50	50	U

LABORATORY CONTROL SAMPLE: 3579411

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Silver	ug/L	160	160	97	80-120	

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Workorder: J2010933 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3579411

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	160	170	103	80-120	
Barium	ug/L	60	63	105	80-120	
Beryllium	ug/L	40	40	100	80-120	
Cadmium	ug/L	10	10	101	80-120	
Cobalt	ug/L	20	21	105	80-120	
Chromium	ug/L	100	100	101	80-120	
Copper	ug/L	200	210	107	80-120	
Iron	ug/L	4000	4000	101	80-120	
Sodium	mg/L	16	16	101	80-120	
Nickel	ug/L	200	210	103	80-120	
Lead	ug/L	60	59	98	80-120	
Vanadium	ug/L	40	41	103	80-120	
Zinc	ug/L	1000	1000	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3580268 3580269 Original: J2010933019

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Silver	ug/L	1.5	160	150	140	92	85	75-125	7	20	
Arsenic	ug/L	3.2	160	160	140	100	86	75-125	14	20	
Barium	ug/L	7	60	65	59	97	87	75-125	9	20	
Beryllium	ug/L	0.1	40	38	34	94	85	75-125	10	20	
Cadmium	ug/L	0	10	9.3	8.4	93	84	75-125	10	20	
Cobalt	ug/L	0	20	19	18	96	88	75-125	9	20	
Chromium	ug/L	1.6	100	94	84	94	84	75-125	11	20	
Copper	ug/L	0.3	200	200	180	99	89	75-125	10	20	
Iron	ug/L	290	4000	4000	3700	94	85	75-125	9	20	
Sodium	mg/L	12	16	28	25	99	85	75-125	8	20	
Nickel	ug/L	0.7	200	190	170	96	87	75-125	10	20	
Lead	ug/L	2.8	60	58	53	97	88	75-125	10	20	
Vanadium	ug/L	31	40	69	64	95	83	75-125	7	20	
Zinc	ug/L	17	1000	960	870	96	87	75-125	10	20	

QC Batch: DGMj/2041 Analysis Method: SW-846 6010

QC Batch Method: SW-846 3010A Prepared: 08/13/2020 04:40

Associated Lab Samples: J2010933001, J2010933002, J2010933003, J2010933004, J2010933005, J2010933006, J2010933007, J2010933008,

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

METHOD BLANK: 3579421

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Silver	ug/L	8.0	8.0	U
Arsenic	ug/L	8.0	8.0	U
Barium	ug/L	3.0	3.0	U
Beryllium	ug/L	2.0	2.0	U
Cadmium	ug/L	0.50	0.50	U
Cobalt	ug/L	1.0	1.0	U
Chromium	ug/L	5.0	5.0	U
Copper	ug/L	10	10	U
Iron	ug/L	200	200	U
Sodium	mg/L	0.80	0.80	U
Nickel	ug/L	10	10	U
Lead	ug/L	3.0	3.0	U
Vanadium	ug/L	2.0	2.0	U
Zinc	ug/L	50	50	U

LABORATORY CONTROL SAMPLE: 3579422

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Silver	ug/L	160	160	97	80-120	
Arsenic	ug/L	160	160	102	80-120	
Barium	ug/L	60	62	104	80-120	
Beryllium	ug/L	40	39	98	80-120	
Cadmium	ug/L	10	9.9	99	80-120	
Cobalt	ug/L	20	21	104	80-120	
Chromium	ug/L	100	96	96	80-120	
Copper	ug/L	200	210	105	80-120	
Iron	ug/L	4000	4000	99	80-120	
Sodium	mg/L	16	16	98	80-120	
Nickel	ug/L	200	210	103	80-120	
Lead	ug/L	60	60	100	80-120	
Vanadium	ug/L	40	39	98	80-120	
Zinc	ug/L	1000	1000	102	80-120	

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3579423 3579424 Original: J2010933001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Silver	ug/L	2.3	160	150	150	96	94	75-125	3	20	
Arsenic	ug/L	0	160	170	160	105	100	75-125	5	20	
Barium	ug/L	2.9	60	64	63	106	104	75-125	2	20	
Beryllium	ug/L	0.1	40	39	38	98	95	75-125	3	20	
Cadmium	ug/L	0	10	9.8	9.6	98	96	75-125	2	20	
Cobalt	ug/L	0	20	20	20	100	99	75-125	1	20	
Chromium	ug/L	2.5	100	96	93	96	93	75-125	3	20	
Copper	ug/L	0	200	210	200	105	102	75-125	3	20	
Iron	ug/L	98	4000	4000	3900	99	97	75-125	2	20	
Sodium	mg/L	45	16	62	61	101	95	75-125	2	20	
Nickel	ug/L	5.4	200	210	200	103	100	75-125	3	20	
Lead	ug/L	0	60	58	58	98	98	75-125	0	20	
Vanadium	ug/L	2.5	40	40	40	95	94	75-125	0	20	
Zinc	ug/L	18	1000	1000	1000	103	100	75-125	3	20	

QC Batch: DGMj/2042 Analysis Method: SW-846 6020

QC Batch Method: SW-846 3010A Prepared: 08/13/2020 04:40

Associated Lab Samples: J2010933019, J2010933020, J2010933021, J2010933022, J2010933023, J2010933024, J2010933025, J2010933026,

METHOD BLANK: 3579464

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

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Antimony	ug/L	0.11	0.11	U

LABORATORY CONTROL SAMPLE: 3579465

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Selenium	ug/L	50	55	111	80-120	

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3579465

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	50	56	112	80-120	
Thallium	ug/L	50	54	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3579466 3579467 Original: J2010933019

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Selenium	ug/L	1.6	50	56	54	108	105	75-125	3	20	
Antimony	ug/L	0.35	50	60	58	119	115	75-125	4	20	
Thallium	ug/L	0.01	50	55	53	111	106	75-125	4	20	

QC Batch: WCAj/3088 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: J2010933006, J2010933007, J2010933008, J2010933011, J2010933012, J2010933013, J2010933014, J2010933015,

METHOD BLANK: 3579631

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

LABORATORY CONTROL SAMPLE: 3579632

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	300	310	102	85-115	

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

SAMPLE DUPLICATE: 3580770 Original: J2010933013

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	42	48	13	10	

QC Batch: MSVj/2334 Analysis Method: SW-846 8260B (SIM)
QC Batch Method: SW-846 5030B Prepared: 08/12/2020 18:58
Associated Lab Samples: J2010933019, J2010933020, J2010933021, J2010933022, J2010933023, J2010933024, J2010933025, J2010933026,

METHOD BLANK: 3580222

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)	%	98	77-125	
Toluene-d8 (S)	%	101	80-121	
Bromofluorobenzene (S)	%	101	80-129	

LABORATORY CONTROL SAMPLE & LCSD: 3580223 3580224

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	0.71	0.86	89	108	70-130	19	30	
1,2-Dibromo-3-Chloropropane	ug/L	0.8	0.81	0.90	101	113	70-130	11	30	
1,2-Dichloroethane-d4 (S)	%				101	101	77-125	0		
Toluene-d8 (S)	%				101	104	80-121	3		
Bromofluorobenzene (S)	%				104	108	80-129	4		

MATRIX SPIKE SAMPLE: 3580225 Original: J2010933019

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Ethylene Dibromide (EDB)	ug/L	0	0.8	0.80	100	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	0.8	0.92	115	70-130	
1,2-Dichloroethane-d4 (S)	%	101			99	77-125	
Toluene-d8 (S)	%	103			104	80-121	

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 3580225 Original: J2010933019

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromofluorobenzene (S)	%	100			102	80-129	

QC Batch: MSVj/2336 Analysis Method: SW-846 8260B
QC Batch Method: SW-846 5030B Prepared: 08/12/2020 18:58
Associated Lab Samples: J2010933019, J2010933020, J2010933021, J2010933022, J2010933023, J2010933024, J2010933025, J2010933026,

METHOD BLANK: 3580230

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

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

METHOD BLANK: 3580230

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
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)	%	111	70-128	
Toluene-d8 (S)	%	99	77-119	
Bromofluorobenzene (S)	%	109	86-123	

LABORATORY CONTROL SAMPLE & LCSD: 3580231 3580232

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Chloromethane	ug/L	20	19	20	96	101		5		
Vinyl Chloride	ug/L	20	23	25	114	123	70-130	8	20	
Bromomethane	ug/L	20	21	22	104	108		3		
Chloroethane	ug/L	20	23	24	117	122		5		
Trichlorofluoromethane	ug/L	20	18	19	91	96		6		
Acetone	ug/L	20	20	21	102	104		2		
1,1-Dichloroethylene	ug/L	20	24	27	122	133	70-130	9	20	
Iodomethane (Methyl Iodide)	ug/L	20	15	20	75	100		28		
Acrylonitrile	ug/L	20	24	25	118	126		7		
Methylene Chloride	ug/L	20	24	24	122	121		1		
Carbon Disulfide	ug/L	20	25	28	126	139		10		
trans-1,2-Dichloroethylene	ug/L	20	23	25	117	126		8		
1,1-Dichloroethane	ug/L	20	21	23	106	115		8		
Vinyl Acetate	ug/L	20	15	12	77	58		28		
2-Butanone (MEK)	ug/L	20	19	19	93	95		2		
cis-1,2-Dichloroethylene	ug/L	20	22	23	108	116	70-130	8	20	
Bromochloromethane	ug/L	20	23	24	113	121		7		

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE & LCSD: 3580231 3580232

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Chloroform	ug/L	20	19	21	97	105	70-130	7	20	
1,2-Dichloroethane	ug/L	20	21	22	105	109		4		
1,1,1-Trichloroethane	ug/L	20	19	21	94	105		11		
Carbon Tetrachloride	ug/L	20	17	19	85	94		10		
Benzene	ug/L	20	20	21	101	107	70-130	7	20	
Dibromomethane	ug/L	20	21	21	103	107		4		
1,2-Dichloropropane	ug/L	20	21	23	105	114		8		
Trichloroethene	ug/L	20	18	21	92	105	70-130	13	20	
Bromodichloromethane	ug/L	20	19	21	95	105		10		
cis-1,3-Dichloropropene	ug/L	20	19	20	96	102		6		
4-Methyl-2-pentanone (MIBK)	ug/L	20	19	19	93	95		1		
trans-1,3-Dichloropropylene	ug/L	20	18	20	92	98		6		
1,1,2-Trichloroethane	ug/L	20	19	20	97	100		3		
Toluene	ug/L	20	19	21	97	104	70-130	7	20	
2-Hexanone	ug/L	20	19	19	93	97		4		
Dibromochloromethane	ug/L	20	19	20	93	98		5		
Ethylene Dibromide (EDB)	ug/L	20	19	20	97	99		2		
Tetrachloroethylene (PCE)	ug/L	20	17	18	85	91	70-130	6	20	
1,1,1,2-Tetrachloroethane	ug/L	20	17	18	85	90		6		
Chlorobenzene	ug/L	20	18	20	91	99	70-130	8	20	
Ethylbenzene	ug/L	20	19	20	95	102	70-130	7	20	
Bromoform	ug/L	20	18	20	92	100		8		
Styrene	ug/L	20	18	20	92	98		6		
1,1,2,2-Tetrachloroethane	ug/L	20	22	21	109	107		2		
1,2,3-Trichloropropane	ug/L	20	22	22	108	112		4		
1,4-Dichlorobenzene	ug/L	20	18	20	91	102		12		
1,2-Dichlorobenzene	ug/L	20	18	21	90	104	70-130	15	20	
1,2-Dibromo-3-Chloropropane	ug/L	20	19	23	97	114		16		
Xylene (Total)	ug/L	60	56	61	94	102	70-130	8	20	
1,2-Dichloroethane-d4 (S)	%				114	112	70-128	2		
Toluene-d8 (S)	%				100	100	77-119	0		
Bromofluorobenzene (S)	%				101	105	86-123	4		

MATRIX SPIKE SAMPLE: 3580233 Original: J2010933021

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Chloromethane	ug/L	0	20	18	88		
Vinyl Chloride	ug/L	0	20	22	112	70-130	
Bromomethane	ug/L	0	20	18	92		

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 3580233 Original: J2010933021

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloroethane	ug/L	0	20	24	122		
Trichlorofluoromethane	ug/L	0	20	18	90		
Acetone	ug/L	2.6	20	20	85		
1,1-Dichloroethylene	ug/L	0	20	25	127	70-130	
Iodomethane (Methyl Iodide)	ug/L	0	20	13	63		
Acrylonitrile	ug/L	0	20	24	120		
Methylene Chloride	ug/L	0	20	23	114		
Carbon Disulfide	ug/L	0	20	26	131		
trans-1,2-Dichloroethylene	ug/L	0	20	24	119		
1,1-Dichloroethane	ug/L	0	20	22	109		
Vinyl Acetate	ug/L	0	20	18	89		
2-Butanone (MEK)	ug/L	0	20	19	93		
cis-1,2-Dichloroethylene	ug/L	0	20	22	108	70-130	
Bromochloromethane	ug/L	0	20	23	115		
Chloroform	ug/L	0	20	20	100	70-130	
1,2-Dichloroethane	ug/L	0	20	21	107		
1,1,1-Trichloroethane	ug/L	0	20	20	98		
Carbon Tetrachloride	ug/L	0	20	18	90		
Benzene	ug/L	0	20	20	102	70-130	
Dibromomethane	ug/L	0	20	21	103		
1,2-Dichloropropane	ug/L	0	20	22	110		
Trichloroethene	ug/L	0	20	19	93	70-130	
Bromodichloromethane	ug/L	0	20	20	100		
cis-1,3-Dichloropropene	ug/L	0	20	19	95		
4-Methyl-2-pentanone (MIBK)	ug/L	0	20	19	95		
trans-1,3-Dichloropropylene	ug/L	0	20	18	90		
1,1,2-Trichloroethane	ug/L	0	20	20	98		
Toluene	ug/L	0	20	19	97	70-130	
2-Hexanone	ug/L	0	20	18	89		
Dibromochloromethane	ug/L	0	20	19	95		
Ethylene Dibromide (EDB)	ug/L	0	20	19	95		
Tetrachloroethylene (PCE)	ug/L	2.6	20	19	85	70-130	
1,1,1,2-Tetrachloroethane	ug/L	0	20	17	86		
Chlorobenzene	ug/L	0	20	18	91	70-130	
Ethylbenzene	ug/L	0	20	19	96	70-130	
Bromoform	ug/L	0	20	19	93		
Styrene	ug/L	0	20	19	94		
1,1,2,2-Tetrachloroethane	ug/L	0	20	23	114		
1,2,3-Trichloropropane	ug/L	0	20	21	106		
1,4-Dichlorobenzene	ug/L	0	20	19	95		
1,2-Dichlorobenzene	ug/L	0	20	18	92	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	20	21	105		

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 3580233 Original: J2010933021

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Xylene (Total)	ug/L	0	60	57	95	70-130	
1,2-Dichloroethane-d4 (S)	%	109			113	70-128	
Toluene-d8 (S)	%	99			97	77-119	
Bromofluorobenzene (S)	%	111			107	86-123	

QC Batch: DGMj/2043 Analysis Method: SW-846 7470A
QC Batch Method: SW-846 7470A Prepared: 08/13/2020 11:53
Associated Lab Samples: J2010933019, J2010933020, J2010933021, J2010933022, J2010933023, J2010933024, J2010933025, J2010933026,

METHOD BLANK: 3580580

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

LABORATORY CONTROL SAMPLE: 3580581

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Mercury	ug/L	2	2.1	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3580582 3580583 Original: J2010933019

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Mercury	ug/L	0	2	2.0	2.0	101	99	80-120	2	20	

QC Batch: WCAj/3097 Analysis Method: SM 2540 C
QC Batch Method: SM 2540 C Prepared:
Associated Lab Samples: J2010933029, J2010933030, J2010933031, J2010933032

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

METHOD BLANK: 3581635

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

LABORATORY CONTROL SAMPLE: 3581636

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	300	290	95	85-115	

SAMPLE DUPLICATE: 3581637 Original: J2011025001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	13000	13000	2	10	

QC Batch: MSVj/2342 Analysis Method: SW-846 8260B (SIM)

QC Batch Method: SW-846 5030B Prepared: 08/13/2020 09:51

Associated Lab Samples: J2010933034, J2010933035, J2010933036, J2010933037, J2010933038, J2010933039, J2010933040, J2010933041

METHOD BLANK: 3581957

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)	%	103	77-125	
Toluene-d8 (S)	%	102	80-121	
Bromofluorobenzene (S)	%	103	80-129	

LABORATORY CONTROL SAMPLE & LCSD: 3581958 3581959

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

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE & LCSD: 3581958 3581959

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Ethylene Dibromide (EDB)	ug/L	0.8	0.81	0.74	101	93	70-130	9	30	
1,2-Dibromo-3-Chloropropane	ug/L	0.8	0.88	0.88	110	110	70-130	0	30	
1,2-Dichloroethane-d4 (S)	%				101	99	77-125	2		
Toluene-d8 (S)	%				103	103	80-121	0		
Bromofluorobenzene (S)	%				104	104	80-129	0		

MATRIX SPIKE SAMPLE: 3581960 Original: J2010933034

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Ethylene Dibromide (EDB)	ug/L	0	0.8	0.70	88	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	0.8	0.82	103	70-130	
1,2-Dichloroethane-d4 (S)	%	99			101	77-125	
Toluene-d8 (S)	%	102			97	80-121	
Bromofluorobenzene (S)	%	104			105	80-129	

QC Batch: MSVj/2344 Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B Prepared: 08/13/2020 09:51

Associated Lab Samples: J2010933034, J2010933035, J2010933036, J2010933037, J2010933038, J2010933039, J2010933040, J2010933041

