

**REPORT ON
2020 BIENNIAL GROUNDWATER MONITORING - CLOSED
RCRA LANDFILL
1400 LOWELL STREET
ELYRIA, OHIO**

by Haley & Aldrich, Inc.
Cleveland, Ohio

for RACER Trust
Elyria, Ohio

File No. 129862-017
February 2021





HALEY & ALDRICH, INC.
6500 Rockside Road
Suite 200
Cleveland, OH 44131
216.739.0555

17 February 2021
File No. 129862-017

RACER Trust
1400 Lowell Street
Elyria, Ohio 44035

Attention: Pamela Barnett

Subject: 2020 Biennial Groundwater Monitoring - Closed RCRA Landfill
1400 Lowell Street
Elyria, Ohio

Ladies and Gentlemen:

Please find attached the 2020 Biennial Groundwater Monitoring Report for the Closed Landfill in Elyria, Ohio. We appreciate the opportunity to provide environmental consulting services on this project, and if you have any questions or comments, please do not hesitate to contact me.

Sincerely yours,
HALEY & ALDRICH, INC.

A handwritten signature in black ink that reads "Ban Aragona".

Ban Aragona
Senior Project Manager

Enclosures

\\haleyaldrich.com\share\cle_common\Projects\129862_Racer Elyria\013 - 2020 O&M\2020 Biennial GW Reporting\2021_0217_Biennial GW Monitoring_F.docx

Introduction/Executive Summary

This report presents the 2020 Biennial Groundwater Monitoring Event for the Closed Landfill (Site) in Elyria, Ohio as described in the Revised Post-Closure Care Plan (Revised PCCP) (Haley & Aldrich, 2015). The Revised PCCP was approved by the Ohio EPA on 29 December 2015. This work is required under the Ohio Environmental Protection Agency (Ohio EPA) Ohio Administrative Code (OAC) Rule 3745-54-75. This report has been prepared by Haley & Aldrich, Inc. (Haley & Aldrich), on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust. The Site is located in Lorain County, Ohio, at 1400 Lowell Street, in the City of Elyria, as presented on Figure 1.1.

The groundwater monitoring events in 2020 included the following activities:

- Water level measurements were collected from Site monitoring wells, piezometers, and primary sumps (June 2020); and
- Water quality samples were collected from select Site monitoring wells (June and November 2020).

Haley & Aldrich performed the field activities associated with the sampling events. Samples were submitted to TestAmerica Laboratories, Inc. in North Canton, Ohio for laboratory analysis.

The results of the water level and water quality monitoring are presented in subsequent sections of this report. The data collected in 2020 are being submitted electronically as Microsoft Excel (MS Excel) files, as per the 2013 generic Form and Instructions from Ohio EPA. The five MS Excel files are labeled as: Facility, Wells, Sampling, Params, GW Data, and are included in Appendix A.

Table of Contents

	Page
List of Tables	iii
List of Figures	iii
1. Facility Database	1
2. Well Database	2
3. Sampling Database	3
4. Parameter Database	4
5. Groundwater Database	5
6. Other Required Information	6
6.1 GROUNDWATER CONTOURS	6
6.2 GROUNDWATER FLOW	6
6.3 GROUNDWATER SAMPLING	6
7. Statistical Evaluation	8
8. Compliance Groundwater Monitoring	9
9. Corrective Action Groundwater Monitoring	10
10. Declaration	11

Tables

Figures

Appendix A – 2020 Biennial Groundwater Monitoring Report Form

Appendix B – Groundwater Flow Velocity Calculations

Appendix C – Field Forms

Appendix D – Laboratory Analytical Report

Appendix E – Data Quality Assessment and Validation Report

List of Tables

Table No.	Title
I	Groundwater Elevation Summary
II	Summary of Analytical Results for Groundwater Samples

List of Figures

Figure No.	Title
1	Project Locus
2	Till Contact Groundwater Elevations June 2020
3	Bedrock Contact Groundwater Elevations June 2020

1. Facility Database

The 2020 Biennial Report Form for Section 1 has been completed and is included in Appendix A-1.

2. Well Database

The 2020 Biennial Report Form for Section 2 has been completed and is included in Appendix A-2.

3. Sampling Database

The 2020 Biennial Report Form for Section 3 has been completed and is included in Appendix A-3.

4. Parameter Database

The 2020 Biennial Report Form for Section 4 has been completed and is included in Appendix A-4.

5. Groundwater Database

The 2020 Biennial Report Form for Section 5 has been completed and is included in Appendix A-5.

6. Other Required Information

6.1 GROUNDWATER CONTOURS

There are 18 monitoring wells and 8 piezometers that are currently part of the Site's hydraulic monitoring network. These locations are required according to the Revised PCCP.

Groundwater elevations were collected on 10 June 2020. Groundwater elevations were collected from 26 wells and piezometers. The groundwater elevations for 2020 are summarized in Table I. Water levels were noted as part of the November 2020 sampling event, but groundwater elevations were not evaluated for this event.

The groundwater elevations, contours, and generalized flow direction for the till contact and bedrock aquifers for June 2020 are presented in Figures 2 and 3, respectively. During the June 2020 monitoring event, groundwater flow directions in the till contact and bedrock aquifers beneath the landfill secure cell were from southwest to northeast, which is consistent with previous monitoring events.

6.2 GROUNDWATER FLOW

Groundwater flow velocity was calculated based on the June 2020 water level measurements using an average hydraulic conductivity of 4.1×10^{-4} centimeters per second (cm/sec), and 1.9×10^{-4} cm/sec (Supplemental Annual Report, CRA, 2002) for till contact and bedrock water-bearing zones, respectively. The groundwater flow velocity beneath the landfill in the till contact zone was calculated at a rate of 25.40 feet per year as detailed in Appendix B-1. The groundwater flow velocity beneath the landfill in the bedrock water-bearing zone was calculated at a rate of 13.14 feet per year as detailed in Appendix B-2.

6.3 GROUNDWATER SAMPLING

Groundwater samples were collected over two separate events; 11 to 15 June 2020 and 18 to 20 November 2020. During the June 2020 sampling event, groundwater samples were inadvertently collected from only 12 of the 18 landfill monitoring wells. Also, samples collected from those 12 monitoring wells during the June 2020 event were inadvertently not analyzed for cyanide, chromium, nickel, and potassium.

All 18 of the landfill monitoring wells were re-sampled during November 2020. The additional sampling event was conducted to collect samples from the 6 monitoring wells inadvertently missed during the June 2020 event. In addition, samples were collected from the 12 previously sampled wells for analysis of cyanide, chromium, nickel, and potassium. Analytical data for groundwater samples collected over both events are provided in Table II.

Groundwater quality samples were collected during the 2020 sampling events using a peristaltic pump and both low-flow and purge and sample methods in accordance with the Revised PCCP. Two field duplicate samples, one matrix spike, and one matrix spike duplicate sample were collected and analyzed for quality control purposes during each event.

Groundwater samples were analyzed for the following Site-specific parameters:

- Barium (waste indicator parameter);
- Total and dissolved metals - calcium, chromium, iron, magnesium, manganese, nickel, potassium, and sodium;
- Total cyanide; and
- Chloride and sulfate.

Samples analyzed for dissolved metals were field filtered with a 0.45-micron filter. Specific conductance, pH, temperature, turbidity, dissolved oxygen, and oxygen reduction potential were measured in the field at each monitoring well prior to sampling.

There were no exceedances of the current Maximum Contaminant Levels (MCLs) as established by U.S. EPA in any of the groundwater samples that were collected during the 2020 events (Table II). MCLs currently exist for barium (2 milligrams per liter [mg/L]), chromium (0.1 mg/L), and total cyanide (0.2 mg/L).

Groundwater monitoring field forms for each sampling event are presented in Appendix C. The laboratory analytical report and chain of custody documents are presented in Appendix D. The associated data quality assessment and validation memorandum are presented in Appendix E.

7. Statistical Evaluation

The Revised PCCP was approved by Ohio EPA on 29 December 2015. The previously approved statistical evaluation has been replaced by comparisons of groundwater results to MCLs for screening purposes under the Revised PCCP.

There were no exceedances of the current MCLs (which exist for barium, chromium, and total cyanide) in any of the groundwater samples collected in 2020.

8. Compliance Groundwater Monitoring

Compliance groundwater monitoring is not required because the Site is currently being monitored under a Detection Monitoring Program in accordance with the approved Revised PCCP.

9. Corrective Action Groundwater Monitoring

Corrective action groundwater monitoring is not required because there were no groundwater corrective action measures taken at this Site in 2020.

10. Declaration

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Ban N. Aragona

Haley & Aldrich, Inc. (Consultant for Closed Landfill in Elyria, Ohio, # OHD004201091)

TABLES

**TABLE I
GROUNDWATER ELEVATION SUMMARY
RACER ELYRIA
ELYRIA, OHIO**

Well ID	TOC Elevation (feet)	6/10/2020			Well Status	Stratigraphic Unit
		Water Depth (feet TOC)	Groundwater Elevation (feet amsl)	Depth to Bottom (feet TOC)		
P-1T	750.44	10.90	739.54	12.44	Piezometer	Till Contact
P-2T	749.80	5.90	743.90	15.16	Monitoring Well	
P-3T	748.77	5.11	743.66	12.77	Monitoring Well	
P-8T	751.13	6.70	744.43	12.49	Monitoring Well	
P-11	749.52	7.11	742.41	15.17	Piezometer	
P-12TR	752.22	5.13	747.09	14.02	Monitoring Well	
P-13T	750.83	5.76	745.07	10.78	Piezometer	
P-14T	751.68	5.52	746.16	14.39	Monitoring Well	
P-15T	753.59	6.35	747.24	15.97	Monitoring Well	
P-16T	747.40	7.95	739.45	12.15	Monitoring Well	
P-18T	750.25	4.00	746.25	19.92	Monitoring Well	
P-21T	751.28	8.54	742.74	15.90	Monitoring Well	
P-1	749.57	10.79	738.78	21.10	Piezometer	Bedrock
P-2	748.87	4.98	743.89	22.60	Monitoring Well	
P-3R	748.87	4.87	744.00	21.50	Monitoring Well	
P-8R	751.09	7.25	743.84	22.53	Monitoring Well	
P-12	751.83	4.81	747.02	22.52	Monitoring Well	
P-13	750.94	4.31	746.63	19.50	Piezometer	
P-14	751.64	5.52	746.12	22.15	Monitoring Well	
P-15	753.73	6.61	747.12	24.15	Monitoring Well	
P-16	747.62	8.41	739.21	20.27	Monitoring Well	
P-17	754.96	7.68	747.28	25.30	Piezometer	
P-18	751.35	5.20	746.15	31.22	Monitoring Well	
P-19	750.24	5.85	744.39	21.06	Piezometer	
P-20	748.94	7.71	741.23	20.77	Piezometer	
P-21	751.35	8.85	742.50	24.02	Monitoring Well	

Notes/Abbreviations:

TOC = top of casing

amsl = above mean sea level

TABLE II
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES
RACER ELYRIA
ELYRIA, OHIO

Location Group	MCL	Downgradient										Down/Side-Gradient											
		P-08R	P-08R	P-08T	P-16	P-16	P-16T	P-16T	P-21	P-21T	P-21T	P-02	P-02	P-02	P-02T	P-02T	P-03R	P-03R	P-03T	P-03T	P-18	P-18	
Location		06/11/2020	11/20/2020	11/20/2020	06/15/2020	11/20/2020	06/15/2020	11/20/2020	11/20/2020	06/15/2020	11/20/2020	06/15/2020	11/20/2020	11/20/2020	06/15/2020	11/20/2020	11/19/2020	11/19/2020	06/12/2020	11/19/2020	06/15/2020	06/15/2020	
Sample Date		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Sample Type		N	N	N	N	N	N	N	N	N	N	N	N	N	FD	N	N	N	FD	N	N	N	FD
Field Parameters																							
Temperature (Deg C)	-	13.4	13.15	13.18	15.3	14.68	15.2	14.68	14.35	13.9	14.08	11.4	14.93	-	12.4	15.37	14.31	-	13.3	14.3	14.9	-	
Dissolved Oxygen, Field (mg/L)	-	0.52	0.56	0.82	0.69	0.76	0.55	0.6	0.35	0.35	1.09	0.45	0.41	-	0.39	0.5	0.3	-	1.02	0.98	0.87	-	
Conductivity, Field (mS/cm)	-	1.46	1.37	0.552	1.91	1.26	1.45	0.727	1.016	1.76	1.32	1.59	1.58	-	2.5	2.21	1.21	-	2.24	1.63	1.72	-	
ORP, Field (mV)	-	-8	-12	-23	-33	-35	47	56	-68	-4.4	-5.2	-33	-30	-	13	15	155.9	-	115	121	-65	-	
Turbidity, Field (NTU)	-	3.8	0	0	20.2	0.9	15.2	1.4	9	9.5	0	3.9	1	-	45.7	40.1	3.9	-	4.4	0.9	7	-	
pH, Field (pH units)	-	7	7.02	6.97	6.79	6.95	6.98	6.98	7.6	6.58	6.95	6.85	6.96	-	6.68	7.36	7.15	-	6.79	6.82	7.67	-	
Inorganic Compounds, Total (mg/L)																							
Barium, Total	2	0.078 J	-	0.057 J	0.033 J	-	0.017 J	-	0.024 J	0.034 J	-	0.068 J	-	-	0.018 J	-	0.032 J	0.027 J	0.019 J	-	0.007 J	0.0071 J	
Calcium, Total	-	89	-	76	230	-	150	-	69	220	-	150	-	-	300	-	25	22	170	-	12	12	
Chromium, Total	0.1	-	ND (0.005)	ND (0.005)	-	ND (0.005)	-	ND (0.005)	ND (0.005)	-	ND (0.005)	-	-	-	-	ND (0.005)	ND (0.005)	ND (0.005)	-	ND (0.005)	-	-	
Iron, Total	-	0.29	-	0.17	3.5	-	0.14	-	0.69	0.33	-	0.96	-	-	1.4	-	0.034 J	0.038 J	0.33	-	0.026 J	ND (0.1)	
Magnesium, Total	-	21	-	30	67	-	41	-	20	54	-	51	-	-	120	-	19	16	93	-	3.9 J	3.9 J	
Manganese, Total	-	0.065	-	0.21	0.19	-	0.0025 J	-	0.056	0.52	-	0.57	-	-	0.67	-	0.018	0.017	0.024	-	0.022	0.024	
Mercury, Total	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Nickel, Total	-	-	0.0038 J	0.0035 J	-	0.056	-	0.0037 J	0.075	-	0.26	-	-	-	-	0.013 J	ND (0.04)	ND (0.04)	-	ND (0.04)	-	-	
Potassium, Total	-	-	2.9 J	4.1 J	-	2.1 J	-	1.3 J	4.1 J	-	2.5 J	-	-	-	-	1.5 J	4 J	3.5 J	-	1.6 J	-	-	
Sodium, Total	-	150	-	16	76	-	57	-	180	120	-	91	-	-	41	-	280	240	160	-	310	310	
Inorganic Compounds, Dissolved (mg/L)																							
Barium, Dissolved	2	0.079 J	-	0.053 J	0.031 J	-	0.018 J	-	0.022 J	0.035 J	-	0.065 J	-	-	0.015 J	-	0.028 J	0.028 J	0.017 J	-	0.007 J	0.0081 J	
Calcium, Dissolved	-	88	-	70	230	-	160	-	61	210	-	150	-	-	310	-	23	23	180	-	12	12	
Chromium, Dissolved	0.1	-	ND (0.005)	ND (0.005)	-	ND (0.005)	-	ND (0.005)	ND (0.005)	-	ND (0.005)	-	ND (0.005)	ND (0.005)	-	ND (0.005)	ND (0.005)	ND (0.005)	-	ND (0.005)	-	-	
Iron, Dissolved	-	0.27	-	ND (0.1)	3.3	-	ND (0.1)	-	0.18	0.31	-	0.85	-	-	0.7	-	ND (0.1)	ND (0.1)	ND (0.1)	-	ND (0.1)	ND (0.1)	
Magnesium, Dissolved	-	20	-	28	66	-	41	-	19	53	-	50	-	-	120	-	17	17	96	-	3.9 J	3.9 J	
Manganese, Dissolved	-	0.065	-	0.18	0.18	-	0.0073 J	-	0.043	0.53	-	0.52	-	-	0.66	-	ND (0.015)	ND (0.015)	0.0028 J	-	0.022	0.022	
Nickel, Dissolved	-	-	0.0038 J	0.0037 J	-	0.058	-	0.0029 J	0.062	-	0.24	-	0.0062 J	0.0062 J	-	0.01 J	ND (0.04)	ND (0.04)	-	0.0025 J	-	-	
Potassium, Dissolved	-	-	3.1 J	3.8 J	-	2.1 J	-	1.3 J	4.4 J	-	2.4 J	-	3.8 J	3.6 J	-	1.3 J	3.7 J	3.6 J	-	1.8 J	-	-	
Sodium, Dissolved	-	150	-	16	78	-	60	-	210	130	-	91	-	-	43	-	250	250	170	-	320	320	
Other (mg/L)																							
Chloride	-	130	-	20	37	-	2.6	-	100	64	-	43	-	-	68	-	35	35	6.8	-	43	42	
Cyanide	0.2	-	ND (0.01)	ND (0.01)	-	ND (0.01)	-	ND (0.01)	ND (0.01)	-	ND (0.01)	-	-	-	-	ND (0.01)	ND (0.01)	ND (0.01)	-	ND (0.01)	-	-	
Sulfate	-	55	-	71	490	-	340	-	130	490	-	340	-	-	870	-	150	150	730	-	220	210	

Notes and Abbreviations:

- Results in **bold** were detected.
- Results in **red** exceed the MCL.
- ND - Not detected above the reporting limit.
 J - Estimated result
- Sample Type codes:
 N - Normal Sample
 FD - Field Duplicate Sample
- Data validated by Haley & Aldrich, Inc.
 Deg C = degrees Celsius
 mg/L = milligrams per liter
 mS/cm = millisiemens per centimeter
 mV = millivolt
 NTU = Nephelometric Turbidity Unit

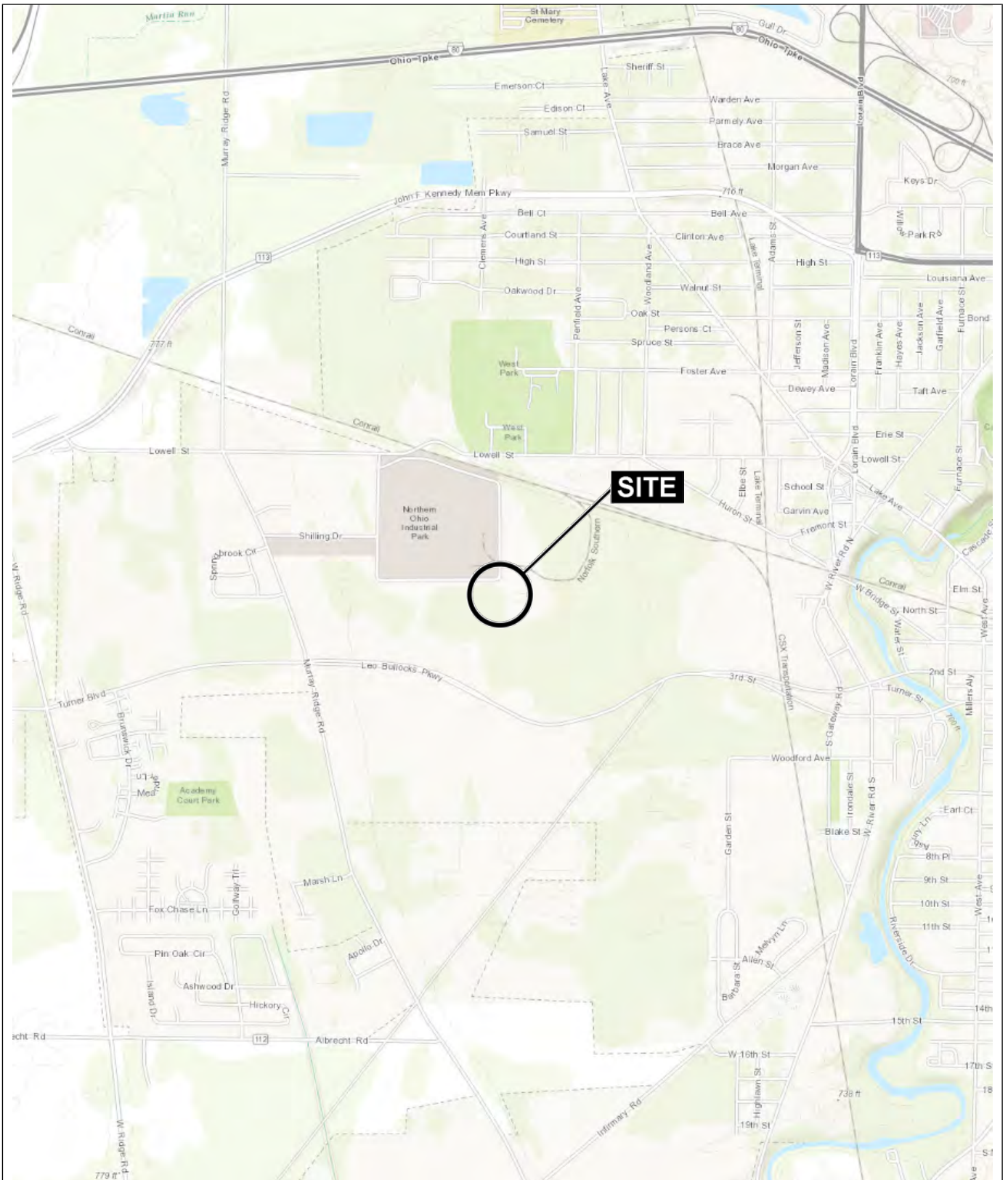
**TABLE II
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES
RACER ELYRIA
ELYRIA, OHIO**