METHOD BLANK: 3581968

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

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

METHOD BLANK: 3581968

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1-Dichloroethane	ug/L	0.14	0.14	U
Vinyl Acetate	ug/L	0.19	0.19	U
2-Butanone (MEK)	ug/L	0.43	0.43	U
cis-1,2-Dichloroethylene	ug/L	0.24	0.24	U
Bromochloromethane	ug/L	0.17	0.17	U
Chloroform	ug/L	0.18	0.18	U
1,2-Dichloroethane	ug/L	0.23	0.23	U
1,1,1-Trichloroethane	ug/L	0.22	0.22	U
Carbon Tetrachloride	ug/L	0.36	0.36	U
Benzene	ug/L	0.16	0.16	U
Dibromomethane	ug/L	0.26	0.26	U
1,2-Dichloropropane	ug/L	0.66	0.66	U
Trichloroethene	ug/L	0.29	0.29	U
Bromodichloromethane	ug/L	0.46	0.46	U
cis-1,3-Dichloropropene	ug/L	0.16	0.16	U
4-Methyl-2-pentanone (MIBK)	ug/L	0.47	0.47	U
trans-1,3-Dichloropropylene	ug/L	0.21	0.21	U
1,1,2-Trichloroethane	ug/L	0.30	0.30	U
Toluene	ug/L	0.23	0.23	U
2-Hexanone	ug/L	0.71	0.71	U
Dibromochloromethane	ug/L	0.33	0.33	U
Ethylene Dibromide (EDB)	ug/L	0.20	0.20	U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36	U
1,1,1,2-Tetrachloroethane	ug/L	0.54	0.54	U
Chlorobenzene	ug/L	0.21	0.21	U
Ethylbenzene	ug/L	0.24	0.24	U
Bromoform	ug/L	0.44	0.44	U
Styrene	ug/L	0.23	0.23	U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20	U
1,2,3-Trichloropropane	ug/L	0.91	0.91	U
1,4-Dichlorobenzene	ug/L	0.22	0.22	U
1,2-Dichlorobenzene	ug/L	0.18	0.18	U
1,2-Dibromo-3-Chloropropane	ug/L	3.1	3.1	U
trans-1,4-Dichloro-2-butene	ug/L	1.8	1.8	U
Xylene (Total)	ug/L	0.53	0.53	U
1,2-Dichloroethane-d4 (S)	%	117	70-128	
Toluene-d8 (S)	%	100	77-119	
Bromofluorobenzene (S)	%	111	86-123	

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE & LCSD: 3581969 3581970

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Chloromethane	ug/L	20	17	18	87	89		2		
Vinyl Chloride	ug/L	20	22	22	110	112	70-130	2	20	
Bromomethane	ug/L	20	18	21	89	106		18		
Chloroethane	ug/L	20	23	23	115	115		0		
Trichlorofluoromethane	ug/L	20	18	18	90	90		0		
Acetone	ug/L	20	20	18	102	89		14		
1,1-Dichloroethylene	ug/L	20	25	25	124	125	70-130	1	20	
Iodomethane (Methyl Iodide)	ug/L	20	20	19	100	96		5		
Acrylonitrile	ug/L	20	23	23	117	113		3		
Methylene Chloride	ug/L	20	22	22	109	110		1		
Carbon Disulfide	ug/L	20	25	27	127	136		7		
trans-1,2-Dichloroethylene	ug/L	20	23	24	117	118		1		
1,1-Dichloroethane	ug/L	20	21	21	107	107		0		
Vinyl Acetate	ug/L	20	15	17	74	85		14		
2-Butanone (MEK)	ug/L	20	18	17	91	86		5		
cis-1,2-Dichloroethylene	ug/L	20	21	21	107	107	70-130	0	20	
Bromochloromethane	ug/L	20	23	23	113	114		1		
Chloroform	ug/L	20	20	20	98	98	70-130	0	20	
1,2-Dichloroethane	ug/L	20	20	20	99	102		2		
1,1,1-Trichloroethane	ug/L	20	19	19	94	97		3		
Carbon Tetrachloride	ug/L	20	17	17	87	86		1		
Benzene	ug/L	20	20	20	99	100	70-130	1	20	
Dibromomethane	ug/L	20	20	20	101	99		2		
1,2-Dichloropropane	ug/L	20	21	21	106	104		3		
Trichloroethene	ug/L	20	18	19	90	93	70-130	4	20	
Bromodichloromethane	ug/L	20	19	19	97	96		2		
cis-1,3-Dichloropropene	ug/L	20	19	19	95	95		1		
4-Methyl-2-pentanone (MIBK)	ug/L	20	18	17	91	86		5		
trans-1,3-Dichloropropylene	ug/L	20	18	18	91	91		1		
1,1,2-Trichloroethane	ug/L	20	19	19	94	94		0		
Toluene	ug/L	20	19	19	94	95	70-130	1	20	
2-Hexanone	ug/L	20	17	17	87	83		5		
Dibromochloromethane	ug/L	20	18	18	88	90		3		
Ethylene Dibromide (EDB)	ug/L	20	18	18	91	90		0		
Tetrachloroethylene (PCE)	ug/L	20	16	16	81	82	70-130	1	20	
1,1,1,2-Tetrachloroethane	ug/L	20	16	17	81	83		3		
Chlorobenzene	ug/L	20	17	18	87	89	70-130	2	20	
Ethylbenzene	ug/L	20	19	19	93	94	70-130	1	20	
Bromoform	ug/L	20	18	17	89	87		1		
Styrene	ug/L	20	18	18	92	91		1		
1,1,2,2-Tetrachloroethane	ug/L	20	21	21	104	105		1		
1,2,3-Trichloropropane	ug/L	20	21	20	104	102		1		
1,4-Dichlorobenzene	ug/L	20	18	18	90	91		2		

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE & LCSD: 3581969 3581970

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
1,2-Dichlorobenzene	ug/L	20	18	18	90	90	70-130	1	20	
1,2-Dibromo-3-Chloropropane	ug/L	20	17	19	87	96		9		
Xylene (Total)	ug/L	60	55	56	92	94	70-130	2	20	
1,2-Dichloroethane-d4 (S)	%				116	113	70-128	3		
Toluene-d8 (S)	%				98	99	77-119	1		
Bromofluorobenzene (S)	%				105	106	86-123	2		

MATRIX SPIKE SAMPLE: 3581971 Original: J2010933035

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	22	112	70-130	
Bromomethane	ug/L	0	20	18	89		
Chloroethane	ug/L	0	20	23	117		
Trichlorofluoromethane	ug/L	0	20	18	90		
Acetone	ug/L	0	20	19	96		
1,1-Dichloroethylene	ug/L	0	20	25	127	70-130	
Iodomethane (Methyl Iodide)	ug/L	0	20	11	53		
Acrylonitrile	ug/L	0	20	24	120		
Methylene Chloride	ug/L	0	20	22	110		
Carbon Disulfide	ug/L	0	20	25	124		
trans-1,2-Dichloroethylene	ug/L	0	20	24	119		
1,1-Dichloroethane	ug/L	0	20	22	108		
Vinyl Acetate	ug/L	0	20	3.0	15		
2-Butanone (MEK)	ug/L	0	20	17	84		
cis-1,2-Dichloroethylene	ug/L	0	20	21	107	70-130	
Bromochloromethane	ug/L	0	20	23	114		
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	98		
Carbon Tetrachloride	ug/L	0	20	17	87		
Benzene	ug/L	0	20	20	101	70-130	
Dibromomethane	ug/L	0	20	20	102		
1,2-Dichloropropane	ug/L	0	20	21	107		
Trichloroethene	ug/L	0	20	19	93	70-130	
Bromodichloromethane	ug/L	0	20	20	98		
cis-1,3-Dichloropropene	ug/L	0	20	19	97		
4-Methyl-2-pentanone (MIBK)	ug/L	0	20	19	93		

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

MATRIX SPIKE SAMPLE: 3581971 Original: J2010933035

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
trans-1,3-Dichloropropylene	ug/L	0	20	18	91		
1,1,2-Trichloroethane	ug/L	0	20	19	94		
Toluene	ug/L	0	20	20	100	70-130	
2-Hexanone	ug/L	0	20	19	94		
Dibromochloromethane	ug/L	0	20	18	92		
Ethylene Dibromide (EDB)	ug/L	0	20	19	96		
Tetrachloroethylene (PCE)	ug/L	0.65	20	18	88	70-130	
1,1,1,2-Tetrachloroethane	ug/L	0	20	18	90		
Chlorobenzene	ug/L	0	20	19	95	70-130	
Ethylbenzene	ug/L	0	20	20	99	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	23	113		
1,2,3-Trichloropropane	ug/L	0	20	21	107		
1,4-Dichlorobenzene	ug/L	0	20	18	92		
1,2-Dichlorobenzene	ug/L	0	20	19	94	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	20	21	107		
Xylene (Total)	ug/L	0	60	58	97	70-130	
1,2-Dichloroethane-d4 (S)	%	114			107	70-128	
Toluene-d8 (S)	%	104			101	77-119	
Bromofluorobenzene (S)	%	109			100	86-123	

QC Batch: WCAj/3104 Analysis Method: SM 2540D

QC Batch Method: SM 2540D Prepared:

Associated Lab Samples: J2010933034, J2010933035, J2010933036, J2010933037, J2010933038, J2010933039, J2010933040

METHOD BLANK: 3582477

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

LABORATORY CONTROL SAMPLE: 3582478

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

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3582478

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Suspended Solids	mg/L	100	110	108	85-115	

SAMPLE DUPLICATE: 3582479 Original: J2011013001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	180	200	6	10	

QC Batch: MICj/1932 Analysis Method: COLILERT-18 (Fecal Coliforms)
QC Batch Method: COLILERT-18 (Fecal Coliforms) Prepared:
Associated Lab Samples: J2010933034, J2010933035, J2010933036, J2010933037, J2010933038, J2010933039, J2010933040

METHOD BLANK: 3583726

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

QC Batch: WCAg/3647 Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4 Prepared:
Associated Lab Samples: J2010933034, J2010933035, J2010933036, J2010933037, J2010933038, J2010933039, J2010933040

METHOD BLANK: 3584231

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Chemical Oxygen Demand	mg/L	10	10	U

METHOD BLANK: 3584241

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Chemical Oxygen Demand	mg/L	10	10	U

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3584232

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Chemical Oxygen Demand	mg/L	500	510	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3584234 3584235 Original: J2010756001

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	260	1000	1200	1200	96	96	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3584238 3584239 Original: J2010933035

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	83	500	560	560	96	96	90-110	0	10	

QC Batch: DGMj/2060 Analysis Method: EPA 245.1
QC Batch Method: EPA 245.1 Prepared: 08/18/2020 11:00
Associated Lab Samples: J2010933034, J2010933035, J2010933036, J2010933037, J2010933038, J2010933039, J2010933040

METHOD BLANK: 3584896

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Mercury	mg/L	0.000011	0.000011	U

LABORATORY CONTROL SAMPLE: 3584897

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Mercury	mg/L	0.002	0.0021	103	85-115	

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3584900 3584901 Original: J2010933034

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Mercury	mg/L	0	0.002	0.0021	0.0019	103	97	70-130	6	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3584940 3584941 Original: J2011248001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Mercury	mg/L	0	0.002	0.0019	0.0019	94	95	70-130	1	20	

QC Batch: WCAg/3658 Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1 Prepared:

Associated Lab Samples: J2010933001, J2010933002, J2010933003, J2010933004, J2010933005, J2010933006, J2010933007, J2010933008,

METHOD BLANK: 3585030

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	0.017	0.017	U

LABORATORY CONTROL SAMPLE: 3585031

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.52	104	90-110	

LABORATORY CONTROL SAMPLE: 3585032

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

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3585033 3585034 Original: J2010933001

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	0.03	0.8	0.80	0.79	100	98	90-110	1	10	

QC Batch: WCAg/3659 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Prepared:
Associated Lab Samples: J2010933012, J2010933013, J2010933014, J2010933015, J2010933016, J2010933017, J2010933018, J2010933019,

METHOD BLANK: 3585218

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	0.017	0.017	U

LABORATORY CONTROL SAMPLE: 3585219

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: 3585220

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.2	0.19	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3585221 3585222 Original: J2010933012

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

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3585221 3585222 Original: J2010933012

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Ammonia (N)	mg/L	0	0.8	0.81	0.82	102	102	90-110	0	10	

QC Batch: WCAg/3660 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Prepared:
Associated Lab Samples: J2010933022, J2010933023, J2010933024, J2010933025, J2010933026, J2010933027, J2010933029, J2010933030,

METHOD BLANK: 3585231

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	0.017	0.017	U

LABORATORY CONTROL SAMPLE: 3585232

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.52	104	90-110	

LABORATORY CONTROL SAMPLE: 3585233

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: 3585234 3585235 Original: J2010933022

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	0.07	0.8	0.76	0.71	87	81	90-110	6	10	

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

QC Batch: WCAg/3661 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Prepared:
Associated Lab Samples: J2010933033, J2010933034, J2010933035, J2010933036, J2010933037, J2010933038, J2010933039, J2010933040

METHOD BLANK: 3585243

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	0.017	0.017	U

LABORATORY CONTROL SAMPLE: 3585244

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.50	101	90-110	

LABORATORY CONTROL SAMPLE: 3585245

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3585246 3585247 Original: J2010933034

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	0.84	0.8	1.6	1.6	98	96	90-110	1	10	

QC Batch: DGMj/2063 Analysis Method: SW-846 6020
QC Batch Method: SW-846 3010A Prepared: 08/19/2020 04:40
Associated Lab Samples: J2010933034, J2010933035, J2010933036, J2010933037, J2010933038, J2010933039, J2010933040

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

METHOD BLANK: 3585612

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

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Antimony	ug/L	0.11	0.11	U

LABORATORY CONTROL SAMPLE: 3585613

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Selenium	ug/L	50	54	109	80-120	
Antimony	ug/L	50	52	105	80-120	
Thallium	ug/L	50	47	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3585614 3585615 Original: J2010933038

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Selenium	ug/L	0.31	50	49	52	97	104	75-125	7	20	
Antimony	ug/L	0.23	50	55	58	109	116	75-125	6	20	
Thallium	ug/L	0.022	50	46	50	91	101	75-125	10	20	

QC Batch: WCAg/3692 Analysis Method: SM 5310B

QC Batch Method: SM 5310B Prepared:

Associated Lab Samples: J2010933034, J2010933035, J2010933036

METHOD BLANK: 3588212

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Organic Carbon	mg/L	1.0	1.0	U

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Workorder: J2010933 Trail Ridge Landfill

METHOD BLANK: 3588216

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Organic Carbon	mg/L	1.0	1.0	U

LABORATORY CONTROL SAMPLE: 3588208

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Organic Carbon	mg/L	10	11	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3588213 3588214 Original: T2014985003

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	12	25	37	38	100	105	90-110	3	10	

QC Batch: WCAg/3695 Analysis Method: EPA 351.2
QC Batch Method: Copper Sulfate Digestion Prepared: 08/18/2020 17:05
Associated Lab Samples: J2010933034, J2010933035, J2010933036, J2010933037, J2010933038, J2010933039, J2010933040

METHOD BLANK: 3588330

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Kjeldahl Nitrogen	mg/L	0.40	0.40	U

METHOD BLANK: 3588331

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Phosphorus (as P)	mg/L	0.50	0.50	U

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3588332

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

LABORATORY CONTROL SAMPLE: 3588333

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Phosphorus (as P)	mg/L	1	0.94	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3588334 3588336 Original: J2010933036

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	113	111	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3588335 3588337 Original: J2010933036

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	0.016	1	0.84	0.92I	84	92	80-120	9	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3588338 3588340 Original: G2008021005

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Kjeldahl Nitrogen	mg/L	0.43	1	1.4	1.2	99	76	90-110	18	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3588339 3588341 Original: G2008021005

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Phosphorus (as P)	mg/L	2.6	1	3.8	3.8	115	116	80-120	0	20	

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

QC Batch: WCAg/3695 Analysis Method: EPA 365.4
QC Batch Method: Copper Sulfate Digestion Prepared: 08/18/2020 17:05
Associated Lab Samples: J2010933034, J2010933035, J2010933036, J2010933037, J2010933038, J2010933039, J2010933040

METHOD BLANK: 3588330

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Kjeldahl Nitrogen	mg/L	0.40	0.40	U

METHOD BLANK: 3588331

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Phosphorus (as P)	mg/L	0.50	0.50	U

LABORATORY CONTROL SAMPLE: 3588332

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

LABORATORY CONTROL SAMPLE: 3588333

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Phosphorus (as P)	mg/L	1	0.94	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3588334 3588336 Original: J2010933036

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	113	111	90-110	2	20	

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3588335 3588337 Original: J2010933036

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	0.016	1	0.84	0.92I	84	92	80-120	9	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3588338 3588340 Original: G2008021005

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Kjeldahl Nitrogen	mg/L	0.43	1	1.4	1.2	99	76	90-110	18	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3588339 3588341 Original: G2008021005

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Phosphorus (as P)	mg/L	2.6	1	3.8	3.8	115	116	80-120	0	20	

QC Batch: DGMj/2078 Analysis Method: SW-846 6010

QC Batch Method: SW-846 3010A Prepared: 08/21/2020 04:45

Associated Lab Samples: J2010933034, J2010933035, J2010933036, J2010933037, J2010933038, J2010933039, J2010933040

METHOD BLANK: 3589703

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Silver	ug/L	8.0	8.0	U
Arsenic	ug/L	8.0	8.0	U
Barium	ug/L	3.0	3.0	U
Beryllium	ug/L	2.0	2.0	U
Calcium	mg/L	0.20	0.20	U
Cadmium	ug/L	0.50	0.50	U
Cobalt	ug/L	1.0	1.0	U
Chromium	ug/L	5.0	5.0	U
Copper	ug/L	10	10	U
Iron	ug/L	200	200	U
Magnesium	mg/L	0.10	0.10	U
Nickel	ug/L	10	10	U
Lead	ug/L	3.0	3.0	U
Vanadium	ug/L	2.0	2.0	U
Zinc	ug/L	50	50	U

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

METHOD BLANK: 3589703

LABORATORY CONTROL SAMPLE: 3589704

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Silver	ug/L	160	150	95	80-120	
Arsenic	ug/L	160	160	101	80-120	
Barium	ug/L	60	58	97	80-120	
Beryllium	ug/L	40	38	96	80-120	
Calcium	mg/L	4	3.8	95	80-120	
Cadmium	ug/L	10	9.9	99	80-120	
Cobalt	ug/L	20	19	96	80-120	
Chromium	ug/L	100	95	95	80-120	
Copper	ug/L	200	200	100	80-120	
Iron	ug/L	4000	3800	95	80-120	
Magnesium	mg/L	2	1.9	96	80-120	
Nickel	ug/L	200	200	98	80-120	
Lead	ug/L	60	58	96	80-120	
Vanadium	ug/L	40	38	95	80-120	
Zinc	ug/L	1000	980	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3589705 3589706 Original: J2011398001

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	160	150	140	96	90	75-125	6	20	
Arsenic	ug/L	1.1	160	160	150	97	94	75-125	3	20	
Barium	ug/L	20	60	78	75	95	91	75-125	4	20	
Beryllium	ug/L	0	40	39	37	97	92	75-125	5	20	
Calcium	mg/L	4.6	4	8.1	7.8	85	80	75-125	3	20	
Cadmium	ug/L	0	10	9.8	9.4	98	94	75-125	4	20	
Cobalt	ug/L	0.9	20	20	19	101	95	75-125	6	20	
Chromium	ug/L	0	100	96	92	96	92	75-125	5	20	
Copper	ug/L	160	200	360	340	97	89	75-125	4	20	
Iron	ug/L	170	4000	3900	3800	98	95	75-125	3	20	
Magnesium	mg/L	3.3	2	5.0	4.9	83	76	75-125	3	20	
Nickel	ug/L	4.4	200	200	190	99	95	75-125	4	20	
Lead	ug/L	9.9	60	68	64	97	91	75-125	6	20	
Vanadium	ug/L	0	40	39	36	97	91	75-125	6	20	
Zinc	ug/L	1300	1000	2300	2200	94	86	75-125	3	20	

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

QC Batch: WCAg/3718 Analysis Method: SM 5310B
QC Batch Method: SM 5310B Prepared:
Associated Lab Samples: J2010933037, J2010933038, J2010933039, J2010933040

METHOD BLANK: 3591335

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Organic Carbon	mg/L	1.0	1.0	U

METHOD BLANK: 3591339

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Organic Carbon	mg/L	1.0	1.0	U

LABORATORY CONTROL SAMPLE: 3591331

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3591332 3591333 Original: M2004643001

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	0.55	25	25	25	99	101	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3591336 3591337 Original: J2010933037

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	8.1	25	34	33	105	98	90-110	5	10	

CERTIFICATE OF ANALYSIS

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

QC Batch: WCAg/3743 Analysis Method: SM 10200 H
QC Batch Method: SM 10200 H Prepared:
Associated Lab Samples: J2010933034, J2010933035, J2010933036, J2010933037, J2010933038, J2010933039, J2010933040

METHOD BLANK: 3592614

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

METHOD BLANK: 3592616

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

SAMPLE DUPLICATE: 3592613 Original: T2015418001

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

SAMPLE DUPLICATE: 3592615 Original: J2010933035

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Corrected Chlorophyll A	mg/m3	19	20	5	35	

SAMPLE DUPLICATE: 3592617 Original: A2007079004

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Corrected Chlorophyll A	mg/m3	4.8	4.8	0	35	

QC Batch: WCAj/3188 Analysis Method: SM 2540 C
QC Batch Method: SM 2540 C Prepared:

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

Associated Lab Samples: J2010933009, J2010933025, J2010933026, J2010933027, J2010933033, J2010933034, J2010933035, J2010933036,

METHOD BLANK: 3593846

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

LABORATORY CONTROL SAMPLE: 3593847

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	300	310	105	85-115	

SAMPLE DUPLICATE: 3593850 Original: J2011057001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	130	150	15	10	

QC Batch: WCAj/3201 Analysis Method: SM 5210B

QC Batch Method: SM 5210B Prepared:

Associated Lab Samples: J2010933034, J2010933035, J2010933036, J2010933037, J2010933038, J2010933039, J2010933040

METHOD BLANK: 3595314

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

LABORATORY CONTROL SAMPLE: 3595315

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Biochemical Oxygen Demand	mg/L	200	180	93	84.6-115.4	

CERTIFICATE OF ANALYSIS

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QUALITY CONTROL DATA

Workorder: J2010933 Trail Ridge Landfill

QUALITY CONTROL DATA QUALIFIERS

Workorder: J2010933 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
[2]	SAMPLE FILTERED: 08/19/2020 8:15

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J2010933 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J2010933001	MWB-22 (S)	SW-846 7470A	DGMj/2025	SW-846 7470A	CVAj/1213
J2010933002	MWB-12 (S)	SW-846 7470A	DGMj/2025	SW-846 7470A	CVAj/1213
J2010933003	MWB-13 (S)	SW-846 7470A	DGMj/2025	SW-846 7470A	CVAj/1213
J2010933004	MWB-27 (S)	SW-846 7470A	DGMj/2025	SW-846 7470A	CVAj/1213
J2010933005	MWB-29 (S)	SW-846 7470A	DGMj/2025	SW-846 7470A	CVAj/1213
J2010933006	MWB-2 (S)	SW-846 7470A	DGMj/2025	SW-846 7470A	CVAj/1213
J2010933007	MWB-20 (S)	SW-846 7470A	DGMj/2025	SW-846 7470A	CVAj/1213
J2010933008	MWB-21 (S)	SW-846 7470A	DGMj/2025	SW-846 7470A	CVAj/1213
J2010933009	MWB-34 (S)	SW-846 7470A	DGMj/2025	SW-846 7470A	CVAj/1213
J2010933011	MWB-39 (S)	SW-846 7470A	DGMj/2025	SW-846 7470A	CVAj/1213
J2010933001	MWB-22 (S)	SW-846 3010A	DGMj/2031	SW-846 6020	ICMj/1370
J2010933002	MWB-12 (S)	SW-846 3010A	DGMj/2031	SW-846 6020	ICMj/1370
J2010933003	MWB-13 (S)	SW-846 3010A	DGMj/2031	SW-846 6020	ICMj/1370
J2010933004	MWB-27 (S)	SW-846 3010A	DGMj/2031	SW-846 6020	ICMj/1370
J2010933005	MWB-29 (S)	SW-846 3010A	DGMj/2031	SW-846 6020	ICMj/1370
J2010933006	MWB-2 (S)	SW-846 3010A	DGMj/2031	SW-846 6020	ICMj/1370
J2010933007	MWB-20 (S)	SW-846 3010A	DGMj/2031	SW-846 6020	ICMj/1370
J2010933008	MWB-21 (S)	SW-846 3010A	DGMj/2031	SW-846 6020	ICMj/1370
J2010933009	MWB-34 (S)	SW-846 3010A	DGMj/2031	SW-846 6020	ICMj/1370
J2010933011	MWB-39 (S)	SW-846 3010A	DGMj/2031	SW-846 6020	ICMj/1370
J2010933001	MWB-22 (S)			EPA 300.0	WCAj/3074
J2010933002	MWB-12 (S)			EPA 300.0	WCAj/3074
J2010933003	MWB-13 (S)			EPA 300.0	WCAj/3074
J2010933004	MWB-27 (S)			EPA 300.0	WCAj/3074
J2010933005	MWB-29 (S)			EPA 300.0	WCAj/3074
J2010933006	MWB-2 (S)			EPA 300.0	WCAj/3074
J2010933007	MWB-20 (S)			EPA 300.0	WCAj/3074
J2010933008	MWB-21 (S)			EPA 300.0	WCAj/3074
J2010933009	MWB-34 (S)			EPA 300.0	WCAj/3074
J2010933011	MWB-39 (S)			EPA 300.0	WCAj/3074
J2010933012	MWB-12 (I)			EPA 300.0	WCAj/3074
J2010933013	MWB-13 (I)			EPA 300.0	WCAj/3074

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J2010933 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J2010933014	MWB-27 (I)			EPA 300.0	WCAj/3074
J2010933015	MWB-29 (I)			EPA 300.0	WCAj/3074
J2010933016	MWB-2 (I)			EPA 300.0	WCAj/3074
J2010933017	MWB-34 (I)			EPA 300.0	WCAj/3074
J2010933018	MWB-39 (I)			EPA 300.0	WCAj/3074
J2010933001	MWB-22 (S)	SW-846 5030B	MSVj/2322	SW-846 8260B (SIM)	MSVj/2323
J2010933002	MWB-12 (S)	SW-846 5030B	MSVj/2322	SW-846 8260B (SIM)	MSVj/2323
J2010933003	MWB-13 (S)	SW-846 5030B	MSVj/2322	SW-846 8260B (SIM)	MSVj/2323
J2010933004	MWB-27 (S)	SW-846 5030B	MSVj/2322	SW-846 8260B (SIM)	MSVj/2323
J2010933005	MWB-29 (S)	SW-846 5030B	MSVj/2322	SW-846 8260B (SIM)	MSVj/2323
J2010933006	MWB-2 (S)	SW-846 5030B	MSVj/2322	SW-846 8260B (SIM)	MSVj/2323
J2010933007	MWB-20 (S)	SW-846 5030B	MSVj/2322	SW-846 8260B (SIM)	MSVj/2323
J2010933008	MWB-21 (S)	SW-846 5030B	MSVj/2322	SW-846 8260B (SIM)	MSVj/2323
J2010933009	MWB-34 (S)	SW-846 5030B	MSVj/2322	SW-846 8260B (SIM)	MSVj/2323
J2010933010	Trip Blank	SW-846 5030B	MSVj/2322	SW-846 8260B (SIM)	MSVj/2323
J2010933011	MWB-39 (S)	SW-846 5030B	MSVj/2322	SW-846 8260B (SIM)	MSVj/2323
J2010933001	MWB-22 (S)	SW-846 5030B	MSVj/2324	SW-846 8260B	MSVj/2325
J2010933002	MWB-12 (S)	SW-846 5030B	MSVj/2324	SW-846 8260B	MSVj/2325
J2010933003	MWB-13 (S)	SW-846 5030B	MSVj/2324	SW-846 8260B	MSVj/2325
J2010933004	MWB-27 (S)	SW-846 5030B	MSVj/2324	SW-846 8260B	MSVj/2325
J2010933005	MWB-29 (S)	SW-846 5030B	MSVj/2324	SW-846 8260B	MSVj/2325
J2010933006	MWB-2 (S)	SW-846 5030B	MSVj/2324	SW-846 8260B	MSVj/2325
J2010933007	MWB-20 (S)	SW-846 5030B	MSVj/2324	SW-846 8260B	MSVj/2325
J2010933008	MWB-21 (S)	SW-846 5030B	MSVj/2324	SW-846 8260B	MSVj/2325
J2010933009	MWB-34 (S)	SW-846 5030B	MSVj/2324	SW-846 8260B	MSVj/2325
J2010933010	Trip Blank	SW-846 5030B	MSVj/2324	SW-846 8260B	MSVj/2325
J2010933011	MWB-39 (S)	SW-846 5030B	MSVj/2324	SW-846 8260B	MSVj/2325
J2010933001	MWB-22 (S)			SM 2540 C	WCAj/3080
J2010933002	MWB-12 (S)			SM 2540 C	WCAj/3080
J2010933003	MWB-13 (S)			SM 2540 C	WCAj/3080
J2010933004	MWB-27 (S)			SM 2540 C	WCAj/3080

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J2010933 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J2010933005	MWB-29 (S)			SM 2540 C	WCAj/3080
J2010933019	MWB-33 (S)			EPA 300.0	WCAj/3086
J2010933020	MWB-32 (S)			EPA 300.0	WCAj/3086
J2010933021	MWB-11 (S)			EPA 300.0	WCAj/3086
J2010933022	MWB-03 (S)			EPA 300.0	WCAj/3086
J2010933023	MWB-35 (S)			EPA 300.0	WCAj/3086
J2010933024	SGMW-1 (S)R			EPA 300.0	WCAj/3086
J2010933025	SGMW-2 (S)			EPA 300.0	WCAj/3086
J2010933026	MWB-40 (S)			EPA 300.0	WCAj/3086
J2010933027	Equipment Blank			EPA 300.0	WCAj/3086
J2010933029	MWB-32 (I)			EPA 300.0	WCAj/3086
J2010933030	MWB-11 (I)R			EPA 300.0	WCAj/3086
J2010933031	MWB-03 (I)			EPA 300.0	WCAj/3086
J2010933032	MWB-35 (I)			EPA 300.0	WCAj/3086
J2010933033	Equipment Blank			EPA 300.0	WCAj/3086
J2010933019	MWB-33 (S)	SW-846 3010A	DGMj/2040	SW-846 6010	ICPj/1458
J2010933020	MWB-32 (S)	SW-846 3010A	DGMj/2040	SW-846 6010	ICPj/1458
J2010933021	MWB-11 (S)	SW-846 3010A	DGMj/2040	SW-846 6010	ICPj/1458
J2010933022	MWB-03 (S)	SW-846 3010A	DGMj/2040	SW-846 6010	ICPj/1458
J2010933023	MWB-35 (S)	SW-846 3010A	DGMj/2040	SW-846 6010	ICPj/1458
J2010933024	SGMW-1 (S)R	SW-846 3010A	DGMj/2040	SW-846 6010	ICPj/1458
J2010933025	SGMW-2 (S)	SW-846 3010A	DGMj/2040	SW-846 6010	ICPj/1458
J2010933026	MWB-40 (S)	SW-846 3010A	DGMj/2040	SW-846 6010	ICPj/1458
J2010933027	Equipment Blank	SW-846 3010A	DGMj/2040	SW-846 6010	ICPj/1458
J2010933029	MWB-32 (I)	SW-846 3010A	DGMj/2040	SW-846 6010	ICPj/1458
J2010933030	MWB-11 (I)R	SW-846 3010A	DGMj/2040	SW-846 6010	ICPj/1458
J2010933031	MWB-03 (I)	SW-846 3010A	DGMj/2040	SW-846 6010	ICPj/1458
J2010933032	MWB-35 (I)	SW-846 3010A	DGMj/2040	SW-846 6010	ICPj/1458
J2010933033	Equipment Blank	SW-846 3010A	DGMj/2040	SW-846 6010	ICPj/1458
J2010933001	MWB-22 (S)	SW-846 3010A	DGMj/2041	SW-846 6010	ICPj/1459
J2010933002	MWB-12 (S)	SW-846 3010A	DGMj/2041	SW-846 6010	ICPj/1459

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J2010933 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J2010933003	MWB-13 (S)	SW-846 3010A	DGMj/2041	SW-846 6010	ICPj/1459
J2010933004	MWB-27 (S)	SW-846 3010A	DGMj/2041	SW-846 6010	ICPj/1459
J2010933005	MWB-29 (S)	SW-846 3010A	DGMj/2041	SW-846 6010	ICPj/1459
J2010933006	MWB-2 (S)	SW-846 3010A	DGMj/2041	SW-846 6010	ICPj/1459
J2010933007	MWB-20 (S)	SW-846 3010A	DGMj/2041	SW-846 6010	ICPj/1459
J2010933008	MWB-21 (S)	SW-846 3010A	DGMj/2041	SW-846 6010	ICPj/1459
J2010933009	MWB-34 (S)	SW-846 3010A	DGMj/2041	SW-846 6010	ICPj/1459
J2010933011	MWB-39 (S)	SW-846 3010A	DGMj/2041	SW-846 6010	ICPj/1459
J2010933012	MWB-12 (I)	SW-846 3010A	DGMj/2041	SW-846 6010	ICPj/1459
J2010933013	MWB-13 (I)	SW-846 3010A	DGMj/2041	SW-846 6010	ICPj/1459
J2010933014	MWB-27 (I)	SW-846 3010A	DGMj/2041	SW-846 6010	ICPj/1459
J2010933015	MWB-29 (I)	SW-846 3010A	DGMj/2041	SW-846 6010	ICPj/1459
J2010933016	MWB-2 (I)	SW-846 3010A	DGMj/2041	SW-846 6010	ICPj/1459
J2010933017	MWB-34 (I)	SW-846 3010A	DGMj/2041	SW-846 6010	ICPj/1459
J2010933018	MWB-39 (I)	SW-846 3010A	DGMj/2041	SW-846 6010	ICPj/1459
J2010933019	MWB-33 (S)	SW-846 3010A	DGMj/2042	SW-846 6020	ICMj/1374
J2010933020	MWB-32 (S)	SW-846 3010A	DGMj/2042	SW-846 6020	ICMj/1374
J2010933021	MWB-11 (S)	SW-846 3010A	DGMj/2042	SW-846 6020	ICMj/1374
J2010933022	MWB-03 (S)	SW-846 3010A	DGMj/2042	SW-846 6020	ICMj/1374
J2010933023	MWB-35 (S)	SW-846 3010A	DGMj/2042	SW-846 6020	ICMj/1374
J2010933024	SGMW-1 (S)R	SW-846 3010A	DGMj/2042	SW-846 6020	ICMj/1374
J2010933025	SGMW-2 (S)	SW-846 3010A	DGMj/2042	SW-846 6020	ICMj/1374
J2010933026	MWB-40 (S)	SW-846 3010A	DGMj/2042	SW-846 6020	ICMj/1374
J2010933027	Equipment Blank	SW-846 3010A	DGMj/2042	SW-846 6020	ICMj/1374
J2010933006	MWB-2 (S)			SM 2540 C	WCAj/3088
J2010933007	MWB-20 (S)			SM 2540 C	WCAj/3088
J2010933008	MWB-21 (S)			SM 2540 C	WCAj/3088
J2010933011	MWB-39 (S)			SM 2540 C	WCAj/3088
J2010933012	MWB-12 (I)			SM 2540 C	WCAj/3088
J2010933013	MWB-13 (I)			SM 2540 C	WCAj/3088
J2010933014	MWB-27 (I)			SM 2540 C	WCAj/3088
J2010933015	MWB-29 (I)			SM 2540 C	WCAj/3088