Location Group	MCL	Down/Side-Gradient		Upgradient										
		P-18 11/19/2020	P-18T 11/19/2020	P-12 11/18/2020	P-12TR 11/18/2020	P-14 06/11/2020	P-14 11/18/2020	P-14T 06/11/2020	P-14T 11/18/2020	P-15 06/12/2020	P-15 11/18/2020	P-15T 06/12/2020	P-15T 06/12/2020	P-15T 11/18/2020
Location		N	N	N	N	N	N	N	N	N	N	N	FD	N
Sample Date														
Sample Type														
Field Parameters														
Temperature (Deg C)	-	16.53	15.22	14.76	14.8	12.6	14.26	13.3	14.09	13.3	14.35	13.6	-	14.26
Dissolved Oxygen, Field (mg/L)	-	0.6	0.92	0.6	0.52	0.28	0.23	0.58	0.59	0.49	0.62	0.33	-	0.51
Conductivity, Field (mS/cm)	-	1.09	0.76	0.705	0.689	0.878	0.59	0.504	0.459	1.21	1.05	1.37	-	1.35
ORP, Field (mV)	-	-10	-31.6	134.4	55.6	-50	-55	-93	-95	-19	-18	-23	-	-29
Turbidity, Field (NTU)	-	0	3.2	1.5	0	4.2	4.2	4.3	2.1	11.8	0.6	7	-	4.2
pH, Field (pH units)	-	8.37	7.22	7.09	7.02	6.89	6.96	6.45	6.46	6.49	6.6	6.46	-	6.5
Inorganic Compounds, Total (mg/L)														
Barium, Total	2	-	0.046 J	0.016 J	0.075 J	0.057 J	-	0.058 J	-	0.086 J	-	0.09 J	0.092 J	-
Calcium, Total	-	-	60	43	130	110	-	75	-	160	-	180	190	-
Chromium, Total	0.1	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	-	ND (0.005)	-	ND (0.005)	-	ND (0.005)	-	-	ND (0.005)
Iron, Total	-	-	0.4	0.094 J	0.75	3.9	-	8.6	-	2	-	1.8	1.8	-
Magnesium, Total	-	-	20	12	34	24	-	9.3	-	30	-	43	44	-
Manganese, Total	-	-	0.087	0.021	0.028	0.15	-	2.8	-	1.6	-	1.6	1.6	-
Mercury, Total	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel, Total	-	0.23	0.11	ND (0.04)	0.0025 J	-	ND (0.04)	-	0.0037 J	-	0.0058 J	-	-	0.0087 J
Potassium, Total	-	3.3 J	5.6	4 J	2.3 J	-	1.3 J	-	1.2 J	-	12	-	-	3.2 J
Sodium, Total	-	-	150	120	45	8.2	-	3.5 J	-	17	-	16	16	-
Inorganic Compounds, Dissolved (mg/L)														
Barium, Dissolved	2	-	0.043 J	0.017 J	0.077 J	0.057 J	-	0.059 J	-	0.089 J	-	0.091 J	0.09 J	-
Calcium, Dissolved	-	-	57	45	130	110	-	74	-	160	-	180	180	-
Chromium, Dissolved	0.1	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	-	ND (0.005)	-	ND (0.005)	-	ND (0.005)	-	-	ND (0.005)
Iron, Dissolved	-	-	0.054 J	ND (0.1)	0.035 J	1.7	-	8.3	-	2	-	1.8	1.7	-
Magnesium, Dissolved	-	-	19	13	35	24	-	9.2	-	30	-	42	42	-
Manganese, Dissolved	-	-	0.026	0.014 J	0.012 J	0.15	-	2.7	-	1.6	-	1.5	1.5	-
Nickel, Dissolved	-	0.24	0.1	ND (0.04)	ND (0.04)	-	ND (0.04)	-	0.0028 J	-	0.0063 J	-	-	0.0049 J
Potassium, Dissolved	-	3.4 J	5.3	4.1 J	2.3 J	-	1.3 J	-	1.2 J	-	12	-	-	3 J
Sodium, Dissolved	-	-	140	130	48	8.3	-	3.4 J	-	18	-	16	16	-
Other (mg/L)														
Chloride	-	-	38	21	12	8.1	-	1.2	-	7.1	-	6.5	6.5	-
Cyanide	0.2	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	-	ND (0.01)	-	ND (0.01)	-	ND (0.01)	-	-	ND (0.01)
Sulfate	-	-	170	67	110	49	-	1.7	-	150	-	240	240	-

Notes and Abbreviations:

1. Results in **bold** were detected.
2. Results in **red** exceed the MCL.
3. ND - Not detected above the reporting limit.
J - Estimated result
4. Sample Type codes:
N - Normal Sample
FD - Field Duplicate Sample
5. Data validated by Haley & Aldrich, Inc.
Deg C = degrees Celsius
mg/L = milligrams per liter
mS/cm = millisiemens per centimeter
mV = millivolt
NTU = Nephelometric Turbidity Unit

FIGURES



MAP SOURCE: ESRI

SITE COORDINATES: 41°22'11"N, 82°8'8"W



**HALEY
ALDRICH**

RACER TRUST LANDFILL
1400 LOWELL STREET
ELROY, OHIO

PROJECT LOCUS






APPROXIMATE SCALE: 1 IN = 2000 FT
SEPTEMBER 2018

FIGURE 1

GIS FILE PATH: \\haleyaldrich.com\share\cde_common\Projects\41753_RacerTrust\Global\GIS\Maps\2020_08\129862_013_00MB_GW_CONTOURS.mxd — USER: hwachholz — LAST SAVED: 8/28/2020 9:58:57 AM

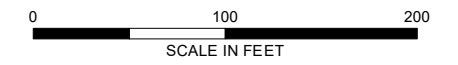


LEGEND

-  MONITORING WELL
-  PIEZOMETER
-  GROUNDWATER FLOW DIRECTION
-  INTERPRETED GROUNDWATER ELEVATION CONTOUR, 2-FT INTERVAL
-  SITE BOUNDARY

NOTES

1. ALL LOCATIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: ESRI



HALEY ALDRICH
 RACER TRUST ELYRIA
 1400 LOWELL STREET
 ELYRIA, OHIO

**TILL CONTACT GROUNDWATER
 ELEVATIONS JUNE 2020**






AUGUST 2020

FIGURE 2

GIS FILE PATH: \\haleyaldrich.com\share\cde_common\Projects\41753_RacerTrust\Global\GIS\Maps\2020_08\129862_013_00MB_GW_CONTOURS.mxd — USER: hwachholz — LAST SAVED: 8/28/2020 9:58:57 AM

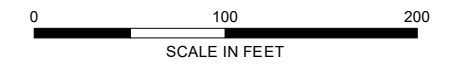


LEGEND

-  MONITORING WELL
-  PIEZOMETER
-  GROUNDWATER FLOW DIRECTION
-  INTERPRETED GROUNDWATER ELEVATION CONTOUR, 2-FT INTERVAL
-  SITE BOUNDARY

NOTES

1. ALL LOCATIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: ESRI



HALEY ALDRICH
 RACER TRUST ELYRIA
 1400 LOWELL STREET
 ELYRIA, OHIO

**BEDROCK CONTACT GROUNDWATER
 ELEVATIONS JUNE 2020**

AUGUST 2020

FIGURE 3

APPENDIX A

2020 Biennial Groundwater Monitoring Report Forms

Facility.xls
Closed Landfill
Elyria, OH

FACILITY	FCID	ADDR1	CITY	STATE	ZIP	PHONE	CONTACT	LATITUDE	LONGITUDE	GEOG_METHOD	NUM_WELLS	COUNTY
RACER Elyria Closed Landfill	OHD004201091	1400 Lowell Street	Elyria	OH	44035	937.751.8635	Pam Barnett	412219.74000	820806.84000	S	57	Lorain

Wells.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	DATUM	DEPTH	TOP_CAS_EL	TOP_SCR_EL	BOT_SCR_EL	GRAD_POSTN	CAS_MATERL	PIPE_DIA
OHD004201091	Northeast Primary Sump	MSL	18.4	760.21			O		
OHD004201091	Northeast Secondary Sump	MSL	19.7	756.70			O		
OHD004201091	Northwest Primary Sump	MSL	17.48	760.36			O		
OHD004201091	Northwest Secondary Sump	MSL	16.8	756.80			O		
OHD004201091	P-01	MSL	21.1	749.57	15.00	20.00	U	PVC	2
OHD004201091	P-01T	MSL	12.44	750.44	5.00	10.00	U	PVC	2
OHD004201091	P-02	MSL	22.6	748.87	17.00	22.00	U	PVC	2
OHD004201091	P-02T	MSL	15.16	749.80	8.50	13.50	U	PVC	2
OHD004201091	P-03R	MSL	21.5	748.87	14.00	19.00	U	PVC	2
OHD004201091	P-03T	MSL	12.77	748.77	5.00	10.00	U	PVC	2
OHD004201091	P-08R	MSL	22.53	751.09	15.00	20.00	U	PVC	2
OHD004201091	P-08T	MSL	12.49	751.13	5.00	10.00	U	PVC	2
OHD004201091	P-11	MSL	15.16	749.52	8	13	U	PVC	2
OHD004201091	P-12	MSL	22.52	751.83	15	20	U	PVC	2
OHD004201091	P-12TR	MSL	14.02	752.22	6.5	11.5	U	PVC	2
OHD004201091	P-13	MSL	19.5	750.94	12	17	U	PVC	2
OHD004201091	P-13T	MSL	10.78	750.83	3	8	U	PVC	2
OHD004201091	P-14	MSL	22.15	751.64	15	20	U	PVC	2
OHD004201091	P-14T	MSL	14.39	751.68	7	12	U	PVC	2
OHD004201091	P-15	MSL	24.15	753.73	17	22	U	PVC	2
OHD004201091	P-15T	MSL	15.97	753.59	8.5	13.5	U	PVC	2
OHD004201091	P-16	MSL	20.27	747.62	13	18	U	PVC	2
OHD004201091	P-16T	MSL	12.15	747.4	5	10	U	PVC	2
OHD004201091	P-17	MSL	25.3	754.96	17	22	U	PVC	2
OHD004201091	P-18	MSL	31.22	751.35	23.2	28.2	U	PVC	2
OHD004201091	P-18T	MSL	19.92	750.25	12.5	17.5	U	PVC	2
OHD004201091	P-19	MSL	21.06	750.24	12.8	17.8	U	PVC	2
OHD004201091	P-20	MSL	20.77	748.94	13	18	U	PVC	2
OHD004201091	P-21	MSL	24.02	751.35	16	21	U	PVC	2
OHD004201091	P-21T	MSL	15.9	751.28	9	14	U	PVC	2
OHD004201091	Southeast Primary Sump	MSL	16.42	760.34			O		
OHD004201091	Southeast Secondary Sump	MSL	13.1	757.1			O		
OHD004201091	Southwest Primary Sump	MSL	16.29	760.26			O		
OHD004201091	Southwest Secondary Sump	MSL	17.4	758.4			O		

Wells.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	SURFACE_EL	LATITUDE	LONGITUDE	GEOG_M	WELL_USE	WELL_LOG_T	DATE_INSTL
OHD004201091	Northeast Primary Sump		412211 321	820802 863	S	8C	D	01/01/98
OHD004201091	Northeast Secondary Sump		412211 966	820802 864	S	8C	D	01/01/98
OHD004201091	Northwest Primary Sump		412211 310	820805 561	S	8C	D	01/01/98
OHD004201091	Northwest Secondary Sump		412211 988	820805 533	S	8C	D	01/01/98
OHD004201091	P-01	748.47	412214 120	820800 161	S	8B	D	05/14/81
OHD004201091	P-01T	747.05	412214 209	820800 126	S	8B	D	10/26/88
OHD004201091	P-02	747.12	412209 566	820800 180	S	8A	D	05/15/81
OHD004201091	P-02T	747.54	412209 696	820800 212	S	8A	D	10/26/88
OHD004201091	P-03R	746.45	412207 715	820800 097	S	8A	D	06/03/02
OHD004201091	P-03T	746.56	412207 587	820800 046	S	8A	D	05/23/02
OHD004201091	P-08R	748.58	412212 620	820804 654	S	8A	D	05/29/02
OHD004201091	P-08T	748.00	412212 638	820804 381	S	8A	D	10/26/88
OHD004201091	P-11	747	412211 080	820800 176	S	8B	D	10/27/88
OHD004201091	P-12	750	412212 280	820808 211	S	8A	D	02/03/00
OHD004201091	P-12TR	749.83	412210 280	820808 151	S	8A	D	06/11/02
OHD004201091	P-13	748.52	412206 840	820804 269	S	8B	D	03/09/00
OHD004201091	P-13T	747.4	412206 835	820804 090	S	8B	D	03/09/00
OHD004201091	P-14	749.28	412212 025	820808 577	S	8A	D	06/05/02
OHD004201091	P-14T	749.37	412212 191	820808 586	S	8A	D	05/24/02
OHD004201091	P-15	751.31	412208 046	820807 966	S	8A	D	05/30/02
OHD004201091	P-15T	751.24	412208 067	820807 898	S	8A	D	05/23/02
OHD004201091	P-16	745.03	412211 993	820759 937	S	8A	D	06/05/02
OHD004201091	P-16T	745.01	412212 038	820759 966	S	8A	D	05/24/02
OHD004201091	P-17	752.16	412208 917	820809 077	S	8B	D	06/23/03
OHD004201091	P-18	748.47	412208 209	820803 807	S	8A	D	06/30/03
OHD004201091	P-18T	747.8	412208 343	820803 611	S	8A	D	04/22/09
OHD004201091	P-19	747.59	412206 522	820801 426	S	8B	D	06/27/03
OHD004201091	P-20	745.98	412210 565	820758 891	S	8B	D	07/01/03
OHD004201091	P-21	748.4	412212 281	820802 958	S	8A	D	07/02/03
OHD004201091	P-21T	748.5	412211 997	820803 578	S	8A	D	04/22/09
OHD004201091	Southeast Primary Sump		412209 451	820802 830	S	8C	D	01/01/98
OHD004201091	Southeast Secondary Sump		412208 800	820802 815	S	8C	D	01/01/98
OHD004201091	Southwest Primary Sump		412209 427	820805 575	S	8C	D	01/01/98
OHD004201091	Southwest Secondary Sump		412208 810	820805 580	S	8C	D	01/01/98

Wells.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	DPTH_INSTL	GWElv_INST
OHD004201091	Northeast Primary Sump		NA
OHD004201091	Northeast Secondary Sump		NA
OHD004201091	Northwest Primary Sump		NA
OHD004201091	Northwest Secondary Sump		NA
OHD004201091	P-01	20'	738.78000
OHD004201091	P-01T	12.5'	739.54000
OHD004201091	P-02	22'	743.89000
OHD004201091	P-02T	13.5'	743.90000
OHD004201091	P-03R	19'	744.00000
OHD004201091	P-03T	10'	743.66000
OHD004201091	P-08R	20'	743.84000
OHD004201091	P-08T	10'	744.43000
OHD004201091	P-11	13'	742.41000
OHD004201091	P-12	24.5'	747.02000
OHD004201091	P-12TR	11.5'	747.09000
OHD004201091	P-13	17'	746.63000
OHD004201091	P-13T	8.17'	745.07000
OHD004201091	P-14	20'	746.12000
OHD004201091	P-14T	12'	746.16000
OHD004201091	P-15	22'	747.12000
OHD004201091	P-15T	14'	747.24000
OHD004201091	P-16	18'	739.21000
OHD004201091	P-16T	10'	739.45000
OHD004201091	P-17	22.7'	747.28000
OHD004201091	P-18	28.3'	746.15000
OHD004201091	P-18T	17.5'	746.25000
OHD004201091	P-19	20.2'	744.39000
OHD004201091	P-20	18.2'	741.23000
OHD004201091	P-21	22'	742.50000
OHD004201091	P-21T	14'	742.74000
OHD004201091	Southeast Primary Sump		NA
OHD004201091	Southeast Secondary Sump		NA
OHD004201091	Southwest Primary Sump		NA
OHD004201091	Southwest Secondary Sump		NA

Sampling.xls
Closed Landfill
Elyria, OH

FCID	SAMP_DATE	SAMP_SCHEM	COMMENT
OHD004201091	06/11/20	O	Biennial Groundwater Monitoring Event - 11-15 June 2020
OHD004201091	11/18/20	O	Biennial Groundwater Monitoring Event - 18-20 November 2020

Params.xls
 Closed Landfill
 Elyria, OH

FCID	NAME	UNITS	DET_LMT	ACL	MCL	METH_CODE
OHD004201091	Ba dis	ug/l	1.3		2	6010B
OHD004201091	Ba	ug/l	1.3		2	6010B
OHD004201091	Ca dis	ug/l	310			6010B
OHD004201091	Ca	ug/l	310			6010B
OHD004201091	Chloride	mg/l	2.8			E300
OHD004201091	Cond F	mS/cm	0.001			Field
OHD004201091	Cyanide	mg/l	0.006		0.2	4500
OHD004201091	Cr dis	ug/l	0.63		0.1	6010B
OHD004201091	Cr	ug/l	0.63		0.1	6010B
OHD004201091	Dis O2 F	mg/l	0.01			Field
OHD004201091	Fe dis	ug/l	26			6010B
OHD004201091	Fe	ug/l	26			6010B
OHD004201091	K dis	ug/l	560			6010B
OHD004201091	K	ug/l	560			6010B
OHD004201091	Mg dis	ug/l	260			6010B
OHD004201091	Mg	ug/l	260			6010B
OHD004201091	Mn dis	ug/l	2.1			6010B
OHD004201091	Mn	ug/l	2.1			6010B
OHD004201091	Na dis	ug/l	560			6010B
OHD004201091	Na	ug/l	560			6010B
OHD004201091	Ni dis	ug/l	2.2			6010B
OHD004201091	Ni	ug/l	2.2			6010B
OHD004201091	ORP F	mv	1			Field
OHD004201091	pH F	SU	0.1			Field
OHD004201091	Sulfate	mg/L	3.5			E300
OHD004201091	Temp F	C	0.01			Field
OHD004201091	Turb F	NTU	0.1			Field
OHD004201091	GWL	feet	0.01			Field

GW Data.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	PARAMETER	SAMP_DATE	CHR_DATA	REAL_DATA	UNITS	DUP_CODE	REP_CODE	METH_CODE	DATA_QUAL
OHD004201091	P-02	Ba	06/15/20	68	68	ug/l			6010B	J
OHD004201091	P-02	Ba dis	06/15/20	65	65	ug/l			6010B	J
OHD004201091	P-02	Ca	06/15/20	150000	150000	ug/l			6010B	
OHD004201091	P-02	Ca dis	06/15/20	150000	150000	ug/l			6010B	
OHD004201091	P-02	Chloride	06/15/20	43	43	mg/l			E300	
OHD004201091	P-02	Cond F	06/15/20	1.59	1.59	mS/cm			Field	
OHD004201091	P-02	Cond F	11/20/20	1.58	1.58	mS/cm			Field	
OHD004201091	P-02	Cr dis	11/20/20	ND<0.63	ND	ug/l	Dup		6010B	U
OHD004201091	P-02	Cr dis	11/20/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-02	Dis O2 F	06/15/20	0.45	0.45	mg/l			Field	
OHD004201091	P-02	Dis O2 F	11/20/20	0.41	0.41	mg/l			Field	
OHD004201091	P-02	Fe	06/15/20	960	960	ug/l			6010B	
OHD004201091	P-02	Fe dis	06/15/20	850	850	ug/l			6010B	
OHD004201091	P-02	K dis	11/20/20	3600	3600	ug/l	Dup		6010B	J
OHD004201091	P-02	K dis	11/20/20	3800	3800	ug/l			6010B	J
OHD004201091	P-02	Mg	06/15/20	51000	51000	ug/l			6010B	
OHD004201091	P-02	Mg dis	06/15/20	50000	50000	ug/l			6010B	
OHD004201091	P-02	Mn	06/15/20	570	570	ug/l			6010B	
OHD004201091	P-02	Mn dis	06/15/20	520	520	ug/l			6010B	
OHD004201091	P-02	Na	06/15/20	91000	91000	ug/l			6010B	
OHD004201091	P-02	Na dis	06/15/20	91000	91000	ug/l			6010B	
OHD004201091	P-02	Ni dis	11/20/20	6.2	6.2	ug/l	Dup		6010B	J
OHD004201091	P-02	Ni dis	11/20/20	6.2	6.2	ug/l			6010B	J
OHD004201091	P-02	ORP F	06/15/20	-33	-33	mv			Field	
OHD004201091	P-02	ORP F	11/20/20	-30	-30	mv			Field	
OHD004201091	P-02	pH F	06/15/20	6.85	6.85	SU			Field	
OHD004201091	P-02	pH F	11/20/20	6.96	6.96	SU			Field	
OHD004201091	P-02	Sulfate	06/15/20	340	340	mg/L			E300	
OHD004201091	P-02	Temp F	06/15/20	11.4	11.4	C			Field	
OHD004201091	P-02	Temp F	11/20/20	14.93	14.93	C			Field	
OHD004201091	P-02	Turb F	06/15/20	3.9	3.9	NTU			Field	
OHD004201091	P-02	Turb F	11/20/20	1	1	NTU			Field	
OHD004201091	P-02T	Ba	06/15/20	18	18	ug/l			6010B	J
OHD004201091	P-02T	Ba dis	06/15/20	15	15	ug/l			6010B	J
OHD004201091	P-02T	Ca	06/15/20	300000	300000	ug/l			6010B	
OHD004201091	P-02T	Ca dis	06/15/20	310000	310000	ug/l			6010B	
OHD004201091	P-02T	Chloride	06/15/20	68	68	mg/l			E300	
OHD004201091	P-02T	Cond F	06/15/20	2.5	2.5	mS/cm			Field	
OHD004201091	P-02T	Cond F	11/20/20	2.21	2.21	mS/cm			Field	