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J2010933 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J2010933016	MWB-2 (I)			SM 2540 C	WCAj/3088
J2010933017	MWB-34 (I)			SM 2540 C	WCAj/3088
J2010933018	MWB-39 (I)			SM 2540 C	WCAj/3088
J2010933019	MWB-33 (S)			SM 2540 C	WCAj/3088
J2010933020	MWB-32 (S)			SM 2540 C	WCAj/3088
J2010933021	MWB-11 (S)			SM 2540 C	WCAj/3088
J2010933022	MWB-03 (S)			SM 2540 C	WCAj/3088
J2010933023	MWB-35 (S)			SM 2540 C	WCAj/3088
J2010933024	SGMW-1 (S)R			SM 2540 C	WCAj/3088
J2010933034	SW-1			EPA 300.0	WCAj/3089
J2010933035	SW-3			EPA 300.0	WCAj/3089
J2010933036	SW-B			EPA 300.0	WCAj/3089
J2010933037	SW-4			EPA 300.0	WCAj/3089
J2010933038	SW-7			EPA 300.0	WCAj/3089
J2010933039	SW-5			EPA 300.0	WCAj/3089
J2010933040	SW-6			EPA 300.0	WCAj/3089
J2010933019	MWB-33 (S)	SW-846 5030B	MSVj/2334	SW-846 8260B (SIM)	MSVj/2335
J2010933020	MWB-32 (S)	SW-846 5030B	MSVj/2334	SW-846 8260B (SIM)	MSVj/2335
J2010933021	MWB-11 (S)	SW-846 5030B	MSVj/2334	SW-846 8260B (SIM)	MSVj/2335
J2010933022	MWB-03 (S)	SW-846 5030B	MSVj/2334	SW-846 8260B (SIM)	MSVj/2335
J2010933023	MWB-35 (S)	SW-846 5030B	MSVj/2334	SW-846 8260B (SIM)	MSVj/2335
J2010933024	SGMW-1 (S)R	SW-846 5030B	MSVj/2334	SW-846 8260B (SIM)	MSVj/2335
J2010933025	SGMW-2 (S)	SW-846 5030B	MSVj/2334	SW-846 8260B (SIM)	MSVj/2335
J2010933026	MWB-40 (S)	SW-846 5030B	MSVj/2334	SW-846 8260B (SIM)	MSVj/2335
J2010933027	Equipment Blank	SW-846 5030B	MSVj/2334	SW-846 8260B (SIM)	MSVj/2335
J2010933028	Trip Blank	SW-846 5030B	MSVj/2334	SW-846 8260B (SIM)	MSVj/2335
J2010933019	MWB-33 (S)	SW-846 5030B	MSVj/2336	SW-846 8260B	MSVj/2337
J2010933020	MWB-32 (S)	SW-846 5030B	MSVj/2336	SW-846 8260B	MSVj/2337
J2010933021	MWB-11 (S)	SW-846 5030B	MSVj/2336	SW-846 8260B	MSVj/2337
J2010933022	MWB-03 (S)	SW-846 5030B	MSVj/2336	SW-846 8260B	MSVj/2337
J2010933023	MWB-35 (S)	SW-846 5030B	MSVj/2336	SW-846 8260B	MSVj/2337

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Fax: (904)363-9354

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J2010933 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J2010933024	SGMW-1 (S)R	SW-846 5030B	MSVj/2336	SW-846 8260B	MSVj/2337
J2010933025	SGMW-2 (S)	SW-846 5030B	MSVj/2336	SW-846 8260B	MSVj/2337
J2010933026	MWB-40 (S)	SW-846 5030B	MSVj/2336	SW-846 8260B	MSVj/2337
J2010933027	Equipment Blank	SW-846 5030B	MSVj/2336	SW-846 8260B	MSVj/2337
J2010933028	Trip Blank	SW-846 5030B	MSVj/2336	SW-846 8260B	MSVj/2337
J2010933019	MWB-33 (S)	SW-846 7470A	DGMj/2043	SW-846 7470A	CVAj/1218
J2010933020	MWB-32 (S)	SW-846 7470A	DGMj/2043	SW-846 7470A	CVAj/1218
J2010933021	MWB-11 (S)	SW-846 7470A	DGMj/2043	SW-846 7470A	CVAj/1218
J2010933022	MWB-03 (S)	SW-846 7470A	DGMj/2043	SW-846 7470A	CVAj/1218
J2010933023	MWB-35 (S)	SW-846 7470A	DGMj/2043	SW-846 7470A	CVAj/1218
J2010933024	SGMW-1 (S)R	SW-846 7470A	DGMj/2043	SW-846 7470A	CVAj/1218
J2010933025	SGMW-2 (S)	SW-846 7470A	DGMj/2043	SW-846 7470A	CVAj/1218
J2010933026	MWB-40 (S)	SW-846 7470A	DGMj/2043	SW-846 7470A	CVAj/1218
J2010933027	Equipment Blank	SW-846 7470A	DGMj/2043	SW-846 7470A	CVAj/1218
J2010933029	MWB-32 (I)			SM 2540 C	WCAj/3097
J2010933030	MWB-11 (I)R			SM 2540 C	WCAj/3097
J2010933031	MWB-03 (I)			SM 2540 C	WCAj/3097
J2010933032	MWB-35 (I)			SM 2540 C	WCAj/3097
J2010933034	SW-1	SW-846 5030B	MSVj/2342	SW-846 8260B (SIM)	MSVj/2343
J2010933035	SW-3	SW-846 5030B	MSVj/2342	SW-846 8260B (SIM)	MSVj/2343
J2010933036	SW-B	SW-846 5030B	MSVj/2342	SW-846 8260B (SIM)	MSVj/2343
J2010933037	SW-4	SW-846 5030B	MSVj/2342	SW-846 8260B (SIM)	MSVj/2343
J2010933038	SW-7	SW-846 5030B	MSVj/2342	SW-846 8260B (SIM)	MSVj/2343
J2010933039	SW-5	SW-846 5030B	MSVj/2342	SW-846 8260B (SIM)	MSVj/2343
J2010933040	SW-6	SW-846 5030B	MSVj/2342	SW-846 8260B (SIM)	MSVj/2343
J2010933041	TRIP	SW-846 5030B	MSVj/2342	SW-846 8260B (SIM)	MSVj/2343
J2010933034	SW-1	SW-846 5030B	MSVj/2344	SW-846 8260B	MSVj/2345
J2010933035	SW-3	SW-846 5030B	MSVj/2344	SW-846 8260B	MSVj/2345
J2010933036	SW-B	SW-846 5030B	MSVj/2344	SW-846 8260B	MSVj/2345

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J2010933 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J2010933037	SW-4	SW-846 5030B	MSVj/2344	SW-846 8260B	MSVj/2345
J2010933038	SW-7	SW-846 5030B	MSVj/2344	SW-846 8260B	MSVj/2345
J2010933039	SW-5	SW-846 5030B	MSVj/2344	SW-846 8260B	MSVj/2345
J2010933040	SW-6	SW-846 5030B	MSVj/2344	SW-846 8260B	MSVj/2345
J2010933041	TRIP	SW-846 5030B	MSVj/2344	SW-846 8260B	MSVj/2345
J2010933034	SW-1			SM 2540D	WCAj/3104
J2010933035	SW-3			SM 2540D	WCAj/3104
J2010933036	SW-B			SM 2540D	WCAj/3104
J2010933037	SW-4			SM 2540D	WCAj/3104
J2010933038	SW-7			SM 2540D	WCAj/3104
J2010933039	SW-5			SM 2540D	WCAj/3104
J2010933040	SW-6			SM 2540D	WCAj/3104
J2010933034	SW-1			COLILERT-18 (Fecal Coliforms)	MICj/1932
J2010933035	SW-3			COLILERT-18 (Fecal Coliforms)	MICj/1932
J2010933036	SW-B			COLILERT-18 (Fecal Coliforms)	MICj/1932
J2010933037	SW-4			COLILERT-18 (Fecal Coliforms)	MICj/1932
J2010933038	SW-7			COLILERT-18 (Fecal Coliforms)	MICj/1932
J2010933039	SW-5			COLILERT-18 (Fecal Coliforms)	MICj/1932
J2010933040	SW-6			COLILERT-18 (Fecal Coliforms)	MICj/1932
J2010933034	SW-1			EPA 410.4	WCAg/3647
J2010933035	SW-3			EPA 410.4	WCAg/3647
J2010933036	SW-B			EPA 410.4	WCAg/3647
J2010933037	SW-4			EPA 410.4	WCAg/3647
J2010933038	SW-7			EPA 410.4	WCAg/3647
J2010933039	SW-5			EPA 410.4	WCAg/3647
J2010933040	SW-6			EPA 410.4	WCAg/3647
J2010933034	SW-1	EPA 245.1	DGMj/2060	EPA 245.1	CVAj/1221

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J2010933 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J2010933035	SW-3	EPA 245.1	DGMj/2060	EPA 245.1	CVAj/1221
J2010933036	SW-B	EPA 245.1	DGMj/2060	EPA 245.1	CVAj/1221
J2010933037	SW-4	EPA 245.1	DGMj/2060	EPA 245.1	CVAj/1221
J2010933038	SW-7	EPA 245.1	DGMj/2060	EPA 245.1	CVAj/1221
J2010933039	SW-5	EPA 245.1	DGMj/2060	EPA 245.1	CVAj/1221
J2010933040	SW-6	EPA 245.1	DGMj/2060	EPA 245.1	CVAj/1221
J2010933001	MWB-22 (S)			EPA 350.1	WCAg/3658
J2010933002	MWB-12 (S)			EPA 350.1	WCAg/3658
J2010933003	MWB-13 (S)			EPA 350.1	WCAg/3658
J2010933004	MWB-27 (S)			EPA 350.1	WCAg/3658
J2010933005	MWB-29 (S)			EPA 350.1	WCAg/3658
J2010933006	MWB-2 (S)			EPA 350.1	WCAg/3658
J2010933007	MWB-20 (S)			EPA 350.1	WCAg/3658
J2010933008	MWB-21 (S)			EPA 350.1	WCAg/3658
J2010933009	MWB-34 (S)			EPA 350.1	WCAg/3658
J2010933011	MWB-39 (S)			EPA 350.1	WCAg/3658
J2010933012	MWB-12 (I)			EPA 350.1	WCAg/3659
J2010933013	MWB-13 (I)			EPA 350.1	WCAg/3659
J2010933014	MWB-27 (I)			EPA 350.1	WCAg/3659
J2010933015	MWB-29 (I)			EPA 350.1	WCAg/3659
J2010933016	MWB-2 (I)			EPA 350.1	WCAg/3659
J2010933017	MWB-34 (I)			EPA 350.1	WCAg/3659
J2010933018	MWB-39 (I)			EPA 350.1	WCAg/3659
J2010933019	MWB-33 (S)			EPA 350.1	WCAg/3659
J2010933020	MWB-32 (S)			EPA 350.1	WCAg/3659
J2010933021	MWB-11 (S)			EPA 350.1	WCAg/3659
J2010933022	MWB-03 (S)			EPA 350.1	WCAg/3660
J2010933023	MWB-35 (S)			EPA 350.1	WCAg/3660
J2010933024	SGMW-1 (S)R			EPA 350.1	WCAg/3660
J2010933025	SGMW-2 (S)			EPA 350.1	WCAg/3660
J2010933026	MWB-40 (S)			EPA 350.1	WCAg/3660

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J2010933 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J2010933027	Equipment Blank			EPA 350.1	WCAg/3660
J2010933029	MWB-32 (I)			EPA 350.1	WCAg/3660
J2010933030	MWB-11 (I)R			EPA 350.1	WCAg/3660
J2010933031	MWB-03 (I)			EPA 350.1	WCAg/3660
J2010933032	MWB-35 (I)			EPA 350.1	WCAg/3660
J2010933033	Equipment Blank			EPA 350.1	WCAg/3661
J2010933034	SW-1			EPA 350.1	WCAg/3661
J2010933035	SW-3			EPA 350.1	WCAg/3661
J2010933036	SW-B			EPA 350.1	WCAg/3661
J2010933037	SW-4			EPA 350.1	WCAg/3661
J2010933038	SW-7			EPA 350.1	WCAg/3661
J2010933039	SW-5			EPA 350.1	WCAg/3661
J2010933040	SW-6			EPA 350.1	WCAg/3661
J2010933034	SW-1	SW-846 3010A	DGMj/2063	SW-846 6020	ICMj/1383
J2010933035	SW-3	SW-846 3010A	DGMj/2063	SW-846 6020	ICMj/1383
J2010933036	SW-B	SW-846 3010A	DGMj/2063	SW-846 6020	ICMj/1383
J2010933037	SW-4	SW-846 3010A	DGMj/2063	SW-846 6020	ICMj/1383
J2010933038	SW-7	SW-846 3010A	DGMj/2063	SW-846 6020	ICMj/1383
J2010933039	SW-5	SW-846 3010A	DGMj/2063	SW-846 6020	ICMj/1383
J2010933040	SW-6	SW-846 3010A	DGMj/2063	SW-846 6020	ICMj/1383
J2010933034	SW-1			SM 5310B	WCAg/3692
J2010933035	SW-3			SM 5310B	WCAg/3692
J2010933036	SW-B			SM 5310B	WCAg/3692
J2010933034	SW-1	Copper Sulfate Digestion	WCAg/3695	EPA 351.2	WCAg/3709
J2010933035	SW-3	Copper Sulfate Digestion	WCAg/3695	EPA 351.2	WCAg/3709
J2010933036	SW-B	Copper Sulfate Digestion	WCAg/3695	EPA 351.2	WCAg/3709
J2010933037	SW-4	Copper Sulfate Digestion	WCAg/3695	EPA 351.2	WCAg/3709
J2010933038	SW-7	Copper Sulfate Digestion	WCAg/3695	EPA 351.2	WCAg/3709
J2010933039	SW-5	Copper Sulfate Digestion	WCAg/3695	EPA 351.2	WCAg/3709

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J2010933 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J2010933040	SW-6	Copper Sulfate Digestion	WCAg/3695	EPA 351.2	WCAg/3709
J2010933034	SW-1	Copper Sulfate Digestion	WCAg/3695	EPA 365.4	WCAg/3710
J2010933035	SW-3	Copper Sulfate Digestion	WCAg/3695	EPA 365.4	WCAg/3710
J2010933036	SW-B	Copper Sulfate Digestion	WCAg/3695	EPA 365.4	WCAg/3710
J2010933037	SW-4	Copper Sulfate Digestion	WCAg/3695	EPA 365.4	WCAg/3710
J2010933038	SW-7	Copper Sulfate Digestion	WCAg/3695	EPA 365.4	WCAg/3710
J2010933039	SW-5	Copper Sulfate Digestion	WCAg/3695	EPA 365.4	WCAg/3710
J2010933040	SW-6	Copper Sulfate Digestion	WCAg/3695	EPA 365.4	WCAg/3710
J2010933034	SW-1	SW-846 3010A	DGMj/2078	SW-846 6010	ICPj/1476
J2010933035	SW-3	SW-846 3010A	DGMj/2078	SW-846 6010	ICPj/1476
J2010933036	SW-B	SW-846 3010A	DGMj/2078	SW-846 6010	ICPj/1476
J2010933037	SW-4	SW-846 3010A	DGMj/2078	SW-846 6010	ICPj/1476
J2010933038	SW-7	SW-846 3010A	DGMj/2078	SW-846 6010	ICPj/1476
J2010933039	SW-5	SW-846 3010A	DGMj/2078	SW-846 6010	ICPj/1476
J2010933040	SW-6	SW-846 3010A	DGMj/2078	SW-846 6010	ICPj/1476
J2010933037	SW-4			SM 5310B	WCAg/3718
J2010933038	SW-7			SM 5310B	WCAg/3718
J2010933039	SW-5			SM 5310B	WCAg/3718
J2010933040	SW-6			SM 5310B	WCAg/3718
J2010933034	SW-1			SM 10200 H	WCAg/3743
J2010933035	SW-3			SM 10200 H	WCAg/3743
J2010933036	SW-B			SM 10200 H	WCAg/3743
J2010933037	SW-4			SM 10200 H	WCAg/3743
J2010933038	SW-7			SM 10200 H	WCAg/3743
J2010933039	SW-5			SM 10200 H	WCAg/3743
J2010933040	SW-6			SM 10200 H	WCAg/3743
J2010933009	MWB-34 (S)			SM 2540 C	WCAj/3188
J2010933025	SGMW-2 (S)			SM 2540 C	WCAj/3188
J2010933026	MWB-40 (S)			SM 2540 C	WCAj/3188