GW Data.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	PARAMETER	SAMP_DATE	CHR_DATA	REAL_DATA	UNITS	DUP_CODE	REP_CODE	METH_CODE	DATA_QUAL
OHD004201091	P-02T	Cr	11/20/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-02T	Cr dis	11/20/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-02T	Cyanide	11/20/20	ND<0.006	ND	mg/l			4500	U
OHD004201091	P-02T	Dis O2 F	06/15/20	0.39	0.39	mg/l			Field	
OHD004201091	P-02T	Dis O2 F	11/20/20	0.5	0.5	mg/l			Field	
OHD004201091	P-02T	Fe	06/15/20	1400	1400	ug/l			6010B	
OHD004201091	P-02T	Fe dis	06/15/20	700	700	ug/l			6010B	
OHD004201091	P-02T	K	11/20/20	1500	1500	ug/l			6010B	J
OHD004201091	P-02T	K dis	11/20/20	1300	1300	ug/l			6010B	J
OHD004201091	P-02T	Mg	06/15/20	120000	120000	ug/l			6010B	
OHD004201091	P-02T	Mg dis	06/15/20	120000	120000	ug/l			6010B	
OHD004201091	P-02T	Mn	06/15/20	670	670	ug/l			6010B	
OHD004201091	P-02T	Mn dis	06/15/20	660	660	ug/l			6010B	
OHD004201091	P-02T	Na	06/15/20	41000	41000	ug/l			6010B	
OHD004201091	P-02T	Na dis	06/15/20	43000	43000	ug/l			6010B	
OHD004201091	P-02T	Ni	11/20/20	13	13	ug/l			6010B	J
OHD004201091	P-02T	Ni dis	11/20/20	10	10	ug/l			6010B	J
OHD004201091	P-02T	ORP F	06/15/20	13	13	mv			Field	
OHD004201091	P-02T	ORP F	11/20/20	15	15	mv			Field	
OHD004201091	P-02T	pH F	06/15/20	6.68	6.68	SU			Field	
OHD004201091	P-02T	pH F	11/20/20	7.36	7.36	SU			Field	
OHD004201091	P-02T	Sulfate	06/15/20	870	870	mg/L			E300	
OHD004201091	P-02T	Temp F	06/15/20	12.4	12.4	C			Field	
OHD004201091	P-02T	Temp F	11/20/20	15.37	15.37	C			Field	
OHD004201091	P-02T	Turb F	06/15/20	45.7	45.7	NTU			Field	
OHD004201091	P-02T	Turb F	11/20/20	40.1	40.1	NTU			Field	
OHD004201091	P-03R	Ba	11/19/20	27	27	ug/l	Dup		6010B	J
OHD004201091	P-03R	Ba	11/19/20	32	32	ug/l			6010B	J
OHD004201091	P-03R	Ba dis	11/19/20	28	28	ug/l	Dup		6010B	J
OHD004201091	P-03R	Ba dis	11/19/20	28	28	ug/l			6010B	J
OHD004201091	P-03R	Ca	11/19/20	22000	22000	ug/l	Dup		6010B	
OHD004201091	P-03R	Ca	11/19/20	25000	25000	ug/l			6010B	
OHD004201091	P-03R	Ca dis	11/19/20	23000	23000	ug/l	Dup		6010B	
OHD004201091	P-03R	Ca dis	11/19/20	23000	23000	ug/l			6010B	
OHD004201091	P-03R	Chloride	11/19/20	35	35	mg/l	Dup		E300	
OHD004201091	P-03R	Chloride	11/19/20	35	35	mg/l			E300	
OHD004201091	P-03R	Cond F	11/19/20	1.21	1.21	mS/cm			Field	
OHD004201091	P-03R	Cr	11/19/20	ND<0.63	ND	ug/l	Dup		6010B	U
OHD004201091	P-03R	Cr	11/19/20	ND<0.63	ND	ug/l			6010B	U

GW Data.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	PARAMETER	SAMP_DATE	CHR_DATA	REAL_DATA	UNITS	DUP_CODE	REP_CODE	METH_CODE	DATA_QUAL
OHD004201091	P-03R	Cr dis	11/19/20	ND<0.63	ND	ug/l	Dup		6010B	U
OHD004201091	P-03R	Cr dis	11/19/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-03R	Cyanide	11/19/20	ND<0.006	ND	mg/l	Dup		4500	U
OHD004201091	P-03R	Cyanide	11/19/20	ND<0.006	ND	mg/l			4500	U
OHD004201091	P-03R	Dis O2 F	11/19/20	0.3	0.3	mg/l			Field	
OHD004201091	P-03R	Fe	11/19/20	38	38	ug/l	Dup		6010B	J
OHD004201091	P-03R	Fe	11/19/20	34	34	ug/l			6010B	J
OHD004201091	P-03R	Fe dis	11/19/20	ND<26	ND	ug/l	Dup		6010B	U
OHD004201091	P-03R	Fe dis	11/19/20	ND<26	ND	ug/l			6010B	U
OHD004201091	P-03R	K	11/19/20	3500	3500	ug/l	Dup		6010B	J
OHD004201091	P-03R	K	11/19/20	4000	4000	ug/l			6010B	J
OHD004201091	P-03R	K dis	11/19/20	3600	3600	ug/l	Dup		6010B	J
OHD004201091	P-03R	K dis	11/19/20	3700	3700	ug/l			6010B	J
OHD004201091	P-03R	Mg	11/19/20	16000	16000	ug/l	Dup		6010B	
OHD004201091	P-03R	Mg	11/19/20	19000	19000	ug/l			6010B	
OHD004201091	P-03R	Mg dis	11/19/20	17000	17000	ug/l	Dup		6010B	
OHD004201091	P-03R	Mg dis	11/19/20	17000	17000	ug/l			6010B	
OHD004201091	P-03R	Mn	11/19/20	17	17	ug/l	Dup		6010B	
OHD004201091	P-03R	Mn	11/19/20	18	18	ug/l			6010B	
OHD004201091	P-03R	Mn dis	11/19/20	ND<2.1	ND	ug/l	Dup		6010B	U
OHD004201091	P-03R	Mn dis	11/19/20	ND<2.1	ND	ug/l			6010B	U
OHD004201091	P-03R	Na	11/19/20	240000	240000	ug/l	Dup		6010B	
OHD004201091	P-03R	Na	11/19/20	280000	280000	ug/l			6010B	
OHD004201091	P-03R	Na dis	11/19/20	250000	250000	ug/l	Dup		6010B	
OHD004201091	P-03R	Na dis	11/19/20	250000	250000	ug/l			6010B	
OHD004201091	P-03R	Ni	11/19/20	ND<2.2	ND	ug/l	Dup		6010B	U
OHD004201091	P-03R	Ni	11/19/20	ND<2.2	ND	ug/l			6010B	U
OHD004201091	P-03R	Ni dis	11/19/20	ND<2.2	ND	ug/l	Dup		6010B	U
OHD004201091	P-03R	Ni dis	11/19/20	ND<2.2	ND	ug/l			6010B	U
OHD004201091	P-03R	ORP F	11/19/20	155.9	155.9	mv			Field	
OHD004201091	P-03R	pH F	11/19/20	7.15	7.15	SU			Field	
OHD004201091	P-03R	Sulfate	11/19/20	150	150	mg/L	Dup		E300	
OHD004201091	P-03R	Sulfate	11/19/20	150	150	mg/L			E300	
OHD004201091	P-03R	Temp F	11/19/20	14.31	14.31	C			Field	
OHD004201091	P-03R	Turb F	11/19/20	3.9	3.9	NTU			Field	
OHD004201091	P-03T	Ba	06/12/20	19	19	ug/l			6010B	J
OHD004201091	P-03T	Ba dis	06/12/20	17	17	ug/l			6010B	J
OHD004201091	P-03T	Ca	06/12/20	170000	170000	ug/l			6010B	
OHD004201091	P-03T	Ca dis	06/12/20	180000	180000	ug/l			6010B	

GW Data.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	PARAMETER	SAMP_DATE	CHR_DATA	REAL_DATA	UNITS	DUP_CODE	REP_CODE	METH_CODE	DATA_QUAL
OHD004201091	P-03T	Chloride	06/12/20	6.8	6.8	mg/l			E300	
OHD004201091	P-03T	Cond F	06/12/20	2.24	2.24	mS/cm			Field	
OHD004201091	P-03T	Cond F	11/19/20	1.63	1.63	mS/cm			Field	
OHD004201091	P-03T	Cr	11/19/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-03T	Cr dis	11/19/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-03T	Cyanide	11/19/20	ND<0.006	ND	mg/l			4500	U
OHD004201091	P-03T	Dis O2 F	06/12/20	1.02	1.02	mg/l			Field	
OHD004201091	P-03T	Dis O2 F	11/19/20	0.98	0.98	mg/l			Field	
OHD004201091	P-03T	Fe	06/12/20	330	330	ug/l			6010B	
OHD004201091	P-03T	Fe dis	06/12/20	ND<26	ND	ug/l			6010B	U
OHD004201091	P-03T	K	11/19/20	1600	1600	ug/l			6010B	J
OHD004201091	P-03T	K dis	11/19/20	1800	1800	ug/l			6010B	J
OHD004201091	P-03T	Mg	06/12/20	93000	93000	ug/l			6010B	
OHD004201091	P-03T	Mg dis	06/12/20	96000	96000	ug/l			6010B	
OHD004201091	P-03T	Mn	06/12/20	24	24	ug/l			6010B	
OHD004201091	P-03T	Mn dis	06/12/20	2.8	2.8	ug/l			6010B	J
OHD004201091	P-03T	Na	06/12/20	160000	160000	ug/l			6010B	
OHD004201091	P-03T	Na dis	06/12/20	170000	170000	ug/l			6010B	
OHD004201091	P-03T	Ni	11/19/20	ND<2.2	ND	ug/l			6010B	U
OHD004201091	P-03T	Ni dis	11/19/20	2.5	2.5	ug/l			6010B	J
OHD004201091	P-03T	ORP F	06/12/20	115	115	mv			Field	
OHD004201091	P-03T	ORP F	11/19/20	121	121	mv			Field	
OHD004201091	P-03T	pH F	06/12/20	6.79	6.79	SU			Field	
OHD004201091	P-03T	pH F	11/19/20	6.82	6.82	SU			Field	
OHD004201091	P-03T	Sulfate	06/12/20	730	730	mg/L			E300	
OHD004201091	P-03T	Temp F	06/12/20	13.3	13.3	C			Field	
OHD004201091	P-03T	Temp F	11/19/20	14.3	14.3	C			Field	
OHD004201091	P-03T	Turb F	06/12/20	4.4	4.4	NTU			Field	
OHD004201091	P-03T	Turb F	11/19/20	0.9	0.9	NTU			Field	
OHD004201091	P-08R	Ba	06/11/20	78	78	ug/l			6010B	J
OHD004201091	P-08R	Ba dis	06/11/20	79	79	ug/l			6010B	J
OHD004201091	P-08R	Ca	06/11/20	89000	89000	ug/l			6010B	
OHD004201091	P-08R	Ca dis	06/11/20	88000	88000	ug/l			6010B	
OHD004201091	P-08R	Chloride	06/11/20	130	130	mg/l			E300	
OHD004201091	P-08R	Cond F	06/11/20	1.46	1.46	mS/cm			Field	
OHD004201091	P-08R	Cond F	11/20/20	1.37	1.37	mS/cm			Field	
OHD004201091	P-08R	Cr	11/20/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-08R	Cr dis	11/20/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-08R	Cyanide	11/20/20	ND<0.006	ND	mg/l			4500	U

GW Data.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	PARAMETER	SAMP_DATE	CHR_DATA	REAL_DATA	UNITS	DUP_CODE	REP_CODE	METH_CODE	DATA_QUAL
OHD004201091	P-08R	Dis O2 F	06/11/20	0.52	0.52	mg/l			Field	
OHD004201091	P-08R	Dis O2 F	11/20/20	0.56	0.56	mg/l			Field	
OHD004201091	P-08R	Fe	06/11/20	290	290	ug/l			6010B	
OHD004201091	P-08R	Fe dis	06/11/20	270	270	ug/l			6010B	
OHD004201091	P-08R	K	11/20/20	2900	2900	ug/l			6010B	J
OHD004201091	P-08R	K dis	11/20/20	3100	3100	ug/l			6010B	J
OHD004201091	P-08R	Mg	06/11/20	21000	21000	ug/l			6010B	
OHD004201091	P-08R	Mg dis	06/11/20	20000	20000	ug/l			6010B	
OHD004201091	P-08R	Mn	06/11/20	65	65	ug/l			6010B	
OHD004201091	P-08R	Mn dis	06/11/20	65	65	ug/l			6010B	
OHD004201091	P-08R	Na	06/11/20	150000	150000	ug/l			6010B	
OHD004201091	P-08R	Na dis	06/11/20	150000	150000	ug/l			6010B	
OHD004201091	P-08R	Ni	11/20/20	3.8	3.8	ug/l			6010B	J
OHD004201091	P-08R	Ni dis	11/20/20	3.8	3.8	ug/l			6010B	J
OHD004201091	P-08R	ORP F	06/11/20	-8	-8	mv			Field	
OHD004201091	P-08R	ORP F	11/20/20	-12	-12	mv			Field	
OHD004201091	P-08R	pH F	06/11/20	7	7	SU			Field	
OHD004201091	P-08R	pH F	11/20/20	7.02	7.02	SU			Field	
OHD004201091	P-08R	Sulfate	06/11/20	55	55	mg/L			E300	
OHD004201091	P-08R	Temp F	06/11/20	13.4	13.4	C			Field	
OHD004201091	P-08R	Temp F	11/20/20	13.15	13.15	C			Field	
OHD004201091	P-08R	Turb F	06/11/20	3.8	3.8	NTU			Field	
OHD004201091	P-08R	Turb F	11/20/20	0	0	NTU			Field	
OHD004201091	P-08T	Ba	11/20/20	57	57	ug/l			6010B	J
OHD004201091	P-08T	Ba dis	11/20/20	53	53	ug/l			6010B	J
OHD004201091	P-08T	Ca	11/20/20	76000	76000	ug/l			6010B	
OHD004201091	P-08T	Ca dis	11/20/20	70000	70000	ug/l			6010B	
OHD004201091	P-08T	Chloride	11/20/20	20	20	mg/l			E300	
OHD004201091	P-08T	Cond F	11/20/20	0.552	0.552	mS/cm			Field	
OHD004201091	P-08T	Cr	11/20/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-08T	Cr dis	11/20/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-08T	Cyanide	11/20/20	ND<0.006	ND	mg/l			4500	U
OHD004201091	P-08T	Dis O2 F	11/20/20	0.82	0.82	mg/l			Field	
OHD004201091	P-08T	Fe	11/20/20	170	170	ug/l			6010B	
OHD004201091	P-08T	Fe dis	11/20/20	ND<26	ND	ug/l			6010B	U
OHD004201091	P-08T	K	11/20/20	4100	4100	ug/l			6010B	J
OHD004201091	P-08T	K dis	11/20/20	3800	3800	ug/l			6010B	J
OHD004201091	P-08T	Mg	11/20/20	30000	30000	ug/l			6010B	
OHD004201091	P-08T	Mg dis	11/20/20	28000	28000	ug/l			6010B	

GW Data.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	PARAMETER	SAMP_DATE	CHR_DATA	REAL_DATA	UNITS	DUP_CODE	REP_CODE	METH_CODE	DATA_QUAL
OHD004201091	P-08T	Mn	11/20/20	210	210	ug/l			6010B	
OHD004201091	P-08T	Mn dis	11/20/20	180	180	ug/l			6010B	
OHD004201091	P-08T	Na	11/20/20	16000	16000	ug/l			6010B	
OHD004201091	P-08T	Na dis	11/20/20	16000	16000	ug/l			6010B	
OHD004201091	P-08T	Ni	11/20/20	3.5	3.5	ug/l			6010B	J
OHD004201091	P-08T	Ni dis	11/20/20	3.7	3.7	ug/l			6010B	J
OHD004201091	P-08T	ORP F	11/20/20	-23	-23	mv			Field	
OHD004201091	P-08T	pH F	11/20/20	6.97	6.97	SU			Field	
OHD004201091	P-08T	Sulfate	11/20/20	71	71	mg/L			E300	
OHD004201091	P-08T	Temp F	11/20/20	13.18	13.18	C			Field	
OHD004201091	P-08T	Turb F	11/20/20	0	0	NTU			Field	
OHD004201091	P-12	Ba	11/18/20	16	16	ug/l			6010B	J
OHD004201091	P-12	Ba dis	11/18/20	17	17	ug/l			6010B	J
OHD004201091	P-12	Ca	11/18/20	43000	43000	ug/l			6010B	
OHD004201091	P-12	Ca dis	11/18/20	45000	45000	ug/l			6010B	
OHD004201091	P-12	Chloride	11/18/20	21	21	mg/l			E300	
OHD004201091	P-12	Cond F	11/18/20	0.705	0.705	mS/cm			Field	
OHD004201091	P-12	Cr	11/18/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-12	Cr dis	11/18/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-12	Cyanide	11/18/20	ND<0.006	ND	mg/l			4500	U
OHD004201091	P-12	Dis O2 F	11/18/20	0.6	0.6	mg/l			Field	
OHD004201091	P-12	Fe	11/18/20	94	94	ug/l			6010B	J
OHD004201091	P-12	Fe dis	11/18/20	ND<26	ND	ug/l			6010B	U
OHD004201091	P-12	K	11/18/20	4000	4000	ug/l			6010B	J
OHD004201091	P-12	K dis	11/18/20	4100	4100	ug/l			6010B	J
OHD004201091	P-12	Mg	11/18/20	12000	12000	ug/l			6010B	
OHD004201091	P-12	Mg dis	11/18/20	13000	13000	ug/l			6010B	
OHD004201091	P-12	Mn	11/18/20	21	21	ug/l			6010B	
OHD004201091	P-12	Mn dis	11/18/20	14	14	ug/l			6010B	J
OHD004201091	P-12	Na	11/18/20	120000	120000	ug/l			6010B	
OHD004201091	P-12	Na dis	11/18/20	130000	130000	ug/l			6010B	
OHD004201091	P-12	Ni	11/18/20	ND<2.2	ND	ug/l			6010B	U
OHD004201091	P-12	Ni dis	11/18/20	ND<2.2	ND	ug/l			6010B	U
OHD004201091	P-12	ORP F	11/18/20	134.4	134.4	mv			Field	
OHD004201091	P-12	pH F	11/18/20	7.09	7.09	SU			Field	
OHD004201091	P-12	Sulfate	11/18/20	67	67	mg/L			E300	
OHD004201091	P-12	Temp F	11/18/20	14.76	14.76	C			Field	
OHD004201091	P-12	Turb F	11/18/20	1.5	1.5	NTU			Field	
OHD004201091	P-12TR	Ba	11/18/20	75	75	ug/l			6010B	J

GW Data.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	PARAMETER	SAMP_DATE	CHR_DATA	REAL_DATA	UNITS	DUP_CODE	REP_CODE	METH_CODE	DATA_QUAL
OHD004201091	P-12TR	Ba dis	11/18/20	77	77	ug/l			6010B	J
OHD004201091	P-12TR	Ca	11/18/20	130000	130000	ug/l			6010B	
OHD004201091	P-12TR	Ca dis	11/18/20	130000	130000	ug/l			6010B	
OHD004201091	P-12TR	Chloride	11/18/20	12	12	mg/l			E300	
OHD004201091	P-12TR	Cond F	11/18/20	0.689	0.689	mS/cm			Field	
OHD004201091	P-12TR	Cr	11/18/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-12TR	Cr dis	11/18/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-12TR	Cyanide	11/18/20	ND<0.006	ND	mg/l			4500	U
OHD004201091	P-12TR	Dis O2 F	11/18/20	0.52	0.52	mg/l			Field	
OHD004201091	P-12TR	Fe	11/18/20	750	750	ug/l			6010B	
OHD004201091	P-12TR	Fe dis	11/18/20	35	35	ug/l			6010B	J
OHD004201091	P-12TR	K	11/18/20	2300	2300	ug/l			6010B	J
OHD004201091	P-12TR	K dis	11/18/20	2300	2300	ug/l			6010B	J
OHD004201091	P-12TR	Mg	11/18/20	34000	34000	ug/l			6010B	
OHD004201091	P-12TR	Mg dis	11/18/20	35000	35000	ug/l			6010B	
OHD004201091	P-12TR	Mn	11/18/20	28	28	ug/l			6010B	
OHD004201091	P-12TR	Mn dis	11/18/20	12	12	ug/l			6010B	J
OHD004201091	P-12TR	Na	11/18/20	45000	45000	ug/l			6010B	
OHD004201091	P-12TR	Na dis	11/18/20	48000	48000	ug/l			6010B	
OHD004201091	P-12TR	Ni	11/18/20	2.5	2.5	ug/l			6010B	J
OHD004201091	P-12TR	Ni dis	11/18/20	ND<2.2	ND	ug/l			6010B	U
OHD004201091	P-12TR	ORP F	11/18/20	55.6	55.6	mv			Field	
OHD004201091	P-12TR	pH F	11/18/20	7.02	7.02	SU			Field	
OHD004201091	P-12TR	Sulfate	11/18/20	110	110	mg/L			E300	
OHD004201091	P-12TR	Temp F	11/18/20	14.8	14.8	C			Field	
OHD004201091	P-12TR	Turb F	11/18/20	0	0	NTU			Field	
OHD004201091	P-14	Ba	06/11/20	57	57	ug/l			6010B	J
OHD004201091	P-14	Ba dis	06/11/20	57	57	ug/l			6010B	J
OHD004201091	P-14	Ca	06/11/20	110000	110000	ug/l			6010B	
OHD004201091	P-14	Ca dis	06/11/20	110000	110000	ug/l			6010B	
OHD004201091	P-14	Chloride	06/11/20	8.1	8.1	mg/l			E300	
OHD004201091	P-14	Cond F	06/11/20	0.878	0.878	mS/cm			Field	
OHD004201091	P-14	Cond F	11/18/20	0.59	0.59	mS/cm			Field	
OHD004201091	P-14	Cr	11/18/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-14	Cr dis	11/18/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-14	Cyanide	11/18/20	ND<0.006	ND	mg/l			4500	U
OHD004201091	P-14	Dis O2 F	06/11/20	0.28	0.28	mg/l			Field	
OHD004201091	P-14	Dis O2 F	11/18/20	0.23	0.23	mg/l			Field	
OHD004201091	P-14	Fe	06/11/20	3900	3900	ug/l			6010B	

GW Data.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	PARAMETER	SAMP_DATE	CHR_DATA	REAL_DATA	UNITS	DUP_CODE	REP_CODE	METH_CODE	DATA_QUAL
OHD004201091	P-14	Fe dis	06/11/20	1700	1700	ug/l			6010B	
OHD004201091	P-14	K	11/18/20	1300	1300	ug/l			6010B	J
OHD004201091	P-14	K dis	11/18/20	1300	1300	ug/l			6010B	J
OHD004201091	P-14	Mg	06/11/20	24000	24000	ug/l			6010B	
OHD004201091	P-14	Mg dis	06/11/20	24000	24000	ug/l			6010B	
OHD004201091	P-14	Mn	06/11/20	150	150	ug/l			6010B	
OHD004201091	P-14	Mn dis	06/11/20	150	150	ug/l			6010B	
OHD004201091	P-14	Na	06/11/20	8200	8200	ug/l			6010B	
OHD004201091	P-14	Na dis	06/11/20	8300	8300	ug/l			6010B	
OHD004201091	P-14	Ni	11/18/20	ND<2.2	ND	ug/l			6010B	U
OHD004201091	P-14	Ni dis	11/18/20	ND<2.2	ND	ug/l			6010B	U
OHD004201091	P-14	ORP F	06/11/20	-50	-50	mv			Field	
OHD004201091	P-14	ORP F	11/18/20	-55	-55	mv			Field	
OHD004201091	P-14	pH F	06/11/20	6.89	6.89	SU			Field	
OHD004201091	P-14	pH F	11/18/20	6.96	6.96	SU			Field	
OHD004201091	P-14	Sulfate	06/11/20	49	49	mg/L			E300	
OHD004201091	P-14	Temp F	06/11/20	12.6	12.6	C			Field	
OHD004201091	P-14	Temp F	11/18/20	14.26	14.26	C			Field	
OHD004201091	P-14	Turb F	06/11/20	4.2	4.2	NTU			Field	
OHD004201091	P-14	Turb F	11/18/20	4.2	4.2	NTU			Field	
OHD004201091	P-14T	Ba	06/11/20	58	58	ug/l			6010B	J
OHD004201091	P-14T	Ba dis	06/11/20	59	59	ug/l			6010B	J
OHD004201091	P-14T	Ca	06/11/20	75000	75000	ug/l			6010B	
OHD004201091	P-14T	Ca dis	06/11/20	74000	74000	ug/l			6010B	
OHD004201091	P-14T	Chloride	06/11/20	1.2	1.2	mg/l			E300	
OHD004201091	P-14T	Cond F	06/11/20	0.504	0.504	mS/cm			Field	
OHD004201091	P-14T	Cond F	11/18/20	0.459	0.459	mS/cm			Field	
OHD004201091	P-14T	Cr	11/18/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-14T	Cr dis	11/18/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-14T	Cyanide	11/18/20	ND<0.006	ND	mg/l			4500	U
OHD004201091	P-14T	Dis O2 F	06/11/20	0.58	0.58	mg/l			Field	
OHD004201091	P-14T	Dis O2 F	11/18/20	0.59	0.59	mg/l			Field	
OHD004201091	P-14T	Fe	06/11/20	8600	8600	ug/l			6010B	
OHD004201091	P-14T	Fe dis	06/11/20	8300	8300	ug/l			6010B	
OHD004201091	P-14T	K	11/18/20	1200	1200	ug/l			6010B	J
OHD004201091	P-14T	K dis	11/18/20	1200	1200	ug/l			6010B	J
OHD004201091	P-14T	Mg	06/11/20	9300	9300	ug/l			6010B	
OHD004201091	P-14T	Mg dis	06/11/20	9200	9200	ug/l			6010B	
OHD004201091	P-14T	Mn	06/11/20	2800	2800	ug/l			6010B	

GW Data.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	PARAMETER	SAMP_DATE	CHR_DATA	REAL_DATA	UNITS	DUP_CODE	REP_CODE	METH_CODE	DATA_QUAL
OHD004201091	P-14T	Mn dis	06/11/20	2700	2700	ug/l			6010B	
OHD004201091	P-14T	Na	06/11/20	3500	3500	ug/l			6010B	J
OHD004201091	P-14T	Na dis	06/11/20	3400	3400	ug/l			6010B	J
OHD004201091	P-14T	Ni	11/18/20	3.7	3.7	ug/l			6010B	J
OHD004201091	P-14T	Ni dis	11/18/20	2.8	2.8	ug/l			6010B	J
OHD004201091	P-14T	ORP F	06/11/20	-93	-93	mv			Field	
OHD004201091	P-14T	ORP F	11/18/20	-95	-95	mv			Field	
OHD004201091	P-14T	pH F	06/11/20	6.45	6.45	SU			Field	
OHD004201091	P-14T	pH F	11/18/20	6.46	6.46	SU			Field	
OHD004201091	P-14T	Sulfate	06/11/20	1.7	1.7	mg/L			E300	
OHD004201091	P-14T	Temp F	06/11/20	13.3	13.3	C			Field	
OHD004201091	P-14T	Temp F	11/18/20	14.09	14.09	C			Field	
OHD004201091	P-14T	Turb F	06/11/20	4.3	4.3	NTU			Field	
OHD004201091	P-14T	Turb F	11/18/20	2.1	2.1	NTU			Field	
OHD004201091	P-15	Ba	06/12/20	86	86	ug/l			6010B	J
OHD004201091	P-15	Ba dis	06/12/20	89	89	ug/l			6010B	J
OHD004201091	P-15	Ca	06/12/20	160000	160000	ug/l			6010B	
OHD004201091	P-15	Ca dis	06/12/20	160000	160000	ug/l			6010B	
OHD004201091	P-15	Chloride	06/12/20	7.1	7.1	mg/l			E300	
OHD004201091	P-15	Cond F	06/12/20	1.21	1.21	mS/cm			Field	
OHD004201091	P-15	Cond F	11/18/20	1.05	1.05	mS/cm			Field	
OHD004201091	P-15	Cr	11/18/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-15	Cr dis	11/18/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-15	Cyanide	11/18/20	ND<0.006	ND	mg/l			4500	U
OHD004201091	P-15	Dis O2 F	06/12/20	0.49	0.49	mg/l			Field	
OHD004201091	P-15	Dis O2 F	11/18/20	0.62	0.62	mg/l			Field	
OHD004201091	P-15	Fe	06/12/20	2000	2000	ug/l			6010B	
OHD004201091	P-15	Fe dis	06/12/20	2000	2000	ug/l			6010B	
OHD004201091	P-15	K	11/18/20	12000	12000	ug/l			6010B	
OHD004201091	P-15	K dis	11/18/20	12000	12000	ug/l			6010B	
OHD004201091	P-15	Mg	06/12/20	30000	30000	ug/l			6010B	
OHD004201091	P-15	Mg dis	06/12/20	30000	30000	ug/l			6010B	
OHD004201091	P-15	Mn	06/12/20	1600	1600	ug/l			6010B	
OHD004201091	P-15	Mn dis	06/12/20	1600	1600	ug/l			6010B	
OHD004201091	P-15	Na	06/12/20	17000	17000	ug/l			6010B	
OHD004201091	P-15	Na dis	06/12/20	18000	18000	ug/l			6010B	
OHD004201091	P-15	Ni	11/18/20	5.8	5.8	ug/l			6010B	J
OHD004201091	P-15	Ni dis	11/18/20	6.3	6.3	ug/l			6010B	J
OHD004201091	P-15	ORP F	06/12/20	-19	-19	mv			Field	

GW Data.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	PARAMETER	SAMP_DATE	CHR_DATA	REAL_DATA	UNITS	DUP_CODE	REP_CODE	METH_CODE	DATA_QUAL
OHD004201091	P-15	ORP F	11/18/20	-18	-18	mv			Field	
OHD004201091	P-15	pH F	06/12/20	6.49	6.49	SU			Field	
OHD004201091	P-15	pH F	11/18/20	6.6	6.6	SU			Field	
OHD004201091	P-15	Sulfate	06/12/20	150	150	mg/L			E300	
OHD004201091	P-15	Temp F	06/12/20	13.3	13.3	C			Field	
OHD004201091	P-15	Temp F	11/18/20	14.35	14.35	C			Field	
OHD004201091	P-15	Turb F	06/12/20	11.8	11.8	NTU			Field	
OHD004201091	P-15	Turb F	11/18/20	0.6	0.6	NTU			Field	
OHD004201091	P-15T	Ba	06/12/20	92	92	ug/l	Dup		6010B	J
OHD004201091	P-15T	Ba	06/12/20	90	90	ug/l			6010B	J
OHD004201091	P-15T	Ba dis	06/12/20	90	90	ug/l	Dup		6010B	J
OHD004201091	P-15T	Ba dis	06/12/20	91	91	ug/l			6010B	J
OHD004201091	P-15T	Ca	06/12/20	190000	190000	ug/l	Dup		6010B	
OHD004201091	P-15T	Ca	06/12/20	180000	180000	ug/l			6010B	
OHD004201091	P-15T	Ca dis	06/12/20	180000	180000	ug/l	Dup		6010B	
OHD004201091	P-15T	Ca dis	06/12/20	180000	180000	ug/l			6010B	
OHD004201091	P-15T	Chloride	06/12/20	6.5	6.5	mg/l	Dup		E300	
OHD004201091	P-15T	Chloride	06/12/20	6.5	6.5	mg/l			E300	
OHD004201091	P-15T	Cond F	06/12/20	1.37	1.37	mS/cm			Field	
OHD004201091	P-15T	Cond F	11/18/20	1.35	1.35	mS/cm			Field	
OHD004201091	P-15T	Cr	11/18/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-15T	Cr dis	11/18/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-15T	Cyanide	11/18/20	ND<0.006	ND	mg/l			4500	U
OHD004201091	P-15T	Dis O2 F	06/12/20	0.33	0.33	mg/l			Field	
OHD004201091	P-15T	Dis O2 F	11/18/20	0.51	0.51	mg/l			Field	
OHD004201091	P-15T	Fe	06/12/20	1800	1800	ug/l	Dup		6010B	
OHD004201091	P-15T	Fe	06/12/20	1800	1800	ug/l			6010B	
OHD004201091	P-15T	Fe dis	06/12/20	1700	1700	ug/l	Dup		6010B	
OHD004201091	P-15T	Fe dis	06/12/20	1800	1800	ug/l			6010B	
OHD004201091	P-15T	K	11/18/20	3200	3200	ug/l			6010B	J
OHD004201091	P-15T	K dis	11/18/20	3000	3000	ug/l			6010B	J
OHD004201091	P-15T	Mg	06/12/20	44000	44000	ug/l	Dup		6010B	
OHD004201091	P-15T	Mg	06/12/20	43000	43000	ug/l			6010B	
OHD004201091	P-15T	Mg dis	06/12/20	42000	42000	ug/l	Dup		6010B	
OHD004201091	P-15T	Mg dis	06/12/20	42000	42000	ug/l			6010B	
OHD004201091	P-15T	Mn	06/12/20	1600	1600	ug/l	Dup		6010B	
OHD004201091	P-15T	Mn	06/12/20	1600	1600	ug/l			6010B	
OHD004201091	P-15T	Mn dis	06/12/20	1500	1500	ug/l	Dup		6010B	
OHD004201091	P-15T	Mn dis	06/12/20	1500	1500	ug/l			6010B	

GW Data.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	PARAMETER	SAMP_DATE	CHR_DATA	REAL_DATA	UNITS	DUP_CODE	REP_CODE	METH_CODE	DATA_QUAL
OHD004201091	P-15T	Na	06/12/20	16000	16000	ug/l	Dup		6010B	
OHD004201091	P-15T	Na	06/12/20	16000	16000	ug/l			6010B	
OHD004201091	P-15T	Na dis	06/12/20	16000	16000	ug/l	Dup		6010B	
OHD004201091	P-15T	Na dis	06/12/20	16000	16000	ug/l			6010B	
OHD004201091	P-15T	Ni	11/18/20	8.7	8.7	ug/l			6010B	J
OHD004201091	P-15T	Ni dis	11/18/20	4.9	4.9	ug/l			6010B	J
OHD004201091	P-15T	ORP F	06/12/20	-23	-23	mv			Field	
OHD004201091	P-15T	ORP F	11/18/20	-29	-29	mv			Field	
OHD004201091	P-15T	pH F	06/12/20	6.46	6.46	SU			Field	
OHD004201091	P-15T	pH F	11/18/20	6.5	6.5	SU			Field	
OHD004201091	P-15T	Sulfate	06/12/20	240	240	mg/L	Dup		E300	
OHD004201091	P-15T	Sulfate	06/12/20	240	240	mg/L			E300	
OHD004201091	P-15T	Temp F	06/12/20	13.6	13.6	C			Field	
OHD004201091	P-15T	Temp F	11/18/20	14.26	14.26	C			Field	
OHD004201091	P-15T	Turb F	06/12/20	7	7	NTU			Field	
OHD004201091	P-15T	Turb F	11/18/20	4.2	4.2	NTU			Field	
OHD004201091	P-16	Ba	06/15/20	33	33	ug/l			6010B	J
OHD004201091	P-16	Ba dis	06/15/20	31	31	ug/l			6010B	J
OHD004201091	P-16	Ca	06/15/20	230000	230000	ug/l			6010B	
OHD004201091	P-16	Ca dis	06/15/20	230000	230000	ug/l			6010B	
OHD004201091	P-16	Chloride	06/15/20	37	37	mg/l			E300	
OHD004201091	P-16	Cond F	06/15/20	1.91	1.91	mS/cm			Field	
OHD004201091	P-16	Cond F	11/20/20	1.26	1.26	mS/cm			Field	
OHD004201091	P-16	Cr	11/20/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-16	Cr dis	11/20/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-16	Cyanide	11/20/20	ND<0.006	ND	mg/l			4500	U
OHD004201091	P-16	Dis O2 F	06/15/20	0.69	0.69	mg/l			Field	
OHD004201091	P-16	Dis O2 F	11/20/20	0.76	0.76	mg/l			Field	
OHD004201091	P-16	Fe	06/15/20	3500	3500	ug/l			6010B	
OHD004201091	P-16	Fe dis	06/15/20	3300	3300	ug/l			6010B	
OHD004201091	P-16	K	11/20/20	2100	2100	ug/l			6010B	J
OHD004201091	P-16	K dis	11/20/20	2100	2100	ug/l			6010B	J
OHD004201091	P-16	Mg	06/15/20	67000	67000	ug/l			6010B	
OHD004201091	P-16	Mg dis	06/15/20	66000	66000	ug/l			6010B	
OHD004201091	P-16	Mn	06/15/20	190	190	ug/l			6010B	
OHD004201091	P-16	Mn dis	06/15/20	180	180	ug/l			6010B	
OHD004201091	P-16	Na	06/15/20	76000	76000	ug/l			6010B	
OHD004201091	P-16	Na dis	06/15/20	78000	78000	ug/l			6010B	
OHD004201091	P-16	Ni	11/20/20	56	56	ug/l			6010B	

GW Data.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	PARAMETER	SAMP_DATE	CHR_DATA	REAL_DATA	UNITS	DUP_CODE	REP_CODE	METH_CODE	DATA_QUAL
OHD004201091	P-16	Ni dis	11/20/20	58	58	ug/l			6010B	
OHD004201091	P-16	ORP F	06/15/20	-33	-33	mv			Field	
OHD004201091	P-16	ORP F	11/20/20	-35	-35	mv			Field	
OHD004201091	P-16	pH F	06/15/20	6.79	6.79	SU			Field	
OHD004201091	P-16	pH F	11/20/20	6.95	6.95	SU			Field	
OHD004201091	P-16	Sulfate	06/15/20	490	490	mg/L			E300	
OHD004201091	P-16	Temp F	06/15/20	15.3	15.3	C			Field	
OHD004201091	P-16	Temp F	11/20/20	14.68	14.68	C			Field	
OHD004201091	P-16	Turb F	06/15/20	20.2	20.2	NTU			Field	
OHD004201091	P-16	Turb F	11/20/20	0.9	0.9	NTU			Field	
OHD004201091	P-16T	Ba	06/15/20	17	17	ug/l			6010B	J
OHD004201091	P-16T	Ba dis	06/15/20	18	18	ug/l			6010B	J
OHD004201091	P-16T	Ca	06/15/20	150000	150000	ug/l			6010B	
OHD004201091	P-16T	Ca dis	06/15/20	160000	160000	ug/l			6010B	
OHD004201091	P-16T	Chloride	06/15/20	2.6	2.6	mg/l			E300	
OHD004201091	P-16T	Cond F	06/15/20	1.45	1.45	mS/cm			Field	
OHD004201091	P-16T	Cond F	11/20/20	0.727	0.727	mS/cm			Field	
OHD004201091	P-16T	Cr	11/20/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-16T	Cr dis	11/20/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-16T	Cyanide	11/20/20	ND<0.006	ND	mg/l			4500	U
OHD004201091	P-16T	Dis O2 F	06/15/20	0.55	0.55	mg/l			Field	
OHD004201091	P-16T	Dis O2 F	11/20/20	0.6	0.6	mg/l			Field	
OHD004201091	P-16T	Fe	06/15/20	140	140	ug/l			6010B	
OHD004201091	P-16T	Fe dis	06/15/20	ND<26	ND	ug/l			6010B	U
OHD004201091	P-16T	K	11/20/20	1300	1300	ug/l			6010B	J
OHD004201091	P-16T	K dis	11/20/20	1300	1300	ug/l			6010B	J
OHD004201091	P-16T	Mg	06/15/20	41000	41000	ug/l			6010B	
OHD004201091	P-16T	Mg dis	06/15/20	41000	41000	ug/l			6010B	
OHD004201091	P-16T	Mn	06/15/20	2.5	2.5	ug/l			6010B	J
OHD004201091	P-16T	Mn dis	06/15/20	7.3	7.3	ug/l			6010B	J
OHD004201091	P-16T	Na	06/15/20	57000	57000	ug/l			6010B	
OHD004201091	P-16T	Na dis	06/15/20	60000	60000	ug/l			6010B	
OHD004201091	P-16T	Ni	11/20/20	3.7	3.7	ug/l			6010B	J
OHD004201091	P-16T	Ni dis	11/20/20	2.9	2.9	ug/l			6010B	J
OHD004201091	P-16T	ORP F	06/15/20	47	47	mv			Field	
OHD004201091	P-16T	ORP F	11/20/20	56	56	mv			Field	
OHD004201091	P-16T	pH F	06/15/20	6.98	6.98	SU			Field	
OHD004201091	P-16T	pH F	11/20/20	6.98	6.98	SU			Field	
OHD004201091	P-16T	Sulfate	06/15/20	340	340	mg/L			E300	