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J2010933 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J2010933027	Equipment Blank			SM 2540 C	WCAj/3188
J2010933033	Equipment Blank			SM 2540 C	WCAj/3188
J2010933034	SW-1			SM 2540 C	WCAj/3188
J2010933035	SW-3			SM 2540 C	WCAj/3188
J2010933036	SW-B			SM 2540 C	WCAj/3188
J2010933037	SW-4			SM 2540 C	WCAj/3188
J2010933038	SW-7			SM 2540 C	WCAj/3188
J2010933039	SW-5			SM 2540 C	WCAj/3188
J2010933040	SW-6			SM 2540 C	WCAj/3188
J2010933034	SW-1			SM 5210B	WCAj/3201
J2010933035	SW-3			SM 5210B	WCAj/3201
J2010933036	SW-B			SM 5210B	WCAj/3201
J2010933037	SW-4			SM 5210B	WCAj/3201
J2010933038	SW-7			SM 5210B	WCAj/3201
J2010933039	SW-5			SM 5210B	WCAj/3201
J2010933040	SW-6			SM 5210B	WCAj/3201
J2010933034	SW-1	Calculation	CLCg/	Calculation	CLCg/
J2010933034	SW-1	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J2010933034	SW-1	Field Measurements	FLDj/	Field Measurements	FLDj/
J2010933035	SW-3	Calculation	CLCg/	Calculation	CLCg/
J2010933035	SW-3	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J2010933035	SW-3	Field Measurements	FLDj/	Field Measurements	FLDj/
J2010933036	SW-B	Calculation	CLCg/	Calculation	CLCg/
J2010933036	SW-B	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J2010933036	SW-B	Field Measurements	FLDj/	Field Measurements	FLDj/
J2010933037	SW-4	Calculation	CLCg/	Calculation	CLCg/
J2010933037	SW-4	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J2010933037	SW-4	Field Measurements	FLDj/	Field Measurements	FLDj/
J2010933038	SW-7	Calculation	CLCg/	Calculation	CLCg/
J2010933038	SW-7	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J2010933038	SW-7	Field Measurements	FLDj/	Field Measurements	FLDj/
J2010933039	SW-5	Calculation	CLCg/	Calculation	CLCg/

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J2010933 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J2010933039	SW-5	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J2010933039	SW-5	Field Measurements	FLDj/	Field Measurements	FLDj/
J2010933040	SW-6	Calculation	CLCg/	Calculation	CLCg/
J2010933040	SW-6	DEP SOP 10/03/83	WCAg/	DEP SOP 10/03/83	WCAg/
J2010933040	SW-6	Field Measurements	FLDj/	Field Measurements	FLDj/

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Page 1 of 1 LAB

* J 2 0 1 0 9 3 3 *

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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
SAMPLER	Danny Armour
TURN AROUND TIME	[x] STANDARD ______ [ ] RUSH ______

PROJECT NAME	Trail Ridge Landfill
P.O. NUMBER/PROJECT NUMBER	808372-4
PROJECT LOCATION	

REMARKS/SPECIAL INSTRUCTIONS:

Ground Water Shallow Wells

CEC Contact: Jim Christiansen

33828,TRAIL RIDGE LANDFILL, INC. (ADaPT)

AEL Jax Profile: 30178, Line 4

ANALYSIS REQUIRED

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	App I + EDB 8260/8260SIM (3X40mL VOA vials; HCl)	App I + Na,Fe,Hg 6010/6020/7470 (500mL poly; HNO3)	NO3 / Cl / TDS (500mL poly; NP)	Ammonia-N 350.1 (125mL P/W; H2SO4)	LABORATORY I.D. NUMBER
	MWB-22S	G	8-10	0817	W	6		3	1	1	1	001
	MWB-12S	G	8-10	0941	W	6		3	1	1	1	002
	MWB-13S	G	8-10	0921	W	6		3	1	1	1	003
	MWB-27S	G	8-10	1029	W	6		3	1	1	1	004
	MWB-29S	G	8-10	1131	W	6		3	1	1	1	005
	MWB-2S	G	8-10	1239	W	6		3	1	1	1	006
	MWB-20S	G	8-10	1305	W	6		3	1	1	1	007
	MWB-21S	G	8-10	1338	W	6		3	1	1	1	008
	MWB-34S	G	8-10	1441	W	6		3	1	1	1	009
	TRIP	G	8-10	—	W	3		3				010

Matrix Codes: 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 [x] Yes [ ] No [x] Temp taken from sample [ ] Temp from temp blank [ ] When 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 8A, G-LT-1-11-2, T 10A, A 3A

	Relinquished by	Date	Time	Received by	Date	Time
1	[signature]	8-10-20	1630	[signature]	8.10.20	1715
2						
3						
4						

FOR DRINKING WATER USE:

(When PWS information not otherwise supplied) PWS ID: ______

Contact Person: ______ Phone: ______

Supplier of Water: ______

Site Address: ______

NELAP Accredited E82574

Advanced Environmental Laboratories, Inc.

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* J 2 0 1 0 9 3 3 *

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 Arnold

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 Christiansen

33626,TRAIL RIDGE LANDFILL, INC. (ADaPT)

AEL Jax Profile: 30178, Line 4

Bottle Size & Type: 3x40mL VOA vials | 500mL poly | 250mL poly | 125mL poly

Analysis Required: App I + EDB 8260/8260SIM | App I + Na,Fe,Hg 6010/6020/7470 | NO3 / Cl / TDS | Ammonia-N 350.1

Sample ID	Sample Description	Grab Comp	Sampling Date	Sampling Time	Matrix	No. Count	Preservation	App I + EDB 8260/8260SIM (HCl)	App I + Na,Fe,Hg 6010/6020/7470 (HNO3)	NO3 / Cl / TDS (Ice)	Ammonia-N 350.1 (H2SO4)	Laboratory I.D. Number
	MW B-39S	G	8-10	1350	W	6		3	1	1	1	01

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

Preservation Codes: I = Ice H = (HCl) S = (H_2SO_4) N = (HNO_3) T = (Sodium Thiosulfate)

Received on ice: [X] Yes ☐ No [X] Temp taken from sample ☐ Temp from temp blank ☐ Where required, pH checked

Temperature when received 4 (in degrees celcius)

Form revision: 2/2008

Device used for measuring Temp by unique identifier (circle IR temp gun used): (1: 8A) 3: LT-1 LT-2 T: 10A A: 3A

	Relinquished by	Date	Time	Received by	Date	Time
1	[signature]	8-10-20	1630	[signature]	8.10.20	1715
2						
3						
4						

FOR DRINKING WATER USE:

(When DWS information not otherwise supplied) PWS ID: ____

Contact Person: ____ Phone: ____

Supplier of Water: ____

Site Address: ____

Advanced Environmental Laboratories, Inc.

[X] 6681 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
[ ] 4965 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 · E83075

LAB NUMBER: J2010933

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	Denny Armour
TURN AROUND TIME	[X] 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 Christiansen

33628 TRAIL RIDGE LANDFILL, INC. (ADaPT)
AEL Jax Profile: 30178, Line 4

ANALYSIS REQUIRED (Bottle size & type / Preservation):
- Fe,Na by 6010 — 250mL poly — HNO3
- NO3 / Cl / TDS — 250mL poly — None
- Ammonia-N 350.1 — 125mL poly — H2SO4

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	DATE	TIME	MATRIX	NO. COUNT	Fe,Na by 6010	NO3 / Cl / TDS	Ammonia-N 350.1	LABORATORY I.D. NUMBER
	MWB-12I	G	8-10	0741	W	3	\	\	\	012
	MWB-13I	G	8-10	0851	W	3	\	\	\	013
	MWB-27I	G	8-10	0955	W	3	\	\	\	014
	MWB-29I	G	8-10	1101	W	3	\	\	\	015
	MWB-2I	G	8-10	1204	W	3	\	\	\	016
	MWB-34I	G	8-10	1411	W	3	\	\	\	017
	MWB-39I	G	8-10	1520	W	3	\	\	\	018

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: [X] Yes [ ] No [X] Temp taken from sample [ ] Temp from temp blank [ ] When required, pH checked

Temperature when received: 4 (in degrees celcius)

Device used for measuring Temp (or unique identifier (or AEL IR temp gun used)): J-9A / S-17 / IF-2 / T-10A / A-3A

Form revised 2/8/09

	Relinquished by	Date	Time	Received by	Date	Time
1	[signature]	8-10-20	1630	[signature]	8.10.20	1715
2						
3						
4						

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

Advanced Environmental Laboratories, Inc.

Page 1 of 1 LAB NUMBER J2010933

CLIENT NAME	CITY OF JACKSONVILLE	PROJECT NAME	Trail Ridge Landfill
ADDRESS	214 North Hogan Street, 10th Floor		008372.4
	Jacksonville, FL 32202		
PHONE	(904) 255-7513		Ground Water Shallow Wells CEC Contact: Jim Christiansen 33628 TRAIL RIDGE LANDFILL, INC. (ADaPT) AEL Jax Profile: 30178, Line 4
FAX			
REPORT TO	Eric B. Fuller		
SAMPLER	Danny Armour		

ANALYSIS REQUIRED: App I + EDB 8260/8260SIM; App I + Na,Fe,Hg 6010/6020/7470; NO3 / Cl / TDS; Ammonia-N 350.1

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	DATE	TIME	MATRIX	CONT. COUNT	App I + EDB 8260/8260SIM	App I + Na,Fe,Hg 6010/6020/7470	NO3 / Cl / TDS	Ammonia-N 350.1	LABORATORY I.D. NUMBER
	MWB-33S	G	6-11	0658	W	6	3	1	1	1	019
	MWB-37S	G	6-11	0801	W	6	3	1	1	1	020
	MWB-11S	G	6-11	0908	W	6	3	1	1	1	021
	MWB-03S	G	6-11	0945	W	6	3	1	1	1	022
	MWB-35S	G	6-11	1121	W	6	3	1	1	1	023
	SGMW-1SR	G	6-11	1157	W	6	3	1	1	1	024
	SGMW-2S	G	6-11	1238	W	6	3	1	1	1	025
	MWB-40S	G	6-11	1305	W	6	3	1	1	1	026
	EQUIPMENT BLANK	G	6-11	1321	W	6	3	1	1	1	027
	TRIP	G	6-11	—	W	3	3				028

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

Preservation Codes: I = Ice H = HCl S = H2SO4 N = HNO3 T = Sodium Thiosulfate

Temperature when received 4 (in degrees celsius)

	Relinquished By	Date	Time	Received By	Date	Time
1	[signature]	8-11-20	1550	[signature]	8/11/20	1550
2	[signature]	8/11/20	1625	[signature]	8/11/20	1625
3						
4						

FOR DRINKING WATER USE:

Contact Person: Phone:

Supplier of Water:

Advanced Environmental Laboratories, Inc.

Page 1 of 1 LAB NUMBER: J2010933

- [X] 9601 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 • E83079

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	[X] Standard [ ] Rush

Project Name	Trail Ridge Landfill
P.O. Number/Project Number	6082724
Project Location	
Report/Special Instructions	Ground Water Intermediate Wells CEC Contact: Jim Christiansen 33628 TRAIL RIDGE LANDFILL, INC. (ADaPT) AEL Jax Profile: 30178, Line 4

ANALYSIS REQUIRED

Sample ID	Sample Description	Grab/Comp	Sampling Date	Sampling Time	Matrix	No. Count	Preservation	Fe,Na by 6010 (250mL poly, HNO3)	NO3 / Cl / TDS (250mL poly, Ice)	Ammonia-N 350.1 (125mL poly, H2SO4)	Laboratory I.D. Number
	MWB-32I	G	8-11	0931	W	3		1	1	1	029
	MWB-11IR	G	8-11	0838	W	3		1	1	1	030
	MWB-03I	G	8-11	1017	W	3		1	1	1	031
	MWB-35I	G	8-11	1051	W	3		1	1	1	032
	EQUIPMENT BLANK	G	8-11	1311	W	3		1	1	1	033

Matrix Codes: 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: [X] Yes [ ] No [X] Temp taken from sample [ ] Temp from temp blank [ ] When required, pH checked

Temperature when received ______ (in degrees celcius)

Form revised [illegible]

Device used for measuring Temp by unique identifier (circle IR temp gun used): (J-5a) G LT-1 LT-2 T-10A W-3A

	Relinquished by	Date	Time	Received by	Date	Time
1		8-11-20	1530		8/11/20	1530
2		8/11/20	1625		8/11/20	1625
3						
4						

FOR DRINKING WATER USE:

(When PWS information not otherwise supplied) PWS ID ________

Contact Person ________ Phone ________

Supplier of Water ________

Site address

Advanced Environmental Laboratories, Inc.

Page 1 of 1 LAB NUMBER: J2010933

- [x] 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 • E82076

CLIENT	CITY OF JACKSONVILLE
ADDRESS	214 North Hogan Street, 10th Floor Jacksonville, FL 32202
PHONE	(904)-255-7513
FAX	
CONTACT	Eric B. Fuller
SAMPLED BY	
TURNAROUND TIME	[x] Standard [ ] Rush
PROJECT NAME	Trail Ridge Landfill
P.O. NUMBER/PROJECT NUMBER	808372-4
PROJECT LOCATION	
REMARKS/SPECIAL INSTRUCTIONS	Surface Water CEC Contact: Jim Christensen 33628,TRAIL RIDGE LANDFILL, INC. (ADaPT) AEL Jax Profile: 30179, Line 5

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	App I + EDB 8260/8260SIM (3x40mL VOA vials; HCl+Ice)	App I + Fe,Hg,hardness (500mL poly; HNO3)	Nox/TKN/TN/TP/NH3/ Un-NH3 /COD (250mL poly; H2SO4)	BOD / NO3 / TDS / TSS (1L poly; None)	chlorophyll-a 10200H (1L amber; None in 1 hr)	TOC 5310B (2x40mL VOA vials; HCl)	Fecal 9222D (100mL Clio; Sodium Thiosulfate)				LABORATORY I.D. NUMBER
	SW-1	G	8-12	0921	W	10	3	1	1	1	1	2	1				034
	SW-3	G	8-12	0851	W	10	3	1	1	1	1	2	1				035
	SW-B	G	8-12	0821	W	10	3	1	1	1	1	2	1				036
	SW-4	G	8-12	0751	W	10	3	1	1	1	1	2	1				037
	SW-7	G	8-12	0730	W	10	3	1	1	1	1	2	1				038
	SW-5	G	8-12	0651	W	10	3	1	1	1	1	2	1				039
	SW-6	G	8-12	0631	W	10	3	1	1	1	1	2	1				040
	TRIP	G	8-12	—	W	3	3										041

Matrix Codes: 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 [x] Yes [ ] No [x] 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): IR-9A IR-17-1 IR-17-2 T-10A ... 34

Form revised 2/6/08

	Relinquished by	Date	Time	Received by	Date	Time
1	[signature]	8-12-20	1045	[signature]	8.12.20	1045
2						
3						
4						

FOR DRINKING WATER USE:

When PWS information not otherwise supplied: PWS ID: ____

Contact Person: ____ Phone: ____

Supplier of Water: ____

Site Address: ____

Advanced Environmental Laboratories, Inc.

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

Project No.: J2010933

Client Name: City of Jacksonville

ProjectID: Trail Ridge Landfill

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: SW-846 6020

Preparation: SW-846 3010A

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: Method Blank 3577171 (MB) contained a low level of Antimony above the Method Detection Limit (MDL), but below the Method Reporting Limit (MRL). The associated samples did not contain the analyte in question above the Method Detection Limit (MDL); therefore, the presence of Antimony in the MB had no adverse effects on the data.

C. Duplicates: All acceptance criteria were met.

D. Spikes: All acceptance criteria were met.

E. Serial Diluion: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

Advanced Environmental Laboratories, Inc.

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

Project No.: J2010933

Client Name: City of Jacksonville

ProjectID: Trail Ridge Landfill

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: SW-846 6020

Preparation: SW-846 3010A

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: The upper control criterion was exceeded for several target analytes in Continuing Calibration Verification (CCV) standards for analytical batch 1374, indicating increased sensitivity. The client samples reported in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

The upper control criterion was exceeded for several target analytes in low level Continuing Calibration Verification (LLCCV) standards for analytical batch 1374, indicating increased sensitivity. The client samples reported in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

B. Blanks: All acceptance criteria were met.

C. Duplicates: All acceptance criteria were met.

D. Spikes: All acceptance criteria were met.

E. Serial Diluion:

Due to non-target background analytes present, the proper quantitaion of the internal standard in J2010933026, J2010926001, G2007792001 was obstructed. In order to separate out and return the internal standard to within acceptance limits, this sample was analyzed at a dilution.

F. Samples: Sample analyses proceeded normally.

G. Other:

Advanced Environmental Laboratories, Inc.

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

Project No.: J2010933

Client Name: City of Jacksonville

ProjectID: Trail Ridge Landfill

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: SW-846 6020

Preparation: SW-846 3010A

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: The Continuing Calibration Blank (CCB) associated with batch 1384 contained low levels of Lead and Copper above the Method Detection Limit (MDL). The associated samples did not contain the analyte in question above the Method Detection Limit (MDL); therefore, the presence of Lead and Copper in the CCB had no adverse effects on the data.

C. Duplicates: All acceptance criteria were met.

D. Spikes: All acceptance criteria were met.

E. Serial Diluion: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

Advanced Environmental Laboratories, Inc.

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

Project No.: J2010933

Client Name: City of Jacksonville

ProjectID: Trail Ridge Landfill

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: SW-846 8260B

Preparation: SW-846 5030B

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: All acceptance criteria were met.

D. Spikes: The matrix spike recoveries of Vinyl Chloride and 1,1-Dichloroethylene for J2010933002 were outside control criteria due to matrix interference in the sample. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential high bias in this matrix. The affected sample is qualified to indicate matrix interference.

E. Internal Standard: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

Advanced Environmental Laboratories, Inc.

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

Project No.: J2010933

Client Name: City of Jacksonville

ProjectID: Trail Ridge Landfill

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: SW-846 8260B

Preparation: SW-846 5030B

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: All acceptance criteria were met.