GW Data.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	PARAMETER	SAMP_DATE	CHR_DATA	REAL_DATA	UNITS	DUP_CODE	REP_CODE	METH_CODE	DATA_QUAL
OHD004201091	P-16T	Temp F	06/15/20	15.2	15.2	C			Field	
OHD004201091	P-16T	Temp F	11/20/20	14.68	14.68	C			Field	
OHD004201091	P-16T	Turb F	06/15/20	15.2	15.2	NTU			Field	
OHD004201091	P-16T	Turb F	11/20/20	1.4	1.4	NTU			Field	
OHD004201091	P-18	Ba	06/15/20	7.1	7.1	ug/l	Dup		6010B	J
OHD004201091	P-18	Ba	06/15/20	7	7	ug/l			6010B	J
OHD004201091	P-18	Ba dis	06/15/20	8.1	8.1	ug/l	Dup		6010B	J
OHD004201091	P-18	Ba dis	06/15/20	7	7	ug/l			6010B	J
OHD004201091	P-18	Ca	06/15/20	12000	12000	ug/l	Dup		6010B	
OHD004201091	P-18	Ca	06/15/20	12000	12000	ug/l			6010B	
OHD004201091	P-18	Ca dis	06/15/20	12000	12000	ug/l	Dup		6010B	
OHD004201091	P-18	Ca dis	06/15/20	12000	12000	ug/l			6010B	
OHD004201091	P-18	Chloride	06/15/20	42	42	mg/l	Dup		E300	
OHD004201091	P-18	Chloride	06/15/20	43	43	mg/l			E300	
OHD004201091	P-18	Cond F	06/15/20	1.72	1.72	mS/cm			Field	
OHD004201091	P-18	Cond F	11/19/20	1.09	1.09	mS/cm			Field	
OHD004201091	P-18	Cr	11/19/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-18	Cr dis	11/19/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-18	Cyanide	11/19/20	ND<0.006	ND	mg/l			4500	U
OHD004201091	P-18	Dis O2 F	06/15/20	0.87	0.87	mg/l			Field	
OHD004201091	P-18	Dis O2 F	11/19/20	0.6	0.6	mg/l			Field	
OHD004201091	P-18	Fe	06/15/20	ND<26	ND	ug/l	Dup		6010B	U
OHD004201091	P-18	Fe	06/15/20	26	26	ug/l			6010B	J
OHD004201091	P-18	Fe dis	06/15/20	ND<26	ND	ug/l	Dup		6010B	U
OHD004201091	P-18	Fe dis	06/15/20	ND<26	ND	ug/l			6010B	U
OHD004201091	P-18	K	11/19/20	3300	3300	ug/l			6010B	J
OHD004201091	P-18	K dis	11/19/20	3400	3400	ug/l			6010B	J
OHD004201091	P-18	Mg	06/15/20	3900	3900	ug/l	Dup		6010B	J
OHD004201091	P-18	Mg	06/15/20	3900	3900	ug/l			6010B	J
OHD004201091	P-18	Mg dis	06/15/20	3900	3900	ug/l	Dup		6010B	J
OHD004201091	P-18	Mg dis	06/15/20	3900	3900	ug/l			6010B	J
OHD004201091	P-18	Mn	06/15/20	24	24	ug/l	Dup		6010B	
OHD004201091	P-18	Mn	06/15/20	22	22	ug/l			6010B	
OHD004201091	P-18	Mn dis	06/15/20	22	22	ug/l	Dup		6010B	
OHD004201091	P-18	Mn dis	06/15/20	22	22	ug/l			6010B	
OHD004201091	P-18	Na	06/15/20	310000	310000	ug/l	Dup		6010B	
OHD004201091	P-18	Na	06/15/20	310000	310000	ug/l			6010B	
OHD004201091	P-18	Na dis	06/15/20	320000	320000	ug/l	Dup		6010B	
OHD004201091	P-18	Na dis	06/15/20	320000	320000	ug/l			6010B	

GW Data.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	PARAMETER	SAMP_DATE	CHR_DATA	REAL_DATA	UNITS	DUP_CODE	REP_CODE	METH_CODE	DATA_QUAL
OHD004201091	P-18	Ni	11/19/20	230	230	ug/l			6010B	
OHD004201091	P-18	Ni dis	11/19/20	240	240	ug/l			6010B	
OHD004201091	P-18	ORP F	06/15/20	-65	-65	mv			Field	
OHD004201091	P-18	ORP F	11/19/20	-10	-10	mv			Field	
OHD004201091	P-18	pH F	06/15/20	7.67	7.67	SU			Field	
OHD004201091	P-18	pH F	11/19/20	8.37	8.37	SU			Field	
OHD004201091	P-18	Sulfate	06/15/20	210	210	mg/L	Dup		E300	
OHD004201091	P-18	Sulfate	06/15/20	220	220	mg/L			E300	
OHD004201091	P-18	Temp F	06/15/20	14.9	14.9	C			Field	
OHD004201091	P-18	Temp F	11/19/20	16.53	16.53	C			Field	
OHD004201091	P-18	Turb F	06/15/20	7	7	NTU			Field	
OHD004201091	P-18	Turb F	11/19/20	0	0	NTU			Field	
OHD004201091	P-18T	Ba	11/19/20	46	46	ug/l			6010B	J
OHD004201091	P-18T	Ba dis	11/19/20	43	43	ug/l			6010B	J
OHD004201091	P-18T	Ca	11/19/20	60000	60000	ug/l			6010B	
OHD004201091	P-18T	Ca dis	11/19/20	57000	57000	ug/l			6010B	
OHD004201091	P-18T	Chloride	11/19/20	38	38	mg/l			E300	
OHD004201091	P-18T	Cond F	11/19/20	0.76	0.76	mS/cm			Field	
OHD004201091	P-18T	Cr	11/19/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-18T	Cr dis	11/19/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-18T	Cyanide	11/19/20	ND<0.006	ND	mg/l			4500	U
OHD004201091	P-18T	Dis O2 F	11/19/20	0.92	0.92	mg/l			Field	
OHD004201091	P-18T	Fe	11/19/20	400	400	ug/l			6010B	
OHD004201091	P-18T	Fe dis	11/19/20	54	54	ug/l			6010B	J
OHD004201091	P-18T	K	11/19/20	5600	5600	ug/l			6010B	
OHD004201091	P-18T	K dis	11/19/20	5300	5300	ug/l			6010B	
OHD004201091	P-18T	Mg	11/19/20	20000	20000	ug/l			6010B	
OHD004201091	P-18T	Mg dis	11/19/20	19000	19000	ug/l			6010B	
OHD004201091	P-18T	Mn	11/19/20	87	87	ug/l			6010B	
OHD004201091	P-18T	Mn dis	11/19/20	26	26	ug/l			6010B	
OHD004201091	P-18T	Na	11/19/20	150000	150000	ug/l			6010B	
OHD004201091	P-18T	Na dis	11/19/20	140000	140000	ug/l			6010B	
OHD004201091	P-18T	Ni	11/19/20	110	110	ug/l			6010B	
OHD004201091	P-18T	Ni dis	11/19/20	100	100	ug/l			6010B	
OHD004201091	P-18T	ORP F	11/19/20	-31.6	-31.6	mv			Field	
OHD004201091	P-18T	pH F	11/19/20	7.22	7.22	SU			Field	
OHD004201091	P-18T	Sulfate	11/19/20	170	170	mg/L			E300	
OHD004201091	P-18T	Temp F	11/19/20	15.22	15.22	C			Field	
OHD004201091	P-18T	Turb F	11/19/20	3.2	3.2	NTU			Field	

GW Data.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	PARAMETER	SAMP_DATE	CHR_DATA	REAL_DATA	UNITS	DUP_CODE	REP_CODE	METH_CODE	DATA_QUAL
OHD004201091	P-21	Ba	11/20/20	24	24	ug/l			6010B	J
OHD004201091	P-21	Ba dis	11/20/20	22	22	ug/l			6010B	J
OHD004201091	P-21	Ca	11/20/20	69000	69000	ug/l			6010B	
OHD004201091	P-21	Ca dis	11/20/20	61000	61000	ug/l			6010B	
OHD004201091	P-21	Chloride	11/20/20	100	100	mg/l			E300	
OHD004201091	P-21	Cond F	11/20/20	1.016	1.016	mS/cm			Field	
OHD004201091	P-21	Cr	11/20/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-21	Cr dis	11/20/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-21	Cyanide	11/20/20	ND<0.006	ND	mg/l			4500	U
OHD004201091	P-21	Dis O2 F	11/20/20	0.35	0.350	mg/l			Field	
OHD004201091	P-21	Fe	11/20/20	690	690.000	ug/l			6010B	
OHD004201091	P-21	Fe dis	11/20/20	180	180.000	ug/l			6010B	
OHD004201091	P-21	K	11/20/20	4100	4100.000	ug/l			6010B	J
OHD004201091	P-21	K dis	11/20/20	4400	4400.000	ug/l			6010B	J
OHD004201091	P-21	Mg	11/20/20	20000	20000.000	ug/l			6010B	
OHD004201091	P-21	Mg dis	11/20/20	19000	19000.000	ug/l			6010B	
OHD004201091	P-21	Mn	11/20/20	56	56.000	ug/l			6010B	
OHD004201091	P-21	Mn dis	11/20/20	43	43.000	ug/l			6010B	
OHD004201091	P-21	Na	11/20/20	180000	180000.000	ug/l			6010B	
OHD004201091	P-21	Na dis	11/20/20	210000	210000.000	ug/l			6010B	
OHD004201091	P-21	Ni	11/20/20	75	75.000	ug/l			6010B	
OHD004201091	P-21	Ni dis	11/20/20	62	62.000	ug/l			6010B	
OHD004201091	P-21	ORP F	11/20/20	-68	-68.000	mv			Field	
OHD004201091	P-21	pH F	11/20/20	7.6	7.600	SU			Field	
OHD004201091	P-21	Sulfate	11/20/20	130	130.000	mg/L			E300	
OHD004201091	P-21	Temp F	11/20/20	14.35	14.350	C			Field	
OHD004201091	P-21	Turb F	11/20/20	9	9.000	NTU			Field	
OHD004201091	P-21T	Ba	06/15/20	34	34.000	ug/l			6010B	J
OHD004201091	P-21T	Ba dis	06/15/20	35	35.000	ug/l			6010B	J
OHD004201091	P-21T	Ca	06/15/20	220000	220000.000	ug/l			6010B	
OHD004201091	P-21T	Ca dis	06/15/20	210000	210000.000	ug/l			6010B	
OHD004201091	P-21T	Chloride	06/15/20	64	64.000	mg/l			E300	
OHD004201091	P-21T	Cond F	06/15/20	1.76	1.760	mS/cm			Field	
OHD004201091	P-21T	Cond F	11/20/20	1.32	1.320	mS/cm			Field	
OHD004201091	P-21T	Cr	11/20/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-21T	Cr dis	11/20/20	ND<0.63	ND	ug/l			6010B	U
OHD004201091	P-21T	Cyanide	11/20/20	ND<0.006	ND	mg/l			4500	U
OHD004201091	P-21T	Dis O2 F	06/15/20	0.35	0.350	mg/l			Field	
OHD004201091	P-21T	Dis O2 F	11/20/20	1.09	1.090	mg/l			Field	

GW Data.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	PARAMETER	SAMP_DATE	CHR_DATA	REAL_DATA	UNITS	DUP_CODE	REP_CODE	METH_CODE	DATA_QUAL
OHD004201091	P-21T	Fe	06/15/20	330	330.000	ug/l			6010B	
OHD004201091	P-21T	Fe dis	06/15/20	310	310.000	ug/l			6010B	
OHD004201091	P-21T	K	11/20/20	2500	2500.000	ug/l			6010B	J
OHD004201091	P-21T	K dis	11/20/20	2400	2400.000	ug/l			6010B	J
OHD004201091	P-21T	Mg	06/15/20	54000	54000.000	ug/l			6010B	
OHD004201091	P-21T	Mg dis	06/15/20	53000	53000.000	ug/l			6010B	
OHD004201091	P-21T	Mn	06/15/20	520	520.000	ug/l			6010B	
OHD004201091	P-21T	Mn dis	06/15/20	530	530.000	ug/l			6010B	
OHD004201091	P-21T	Na	06/15/20	120000	120000.000	ug/l			6010B	
OHD004201091	P-21T	Na dis	06/15/20	130000	130000.000	ug/l			6010B	
OHD004201091	P-21T	Ni	11/20/20	260	260.000	ug/l			6010B	
OHD004201091	P-21T	Ni dis	11/20/20	240	240.000	ug/l			6010B	
OHD004201091	P-21T	ORP F	06/15/20	-4.4	-4.400	mv			Field	
OHD004201091	P-21T	ORP F	11/20/20	-5.2	-5.2	mv			Field	
OHD004201091	P-21T	pH F	06/15/20	6.58	6.58	SU			Field	
OHD004201091	P-21T	pH F	11/20/20	6.95	6.95	SU			Field	
OHD004201091	P-21T	Sulfate	06/15/20	490	490	mg/L			E300	
OHD004201091	P-21T	Temp F	06/15/20	13.9	13.9	C			Field	
OHD004201091	P-21T	Temp F	11/20/20	14.08	14.08	C			Field	
OHD004201091	P-21T	Turb F	06/15/20	9.5	9.500	NTU			Field	
OHD004201091	P-21T	Turb F	11/20/20	0	0.000	NTU			Field	
OHD004201091	P-01	GWL	06/10/20	10.79	10.79	feet			Field	
OHD004201091	P-01T	GWL	06/10/20	10.9	10.9	feet			Field	
OHD004201091	P-02	GWL	06/10/20	4.98	4.98	feet			Field	
OHD004201091	P-02T	GWL	06/10/20	5.90	5.90	feet			Field	
OHD004201091	P-03R	GWL	06/10/20	4.87	4.87	feet			Field	
OHD004201091	P-03T	GWL	06/10/20	5.11	5.11	feet			Field	
OHD004201091	P-08R	GWL	06/10/20	7.25	7.25	feet			Field	
OHD004201091	P-08T	GWL	06/10/20	6.70	6.70	feet			Field	
OHD004201091	P-11	GWL	06/10/20	7.11	7.11	feet			Field	
OHD004201091	P-12	GWL	06/10/20	4.81	4.81	feet			Field	
OHD004201091	P-12TR	GWL	06/10/20	5.13	5.13	feet			Field	
OHD004201091	P-13	GWL	06/10/20	4.31	4.31	feet			Field	
OHD004201091	P-13T	GWL	06/10/20	5.76	5.76	feet			Field	
OHD004201091	P-14	GWL	06/10/20	5.52	5.52	feet			Field	
OHD004201091	P-14T	GWL	06/10/20	5.52	5.52	feet			Field	
OHD004201091	P-15	GWL	06/10/20	6.61	6.61	feet			Field	
OHD004201091	P-15T	GWL	06/10/20	6.35	6.35	feet			Field	
OHD004201091	P-16	GWL	06/10/20	8.41	8.41	feet			Field	

GW Data.xls
Closed Landfill
Elyria, OH

FCID	WELL_ID	PARAMETER	SAMP_DATE	CHR_DATA	REAL_DATA	UNITS	DUP_CODE	REP_CODE	METH_CODE	DATA_QUAL
OHD004201091	P-16T	GWL	06/10/20	7.95	7.95	feet			Field	
OHD004201091	P-17	GWL	06/10/20	7.64	7.64	feet			Field	
OHD004201091	P-18	GWL	06/10/20	5.20	5.20	feet			Field	
OHD004201091	P-18T	GWL	06/10/20	4.00	4.00	feet			Field	
OHD004201091	P-19	GWL	06/10/20	5.85	5.85	feet			Field	
OHD004201091	P-20	GWL	06/10/20	7.71	7.71	feet			Field	
OHD004201091	P-21	GWL	06/10/20	8.85	8.85	feet			Field	
OHD004201091	P-21T	GWL	06/10/20	8.54	8.54	feet			Field	

APPENDIX B

Groundwater Flow Velocity Calculations

APPENDIX B-1
GROUNDWATER FLOW RATE IN TILL CONTACT WATER-BEARING ZONE
CLOSED RCRA LANDFILL
ELYRIA, OHIO

Gradient $I = \frac{(747.24 - 739.54)}{860.00} = 0.009 \text{ ft/ft}$ 10 June 2020

Hydraulic Conductivity $K = 4.1 \times 10^{-4} \text{ cm/sec} = 1.16 \text{ ft/day}^*$

Porosity $n = 0.15^{**}$

Flow Rate $v = \frac{(1.16 \text{ ft/day}) \times (0.009 \text{ ft/ft})}{0.15}$

$v = 25.40 \text{ ft/yr}$

Notes:

- * - K-value of 1.16 ft/day was taken from the 2002, CRA Supplemental Annual Report for the RACER Elyria site.
- ** -Porosity - n-value used is the value for sandstone. Till contact wells are screened partially in clay till and partially in sandstone. The porosity for sandstone will provide a more conservative value for velocity.
- Wells P-15T and P-1T used for gradient calculations.

**APPENDIX B-2
GROUNDWATER FLOW RATE IN BEDROCK WATER-BEARING ZONE
CLOSED RCRA LANDFILL
ELYRIA, OHIO**

Gradient $I = \frac{(747.28 - 738.78)}{860.00} = 0.010 \text{ ft/ft}$ 10 June 2020

Hydraulic Conductivity $K = 1.9 \times 10^{-4} \text{ cm/sec} = 5.4 \times 10^{-1} \text{ ft/day}^*$

Porosity $n = 0.15^{**}$

Flow Rate $v = \frac{(0.54 \text{ ft/day}) \times (0.010 \text{ ft/ft})}{0.15}$

$v = 13.14 \text{ ft/yr}$

Notes:

- * - K-value of 0.54 ft/day was taken from the 2002, CRA, Supplemental Annual Report for the RACER Elyria site.
- ** -Porosity - n-value used is the value for sandstone.
- Wells P-17 and P-1 used for gradient calculations.

APPENDIX C

Field Forms

LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: P-08R	Date: 6-11-2020	Time Started: 1100	File Number: 129862-013
Weather Conditions: 85F Sunny		Time Ended: 1240	Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 22.55	Riser Pipe Diameter (in.) 2.0
Measured Water Level (TOR-ft) 5.63	PID background (ppm) N/A
Notes: N/A	PID headspace (ppm) N/A

Well Condition

Well Riser Type (place an X in one box)		<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK <input type="checkbox"/> X <input checked="" type="checkbox"/>	Repair Required:		
Cap Condition:	OK <input type="checkbox"/> X <input checked="" type="checkbox"/>	Repair Required:		
Paint Condition:	OK <input type="checkbox"/> X <input checked="" type="checkbox"/>	Repair Required:		
Lock Condition:	OK <input type="checkbox"/> X <input checked="" type="checkbox"/>	Repair Required:		
Inner Casing Condition:	OK <input type="checkbox"/> X <input checked="" type="checkbox"/>	Repair Required:		
Surface Seal Condition:	OK <input type="checkbox"/> X <input checked="" type="checkbox"/>	Repair Required:		
Other:	OK <input type="checkbox"/>	Repair Required:		

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time: 1130				
Water Level Prior to Purging (TOR ft.)	5.63	Water Level After Purging (TOR ft.)	6.25	
Amount Purged: 8.25 gal	Flow Rate (mL per minute): ~300			
Comments: 1 WV = 2.75 Gal				

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
0	16.02	7.04	1.55	180	0.95	70	6.40	
5	13.22	7.01	1.46	13.8	0.93	12	6.44	
10	13.42	7.02	1.46	9.4	0.63	0	6.25	
15	13.40	7.01	1.47	6.9	0.54	-4	6.25	
20	13.40	7.00	1.46	4.5	0.53	-5	6.25	
25	13.41	7.00	1.46	4	0.53	-7	6.25	
30	13.40	7.01	1.47	3.9	0.52	-7	6.25	
35	13.41	7.00	1.46	3.8	0.52	-8	6.25	
40								
45								
50								
55								
60								
65								

Sampling Information

Date: 06/11/2020	Time Sampled: 1240	Field Personnel: S. Partyka
Measured Water Level (TOR ft): 6.25		
Sampling Method: (place X in box)	<input type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump
	<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump
		<input type="checkbox"/> Grundfos Pump
		<input type="checkbox"/> Teflon Bailer
Analysis: Metals (Total and Dissolved), Chloride & Sulfate		
Sample ID: P08R-061120-1240		
Odor: Sulferous	Appearance: Clear	
QA/QC Samples Taken: None		
Comments: Diss Metals w/ 0.45 micron filter		

Sampler (Print) Sam Partyka	Sampler (signature): See Field Log	Date: 06/11/2021
------------------------------------	------------------------------------	-------------------------



LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: P-14	Date: 6-11-2020	Time Started: 0900	File Number: 129862-013
Weather Conditions: 78F Sunny		Time Ended: 1040	Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 22.15	Riser Pipe Diameter (in.) 2.0
Measured Water Level (TOR-ft) 4.98	PID background (ppm) N/A
Notes: N/A	PID headspace (ppm) N/A

Well Condition

Well Riser Type (place an X in one box)	<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Cap Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Paint Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Lock Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Inner Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Surface Seal Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Other:	OK	<input type="checkbox"/>	Repair Required:

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time: 0920				
Water Level Prior to Purging (TOR ft.) 4.98		Water Level After Purging (TOR ft.) 5.11		
Amount Purged: 8.25 gal		Flow Rate (mL per minute): ~400		
Comments: 1 WV = 2.75 Gal				

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
0	12.60	7.00	0.833	330	1.00	-18	5.13	
5	12.65	6.85	0.873	70.4	1.53	-37	5.10	
10	12.62	6.73	0.876	14.8	0.50	-47	5.11	
15	12.60	6.71	0.877	13.2	0.46	-49	5.10	
20	12.61	6.70	0.877	4.9	0.30	-49	5.12	
25	12.63	6.70	0.877	4.2	0.29	-50	5.11	
30	12.62	6.69	0.878	4.1	0.29	-50	5.10	
35	12.62	6.89	0.878	4.2	0.28	-50	5.11	
40								
45								
50								
55								
60								
65								

Sampling Information

Date: 06/11/2020	Time Sampled: 1040	Field Personnel: S. Partyka
Measured Water Level (TOR ft): 6.25		
Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump
	<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump
		<input type="checkbox"/> Grundfos Pump
		<input type="checkbox"/> Teflon Bailer
Analysis: Metals (Total and Dissolved), Chloride & Sulfate		
Sample ID: P14-061120-1040		
Odor: None		Appearance: Rust color
QA/QC Samples Taken: None		
Comments: Diss Metals w/ 0.45 micron filter		
Sampler (Print) Sam Partyka	Sampler (signature): See Field Log	Date: 06/11/2021



LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: P-14T	Date: 6-11-2020	Time Started: 1300	File Number: 129862-013
Weather Conditions: 78F Sunny		Time Ended: 1430	Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 16.4	Riser Pipe Diameter (in.) 2.0
Measured Water Level (TOR-ft) 5.05	PID background (ppm) N/A
Notes: N/A	PID headspace (ppm) N/A

Well Condition

Well Riser Type (place an X in one box)	<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Cap Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Paint Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Lock Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Inner Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Surface Seal Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Other:	OK	<input type="checkbox"/>	Repair Required:

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time: 1320				
Water Level Prior to Purging (TOR ft.) 5.05		Water Level After Purging (TOR ft.) 5.26		
Amount Purged: 5.5 gal		Flow Rate (mL per minute): ~200		
Comments: 3 WV = 5.5 Gal				

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
0	13.35	6.52	0.488	7.9	0.84	-87	5.25	
5	13.30	6.49	0.499	7.7	0.60	-91	5.25	
10	13.31	6.47	0.501	7.6	0.60	-91	5.26	
15	13.33	6.46	0.502	6.4	0.59	-91	5.25	
20	13.31	6.46	0.502	4.3	0.59	-92	5.25	
25	13.30	6.45	0.503	4.5	0.58	-92	5.26	
30	13.30	6.45	0.504	4.4	0.58	-92	5.25	
35	13.30	6.45	0.504	4.3	0.58	-93	5.26	
40								
45								
50								
55								
60								
65								

Sampling Information

Date: 06/11/2020	Time Sampled: 1430	Field Personnel: S. Partyka
Measured Water Level (TOR ft): 5.26		
Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump
	<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump
		<input type="checkbox"/> Grundfos Pump
		<input type="checkbox"/> Teflon Bailer
Analysis: Metals (Total and Dissolved), Chloride & Sulfate		
Sample ID: P14T-061120-1430		
Odor: None	Appearance: Clear	
QA/QC Samples Taken: None		
Comments: None		
Sampler (Print) Sam Partyka	Sampler (signature): See Field Log	Date: 06/11/2021



LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: P-15	Date: 6-12-2020	Time Started: 0830	File Number: 129862-013
Weather Conditions: 68F Sunny		Time Ended: 1000	Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 24.18	Riser Pipe Diameter (in.) 2.0
Measured Water Level (TOR-ft) 6.00	PID background (ppm) N/A
Notes: N/A	PID headspace (ppm) N/A

Well Condition

Well Riser Type (place an X in one box)	<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Cap Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Paint Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Lock Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Inner Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Surface Seal Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Other:	OK		Repair Required:

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time: 0850				
Water Level Prior to Purging (TOR ft.) 6.00	Water Level After Purging (TOR ft.) 6.09			
Amount Purged: 9.0 gal	Flow Rate (mL per minute): ~400			
Comments: 3 WV = 9 Gal				

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
0	13.90	6.46	0.933	14.7	1.45	-11	6.11	
5	13.53	6.47	1.08	10.5	0.77	-16	6.08	
10	13.50	6.47	1.1	9.2	0.71	-18	6.09	
15	13.30	6.53	1.1	11.2	0.60	-18	6.09	
20	13.29	6.50	1.19	11.5	0.52	-18	6.09	
25	13.30	6.50	1.19	11.6	0.50	-19	6.10	
30	13.31	6.49	1.2	11.7	0.50	-19	6.10	
35	13.30	6.49	1.2	11.7	0.49	-19	6.10	
40	13.31	6.49	1.21	11.8	0.49	-19	6.09	
45								
50								
55								
60								
65								

Sampling Information

Date: 06/12/2020	Time Sampled: 1000	Field Personnel: S. Partyka
Measured Water Level (TOR ft): 6.09		
Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump
	<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump
		<input type="checkbox"/> Grundfos Pump
		<input type="checkbox"/> Teflon Bailer
Analysis: Metals (Total and Dissolved), Chloride & Sulfate		
Sample ID: P15-061220-1000		
Odor: None	Appearance: Iron Color	
QA/QC Samples Taken: MS/MSD		
Comments: Diss Metals Filtered w. 0.45 micron		
Sampler (Print) Sam Partyka	Sampler (signature): See Field Log	Date: 06/12/2021



LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: P-15T	Date: 6-12-2020	Time Started: 1015	File Number: 129862-013
Weather Conditions: 68F Sunny		Time Ended: 1055	Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 16	Riser Pipe Diameter (in.) 2.0
Measured Water Level (TOR-ft) 5.92	PID background (ppm) N/A
Notes: N/A	PID headspace (ppm) N/A

Well Condition

Well Riser Type (place an X in one box)	<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Cap Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Paint Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Lock Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Inner Casing Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Surface Seal Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Other:	OK	<input type="checkbox"/> Repair Required:	

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time: 1015				
Water Level Prior to Purging (TOR ft.) 5.92	Water Level After Purging (TOR ft.) 5.96			
Amount Purged: 5.0 gal	Flow Rate (mL per minute):			
Comments: 3 WV = 5 Gal				

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
0	13.80	6.49	1.2	9.3	0.76	-26	5.98	
5	13.70	6.49	1.25	8.7	0.54	-25	5.98	
10	13.64	6.48	1.34	8.3	0.35	-24	5.97	
15	13.63	6.47	1.36	7.1	0.34	-23	5.97	
20	13.63	6.46	1.37	7.2	0.34	-23	5.96	
25	13.62	6.46	1.37	7	0.33	-23	5.96	
30								
35								
40								
45								
50								
55								
60								
65								

Sampling Information

Date: 06/12/2020	Time Sampled: 1055	Field Personnel: S. Partyka
Measured Water Level (TOR ft): 5.96		
Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump
	<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump
		<input type="checkbox"/> Grundfos Pump
		<input type="checkbox"/> Teflon Bailer
Analysis: Metals (Total and Dissolved), Chloride & Sulfate		
Sample ID: P15T-061220-1055		
Odor: None	Appearance: Clear	
QA/QC Samples Taken: DUP 7082-061220-0001		
Comments: None		
Sampler (Print) Sam Partyka	Sampler (signature): See Field Log	Date: 06/12/2021



LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: P-3T	Date: 6-12-2020	Time Started: 1240	File Number: 129862-013
Weather Conditions: 77F Sunny		Time Ended: 1325	Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 12.8	Riser Pipe Diameter (in.) 2.0
Measured Water Level (TOR-ft) 4.78	PID background (ppm) N/A
Notes: N/A	PID headspace (ppm) N/A

Well Condition

Well Riser Type (place an X in one box)	<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Cap Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Paint Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Lock Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Inner Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Surface Seal Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Other:	OK		Repair Required:

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	Other:
Purge Start Time: 1240				
Water Level Prior to Purging (TOR ft.) 4.78		Water Level After Purging (TOR ft.) 8.90		
Amount Purged: 4.0 gal		Flow Rate (mL per minute): 350		
Comments: 3 WV = 4 Gal				

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
0	13.80	7.43	2.25	6.6	5.12	99	8.90	
5	13.36	6.94	2.25	4.4	2.56	109	8.90	
10	13.29	6.80	2.26	4.6	1.04	113	8.90	
15	13.28	6.80	2.25	4.5	1.04	114	8.90	
20	13.30	6.79	2.25	4.5	1.02	114	8.90	
25	13.29	6.79	2.24	4.4	1.02	115	8.90	
30								
35								
40								
45								
50								
55								
60								
65								

Sampling Information

Date: 06/12/2020	Time Sampled: 1325	Field Personnel: S. Partyka
Measured Water Level (TOR ft): 8.90		
Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump
	<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump
		<input type="checkbox"/> Grundfos Pump
		<input type="checkbox"/> Teflon Bailer
Analysis: Metals (Total and Dissolved), Chloride & Sulfate		
Sample ID: P3T-061220-1325		
Odor: None	Appearance: Clear	
QA/QC Samples Taken: N/A		
Comments: None		
Sampler (Print) Sam Partyka	Sampler (signature): See Field Log	Date: 06/12/2021



LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: P-18	Date: 6-12-2020	Time Started: 1105	File Number: 129862-013
Weather Conditions: 77F Sunny		Time Ended: 0745 6/15	Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 31.24	Riser Pipe Diameter (in.) 2.0
Measured Water Level (TOR-ft) 4.90	PID background (ppm) N/A
Notes: N/A	PID headspace (ppm) N/A

Well Condition

Well Riser Type (place an X in one box)	<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Cap Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Paint Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Lock Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Inner Casing Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Surface Seal Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Other:	OK	<input type="checkbox"/> Repair Required:	

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time: 1115				
Water Level Prior to Purging (TOR ft.) 4.9	Water Level After Purging (TOR ft.) DRY			
Amount Purged: 2.5 gal	Flow Rate (mL per minute): 200			
Comments: 3 WV = 13 Gal, purged to dry				

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
0	15.14	6.80	1.54	10.4	2.63	-34	17.90	
5	14.79	7.51	1.66	8.9	1.00	-72	22.50	
10	14.81	7.64	1.71	7.6	0.64	-66	27.32	
15	14.90	7.67	1.72	7	0.87	-63	DRY	
20								
25								
30								
35								
40								
45								
50								
55								
60								
65								

Sampling Information

Date: 06/15/2020	Time Sampled: 0745	Field Personnel: S. Partyka
Measured Water Level (TOR ft): 5.11		
Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump
	<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump
		<input type="checkbox"/> Grundfos Pump
		<input type="checkbox"/> Teflon Bailer
Analysis: Metals (Total and Dissolved), Chloride & Sulfate		
Sample ID: P18-061520-0745		
Odor: None	Appearance: Clear	
QA/QC Samples Taken: DUP 7082-061520-0001		
Comments: Diss Metals filtered w/ 0.45 micron		
Sampler (Print) Sam Partyka	Sampler (signature): See Field Log	Date: 06/15/2021



LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: P-2	Date: 6-15-2020	Time Started: 0830	File Number: 129862-013
Weather Conditions: 60F Overcast		Time Ended: 0925	Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 22.65	Riser Pipe Diameter (in.) 2.0
Measured Water Level (TOR-ft) 5.00	PID background (ppm) N/A
Notes: N/A	PID headspace (ppm) N/A

Well Condition

Well Riser Type (place an X in one box)	<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Cap Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Paint Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Lock Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Inner Casing Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Surface Seal Condition:	OK	<input checked="" type="checkbox"/> Repair Required:	
Other:	OK	<input type="checkbox"/> Repair Required:	

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time: 0840				
Water Level Prior to Purging (TOR ft.) 5.00	Water Level After Purging (TOR ft.) 5.10			
Amount Purged:	Flow Rate (mL per minute): 500			
Comments: 3 WV = 6.15 Gal				

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
0	11.56	7.24	1.68	7.9	1.29	70	5.09	
5	11.40	7.02	1.63	7.6	0.63	-8	5.08	
10	11.41	7.01	1.59	6.5	0.60	-16	5.10	
15	11.39	6.95	1.6	5	0.45	-32	5.10	
20	11.40	6.96	1.6	4.1	0.46	-32	5.10	
25	11.40	6.96	1.6	3.9	0.45	-33	5.10	
30	11.39	6.95	1.59	3.9	0.45	-33	5.10	
35								
40								
45								
50								
55								
60								
65								

Sampling Information

Date: 06/15/2020	Time Sampled: 0925	Field Personnel: S. Partyka
Measured Water Level (TOR ft): 5.10		
Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump
	<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump
		<input type="checkbox"/> Grundfos Pump
		<input type="checkbox"/> Teflon Bailer
Analysis: Metals (Total and Dissolved), Chloride & Sulfate		
Sample ID: P2-061520-0925		
Odor: None	Appearance: Clear	
QA/QC Samples Taken: None		
Comments: Diss Metals filtered w/ 0.45 micron		
Sampler (Print) Sam Partyka	Sampler (signature): See Field Log	Date: 06/15/2021



LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: P-2T	Date: 6-15-2020	Time Started: 0935	File Number: 129862-013
Weather Conditions: 60F Overcast		Time Ended: 1030	Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 15.17	Riser Pipe Diameter (in.) 2.0
Measured Water Level (TOR-ft) 6.23	PID background (ppm) N/A
Notes: N/A	PID headspace (ppm) N/A

Well Condition

Well Riser Type (place an X in one box)	<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Cap Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Paint Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Lock Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Inner Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Surface Seal Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Other:	OK		Repair Required:

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time: 0940				
Water Level Prior to Purging (TOR ft.) 6.23		Water Level After Purging (TOR ft.) 8.91		
Amount Purged: 4.5 gal		Flow Rate (mL per minute): 500		
Comments: 3 WV = 4.5 Gal				

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
0	11.90	6.80	2.26	30.5	0.75	-4	8.52	
5	12.32	6.78	2.51	76.4	0.70	21	8.88	
10	12.39	6.75	2.53	45.5	0.73	35	9.10	
15	12.40	6.73	2.53	45.4	0.74	37	9.05	
20	12.41	6.70	2.52	45.5	0.63	30	9.03	
25	12.40	6.69	2.52	45.7	0.43	16	9.00	
30	12.41	6.69	2.51	45.6	0.40	14	8.98	
35	12.40	6.68	2.51	45.7	0.40	14	8.94	
40	12.40	6.68	2.50	45.7	0.39	13	8.91	
45								
50								
55								
60								
65								

Sampling Information

Date: 06/15/2020	Time Sampled: 1030	Field Personnel: S. Partyka
Measured Water Level (TOR ft): 8.91		
Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump
	<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump
		<input type="checkbox"/> Grundfos Pump
		<input type="checkbox"/> Teflon Bailer
Analysis: Metals (Total and Dissolved), Chloride & Sulfate		
Sample ID: P2T-061520-1030		
Odor: None	Appearance: Clear	
QA/QC Samples Taken: None		
Comments: None		
Sampler (Print) Sam Partyka	Sampler (signature): See Field Log	Date: 06/15/2021



LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: P-16	Date: 6-15-2020	Time Started: 1050	File Number: 129862-013
Weather Conditions: 60F Overcast		Time Ended: 1200	Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 20.3	Riser Pipe Diameter (in.) 2.0
Measured Water Level (TOR-ft) 8.29	PID background (ppm) N/A
Notes: N/A	PID headspace (ppm) N/A

Well Condition

Well Riser Type (place an X in one box)	<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Cap Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Paint Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Lock Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Inner Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Surface Seal Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Other:	OK		Repair Required:

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time: 1055				
Water Level Prior to Purging (TOR ft.) 8.29		Water Level After Purging (TOR ft.) 14.08		
Amount Purged: 6 gal		Flow Rate (mL per minute): 500		
Comments: 3 WV = 6 Gal				

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
0	15.90	7.05	1.92	109	3.92	66.00	12.20	
5	15.95	6.80	1.86	29.6	0.76	-23.00	12.88	
10	15.24	6.82	1.9	19.5	0.79	-28.00	13.55	
15	15.23	6.81	1.89	20.5	0.80	-31.00	13.64	
20	15.25	6.81	1.89	19.9	0.78	-31.00	13.89	
25	15.24	6.81	1.89	20.1	0.75	-31.00	13.99	
30	15.24	6.80	1.9	19.9	0.71	-32.00	14.03	
35	15.25	6.80	1.89	20	0.71	-32.00	14.05	
40	15.25	6.79	1.90	20	0.70	-33.00	14.07	
45	15.20	6.79	1.90	20.1	0.70	-33.00	14.08	
50	15.25	6.79	1.91	20.2	0.69	-33.00	14.08	
55								
60								
65								

Sampling Information

Date: 06/15/2020	Time Sampled: 1200	Field Personnel: S. Partyka
Measured Water Level (TOR ft): 8.91		
Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump
	<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump
		<input type="checkbox"/> Grundfos Pump
		<input type="checkbox"/> Teflon Bailer
Analysis: Metals (Total and Dissolved), Chloride & Sulfate		
Sample ID: P16-061520-1200		
Odor: None		Appearance: Clear
QA/QC Samples Taken: None		
Comments: Diss Metals filtered w/ 0.45 micron		
Sampler (Print) Sam Partyka	Sampler (signature): See Field Log	Date: 06/15/2021



LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: P-21T	Date: 6-15-2020	Time Started: 1310	File Number: 129862-013
Weather Conditions: 60F Overcast		Time Ended: 1415	Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 15.95	Riser Pipe Diameter (in.) 2.0
Measured Water Level (TOR-ft) 8.55	PID background (ppm) N/A
Notes: N/A	PID headspace (ppm) N/A

Well Condition

Well Riser Type (place an X in one box)	<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Cap Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Paint Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Lock Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Inner Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Surface Seal Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Other:	OK		Repair Required:

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time: 1315				
Water Level Prior to Purging (TOR ft.) 8.55		Water Level After Purging (TOR ft.) 11.22		
Amount Purged: 3.75 gal		Flow Rate (mL per minute): 200		
Comments: 3 WV = 3.75 Gal				

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
0	14.77	6.67	1.96	91.5	0.78	126.00	10.25	
5	14.72	6.61	1.97	13.4	0.40	101.00	10.30	
10	13.90	6.61	1.79	11.7	0.40	54.00	10.78	
15	13.89	6.61	1.78	11	0.40	21.00	10.91	
20	12.88	6.60	1.78	11.1	0.38	2.00	11.15	
25	13.88	6.59	1.77	10.9	0.38	-3.50	11.24	
30	13.87	6.59	1.76	10.3	0.37	-3.70	11.22	
35	13.87	6.59	1.76	9.7	0.36	-4.10	11.21	
40	13.86	6.59	1.76	9.4	0.36	-4.30	11.21	
45	13.86	6.59	1.76	9.3	0.36	-4.30	11.20	
50	13.86	6.58	1.76	9.5	0.35	-4.40	11.22	
55								
60								
65								

Sampling Information

Date: 06/15/2020	Time Sampled: 1415	Field Personnel: S. Partyka
Measured Water Level (TOR ft): 11.22		
Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump
	<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump
		<input type="checkbox"/> Grundfos Pump
		<input type="checkbox"/> Teflon Bailer
Analysis: Metals (Total and Dissolved), Chloride & Sulfate		
Sample ID: P21T-061520-1415		
Odor: None		Appearance: Clear
QA/QC Samples Taken: None		
Comments: Diss Metals filtered w/ 0.45 micron		
Sampler (Print) Sam Partyka	Sampler (signature): See Field Log	Date: 06/15/2021



LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: P-16T	Date: 6-15-2020	Time Started: 1215	File Number: 129862-013
Weather Conditions: 60F Overcast		Time Ended: 1300	Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 12.17	Riser Pipe Diameter (in.) 2.0
Measured Water Level (TOR-ft) 7.88	PID background (ppm) N/A
Notes: N/A	PID headspace (ppm) N/A

Well Condition

Well Riser Type (place an X in one box)	<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Cap Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Paint Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Lock Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Inner Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Surface Seal Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:
Other:	OK		Repair Required:

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time: 1220				
Water Level Prior to Purging (TOR ft.) 7.88		Water Level After Purging (TOR ft.) 9.04		
Amount Purged: 2.25 gal		Flow Rate (mL per minute): 200		
Comments: 3 WV = 2.25 Gal				

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
0	15.70	7.10	1.88	14.8	1.29	41.00	8.34	
5	15.40	7.05	1.76	15	1.04	44.00	8.62	
10	15.23	7.01	1.64	14.9	0.88	45.00	9.19	
15	15.20	6.99	1.52	15.1	0.69	46.00	9.12	
20	15.20	6.99	1.45	15.2	0.57	46.00	9.06	
25	15.19	6.98	1.45	15.1	0.55	47.00	9.05	
30	15.18	6.98	1.45	15.2	0.55	47.00	9.04	
35								
40								
45								
50								
55								
60								
65								

Sampling Information

Date: 06/15/2020	Time Sampled: 1300	Field Personnel: S. Partyka
Measured Water Level (TOR ft): 9.04		
Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump
	<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump
		<input type="checkbox"/> Grundfos Pump
		<input type="checkbox"/> Teflon Bailer
Analysis: Metals (Total and Dissolved), Chloride & Sulfate		
Sample ID: P16T-061520-1300		
Odor: None		Appearance: Clear
QA/QC Samples Taken: None		
Comments: Diss Metals filtered w/ 0.45 micron		
Sampler (Print) Sam Partyka	Sampler (signature): See Field Log	Date: 06/15/2021

Monitoring Well I.D.: <u>P-02</u>	Date: <u>11-20-20</u>	Time Started: <u>0730</u>	File Number: <u>129862</u>
Weather Conditions: <u>44°F Overcast</u>		Time Ended: <u>0805</u>	Field Personnel: <u>S. Partyka</u>

Initial Readings

Measured Well Bottom (TOR-ft) <u>22.65</u>	Riser Pipe Diameter (in.) <u>2</u>
Measured Water Level (TOR-ft) <u>3.72</u>	
Notes:	

Well Condition

Well Riser Type (place an X in one box)		<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Cap Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Paint Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Lock Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Inner Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Surface Seal Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Other:	OK <input type="checkbox"/>	Repair Required:		

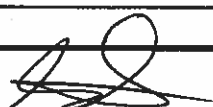
Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time:	<u>0735</u>			
Water Level Prior to Purging (TOR ft.)	<u>3.72</u>			
Amount Purged:	<u>~2.25 gal</u>	Flow Rate (mL per minute):	<u>~300</u>	

Comments:

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
<u>5</u>	<u>15.28</u>	<u>7.24</u>	<u>1.10</u>	<u>0.0</u>	<u>0.42</u>	<u>93</u>	<u>3.75</u>	
<u>10</u>	<u>15.05</u>	<u>6.99</u>	<u>1.51</u>	<u>1.5</u>	<u>0.42</u>	<u>-1</u>	<u>3.79</u>	
<u>15</u>	<u>14.96</u>	<u>6.97</u>	<u>1.57</u>	<u>1.3</u>	<u>0.42</u>	<u>-24</u>	<u>3.80</u>	
<u>20</u>	<u>14.95</u>	<u>6.97</u>	<u>1.57</u>	<u>1.1</u>	<u>0.41</u>	<u>-29</u>	<u>3.80</u>	
<u>25</u>	<u>14.93</u>	<u>6.96</u>	<u>1.58</u>	<u>1.0</u>	<u>0.41</u>	<u>-30</u>	<u>3.81</u>	

Sampling Information

Date: <u>11-20-20</u>	Time Sampled: <u>0800</u>	Field Personnel: <u>SP</u>
Sampling Method: (place X in box)		
<input type="checkbox"/> Stainless Steel Bailor	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Grundfos Pump
<input type="checkbox"/> Polyethylene Bailor	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Other:
Analysis: <u>Barium, Nickel, Chromium, Cyanide</u>		
Sample ID: <u>P2-112020-0800</u>		
Odor: <u>None</u>	Appearance: <u>Clear</u>	
QA/QC Samples Taken: <u>Dup 7082-112020-0801</u>		
Comments:		
Sampler (Print) <u>Sam Partyka</u>	Sampler (signature): 	Date: <u>11-20-20</u>

LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: P-2T	Date: 11-20-20	Time Started: 0805	File Number: 129862
Weather Conditions:		Time Ended: 0850	Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 15.14	Riser Pipe Diameter (in.) 2
Measured Water Level (TOR-ft) 4.78	
Notes:	

Well Condition

Well Riser Type (place an X in one box)		<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:	
Cap Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:	
Paint Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:	
Lock Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:	
Inner Casing Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:	
Surface Seal Condition:	OK	<input checked="" type="checkbox"/>	Repair Required:	
Other:	OK		Repair Required:	

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time:	0910			
Water Level Prior to Purging (TOR ft.)				
Amount Purged:	Flow Rate (mL per minute): ~300			

Comments:

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
5	15.63	7.52	1.99	38.9	1.34	72	5.05	
10	15.60	7.50	2.06	39.21	0.98	48	6.15	
15	15.47	7.38	2.18	40.11	0.76	30	6.22	
20	15.40	7.38	2.20	40.08	0.52	16	6.25	
25	15.38	7.37	2.20	40.13	0.50	15	6.25	
30	15.37	7.36	2.21	40.10	0.50	15	6.27	
							6.27	

Sampling Information

Date: 11-20-20	Time Sampled: 0850	Field Personnel: SUP
Sampling Method: (place X in box)		
<input checked="" type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Grundfos Pump
<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Other:
Analysis:		
Sample ID: PAT-112000-0850		
Odor: None	Appearance: clear	
QA/QC Samples Taken: NA		
Comments:		

Sampler (Print) Sam Partyka	Sampler (signature): 	Date: 11-20-20
-----------------------------	---	----------------



LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: <i>P-03T</i>	Date: <i>11-19-20</i>	Time Started: <i>0905</i>	File Number: 129862
Weather Conditions:		Time Ended: <i>0955</i>	Field Personnel: <i>S. Partyka</i>

Initial Readings

Measured Well Bottom (TOR-ft) <i>12.80</i>	Riser Pipe Diameter (in.) <i>2</i>
Measured Water Level (TOR-ft) <i>3.12</i>	
Notes:	

Well Condition

Well Riser Type (place an X in one box)	<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:	
Cap Condition:	OK <input checked="" type="checkbox"/>	Repair Required:	
Paint Condition:	OK <input checked="" type="checkbox"/>	Repair Required:	
Lock Condition:	OK <input checked="" type="checkbox"/>	Repair Required:	
Inner Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:	
Surface Seal Condition:	OK <input checked="" type="checkbox"/>	Repair Required:	
Other:	OK <input type="checkbox"/>	Repair Required:	

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time: <i>0905</i>				
Water Level Prior to Purging (TOR ft.)				
Amount Purged:	Flow Rate (mL per minute):			

Comments:

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
<i>5</i>	<i>14.90</i>	<i>7.39</i>	<i>1.67</i>	<i>16.0</i>	<i>2.13</i>	<i>98</i>	<i>4.06</i>	
<i>10</i>	<i>14.76</i>	<i>7.28</i>	<i>1.67</i>	<i>6.6</i>	<i>1.36</i>	<i>101</i>	<i>4.66</i>	
<i>15</i>	<i>14.65</i>	<i>7.22</i>	<i>1.66</i>	<i>5.8</i>	<i>1.21</i>	<i>113</i>	<i>5.04</i>	
<i>20</i>	<i>14.52</i>	<i>7.15</i>	<i>1.66</i>	<i>4.2</i>	<i>1.12</i>	<i>117</i>	<i>5.10</i>	
<i>25</i>	<i>14.40</i>	<i>6.90</i>	<i>1.65</i>	<i>2.0</i>	<i>1.04</i>	<i>119</i>	<i>5.12</i>	
<i>30</i>	<i>14.33</i>	<i>6.83</i>	<i>1.64</i>	<i>1.1</i>	<i>1.00</i>	<i>120</i>	<i>5.14</i>	
<i>35</i>	<i>14.32</i>	<i>6.82</i>	<i>1.64</i>	<i>1.0</i>	<i>0.99</i>	<i>121</i>	<i>5.15</i>	
<i>40</i>	<i>14.30</i>	<i>6.82</i>	<i>1.63</i>	<i>0.9</i>	<i>0.98</i>	<i>121</i>	<i>5.17</i>	

Sampling Information

Date: <i>11-19-20</i>	Time Sampled: <i>0950</i>	Field Personnel: <i>SP</i>
Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump
	<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Grundfos Pump
	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Teflon Bailer
	<input type="checkbox"/> Other:	

Analysis:

Sample ID: <i>P3T-111920-0950</i>	
Odor: <i>None</i>	Appearance: <i>Clear</i>
QA/QC Samples Taken: <i>N/A</i>	
Comments:	

Sampler (Print) <i>Sam Partyka</i>	Sampler (signature):	Date: <i>11-19-20</i>
------------------------------------	----------------------	-----------------------



LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: P-08R Date: 11-20-20 Time Started: 1250 File Number: 129862

Weather Conditions: Time Ended: 1335 Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 22.55 Riser Pipe Diameter (in.) 2

Measured Water Level (TOR-ft) 5.41

Notes:

Well Condition

Well Riser Type (place an X in one box) Stainless Steel Carbon Steel PVC

Casing Condition: OK Repair Required:

Cap Condition: OK Repair Required:

Paint Condition: OK Repair Required:

Lock Condition: OK Repair Required:

Inner Casing Condition: OK Repair Required:

Surface Seal Condition: OK Repair Required:

Other: OK Repair Required:

Purge Information

Purging Method: Peristaltic Pump Bladder Pump Grundfos Pump Other:

Purge Start Time: 1255

Water Level Prior to Purging (TOR ft.):

Amount Purged: Flow Rate (mL per minute):

Comments:

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
5	13.45	7.14	0.595	0.0	0.95	24	5.62	
10	13.32	7.11	0.987	0.0	0.74	11	5.74	
15	13.28	7.06	1.20	0.0	0.68	-2	5.98	
20	13.20	7.04	1.35	0.0	0.57	-11	6.25	
25	13.18	7.02	1.37	0.0	0.57	-11	6.29	
30	13.15	7.02	1.37	0.0	0.56	-12	6.30	

Sampling Information

Date: 11-20-20 Time Sampled: 1330 Field Personnel: SWP

Sampling Method: (place X in box) Stainless Steel Bailor Peristaltic Pump Grundfos Pump Teflon Bailor

Polyethylene Bailor Bladder Pump Other:

Analysis:

Sample ID: P08R-112020-1330

Odor: Sulfur odor Appearance: Clear

QA/QC Samples Taken: N/A

Comments:

Sampler (Print) Sam Partyka Sampler (signature):  Date: 11-20-20

Monitoring Well I.D.: P-08J	Date: 11-20-20	Time Started: 12:05	File Number: 129862
Weather Conditions:		Time Ended: 12:50	Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 12.50	Riser Pipe Diameter (in.) 2
Measured Water Level (TOR-ft) 5.53	
Notes:	

Well Condition

Well Riser Type (place an X in one box)	<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:	
Cap Condition:	OK <input checked="" type="checkbox"/>	Repair Required:	
Paint Condition:	OK <input checked="" type="checkbox"/>	Repair Required:	
Lock Condition:	OK <input checked="" type="checkbox"/>	Repair Required:	
Inner Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:	
Surface Seal Condition:	OK <input checked="" type="checkbox"/>	Repair Required:	
Other:	OK <input type="checkbox"/>	Repair Required:	

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time:	12:30			
Water Level Prior to Purging (TOR ft.)				
Amount Purged:	Flow Rate (mL per minute): ~250			

Comments: 30V = 2.85 gal

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
5	13.28	7.37	0.562	0.0	0.88	-29	5.89	
10	13.25	7.19	0.560	1.2	0.86	-28	6.02	
15	13.20	7.00	0.559	0.0	0.84	-26	6.11	
20	13.19	6.98	0.555	0.0	0.84	-26	6.29	
25	13.19	6.98	0.554	0.0	0.83	-24	6.30	
30	13.18	6.97	0.552	0.0	0.82	-23	6.32	

Sampling Information

Date: 11-20-20	Time Sampled: 12:45	Field Personnel: SJP		
Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailor	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Teflon Bailor
	<input type="checkbox"/> Polyethylene Bailor	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Other:	

Analysis:

Sample ID: P08J-112020-1245

Odor: None

Appearance: Clear

QA/QC Samples Taken: N/A

Comments:

Sampler (Print) Sam Partyka	Sampler (signature): 	Date: 11/20/20
-----------------------------	---	----------------

LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: <u>P-14</u>	Date: <u>11-18-20</u>	Time Started: <u>1205</u>	File Number: <u>129862</u>
Weather Conditions:		Time Ended: <u>1250</u>	Field Personnel: <u>S. Partyka</u>

Initial Readings

Measured Well Bottom (TOR-ft) <u>22.15</u>	Riser Pipe Diameter (in.) <u>2</u>
Measured Water Level (TOR-ft) <u>4.11</u>	

Notes:

Well Condition

Well Riser Type (place an X in one box)		<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Cap Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Paint Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Lock Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Inner Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Surface Seal Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Other:	OK <input type="checkbox"/>	Repair Required:		

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time:	<u>1205</u>			
Water Level Prior to Purging (TOR ft.)				
Amount Purged:	Flow Rate (mL per minute):			

Comments:

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
5	14.36	7.11	0.552	4.3	0.00	-71	4.19	
10	14.33	7.03	0.564	4.4	0.68	-70	4.21	
15	14.32	7.00	0.573	4.2	0.53	-59	4.23	
20	14.30	6.98	0.588	4.3	0.42	-57	4.29	
25	14.29	6.98	0.589	4.3	0.26	-57	4.28	
30	14.28	6.97	0.589	4.2	0.25	-55	4.33	
35	14.26	6.96	0.590	4.2	0.23	-55	4.33	
							4.29	

Sampling Information

Date: <u>11-18-20</u>	Time Sampled: <u>1245</u>	Field Personnel: <u>SWP</u>
-----------------------	---------------------------	-----------------------------

Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Teflon Bailer
	<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Other:	

Analysis:

Sample ID: <u>P14-111820-1245</u>	
Odor: <u>NONE</u>	Appearance: <u>Yellow/Rust</u>
QA/QC Samples Taken: <u>NA</u>	

Comments:

Sampler (Print) <u>Sam Partyka</u>	Sampler (signature): 	Date: <u>11-18-20</u>
------------------------------------	---	-----------------------



LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: <u>P-14T</u>	Date: <u>11-18-20</u>	Time Started: <u>1115</u>	File Number: <u>129862</u>
Weather Conditions:		Time Ended: <u>1205</u>	Field Personnel: <u>S. Partyka</u>

Initial Readings

Measured Well Bottom (TOR-ft) <u>16.40</u>	Riser Pipe Diameter (in.) <u>2</u>
Measured Water Level (TOR-ft) <u>4.13</u>	
Notes:	

Well Condition

Well Riser Type (place an X in one box)		<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Cap Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Paint Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Lock Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Inner Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Surface Seal Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Other:	OK <input type="checkbox"/>	Repair Required:		

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time:	<u>1120</u>			
Water Level Prior to Purging (TOR ft.)				
Amount Purged:	Flow Rate (mL per minute):			
Comments:				

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
5	15.33	6.42	0.389	6.2	1.08	-88	4.33	
10	14.62	6.42	0.476	3.5	0.97	-89	4.36	
15	14.15	6.43	0.480	3.3	0.95	-91	4.42	
20	14.12	6.43	0.485	2.9	0.96	-93	4.46	
25	14.11	6.45	0.480	2.2	0.63	-93	4.53	
30	14.11	6.46	0.488	2.3	0.62	-94	4.55	
35	14.09	6.46	0.489	2.1	0.59	-95	4.56	

Sampling Information

Date: <u>11-18-20</u>	Time Sampled: <u>1200</u>	Field Personnel: <u>SVP</u>		
Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Teflon Bailer
	<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump	Other:	
Analysis: <u>Potassium Nickel Chromium Cyanide T+D</u>				
Sample ID: <u>PHT-11820-1200</u>				
Odor: <u>None</u>		Appearance: <u>Clear</u>		
QA/QC Samples Taken: <u>N/A</u>				
Comments:				

Sampler (Print) <u>Sam Partyka</u>	Sampler (signature):	Date: <u>11-18-20</u>
------------------------------------	----------------------	-----------------------

Monitoring Well I.D.: P-12TR Date: 11-18 Time Started: 1255 File Number: 129862

Weather Conditions: _____ Time Ended: 1335 Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 14.04 Riser Pipe Diameter (in.) 2

Measured Water Level (TOR-ft) 4.42

Notes: _____

Well Condition

Well Riser Type (place an X in one box) Stainless Steel Carbon Steel PVC

Casing Condition: OK Repair Required: _____

Cap Condition: OK Repair Required: _____

Paint Condition: OK Repair Required: _____

Lock Condition: OK Repair Required: _____

Inner Casing Condition: OK Repair Required: _____

Surface Seal Condition: OK Repair Required: _____

Other: OK _____ Repair Required: _____

Purge Information

Purging Method: Peristaltic Pump Bladder Pump Grundfos Pump Other: _____

Purge Start Time: 1255

Water Level Prior to Purging (TOR ft.) _____

Amount Purged: _____ Flow Rate (mL per minute): _____

Comments: _____

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
5	15.67	6.97	0.759	0.0	1.55	110	4.91	
10	15.26	6.97	0.702	0.0	1.23	72.6	5.15	
15	15.01	6.98	0.691	0.0	0.91	65.1	5.38	
20	14.90	7.03	0.691	0.0	0.67	60.7	5.69	
25	14.82	7.00	0.690	0.0	0.55	56.1	5.82	
30	14.82	7.01	0.688	0.0	0.53	56.0	6.01	
35	14.80	7.02	0.689	0.0	0.52	55.6	6.00	
							6.02	

Sampling Information

Date: 11-18-20 Time Sampled: 1330 Field Personnel: JWP

Sampling Method: (place X in box) Stainless Steel Bailor Peristaltic Pump Grundfos Pump Teflon Bailor
 Polyethylene Bailor Bladder Pump Other: _____

Analysis: Full List

Sample ID: P12TR-111820-1330

Odor: None Appearance: Clear

QA/QC Samples Taken: N/A

Comments: _____

Sampler (Print) Sam Partyka Sampler (signature): [Signature] Date: 11-18-20

Monitoring Well I.D.: P-15 Date: 11-18-20 Time Started: 1405 File Number: 129862

Weather Conditions: _____ Time Ended: 1450 Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 24.20 Riser Pipe Diameter (in.) 2

Measured Water Level (TOR-ft) 5.95

Notes: _____

Well Condition

Well Riser Type (place an X in one box) Stainless Steel Carbon Steel PVC

Casing Condition: OK Repair Required: _____

Cap Condition: OK Repair Required: _____

Paint Condition: OK Repair Required: _____

Lock Condition: OK Repair Required: _____

Inner Casing Condition: OK Repair Required: _____

Surface Seal Condition: OK Repair Required: _____

Other: OK Repair Required: _____

Purge Information

Purging Method: Peristaltic Pump Bladder Pump Grundfos Pump Other: _____

Purge Start Time: 1405

Water Level Prior to Purging (TOR ft.): _____

Amount Purged: _____ Flow Rate (mL per minute): _____

Comments: _____

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
5	14.98	6.52	0.863	11.7	1.32	-14	6.02	
10	14.76	6.54	0.945	10.2	1.04	-15	6.02	
15	14.70	6.57	0.994	8.3	0.79	-16	6.03	
20	14.61	6.57	1.01	5.1	0.70	-17	6.03	
25	14.49	6.58	1.103	2.9	0.65	-17	6.04	
30	14.37	6.59	1.04	1.6	0.63	-17	6.05	
35	14.35	6.59	1.04	1.1	0.63	-17	6.09	
40	14.35	6.60	1.05	0.6	0.62	-18	6.11	

Sampling Information

Date: 11-18-20 Time Sampled: 1445 Field Personnel: SNP

Sampling Method: (place X in box) Stainless Steel Bailer Peristaltic Pump Grundfos Pump Teflon Bailer
 Polyethylene Bailer Bladder Pump Other: _____

Analysis: _____

Sample ID: P15-111820-1445

Odor: None Appearance: Clear

QA/QC Samples Taken: MS/MSD

Comments: _____

Sampler (Print) Sam Partyka Sampler (signature):  Date: 11-18-20

LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: <u>P-157</u>	Date: <u>11-18-20</u>	Time Started: <u>1450</u>	File Number: <u>129862</u>
Weather Conditions:		Time Ended: <u>1550</u>	Field Personnel: <u>S. Partyka</u>

Initial Readings

Measured Well Bottom (TOR-ft) <u>16.00</u>	Riser Pipe Diameter (in.) <u>2</u>
Measured Water Level (TOR-ft) <u>5.75</u>	
Notes:	

Well Condition

Well Riser Type (place an X in one box)		<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Cap Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Paint Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Lock Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Inner Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Surface Seal Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Other:	OK <input type="checkbox"/>	Repair Required:		

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time:	<u>1455</u>			
Water Level Prior to Purging (TOR ft.)				
Amount Purged:	Flow Rate (mL per minute):			

Comments:

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
5	14.50	6.56	1.15	7.0	0.97	-38	5.40	
10	14.44	6.56	1.19	6.9	0.83	-36	5.86	
15	14.40	6.56	1.18	6.6	0.80	-35	5.22	
20	14.36	6.55	1.20	6.2	0.76	-33	5.83	
25	14.34	6.55	1.22	5.9	0.73	-32	5.54	
30	14.32	6.53	1.26	5.6	0.65	-31	5.85	
35	14.28	6.52	1.33	4.3	0.54	-30	5.87	
40	14.27	6.52	1.33	4.3	0.53	-29	5.87	
45	14.26	6.50	1.35	4.2	0.51	-29	5.88	

Sampling Information

Date: <u>11-18-20</u>	Time Sampled: <u>1545</u>	Field Personnel: <u>SWP</u>
-----------------------	---------------------------	-----------------------------

Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailor	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Teflon Bailor
	<input type="checkbox"/> Polyethylene Bailor	<input type="checkbox"/> Bladder Pump	Other:	

Analysis:	
Sample ID: <u>P157-111820-1545</u>	
Odor: <u>None</u>	Appearance: <u>Clear</u>
QA/QC Samples Taken: <u>NA</u>	

Comments:

Sampler (Print) <u>Sam Partyka</u>	Sampler (signature): 	Date: <u>11-18-20</u>
------------------------------------	---	-----------------------

LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: P-16 Date: 11-20-20 Time Started: 0955 File Number: 129862

Weather Conditions: Time Ended: 1035 Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 20.30 Riser Pipe Diameter (in.) 2

Measured Water Level (TOR-ft) 7.00

Notes:

Well Condition

Well Riser Type (place an X in one box) Stainless Steel Carbon Steel PVC

Casing Condition: OK Repair Required:

Cap Condition: OK Repair Required:

Paint Condition: OK Repair Required:

Lock Condition: OK Repair Required:

Inner Casing Condition: OK Repair Required:

Surface Seal Condition: OK Repair Required:

Other: OK Repair Required:

Purge Information

Purging Method: Peristaltic Pump Bladder Pump Grundfos Pump Other:

Purge Start Time: 0940

Water Level Prior to Purging (TOR ft.) 7.00

Amount Purged: Flow Rate (mL per minute): 450

Comments:

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
5	15.21	7.39	1.23	0.08	0.00	-41	7.28	
10	15.10	7.17	1.25	10.05	1.143	-41	8.01	
15	15.05	7.13	1.25	9.00	1.113	-39	8.39	
20	14.90	7.10	1.24	6.30	1.08	-37	8.81	
25	14.74	7.06	1.25	2.90	0.99	-36	9.07	
30	14.78	6.97	1.26	1.04	0.80	-36	9.44	
35	14.68	6.95	1.26	0.96	0.79	-35	9.91	
40	14.68	6.95	1.26	0.90	0.76	-35	10.11	