D. Spikes: The spike recovery of 1,1-Dichloroethylene for the Laboratory Control Sample Duplicate (LCSD) was outside the upper control criterion. The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.

E. Internal Standard: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

Advanced Environmental Laboratories, Inc.

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

Project No.: J2010933

Client Name: City of Jacksonville

ProjectID: Trail Ridge Landfill

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: EPA 350.1

Preparation: None

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Duplicates: All acceptance criteria were met.

D. Spikes: The matrix spike recoveries of NH3 for J2010933022 were outside control criteria. Recoveries in the Laboratory Control Sample (LCS) and %RPD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was required.

E. Serial Diluion: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

Advanced Environmental Laboratories, Inc.

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

Project No.: J2010933

Client Name: City of Jacksonville

ProjectID: Trail Ridge Landfill

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: EPA 351.2

Preparation: Copper Sulfate Digestion

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Duplicates: All acceptance criteria were met.

D. Spikes: The matrix spike recoveries of TKN for J2010933036 were outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential high bias in this matrix.

The matrix spike recovery duplicate of TKN for G2008021005 was outside control criteria. Recoveries in the Laboratory Control Sample (LCS), Matrix Spike (MS) and %RPD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was required.

E. Serial Diluion: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

Advanced Environmental Laboratories, Inc.

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

Project No.: J2010933

Client Name: City of Jacksonville

ProjectID: Trail Ridge Landfill

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: EPA 300.0

Preparation: None

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Duplicates: All acceptance criteria were met.

D. Spikes: The matrix spike (MS) recovery of Nitrate for J2010933005 was outside control criteria. Recoveries in the Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential high bias in this matrix. The offending analytes were not detected in the client sample. No further corrective action is required.

E. Serial Diluion:

F. Samples:

G. Other:

Advanced Environmental Laboratories, Inc.

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

Project No.: J2010933

Client Name: City of Jacksonville

ProjectID: Trail Ridge Landfill

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: SM 2540 C

Preparation: None

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Duplicates: The relative percent difference (RPD) for the following analyte(s) in the DUPLICATE analyses of J2010933013 was outside control criteria: Total Dissolved Solids. Failing RPD indicates inconsistency in the parent sample matrix. All spike recoveries in the associated LCS were within acceptable limits, indicating the analytical batch was in control. No further corrective action was needed.

D. Spikes: All acceptance criteria were met.

E. Serial Diluion:

F. Samples: Sample analyses proceeded normally.

G. Other:

GROUNDWATER SAMPLING LOG

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

WELL NO: MWB32 | SAMPLE ID: | DATE: 8-11-10

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 52 feet to 62 feet | STATIC DEPTH TO WATER (feet): 13.93 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 151.86 | GROUNDWATER ELEVATION (ft NGVD): 137.93

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 + (0.0 gallons/foot x 62.00 feet) + 0.65 gallons = 78 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 57.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 57.00 | PURGING INITIATED AT: 0957 | PURGING ENDED AT: 1017 | 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
1007	2.50	2.50	0.25	14.92	4.32	22.9	79	0.4	3.03	178		
1010	0.75	3.25	0.25	14.93	4.34	23.0	83	0.4	3.06	169		
1013	0.75	4.00	0.25	14.93	4.32	23.1	86	0.4	3.13	166		
1016	0.75	4.75	0.25	14.93	4.33	23.1	86	0.4	3.05	163	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): [signature] | SAMPLING INITIATED AT: 1017 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 57.00 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) Filtration Equipment Type: | FILTER SIZE: μm

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

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MW-B33	SAMPLE ID:		DATE: 8-31-10

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/16 | WELL SCREEN INTERVAL DEPTH: [illegible] feet to [illegible] feet | STATIC DEPTH TO WATER (feet): 7.89 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 154.38 | GROUNDWATER ELEVATION (ft NGVD): 146.49

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

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

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

= 0.3 gallons + (0.0014 gallons/foot X 20.00 feet) + 0.05 gallons = 0.[illegible] gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | PURGING INITIATED AT: 0925 | PURGING ENDED AT: 0945 | 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
0935	1.70	1.70	0.17	8.15	4.38	24.0	114	0.9	4.58	236		
0938	0.51	2.21	0.17	8.15	4.18	24.1	115	1.0	4.00	237		
0941	0.51	2.72	0.17	8.15	4.18	24.1	113	0.9	3.80	238		
0944	0.51	3.23	0.17	8.16	4.38	24.1	117	1.0	4.04	238	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): [signature] | SAMPLING INITIATED AT: 0945 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | Filtration Equipment Type: | FILTER SIZE: µm

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)

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE FL

WELL NO: MW-B-11 (R) | SAMPLE ID: | DATE: 8-11-[illegible]

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/16 | WELL SCREEN INTERVAL DEPTH: 45 feet to 55 feet | STATIC DEPTH TO WATER (feet): 15.75 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 120.43 | GROUNDWATER ELEVATION (ft NGVD): 104.68

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

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

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

= .03 gallons + (0.0014 gallons/foot X 55.00 feet) + 0.05 gallons = 0.16 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 50.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 50.00 | PURGING INITIATED AT: 0818 | PURGING ENDED AT: 0838 | TOTAL VOLUME PURGED (gallons): 4.86

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
0828	2.40	2.40	0.24	15.86	4.61	24.9	80	0.1	3.35	99		
0831	0.72	3.12	0.24	15.86	4.60	24.9	81	0.1	3.27	98		
0834	0.72	3.84	0.24	15.86	4.59	24.9	80	0.1	4.40	98		
0837	0.72	4.56	0.24	15.87	4.59	24.9	80	0.1	4.38	97	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 / PROTECH | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 0838 | 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

GROUNDWATER SAMPLING LOG

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

WELL NO: MW-G113 | SAMPLE ID: | DATE: 8-11-20

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: [illegible] | STATIC DEPTH TO WATER (feet): 12.69 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 120.81 | GROUNDWATER ELEVATION (ft NGVD): 108.12

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

= 14.50 feet − 12.69 feet) X 0.163 gallons/foot = 1.11 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 14.50 feet) + 0.05 gallons = 0.44 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 14.50 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 14.50 | PURGING INITIATED AT: 0848 | PURGING ENDED AT: 0908 | TOTAL VOLUME PURGED (gallons): 3.4

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
0858	1.70	1.70	0.17	12.83	3.99	23.6	237	0.4	4.97	208		
0901	0.51	2.21	0.17	12.83	3.99	23.6	235	0.4	4.33	210		
0904	0.51	2.72	0.17	12.83	3.97	23.7	238	0.5	3.85	212		
0907	0.51	3.23	0.17	12.83	4.00	23.6	238	0.4	4.75	213	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 AMBROSE / PRO-TECH | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 0908 | 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

GROUNDWATER SAMPLING LOG

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

WELL NO: [illegible] | SAMPLE ID: | DATE: [illegible]

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: [illegible] feet to [illegible] feet | STATIC DEPTH TO WATER (feet): 9.65 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 184.62 | GROUNDWATER ELEVATION (ft NGVD): 174.97

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 76.50 feet) + 0.05 gallons = 0.78 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 66.50 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 66.50 | PURGING INITIATED AT: 0651 | PURGING ENDED AT: 0711 | 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
0701	2.70	2.70	0.27	9.71	4.95	25.5	86	0.1	4.65	70		
0704	0.81	3.51	0.29	9.71	4.96	25.5	86	0.1	4.01	69		
0707	0.81	4.32	0.29	9.71	4.98	25.6	86	0.1	3.86	68		
0710	0.81	5.13	0.27	9.71	4.99	25.7	86	0.1	3.27	66	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./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): [signature] | SAMPLING INITIATED AT: 0711 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 66.50 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm
Filtration Equipment Type:

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

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

REMARKS:

Sheen Present: YES (NO)

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

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

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MW-123	SAMPLE ID:		DATE: 8-10-20

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): 9.80	PURGE PUMP TYPE OR BAILER: PP
WELL ELEVATION TOC (ft NGVD): 24.63		GROUNDWATER ELEVATION (ft NGVD): 14.83		

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 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: 0721	PURGING ENDED AT: 0741	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
0731	1.70	1.70	0.17	11.21	5.84	26.2	351	1.1	6.35	90		
0734	0.51	2.21	0.17	11.21	5.83	26.2	351	1.2	7.26	90		
0737	0.51	2.72	0.17	11.31	5.81	26.3	348	1.1	7.14	89		
0740	0.51	3.23	0.17	11.4	5.80		346	1.1	7.22	89	Lt. 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 / Ecotech	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 0741	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 19.50	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: μm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)

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

REMARKS:

Sheen Present: YES (NO)

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

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

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL
WELL NO: MWB13I	SAMPLE ID:	DATE: 8-10-20

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 18.88	PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 125.98		GROUNDWATER ELEVATION (ft NGVD): 107.90		

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 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: 0831	PURGING ENDED AT: 0851	TOTAL VOLUME PURGED (gallons): 4.56

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
841	2.40	2.40	0.24	18.52	4.96	27.2	87	0.1	3.63	58		
844	0.72	3.12	0.24	18.51	4.95	24.3	83	0.1	3.60	57		
845	0.72	3.84	0.24	18.53	4.94	27.3	82	0.1	3.50	57		
850	0.72	4.56	0.24	18.53	4.94	24.3	82	0.1	4.09	57	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./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: 0851	SAMPLING ENDED AT: NA
PUMP OR TUBING DEPTH IN WELL (feet): 55.40	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: µm
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

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE FL

WELL ID: MW813S | SAMPLE ID: | DATE: 5-10-10

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 5/8 | WELL SCREEN INTERVAL DEPTH: 16.54 to 26.54 | STATIC DEPTH TO WATER (feet): 12.49 | PURGE PUMP TYPE OR BAILER: SP

WELL ELEVATION TOC (ft MSL/VD): 126.04 | GROUNDWATER ELEVATION (ft MSL/VD): 113.55

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

(–) x ( ) = gallons

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

0.2 gal/cm + 0.16 gal/cm x 26.56 feet + 0.05 gallons = 10.51 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 21.56 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 21.56 | PURGING INITIATED AT: 09:01 | PURGING ENDED AT: 09:21 | TOTAL VOLUME PURGED (gallons): 5.60

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0911	1.80	1.80	0.18	12.96	5.89	19.3	634	1.4	6.16	81		
0917	0.94	2.34	0.18	12.96	5.87	19.3	631	1.4	6.21	82		
0917	0.59	1.95	0.18	12.97	5.88	19.6	629	1.4	6.23	83		
0921	0.34	3.42	0.18	12.97	5.88	19.6	628	1.4	6.30	83	TRANSP	
											TRA	
											TWT	

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" = 1.5; 12" = 5.80
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: 09:21 | SAMPLING ENDED AT: NR

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) (treated) | DUPLICATE: Y (N)

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

REMARKS:
Sheen Present: YES (NO)

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

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

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

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

pH: ± 0.2 units. Temperature: ± 0.2 °C. Specific Conductance: ± 5%. Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200.2) optionally, ± 0.2 mg/L or ± 10% (whichever is greater). Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater).

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: TBPA RIDGE		SITE LOCATION: JACKSONVILLE FL	
WELL NO: MW-B2I	SAMPLE ID:		DATE: 5-18-21

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 51.5 feet to 61.5 feet	STATIC DEPTH TO WATER (feet): 11.36	PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 145.93			GROUNDWATER ELEVATION (ft NGVD): 134.57	

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.0014 gallons/foot X 61.50 feet) + 0.065 gallons = 0.45 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 56.50	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 56.50	PURGING INITIATED AT: 1144	PURGING ENDED AT: 1204	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
1154	2.50	2.50	0.25	11.45	4.58	23.7	85	0.3	2.95	96		
1157	0.75	3.25	0.25	11.45	4.52	23.7	85	0.3	3.0	96		
1200	0.75	4.00	0.25	11.45	4.56	23.6	85	0.3	2.80	94		
1203	0.75	4.75	0.25	11.45	4.56	23.6	85	0.3	2.93	94	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 BARROWS / PRO-TECH	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1204	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 56.50	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: μm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N (replaced))	DUPLICATE: Y (N)	

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

REMARKS:

Sheen Present: YES (NO)

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

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

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2) optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE FL

WELL NO: MW-833 | SAMPLE ID: | DATE: 8-11-10

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/16 | WELL SCREEN INTERVAL DEPTH: feet to feet | STATIC DEPTH TO WATER (feet): 8.99 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 146.64 | 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 + (0.0014 gallons/foot X 30.00 feet) + 0.05 gallons = 0.39 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | PURGING INITIATED AT: 1214 | PURGING ENDED AT: 1234 | TOTAL VOLUME PURGED (gallons): 3.24

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
1221	1.60	1.60	0.16	9.98	4.71	25.3	71	2.4	10.08	131		
1224	0.48	2.08	0.16	9.98	4.74	25.2	72	2.4	23.11	133		
1230	0.48	2.56	0.16	9.98	4.71	25.2	71	2.4	24.70	133		
1233	0.48	3.04	0.16	9.98	4.70	25.1	70	2.5	21.01	134	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 BARBOUR / PRO-TECH | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 1234 | 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)

GROUNDWATER SAMPLING LOG

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

WELL NO: MWB205 | SAMPLE ID: | DATE: 8-10-10

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): 9.56 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 121.07 | GROUNDWATER ELEVATION (ft NGVD): 111.51

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

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

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

= 0.3 gallons + (0.006 gallons/foot X 20.00 feet) + 0.05 gallons = 0.47 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | PURGING INITIATED AT: 1245 | PURGING ENDED AT: 1305 | TOTAL VOLUME PURGED (gallons): 3.04

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1255	1.60	1.60	0.16	9.64	4.86	28.0	315	0.3	7.99	165		
1258	0.48	2.08	0.16	9.64	4.85	28.1	318	0.3	11.99	161		
1301	0.48	2.56	0.16	9.68	4.85	28.1	320	0.3	10.04	160		
1304	0.48	3.04	0.16	9.65	4.86	28.1	321	0.3	9.38	157	Tinted 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): [signature] | SAMPLING INITIATED AT: 1305 | SAMPLING ENDED AT: N/A

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)

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE	SITE LOCATION: JACKSONVILLE FL	
WELL NO: MW-13 315	SAMPLE ID:	DATE: 5-10-10

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): 10.83	PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 127.84		GROUNDWATER ELEVATION (ft NGVD): 117.01		

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

= (18.00 feet − 10.83 feet) X 0.163 gallons/foot = 1.17 gallons

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

= 0.5 gallons + (0.006 gallons/foot X 18.00 feet) + 0.05 gallons = 0.66 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.00	PURGING INITIATED AT: 1318	PURGING ENDED AT: 1338	TOTAL VOLUME PURGED (gallons): 3.04

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
1328	1.60	1.60	0.16	12.55	4.80	23.9	199	0.5	9.38	82		
1331	0.48	2.08	0.16	12.15	4.74	23.9	199	0.5	4.34	82		
1334	0.48	2.56	0.16	12.15	4.79	23.9	199	0.5	4.23	81		
1337	0.48	3.04	0.16	12.15	4.80	23.9	199	0.5	4.14	80	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 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): [signature]	SAMPLING INITIATED AT: 1338	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 13.00	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: μm
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

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE
SITE LOCATION: JACKSONVILLE, FL
WELL NO: MW225
SAMPLE ID:
DATE: 8-16-19

PURGING DATA

WELL DIAMETER (inches): 2
TUBING DIAMETER (inches): 3/8
WELL SCREEN INTERVAL DEPTH: 16 (feet) to 21 (feet)
STATIC DEPTH TO WATER (ft): 11.48
PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 126.97
GROUNDWATER ELEVATION (ft NGVD): 115.49

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

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
.03 gallons + (0.024 gallons/foot x 21.00 feet) + 0.05 gallons + 0.21 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 21.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 21.00	PURGING INITIATED AT: 0813	PURGING ENDED AT: 0817		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. (mS/cm or uS/cm)	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0803	1.80	1.80	0.18	11.47	6.03	26.3	548	0.2	3.28	123		
0810	0.54	2.34	0.18	11.48	6.01	26.3	548	0.2	3.31	118		
0813	0.54	2.88	0.18	11.48	6.01	26.4	547	0.2	3.65	114		
0817	0.54	3.42	0.18	11.48	6.01	26.4	546	0.2	3.33	112	BRN	
											Dirt	
											Yellow	
											Tint	

WELL CAPACITY (Gallons Per Foot): 3.75" = 0.02; 1" = 0.04; 1.25" = 0.05; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.5; 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 = Electro Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DON ARNOLD / PED-TECH
SAMPLER(S) SIGNATURE(S):
SAMPLING INITIATED AT: 0813
SAMPLING ENDED AT: NA
PUMP OR TUBING DEPTH IN WELL (feet): 21.00
TUBING MATERIAL CODE: T
FIELD-FILTERED: Y (N) FILTER SIZE: µm
Filtration Equipment Type:
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)
DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	TYPE/MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
*	SEE	SAMPLE	C-O-C	ADD	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; FPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. This 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, 2008

GROUNDWATER SAMPLING LOG

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

WELL NO: MW-23I | SAMPLE ID: | DATE: 5-10-05

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH (feet): [illegible] | STATIC DEPTH TO WATER (feet): 6.27 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 12.63 | GROUNDWATER ELEVATION (ft NGVD): 6.36

WELL VOLUME PURGED: { WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) x WELL CAPACITY } (only fill out if applicable)

= ([illegible] (feet) - [illegible] (feet)) x [illegible] (gallons/foot) = [illegible] gallons

EQUIPMENT VOLUME PURGED: { EQUIPMENT VOL = PUMP VOLUME + TUBING CAPACITY + TUBING LENGTH x FLOW CELL VOLUME } (only fill out if applicable)

= 0.3 gallons + (0.05 gallons/foot x 42.50 feet) + 0.05 gallons + 0.33 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 52.50	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 52.50	PURGING INITIATED AT: 0935	PURGING ENDED AT: 0955	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) umhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	ODOR	COLOR
0943	2.50	2.50	0.45	6.27	5.23	23.8	95	0.3	3.64	19		
0948	0.80	3.25	0.26	6.27	5.22	23.6	96	0.4	3.00	29		
0951	0.75	4.00	0.25	6.27	5.22	23.5	96	0.4	3.56	28		
0954	0.75	4.75	0.25	6.27	5.22	23.6	96	0.4	3.39	31	NONE	

WELL CAPACITY (Gallons Per Foot): 3/16" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 12" = 5.80

TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.001; 1/4" = 0.002; 5/16" = 0.004; 3/8" = 0.005; (1" = 0.041; 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 BRIDGE / PROTECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0955 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 52.50 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | 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	WORK	SHEET	

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 = APP 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 FAC 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, 2003

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE FL

WELL NO: MW273 | SAMPLE ID: | DATE: 8-16-10

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 3' feet to 13.5' feet | STATIC DEPTH TO WATER (feet): 3.05 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft MSVD): 128.42 | GROUNDWATER ELEVATION (ft MSVD): 121.37

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

1 (13.50 (feet) - 3.05 (feet)) x 0.163 gal/ft = 1.58 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 + (0.163 gal/ft x 15.5 ft) + 0.05 gallons = 2.88 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13.50	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.50	PURGING INITIATED AT: 1009	PURGING ENDED AT: 1029	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 (mS/cm or uS/cm)	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODUR
1019	1.50	1.50	0.15	7.27	5.32	26.3	139	0.5	13.62	76		
1023	0.45	1.95	0.15	7.14	5.32	26.0	271	0.5	13.02	78		
1025	0.45	2.40	0.15	7.16	5.32	25.9	273	0.5	12.61	79		
1028	0.45	2.85	0.15	7.25	5.32	26.0	273	0.5	12.52	80	CLEAR	
											TEAL	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 1.5" = 0.10; 2" = 0.17; 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 / PROTECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 1029 | SAMPLING ENDED AT: NA

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

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

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

REMARKS

Sheen Present: YES (NO)

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

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; FPP = Flow-through 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 2212.550(10)(d))

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-1) 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 2, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE FL

WELL NO: MW039I | SAMPLE ID: | DATE: 8/16/10

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/16 | WELL SCREEN INTERVAL DEPTH: 53.5 feet to 63.5 feet | STATIC DEPTH TO WATER (feet): 8.13 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 138.08 | GROUNDWATER ELEVATION (ft NGVD): 129.91

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)
= 0.03 gallons + (0.0014 gallons/foot X 63.50 feet) + 0.05 gallons = 0.33 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 58.50 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 58.50 | PURGING INITIATED AT: 1041 | PURGING ENDED AT: 1101 | TOTAL VOLUME PURGED (gallons): 5.05

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
1051	2.50	2.50	0.25	8.29	4.91	26.3	86	0.4	10.06	63		
1055	0.75	3.25	0.25	8.25	4.91	26.3	86	0.4	9.36	66		
1057	0.75	4.00	0.25	8.32	4.92	26.3	86	0.4	9.73	66		
1100	0.75	4.75	0.25	8.16	4.90	26.4	86	0.4	9.80	66	C 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 Barbour / ProTech | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 1101 | 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

GROUNDWATER SAMPLING LOG

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

WELL NO: MW-B29S | SAMPLE ID: | DATE: 8-10-20

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): 7.83 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 138.02 | GROUNDWATER ELEVATION (ft NGVD): 130.19

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)

= .03 gallons + (0.0006 gallons/foot X 20.00 feet) + 0.05 gallons = 0.09 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00 | PURGING INITIATED AT: 1111 | PURGING ENDED AT: 1131 | 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
1121	1.60	1.60	0.16	7.95	4.84	23.5	153	0.9	3.44	132		
1124	0.48	2.08	0.16	7.95	4.84	23.5	153	1.0	3.30	132		
1127	0.48	2.56	0.16	7.95	4.84	23.5	153	1.0	3.40	131		
1130	0.48	3.04	0.16	7.96	4.84	23.5	153	0.9	4.42	131	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 PERMOSE / PRO-TECH | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 1131 | 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 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

GROUNDWATER SAMPLING LOG

SITE NAME: TROUT RIVER
SITE LOCATION: JACKSONVILLE, FL
WELL NO: MW-B32I
SAMPLE ID:
DATE: 8-11-10

PURGING DATA

WELL DIAMETER (inches): 2
TUBING DIAMETER (inches): 3/16
WELL SCREEN INTERVAL DEPTH: [illegible] feet to 63.5 feet
STATIC DEPTH TO WATER (feet): 8.78
PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 124.79
GROUNDWATER ELEVATION (ft NGVD): 116.01

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 + (0.0014 gallons/foot X 64.56 feet) + 0.65 gallons = 1.04 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 59.56
FINAL PUMP OR TUBING DEPTH IN WELL (feet): 59.56
PURGING INITIATED AT: 0711
PURGING ENDED AT: 0731
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
0721	2.50	2.50	0.25	8.80	5.01	22.7	88	0.2	6.03	99		
0724	0.75	3.25	0.25	8.80	5.04	22.7	88	0.2	5.98	95		
0727	0.75	4.00	0.25	8.80	5.02	22.8	88	0.2	6.06	95		
0730	0.75	4.75	0.25	8.80	5.04	22.8	88	0.2	6.11	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./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: SEAN ARMOUR / PRO-TECH
SAMPLER(S) SIGNATURE(S): [signature]
SAMPLING INITIATED AT: 0731
SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 59.56
TUBING MATERIAL CODE: T
FIELD-FILTERED: Y (N) Filter Size: µm
Filtration Equipment Type:
FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)
DUPLICATE: Y (N)

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

REMARKS:

Sheen Present: YES (NO)

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

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

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE FL
WELL NO: MW-13R-S | SAMPLE ID: | DATE: 8-11-10

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/16 | WELL SCREEN INTERVAL DEPTH: 9.9 feet to 18.9 feet | STATIC DEPTH TO WATER (feet): 8.42 | PURGE PUMP TYPE OR BAILER: ESP

WELL ELEVATION TOC (ft NGVD): 124.64 | GROUNDWATER ELEVATION (ft NGVD): 116.22

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 + (0.0014 gallons/foot X 19.90 feet) + 0.05 gallons = 0.38 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 14.90 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 14.90 | PURGING INITIATED AT: 0741 | PURGING ENDED AT: 0801 | TOTAL VOLUME PURGED (gallons): 3.04

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	1.60	1.60	0.16	9.02	5.19	24.0	180	0.1	15.40	97		
0754	0.48	2.08	0.16	9.03	5.18	24.1	180	0.1	16.12	99		
0757	0.48	2.56	0.16	9.03	5.18	24.1	179	0.1	16.37	99		
0800	0.48	3.04	0.16	9.03	5.18	24.1	179	0.1	17.07	98	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: DON AMBROSE / PRO-TECH | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 0801 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 14.90 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y N | FILTER SIZE: µm
Filtration Equipment Type:

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

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

REMARKS:

Sheen Present: YES (NO)

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

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

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE FL

WELL ID: MW833 | SAMPLE ID: | DATE: 5-11-11

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/8 | WELL SCREEN INTERVAL DEPTH: 3 feet to 20 feet | STATIC DEPTH TO WATER (feet): 10.01 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION (TOC or NGVD): 125.90 | GROUNDWATER ELEVATION (NGVD): 115.89

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

( ) (feet −) (feet) × gallons/foot = gallons

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

0.3 gallons + (0.006 gallons/foot × 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: 0830 | PURGING ENDED AT: 0858 | 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) µMho/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0849	1.10	1.10	0.11	10.13	5.12	24.3	286	0.1	4.38	132		
0851	0.98	2.08	0.16	10.13	5.13	24.6	286	0.1	3.92	128		
0854	0.98	3.06	0.16	10.13	5.13	24.6	285	0.1	3.33	123		
0857	0.98	3.04	0.16	10.13	5.13	24.7	284	0.1	4.16	124	Mod	

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; 8" = 2.60
TUBING INNER DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.001; 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 PARKER / PRO-TECH | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0852 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 15.30 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: µm | Filtration Equipment Type:

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

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

REMARKS:

Shield 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; FPP = 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 62-160-2) 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

GROUNDWATER SAMPLING LOG

SITE NAME: TBALL BIDLC | SITE LOCATION: JACKSONVILLE, FL

WELL NO: MWB397 | SAMPLE ID: | DATE: 8-11-06

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 3/16 | WELL SCREEN INTERVAL DEPTH: [illegible] feet to 53.95 feet | STATIC DEPTH TO WATER (feet): 9.97 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): 125.80 | GROUNDWATER ELEVATION (ft NGVD): 115.83

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 + (0.0014 gallons/foot X 53.95 feet) + 0.05 gallons = 0.43 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 48.95 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 48.95 | PURGING INITIATED AT: 1351 | PURGING ENDED AT: 1411 | TOTAL VOLUME PURGED (gallons): 4.1

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
1401	2.30	2.30	0.23	10.02	4.96	27.4	87					
1404	0.69	2.99	0.23	10.02	4.93	27.5	87	0.4	3.56	119		
1407	0.69	3.68	0.23	10.02	4.98	27.6	86	0.3	4.43	12.		
1410	0.69	4.37	0.23	10.02	4.98	27.6	86	0.3	4.51	121		
								0.3	4.72	122	None	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN PERMOSA / PRO-TECH | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 1411 | SAMPLING ENDED AT: NR

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			LOG	AND BOTTLE		ORDER	WORKSHEET	

REMARKS:

Sheen Present: YES (NO)

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

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

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: JBBL Ridge | SITE LOCATION: Jacksonville, FL

WELL NO: MWB34S | SAMPLE ID: | DATE: 8/10/20

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 1/8 | WELL SCREEN INTERVAL DEPTH: [illegible] feet to [illegible] feet | STATIC DEPTH TO WATER (feet): 8.31 | PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 125.78 | GROUNDWATER ELEVATION (ft NGVD): 117.04 [illegible]

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (18.36 feet − 8.31 feet) X 0.16 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 + (0.0006 gallons/foot X 18.36 feet) + 0.25 gallons = [illegible] gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13.36 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.36 | PURGING INITIATED AT: 1431 | PURGING ENDED AT: 1441 | TOTAL VOLUME PURGED (gallons): 3.04

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
1431	1.60	1.60	0.16	10.91	6.42	28.8	1616	0.2	6.10	64		
1434	0.48	2.08	0.16	10.43	6.43	28.9	1613	0.2	5.51	62		
1437	0.48	2.56	0.16	10.43	6.43	28.3	1613	0.2	4.68	62		
1440	0.48	3.04	0.16	10.43	6.44	28.8	1612	0.2	4.22	60	Sl.	
											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 [illegible] / Pro-Tech | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 1441 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 13.36 | TUBING MATERIAL CODE: T | FIELD-FILTERED: Y (N) | FILTER SIZE: μm | Filtration Equipment Type:

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

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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: MW-35 I | SAMPLE ID: | DATE: 8-11-2005

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 1/4 | WELL SCREEN INTERVAL DEPTH: [illegible] feet to [illegible] feet | STATIC DEPTH TO WATER (feet): 8.54 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): 147.93 | GROUNDWATER ELEVATION (ft NGVD): 139.39

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)

= 0.5 gallons + (0.0026 gallons/foot X 63.40 feet) + 0.05 gallons = 0.71 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 58.90 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 58.40 | PURGING INITIATED AT: 1031 | PURGING ENDED AT: 1051 | TOTAL VOLUME PURGED (gallons): 2.85

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
1041	1.50	1.50	0.15	9.05	4.65	22.4	88	0.1	2.53	200		
1044	0.45	1.95	0.15	9.08	4.64	22.5	87	0.1	3.11	197		
1047	0.45	2.40	0.15	9.09	4.64	22.5	88	0.1	2.51	195		
1050	0.45	2.85	0.15	9.09	4.64	22.6	84	0.1	3.18	194	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: [illegible] / [illegible] | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 1051 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 58.40 | TUBING MATERIAL CODE: PE | FIELD-FILTERED: Y (N) | FILTER SIZE: µm
Filtration Equipment Type:

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

SAMPLE 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-7-5 AND	BOTTLE	ORDER WORKSHEET						

REMARKS:

Sheen Present: YES (NO)

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

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

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE FL

WELL NO: MW-8-35S | SAMPLE ID: | DATE: 8-11-20

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 1/4 | WELL SCREEN INTERVAL DEPTH: 2.5 feet to 12.5 feet | STATIC DEPTH TO WATER (feet): 6.55 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): 148.29 | GROUNDWATER ELEVATION (ft NGVD): 141.94

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

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

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

= 0.0 gallons + (0.0026 gallons/foot X 17.50 feet) + 0.05 gallons = 0.1 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.00 | PURGING INITIATED AT: 1101 | PURGING ENDED AT: 1121 | TOTAL VOLUME PURGED (gallons): 2.50

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
1111	1.20	1.20	0.12	6.59	4.71	25.3	80	0.1	6.34	100		
1114	0.36	1.56	0.12	6.59	4.71	25.3	80	0.2	5.34	100		
1117	0.36	1.92	0.12	6.60	4.70	25.3	80	0.1	6.10	97		
1120	0.36	2.28	0.12	6.60	4.70	25.3	80	0.1	5.88	96	Very slt. Turbid	

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: BRIAN [illegible] / PROTEKA | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 1121 | SAMPLING ENDED AT: NR

PUMP OR TUBING DEPTH IN WELL (feet): 13.00 | TUBING MATERIAL CODE: PE | FIELD-FILTERED: Y (N) Filtration Equipment Type: | FILTER SIZE: μm

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

SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
See sample log and bottle order worksheet									

REMARKS:

Sheen Present: YES (NO)

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

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

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

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

WELL NO: MW-8-34I | SAMPLE ID: | DATE: 8-10-2005

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 1/4 | WELL SCREEN INTERVAL DEPTH: feet to feet | STATIC DEPTH TO WATER (feet): 12.18 | 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)

= (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 = 0.2 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 55.88 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 55.88 | PURGING INITIATED AT: 1500 | PURGING ENDED AT: 1520 | TOTAL VOLUME PURGED (gallons): 3

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
1510	1.50	1.50	0.15	14.08	4.81	26.2	83	0.1	4.05	220		
1513	0.45	1.95	0.15	14.08	4.83	26.2	84	0.1	3.45	217		
1516	0.45	2.40	0.15	14.08	4.85	26.1	84	0.1	4.92	214		
1519	0.45	2.85	0.15	14.09	4.83	26.1	84	0.1	4.17	212	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: Darren Reardon / Pro-Tech | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 1520 | SAMPLING ENDED AT: NA

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 LOGS AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen Present: YES (NO)

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

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

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

FORM FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE FL

WELL NO: MW-18-350 | SAMPLE ID: | DATE: 8-10-10

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 1/4 | WELL SCREEN INTERVAL DEPTH: 8.9 feet to 18.9 feet | STATIC DEPTH TO WATER (feet): 13.94 | 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 – 13.94 feet) X 0.163 gallons/foot = 0.81 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 18.40 feet) + 0.05 gallons = 0.1 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 18.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 18.00 | PURGING INITIATED AT: 1530 | PURGING ENDED AT: 1550 | TOTAL VOLUME PURGED (gallons): 2.09

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
1540	1.10	1.10	0.11	14.14	4.89	23.4	399	0.5	8.37	23		
1543	0.33	1.43	0.11	14.14	4.90	23.5	402	0.4	8.39	25		
1546	0.33	1.76	0.11	14.14	4.85	23.5	402	0.3	8.20	26		
1549	0.33	2.09	0.11	14.14	4.86	23.5	402	0.3	8.46	26	Sli 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: [illegible] / [illegible] | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 1550 | 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			
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)

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TBRIC RIDGE		SITE LOCATION: [illegible], FL	
WELL NO: MW-405	SAMPLE ID:		DATE: 6-11-20

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 1/4 | WELL SCREEN INTERVAL DEPTH: [illegible] feet to [illegible] feet | STATIC DEPTH TO WATER (feet): 10.39 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): 115.41 | GROUNDWATER ELEVATION (ft NGVD): 105.04

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

= 18.52 feet – 10.39 feet) X 0.163 gallons/foot = 1.33 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 = [illegible] gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 18.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 18.00 | PURGING INITIATED AT: 1245 | PURGING ENDED AT: 1305 | 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
1255	1.40	1.40	0.14	10.49	4.92	15.7	966	0.1	4.70	-55		
1258	0.42	1.82	0.14	10.45	4.99	15.7	963	0.1	4.44	-57		
1301	0.42	2.24	0.14	10.45	4.93	15.7	960	0.1	4.33	-58		
1304	0.42	2.66	0.14	10.45	4.92	15.6	955	0.1	4.39	-59	Yellow 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: [illegible] / PRO-TECH | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 1305 | SAMPLING ENDED AT: NA

PUMP OR TUBING DEPTH IN WELL (feet): 18.00 | TUBING MATERIAL CODE: PE | FIELD-FILTERED: Y (N) Filtration Equipment Type: | FILTER SIZE: μm

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 LABEL 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: SGMW-15R	SAMPLE ID:
	DATE: 8-11-20

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 15.67	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 – 15.67 feet) X 0.163 gallons/foot = 0.41 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: 1141	PURGING ENDED AT: 1157	TOTAL VOLUME PURGED (gallons): 1.28

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
1149	0.64	0.64	0.08	16.37	5.52	25.5	300	1.2	101.3	48		
1152	0.16	0.80	0.08	16.37	5.49	25.4	295	1.2	94.72	45		
1154	0.16	0.96	0.08	16.37	5.43	25.5	296	1.3	102.6	42		
1156	0.16	1.12	0.08	16.37	5.46	25.5	288	1.3	78.63	41	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: Danny Armond / Pertsia	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1157	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 18.10	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: μm
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			COC 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)

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE FL

WELL NO: SGMW-25 | SAMPLE ID: | DATE: 8/1/16

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 1/4 | WELL SCREEN INTERVAL DEPTH: [illegible] feet to [illegible] feet | STATIC DEPTH TO WATER (feet): 15.03 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION (TOC in NGVD): 103.55 | GROUNDWATER ELEVATION (in NGVD): 88.52

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

= (17.78 feet – 15.03 feet) X 0.163 gallons/foot = 0.44 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 13.30 feet) + 0.05 gallons = 0.1 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13.50 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.50 | PURGING INITIATED AT: 1213 | PURGING ENDED AT: 1228 | TOTAL VOLUME PURGED (gallons): 1.20

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
1221	0.64	0.64	0.08	15.91	4.87	24.8	91	0.2	10.85	63		
1223	0.16	0.80	0.08	15.91	4.85	24.2	91	0.2	7.25	61		
1225	0.16	0.96	0.08	15.92	4.85	24.6	92	0.2	5.62	61		
1227	0.16	1.12	0.08	15.92	4.81	24.6	92	0.2	5.93	60	None	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./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: [illegible] / PRO-TECH | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 1228 | SAMPLING ENDED AT: NR

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

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

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

REMARKS:

Sheen Present: YES (NO)

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

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

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

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

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: Jacksonville FL

WELL NO: SW-1 | SAMPLE ID: | DATE: 8-12-20

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
0921	NA	NA	NA	NA	7.70	26.9	391	5.5	12.45	176	Brown Tint	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Dan Ramnor ... / Pro-Tech | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 0921 | SAMPLING ENDED AT: NA

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

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

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

REMARKS:
SHEEN: NP 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)

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE	SITE LOCATION: JACKSONVILLE, FL
WELL NO: SW-3	SAMPLE ID:	DATE: 8-11-06

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
0851	NA	NA	NA	NA	7.69	29.3	446	4.7	28.06	251	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): [signature] | SAMPLING INITIATED AT: 0851 | SAMPLING ENDED AT: NA

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

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

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

REMARKS:
SW-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)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TARIK RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SW-4	SAMPLE ID:		DATE: 3-12-12

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
0751	NA	NA	NA	NA	7.41	28.4	185	6.6	7.51	260	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: [illegible] / PROTECH	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 0751	SAMPLING ENDED AT: NA
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: μm
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 LOG AND BOTTLE ORDER WORKSHEET								

REMARKS: TAKEN AT WIER OUTFLOW
SHEEN: NO SW-4 = SURFACE WATER POINT

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

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

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SW-5	SAMPLE ID:		DATE: 8-12-20

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 PURGED: 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 PURGED: 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. (check units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (check units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0851	NA	NA	NA	NA	7.81	29.0	236	6.3	13.23	324	LT. BROWN	
											CLEAR	

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: DAVID ASHCOM / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0851	SAMPLING ENDED AT: NA
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y (N) (pm) 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-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS: TAKEN AT DISCHARGE OUTFALL
DUPLICATE: NO SW-5 = SURFACE WATER POINT

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

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

NOTES: 1. This 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, 2008

Form: FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SW-6	SAMPLE ID:		DATE: 8-11-20

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 PURGED = 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 PURGED = 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) (umhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0931	NA	NA	NA	NA	8.43	28.2	1.98	0.4	28.14	16.1	LT YELLOW 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: DAVID ARMOUR / PACE TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0931	SAMPLING ENDED AT: NA
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD FILTERED: Y (N) with Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y N NA	TUBING Y N (new/used)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSES AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
(SW)	SEE SAMPLE I.D. & BOTTLE ORDER WORKSHEET								

REMARKS: DUPLICATE: NO SW-6 = SURFACE WATER POINT NO FLOW AT WELL-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 FOR LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO.: SW-3	SAMPLE ID:		DATE: 8-11-10

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 PURGED: 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 (inflow)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0730	NA	NA	NA	NA	7.44	25.8	159	4.6	9.38	240	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; 1/4" = 0.0024; 1/2" = 0.0102; 5/8" = 0.0004; 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 Arnold Pace-Tetra	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0730	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y (N) um 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 I.D. & BOTTLE ORDER WORKSHEET								

REMARKS:
SW-3 = 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: ± 3% 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-B	SAMPLE ID:		DATE: 8-12-20

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
0821	NA	NA	NA	NA	7.59	26.9	141	5.2	3.81	264	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 / BLAKE GRISSOM / PRO-TECH | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 0821 | SAMPLING ENDED AT: NA

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

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			
(OK)	SEE SAMPLE I.D.'s 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: EQUIPMENT BLANK	SAMPLE ID:		DATE: 8-1-20

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
1321	NA	NA	NA	NA	6.84	24.8	7	0.9	0.00	22	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: [illegible] / BLAISE GRISSOM / PRO-TECH	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1321	SAMPLING ENDED AT: NA
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: µm
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 LOGS AND BOTTLE ORDER WORKSHEET									

REMARKS:
SHEEN: NA EB- COMPLETED USING D.I. H2O PROVIDED BY REF: TESTAMERICA

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)

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

October 1, 2020

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

RE: Workorder: J2012855 Trail Ridge Landfill

Dear Eric Fuller:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, September 21, 2020. 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

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

SAMPLE SUMMARY

Workorder: J2012855 Trail Ridge Landfill

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J2012855001	SW-3	Water	9/21/2020 07:45	9/21/2020 10:14
J2012855002	SGMW-1SR	Water	9/21/2020 08:50	9/21/2020 10:14
J2012855003	MWB-40S	Water	9/21/2020 09:27	9/21/2020 10:14
J2012855004	MWB-13S	Water	9/21/2020 07:27	9/21/2020 10:14

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ANALYTICAL RESULTS

Workorder: J2012855 Trail Ridge Landfill

Lab ID: **J2012855001** Date Received: 09/21/20 10:14 Matrix: Water
Sample ID: **SW-3** Date Collected: 09/21/20 07:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**2.8**		**mg/L**	**4**	0.16	0.070	9/22/2020 14:42	G

Lab ID: **J2012855002** Date Received: 09/21/20 10:14 Matrix: Water
Sample ID: **SGMW-1SR** Date Collected: 09/21/20 08:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Nickel	**110**		**ug/L**	**1**	40	10	9/30/2020 10:10	J

Lab ID: **J2012855003** Date Received: 09/21/20 10:14 Matrix: Water
Sample ID: **MWB-40S** Date Collected: 09/21/20 09:27

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**390**		**mg/L**	**5**	40	10	9/28/2020 18:19	J
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**860**		**mg/L**	**1**	10	10	9/22/2020 08:55	J

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ANALYTICAL RESULTS

Workorder: J2012855 Trail Ridge Landfill

Lab ID: **J2012855004** Date Received: 09/21/20 10:14 Matrix: Water

Sample ID: **MWB-13S** Date Collected: 09/21/20 07:27

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							
Chromium	**63**		**ug/L**	**1**	20	5.0	9/30/2020 10:13	J
Nickel	**98**		**ug/L**	**1**	40	10	9/30/2020 10:13	J
WET CHEMISTRY								
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**470**		**mg/L**	**1**	10	10	9/22/2020 08:55	J

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ANALYTICAL RESULTS QUALIFIERS

Workorder: J2012855 Trail Ridge Landfill

PARAMETER QUALIFIERS

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

LAB QUALIFIERS

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

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QUALITY CONTROL DATA

Workorder: J2012855 Trail Ridge Landfill

QC Batch: WCAj/3411 Analysis Method: SM 2540 C
QC Batch Method: SM 2540 C Prepared:
Associated Lab Samples: J2012855003, J2012855004

METHOD BLANK: 3622735

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

LABORATORY CONTROL SAMPLE: 3622736

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	300	320	107	85-115	

SAMPLE DUPLICATE: 3625409 Original: J2012823004

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

QC Batch: WCAg/4095 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Prepared:
Associated Lab Samples: J2012855001

METHOD BLANK: 3624909

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	0.017	0.017	U

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QUALITY CONTROL DATA

Workorder: J2012855 Trail Ridge Landfill

LABORATORY CONTROL SAMPLE: 3624910

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.47	94	90-110	

LABORATORY CONTROL SAMPLE: 3624911

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.2	0.21	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3624912 3624913 Original: G2008922001

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	95	80	170	170	96	100	90-110	2	10	

QC Batch: DGMj/2248 Analysis Method: SW-846 6010
QC Batch Method: SW-846 3010A Prepared: 09/24/2020 04:50
Associated Lab Samples: J2012855002, J2012855004

METHOD BLANK: 3626341

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Chromium	ug/L	5.0	5.0	U
Nickel	ug/L	10	10	U

LABORATORY CONTROL SAMPLE: 3626342

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Chromium	ug/L	100	91	91	80-120	
Nickel	ug/L	200	190	96	80-120	

CERTIFICATE OF ANALYSIS

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Fax: (904)363-9354

QUALITY CONTROL DATA

Workorder: J2012855 Trail Ridge Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3626657 3626658 Original: T2017265001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Chromium	ug/L	1	100	89	94	89	94	75-125	5	20	
Nickel	ug/L	2.7	200	180	200	91	98	75-125	7	20	

QC Batch: WCAj/3483 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Prepared:
Associated Lab Samples: J2012855003

METHOD BLANK: 3629412

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Chloride	mg/L	2.0	2.0	U

LABORATORY CONTROL SAMPLE & LCSD: 3629413 3629414

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY										
Chloride	mg/L	20	18	19	92	95	90-110	3	10	

MATRIX SPIKE SAMPLE: 3629415 Original: J2012893001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY							
Chloride	mg/L	18	20	39	106	90-110	

CERTIFICATE OF ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J2012855 Trail Ridge Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J2012855003	MWB-40S			SM 2540 C	WCAj/3411
J2012855004	MWB-13S			SM 2540 C	WCAj/3411
J2012855001	SW-3			EPA 350.1	WCAg/4095
J2012855002	SGMW-1SR	SW-846 3010A	DGMj/2248	SW-846 6010	ICPj/1551
J2012855004	MWB-13S	SW-846 3010A	DGMj/2248	SW-846 6010	ICPj/1551
J2012855003	MWB-40S			EPA 300.0	WCAj/3483

Advanced Environmental Laboratories, Inc.

[x] 6681 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 • 352.377.8349 • Fax 352.395.6639 • E82001
[ ] 528 S. North Lake Blvd., Ste. 1016 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597 • E83079

Page 1 of 1

* J 2 0 1 2 8 5 5 *

Client Name	CITY OF JACKSONVILLE
Address	214 North Hogan Street, 10th Floor, Jacksonville, FL 32202
Phone	(904) 255-7613
Fax	
Contact	Eric B. Fuller
Sampler	
Turn Around Time	[x] 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 Christiansen
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	Ammonia (PE, H_2SO_4)	Metals (PE 250/500 ml, HNO_3)	Cl, TDS (PE 250 ml, –)	Cr	N[illegible] Go[illegible]	Laboratory I.D. Number
	SW-3	G	9-21	0745	W	1	1					001
	SGMW-15R	G	9-21	0850	W	1		1			1	002
	MWB-40S	G	9-21	0927	W	1			1			003
	MWB-13S	G	9-21	0727	W	2		1	1	1	1	004

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

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

Received on Ice [x] Yes [ ] No [x] 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 (for an IR temp gun used) IR-9A G: LT-1 LT-2 T: 19A A: 3A

Form revised 2/8/08

	Relinquished by	Date	Time	Received by	Date	Time
1	[signature]	9-21-20	1014	[signature]	9-21-20	1014
2						
3						
4						

FOR DRINKING WATER USE:
(When PWS information is being supplied) PWS ID ______
Contact Person ______ Phone ______
Supplier of Water ______
Site Address ______

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SAMW-15R	SAMPLE ID:		DATE: 9-21-20

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 3.2 (feet) to Total	STATIC DEPTH TO WATER (feet): 15.73		PURGE PUMP TYPE OR BAILER: PP
WELL ELEVATION TOC (ft NGVD): NA			GROUNDWATER ELEVATION (ft NGVD): NA		

WELL VOLUME PURGED = WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (18.20 feet − 15.73 feet) X 0.163 gallons/foot = 0.40 gallons

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

= 0.0 gallons + 0.024 gallons/foot X 18.20 (feet) = 0.05 gallons = 0.45 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 18.10	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 18.10	PURGING INITIATED AT: 0832	PURGING ENDED AT: 0850		TOTAL VOLUME PURGED (gallons): 1.1L

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) umhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mv)	COLOR	ODOR
0840	0.56	0.56	0.07	16.45	5.51	24.2	311	1.2	83.64	62		
0843	0.21	0.77	0.07	16.45	5.51	24.1	306	1.2	78.42	65		
0846	0.21	0.98	0.07	16.45	5.52	24.1	301	1.3	86.21	59		
0849	0.21	1.19	0.07	16.45	5.52	24.1	299	1.2	88.44	58	Yellow	
											Brown	
											Tint	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Danny Armour / Pro-Tech	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0850	SAMPLING ENDED AT: NA
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					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
* SEE SAMPLE COC AND BOTTLE ORDER WORKSHEET									

REMARKS:
SHEEN: 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; RPPP = 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, 2008

FORM FD 9000-24

GROUNDWATER SAMPLING LOG

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

WELL NO: MW-103 | SAMPLE ID: | DATE: 9-21-20

PURGING DATA

WELL DIAMETER (inches): 2 | TUBING DIAMETER (inches): 1/4 | WELL SCREEN INTERVAL DEPTH: 3 feet to 13 feet | STATIC DEPTH TO WATER (feet): 10.46 | PURGE PUMP TYPE OR BAILER: PP

WELL ELEVATION TOC (ft NGVD): N/A | GROUNDWATER ELEVATION (ft NGVD): N/A

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

= 18.52 (ft) − 10.46 (ft) × 0.163 gallons/foot = 1.32 gallons

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

= 0.3 gallons + (0.0024 gallons/foot × 18.32 feet) + 0.05 gallons = 0.496 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 18.00 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 18.00 | PURGING INITIATED AT: 0907 | PURGING ENDED AT: 0923 | 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) mmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0917	1.40	1.40	0.14	10.55	5.03	24.6	1340	0.2	4.60	-39		
0920	0.42	1.82	0.14	10.55	5.04	24.6	1336	0.1	4.38	-41		
0923	0.42	2.24	0.14	10.55	5.04	24.6	1333	0.1	4.03	-42		
0926	0.42	2.66	0.14	10.55	5.04	24.6	1331	0.1	4.11	-43	YELLOW TINT	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 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: Protech | SAMPLER(S) SIGNATURE(S): | SAMPLING INITIATED AT: 0927 | 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) | DUPLICATE: Y (N)

SAMPLE ID CODE	SAMPLE CONTAINER SPECIFICATION: # OF 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/min)	SAMPLING EQUIPMENT CODE
MW-103	SEE SAMPLE I.D. AND BOTTLE ORDER WORKSHEET								

REMARKS:

Sheen/odor: 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; FPP = 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: 9-21-20

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) gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + TUBING CAPACITY + TUBING LENGTH(s) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons (gallons/foot) + (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) mmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0745	NA	NA	NA	NA	7.41	25.1	461	3.9	13.48	84	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" = 0.002; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; SP = Stainless Pump; ESP = Electric submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH | SAMPLER (SIGNATURE(S)): | SAMPLING INITIATED AT: 0745 | SAMPLING ENDED AT: NR

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

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

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

REMARKS: SW-3 : SURFACE WATER POINT

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

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

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 4):
pH: ± 0.2 units. Temperature: ± 0.2 °C. Specific Conductance: ± 5%. Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.3 mg/L or ± 10% (whichever is greater). Turbidity: all readings ≤ 29 NTU; optionally ± 5 NTU or ± 10% (whichever is greater).

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE
SITE LOCATION: JACKSONVILLE, FL
WELL NO.: MW813S
SAMPLE ID:
DATE: 9-21-20

PURGING DATA

WELL DIAMETER (inches): 2
TUBING DIAMETER (inches): 3/8
WELL SCREEN INTERVAL DEPTH: 16.5 feet to 26.5 feet
STATIC DEPTH TO WATER (feet): 12.47
PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC IN NGVD: 126.06
GROUNDWATER ELEVATION (IN NGVD): 113.59

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

EQUIPMENT VOLUME PURGE (only fill out if applicable)
1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
0.3 gallons = (0.026 gallons/foot X 21.56 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: 0709
PURGING ENDED AT: 0729
TOTAL VOLUME PURGED (gallons): 3.60

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	EMP (°C)	COND. (circle units) umhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0713	1.80	1.80	0.18	12.93	5.84	22.1	703	1.3	6.26	75		
0720	0.54	2.34	0.18	12.93	5.81	22.2	706	1.3	6.31	77		
0723	0.54	2.88	0.18	12.93	5.80	22.4	707	1.3	6.11	77		
0726	0.54	3.42	0.18	12.93	5.81	22.4	708	1.3	6.07	77	YELLOW	
											CLEAR	

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: 0729
SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 21.56
TUBING MATERIAL CODE: T
FIELD-FILTERED: Y (N)
FILTER SIZE:
Filtration Equipment Type:
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (discard)
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
24	SEE	SAMPLE	C-O-C	AND	BOTTLE	ORDER	WORKSHEET		

REMARKS:
Shaen 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; FPPP = Field 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

APPENDIX B

COMPACT DISK CONTAINING REPORT IN .PDF FORMAT AND ADaPT FILE