Sampling Information

Date: 11-20-20 Time Sampled: 1030 Field Personnel: SVP

Sampling Method: (place X in box) Stainless Steel Bailer Peristaltic Pump Grundfos Pump Teflon Bailer
 Polyethylene Bailer Bladder Pump Other:

Analysis:

Sample ID: P16-12020-1035

Odor: None Appearance: Clear

QA/QC Samples Taken: NONE

Comments:

Sampler (Print) Sam Partyka Sampler (signature):  Date: 11-20-20



LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: *P16T* Date: *11-20-20* Time Started: *0855* File Number: **129862**

Weather Conditions: _____ Time Ended: *0935* Field Personnel: *S. Partyka*

Initial Readings

Measured Well Bottom (TOR-ft) *12.17* Riser Pipe Diameter (in.) *2*

Measured Water Level (TOR-ft) *6.53*

Notes: _____

Well Condition

Well Riser Type (place an X in one box) Stainless Steel Carbon Steel PVC

Casing Condition: OK Repair Required: _____

Cap Condition: OK Repair Required: _____

Paint Condition: OK Repair Required: _____

Lock Condition: OK Repair Required: _____

Inner Casing Condition: OK Repair Required: _____

Surface Seal Condition: OK Repair Required: _____

Other: OK Repair Required: _____

Purge Information

Purging Method: Peristaltic Pump Bladder Pump Grundfos Pump Other: _____

Purge Start Time: *0900*

Water Level Prior to Purging (TOR ft.) _____

Amount Purged: _____ Flow Rate (mL per minute): _____

Comments: _____

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
<i>5</i>	<i>15.64</i>	<i>7.14</i>	<i>0.735</i>	<i>0.6</i>	<i>1.30</i>	<i>120</i>	<i>7.12</i>	
<i>10</i>	<i>15.02</i>	<i>7.15</i>	<i>0.732</i>	<i>1.2</i>	<i>1.04</i>	<i>79</i>	<i>7.86</i>	
<i>15</i>	<i>14.70</i>	<i>7.00</i>	<i>0.730</i>	<i>1.7</i>	<i>0.63</i>	<i>57</i>	<i>8.45</i>	
<i>20</i>	<i>14.70</i>	<i>6.99</i>	<i>0.728</i>	<i>1.9</i>	<i>0.62</i>	<i>56</i>	<i>8.45</i>	
<i>25</i>	<i>14.68</i>	<i>6.98</i>	<i>0.727</i>	<i>1.4</i>	<i>0.60</i>	<i>56</i>	<i>8.46</i>	

Sampling Information

Date: *11-20-20* Time Sampled: *0930* Field Personnel: *SNP*

Sampling Method: (place X in box) Stainless Steel Bailer Peristaltic Pump Grundfos Pump Teflon Bailer
 Polyethylene Bailer Bladder Pump Other: _____

Analysis: _____

Sample ID: *P16T-112020-0930*

Odor: *None* Appearance: *Clear*

QA/QC Samples Taken: *n/a*

Comments: _____

Sampler (Print) *Sam Partyka* Sampler (signature):  Date: *11-20-20*

LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: <i>P-18</i>	Date: <i>11-19-20</i>	Time Started: <i>0810</i>	File Number: 129862
Weather Conditions:	Time Ended: <i>0905</i>	Field Personnel: <i>S. Partyka</i>	

Initial Readings

Measured Well Bottom (TOR-ft) <i>31.25</i>	Riser Pipe Diameter (in.) <i>2</i>
Measured Water Level (TOR-ft) <i>4.99</i>	
Notes:	

Well Condition

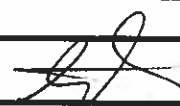
Well Riser Type (place an X in one box)		<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Cap Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Paint Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Lock Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Inner Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Surface Seal Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Other:	OK <input type="checkbox"/>	Repair Required:		

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time:				
Water Level Prior to Purging (TOR ft.)				
Amount Purged:	Flow Rate (mL per minute):			
Comments:				

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
<i>5</i>	<i>17.67</i>	<i>8.39</i>	<i>1.07</i>	<i>0.00</i>	<i>0.00</i>	<i>39</i>	<i>5.20</i>	
<i>10</i>	<i>17.15</i>	<i>8.39</i>	<i>1.07</i>	<i>0.00</i>	<i>0.98</i>	<i>17</i>	<i>5.23</i>	
<i>15</i>	<i>16.92</i>	<i>8.38</i>	<i>1.07</i>	<i>0.00</i>	<i>0.72</i>	<i>8</i>	<i>5.29</i>	
<i>20</i>	<i>16.58</i>	<i>8.38</i>	<i>1.06</i>	<i>0.00</i>	<i>0.61</i>	<i>-9</i>	<i>5.30</i>	
<i>25</i>	<i>16.55</i>	<i>8.37</i>	<i>1.08</i>	<i>0.00</i>	<i>0.01</i>	<i>-10</i>	<i>5.30</i>	
<i>30</i>	<i>16.53</i>	<i>8.37</i>	<i>1.09</i>	<i>0.00</i>	<i>0.00</i>	<i>-10</i>	<i>5.31</i>	

Sampling Information

Date: <i>11-19-20</i>	Time Sampled: <i>0900</i>	Field Personnel: <i>SWP</i>
Sampling Method: (place X in box)		
<input type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Grundfos Pump
<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Other:
Analysis:		
Sample ID: <i>P18-111920-0900</i>		
Odor: <i>None</i>	Appearance: <i>Clear</i>	
QA/QC Samples Taken: <i>7082-111920-0001 = ER 0930</i>		
Comments:		
Sampler (Print) <i>Sam Partyka</i>	Sampler (signature): 	Date: <i>11-19-20</i>

LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: <u>P-18T</u>	Date: <u>11-19-20</u>	Time Started: <u>0720</u>	File Number: <u>129862</u>
Weather Conditions:		Time Ended: <u>0805</u>	Field Personnel: <u>S. Partyka</u>

Initial Readings

Measured Well Bottom (TOR-ft) <u>19.94</u>	Riser Pipe Diameter (in.) <u>2</u>
Measured Water Level (TOR-ft) <u>3.92</u>	
Notes:	

Well Condition

Well Riser Type (place an X in one box)		<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Cap Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Paint Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Lock Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Inner Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Surface Seal Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Other:	OK <input type="checkbox"/>	Repair Required:		

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time:	<u>0725</u>			
Water Level Prior to Purging (TOR ft.)				
Amount Purged:	Flow Rate (mL per minute):			

Comments:

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
<u>5</u>	<u>17.82</u>	<u>7.56</u>	<u>0.791</u>	<u>0.0</u>	<u>3.17</u>	<u>26.1</u>	<u>4.18</u>	
<u>10</u>	<u>17.08</u>	<u>7.50</u>	<u>0.781</u>	<u>12.2</u>	<u>1.15</u>	<u>-15.0</u>	<u>4.45</u>	
<u>15</u>	<u>16.42</u>	<u>7.39</u>	<u>0.771</u>	<u>4.3</u>	<u>1.10</u>	<u>-23.5</u>	<u>5.02</u>	
<u>20</u>	<u>16.15</u>	<u>7.28</u>	<u>0.770</u>	<u>4.0</u>	<u>1.04</u>	<u>-30.3</u>	<u>5.96</u>	
<u>25</u>	<u>15.29</u>	<u>7.23</u>	<u>0.763</u>	<u>3.5</u>	<u>0.96</u>	<u>-31.1</u>	<u>6.18</u>	
<u>30</u>	<u>15.23</u>	<u>7.22</u>	<u>0.762</u>	<u>3.3</u>	<u>0.95</u>	<u>-31.3</u>	<u>6.20</u>	
<u>35</u>	<u>15.22</u>	<u>7.22</u>	<u>0.760</u>	<u>3.2</u>	<u>0.92</u>	<u>-31.6</u>	<u>6.22</u>	

Sampling Information

Date: <u>11-19-20</u>	Time Sampled: <u>0800</u>	Field Personnel: <u>SP</u>		
Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Teflon Bailer
	<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Other:	

Analysis:

Sample ID: <u>P18T-111920-0800</u>	
Odor: <u>None</u>	Appearance: <u>Clear</u>
QA/QC Samples Taken: <u>N/A</u>	

Comments:

Sampler (Print) <u>Sam Partyka</u>	Sampler (signature): 	Date: <u>11-19-20</u>
------------------------------------	---	-----------------------

LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: <u>P-21</u>	Date: <u>11-20-20</u>	Time Started: <u>1150</u>	File Number: <u>129862</u>
Weather Conditions:		Time Ended: <u>1205</u>	Field Personnel: <u>S. Partyka</u>

Initial Readings

Measured Well Bottom (TOR-ft) <u>24.05</u>	Riser Pipe Diameter (in.) <u>2</u>
Measured Water Level (TOR-ft) <u>7.98</u>	
Notes:	

Well Condition

Well Riser Type (place an X in one box)		<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Carbon Steel	<input checked="" type="checkbox"/> PVC
Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Cap Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Paint Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Lock Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Inner Casing Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Surface Seal Condition:	OK <input checked="" type="checkbox"/>	Repair Required:		
Other:	OK <input type="checkbox"/>	Repair Required:		

Purge Information

Purging Method:	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Other:
Purge Start Time:	<u>1130</u>			
Water Level Prior to Purging (TOR ft.)				
Amount Purged:	Flow Rate (mL per minute):			

Comments:

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
5	14.66	8.12	0.982	0.0	1.06	-124	8.15	
10	14.58	8.02	0.989	8.8	0.98	-122	8.98	
15	14.46	7.89	0.996	11.2	0.84	-86	9.40	
20	14.37	7.62	1.010	9.1	0.39	-71	10.11	
25	14.38	7.62	1.014	9.2	0.36	-76	10.12	
30	14.35	7.60	1.016	10.1 9.0	0.35	-68	10.15	

Sampling Information

Date: <u>11-20-20</u>	Time Sampled: <u>1200</u>	Field Personnel: <u>SP</u>		
Sampling Method: (place X in box)	<input checked="" type="checkbox"/> Stainless Steel Bailer	<input checked="" type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Grundfos Pump	<input type="checkbox"/> Teflon Bailer
	<input type="checkbox"/> Polyethylene Bailer	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Other:	


Analysis:

Sample ID: P21-112000-1200

Odor: None Appearance: Clear

QA/QC Samples Taken: None

Comments:

Sampler (Print) <u>Sam Partyka</u>	Sampler (signature): 	Date: <u>11-20-20</u>
------------------------------------	---	-----------------------



LOW-FLOW SAMPLING FIELD FORM

Monitoring Well I.D.: P2M Date: 11-20-20 Time Started: 1040 File Number: 129862

Weather Conditions: _____ Time Ended: 1125 Field Personnel: S. Partyka

Initial Readings

Measured Well Bottom (TOR-ft) 15.45 Riser Pipe Diameter (in.) 2

Measured Water Level (TOR-ft) 7.53

Notes: _____

Well Condition

Well Riser Type (place an X in one box) Stainless Steel Carbon Steel PVC

Casing Condition: OK Repair Required:

Cap Condition: OK Repair Required:

Paint Condition: OK Repair Required:

Lock Condition: OK Repair Required:

Inner Casing Condition: OK Repair Required:

Surface Seal Condition: OK Repair Required:

Other: OK Repair Required:

Purge Information

Purging Method: Peristaltic Pump Bladder Pump Grundfos Pump Other:

Purge Start Time: 1045

Water Level Prior to Purging (TOR ft.) 7.53

Amount Purged: _____ Flow Rate (mL per minute): 2250

Comments: _____

Time Elapsed (min)	Temperature (deg C)	pH	Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Redox (ORP)	Water Level (TOR ft)	Comments
5	14.98	7.39	1.55	0.0	4.05	57	7.59	
10	14.45	7.39	1.50	0.0	3.42	19	8.22	
15	14.22	7.01	1.46	0.0	2.36	3	8.29	
20	14.10	6.99	1.35	0.0	1.12	-5.1	8.31	
25	14.10	6.95	1.33	0.0	1.10	-5.1	8.31	
30	14.08	6.95	1.32	0.0	1.07	-5.2	8.32	

Sampling Information

Date: 11-20-20 Time Sampled: 1120 Field Personnel: SUP

Sampling Method: (place X in box) Stainless Steel Bailer Peristaltic Pump Grundfos Pump Teflon Bailer
 Polyethylene Bailer Bladder Pump Other:

Analysis: _____

Sample ID: P2M-112020-1120

Odor: None Appearance: Clear

QA/QC Samples Taken: NA

Comments: _____

Sampler (Print) Sarn Partyka Sampler (signature): Date: 11-20-20

APPENDIX D

Laboratory Analytical Reports

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-132007-1
Client Project/Site: Racer Elyria

For:

Haley & Aldrich, Inc.
455 E. Eisenhower Parkway
Suite 210
Ann Arbor, Michigan 48108-2280

Attn: Ban Aragona



Authorized for release by:
7/7/2020 5:08:35 PM

Leslie Howell, Project Manager I
(330)966-9266
leslie.howell@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Method Summary	6
Sample Summary	7
Detection Summary	8
Client Sample Results	14
QC Sample Results	29
QC Association Summary	34
Lab Chronicle	37
Certification Summary	41
Chain of Custody	42

Definitions/Glossary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Job ID: 240-132007-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: Haley & Aldrich, Inc.

Project: Racer Elyria

Report Number: 240-132007-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 6/17/2020 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.3° C and 5.4° C.

DISSOLVED METALS (ICP)

Samples P08R-061120-1240 (240-132007-1), P14-061120-1040 (240-132007-2), P14T-061120-1430 (240-132007-3), P15-061220-1000 (240-132007-4), P15T-061220-1055 (240-132007-5), 7082-061220-0001 (240-132007-6), P3T-061220-1325 (240-132007-7), P18-061520-0745 (240-132007-8), 7082-061520-0001 (240-132007-9), P2-061520-0925 (240-132007-10), P2T-061520-1030 (240-132007-11), P16-061520-1200 (240-132007-12), P16T-061520-1300 (240-132007-13), P2IT-061520-1415 (240-132007-14) and 7082-061520-0002 (240-132007-15) were analyzed for dissolved metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 06/19/2020 and analyzed on 06/23/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL RECOVERABLE METALS (ICP)

Samples P08R-061120-1240 (240-132007-1), P14-061120-1040 (240-132007-2), P14T-061120-1430 (240-132007-3), P15-061220-1000 (240-132007-4), P15T-061220-1055 (240-132007-5), 7082-061220-0001 (240-132007-6), P3T-061220-1325 (240-132007-7), P18-061520-0745 (240-132007-8), 7082-061520-0001 (240-132007-9), P2-061520-0925 (240-132007-10),

Case Narrative

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Job ID: 240-132007-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

P2T-061520-1030 (240-132007-11), P16-061520-1200 (240-132007-12), P16T-061520-1300 (240-132007-13), P2IT-061520-1415 (240-132007-14) and 7082-061520-0002 (240-132007-15) were analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 06/19/2020 and analyzed on 06/22/2020 and 06/23/2020.

Sodium was detected in method blank MB 240-439165/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS

Samples P08R-061120-1240 (240-132007-1), P14-061120-1040 (240-132007-2), P14T-061120-1430 (240-132007-3), P15-061220-1000 (240-132007-4), P15T-061220-1055 (240-132007-5), 7082-061220-0001 (240-132007-6), P3T-061220-1325 (240-132007-7), P18-061520-0745 (240-132007-8), 7082-061520-0001 (240-132007-9), P2-061520-0925 (240-132007-10), P2T-061520-1030 (240-132007-11), P16-061520-1200 (240-132007-12), P16T-061520-1300 (240-132007-13), P2IT-061520-1415 (240-132007-14) and 7082-061520-0002 (240-132007-15) were analyzed for anions in accordance with EPA Method 300.0. The samples were analyzed on 07/01/2020, 07/02/2020, 07/03/2020 and 07/06/2020.

Samples P08R-061120-1240 (240-132007-1)[5X], P15-061220-1000 (240-132007-4)[5X], P15T-061220-1055 (240-132007-5)[5X], 7082-061220-0001 (240-132007-6)[5X], P3T-061220-1325 (240-132007-7)[5X], P18-061520-0745 (240-132007-8)[5X], 7082-061520-0001 (240-132007-9)[5X], P2-061520-0925 (240-132007-10)[5X], P2T-061520-1030 (240-132007-11)[10X], P16-061520-1200 (240-132007-12)[5X], P16T-061520-1300 (240-132007-13)[5X] and P2IT-061520-1415 (240-132007-14)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL CAN
300.0	Anions, Ion Chromatography	MCAWW	TAL CAN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CAN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396



Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-132007-1	P08R-061120-1240	Water	06/11/20 12:40	06/17/20 10:00	
240-132007-2	P14-061120-1040	Water	06/11/20 10:40	06/17/20 10:00	
240-132007-3	P14T-061120-1430	Water	06/11/20 14:30	06/17/20 10:00	
240-132007-4	P15-061220-1000	Water	06/12/20 10:00	06/17/20 10:00	
240-132007-5	P15T-061220-1055	Water	06/12/20 10:55	06/17/20 10:00	
240-132007-6	7082-061220-0001	Water	06/12/20 00:00	06/17/20 10:00	
240-132007-7	P3T-061220-1325	Water	06/12/20 13:25	06/17/20 10:00	
240-132007-8	P18-061520-0745	Water	06/15/20 07:45	06/17/20 10:00	
240-132007-9	7082-061520-0001	Water	06/15/20 00:00	06/17/20 10:00	
240-132007-10	P2-061520-0925	Water	06/15/20 09:25	06/17/20 10:00	
240-132007-11	P2T-061520-1030	Water	06/15/20 10:30	06/17/20 10:00	
240-132007-12	P16-061520-1200	Water	06/15/20 12:00	06/17/20 10:00	
240-132007-13	P16T-061520-1300	Water	06/15/20 13:00	06/17/20 10:00	
240-132007-14	P2IT-061520-1415	Water	06/15/20 14:15	06/17/20 10:00	
240-132007-15	7082-061520-0002	Water	06/15/20 14:30	06/17/20 10:00	

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P08R-061120-1240

Lab Sample ID: 240-132007-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	78	J	200	1.3	ug/L	1		6010B	Total
									Recoverable
Calcium	89000		5000	310	ug/L	1		6010B	Total
									Recoverable
Iron	290		100	26	ug/L	1		6010B	Total
									Recoverable
Magnesium	21000		5000	260	ug/L	1		6010B	Total
									Recoverable
Manganese	65		15	2.1	ug/L	1		6010B	Total
									Recoverable
Sodium	150000	B	5000	560	ug/L	1		6010B	Total
									Recoverable
Barium	79	J	200	1.3	ug/L	1		6010B	Dissolved
Calcium	88000		5000	310	ug/L	1		6010B	Dissolved
Iron	270		100	26	ug/L	1		6010B	Dissolved
Magnesium	20000		5000	260	ug/L	1		6010B	Dissolved
Manganese	65		15	2.1	ug/L	1		6010B	Dissolved
Sodium	150000		5000	560	ug/L	1		6010B	Dissolved
Chloride	130		5.0	1.4	mg/L	5		300.0	Total/NA
Sulfate	55		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: P14-061120-1040

Lab Sample ID: 240-132007-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	57	J	200	1.3	ug/L	1		6010B	Total
									Recoverable
Calcium	110000		5000	310	ug/L	1		6010B	Total
									Recoverable
Iron	3900		100	26	ug/L	1		6010B	Total
									Recoverable
Magnesium	24000		5000	260	ug/L	1		6010B	Total
									Recoverable
Manganese	150		15	2.1	ug/L	1		6010B	Total
									Recoverable
Sodium	8200	B	5000	560	ug/L	1		6010B	Total
									Recoverable
Barium	57	J	200	1.3	ug/L	1		6010B	Dissolved
Calcium	110000		5000	310	ug/L	1		6010B	Dissolved
Iron	1700		100	26	ug/L	1		6010B	Dissolved
Magnesium	24000		5000	260	ug/L	1		6010B	Dissolved
Manganese	150		15	2.1	ug/L	1		6010B	Dissolved
Sodium	8300		5000	560	ug/L	1		6010B	Dissolved
Chloride	8.1		1.0	0.28	mg/L	1		300.0	Total/NA
Sulfate	49		1.0	0.35	mg/L	1		300.0	Total/NA

Client Sample ID: P14T-061120-1430

Lab Sample ID: 240-132007-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	58	J	200	1.3	ug/L	1		6010B	Total
									Recoverable
Calcium	75000		5000	310	ug/L	1		6010B	Total
									Recoverable
Iron	8600		100	26	ug/L	1		6010B	Total
									Recoverable
Magnesium	9300		5000	260	ug/L	1		6010B	Total
									Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P14T-061120-1430 (Continued)

Lab Sample ID: 240-132007-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	2800		15	2.1	ug/L	1		6010B	Total
Sodium	3500	J B	5000	560	ug/L	1		6010B	Recoverable Total
Barium	59	J	200	1.3	ug/L	1		6010B	Recoverable Dissolved
Calcium	74000		5000	310	ug/L	1		6010B	Dissolved
Iron	8300		100	26	ug/L	1		6010B	Dissolved
Magnesium	9200		5000	260	ug/L	1		6010B	Dissolved
Manganese	2700		15	2.1	ug/L	1		6010B	Dissolved
Sodium	3400	J	5000	560	ug/L	1		6010B	Dissolved
Chloride	1.2		1.0	0.28	mg/L	1		300.0	Total/NA
Sulfate	1.7		1.0	0.35	mg/L	1		300.0	Total/NA

Client Sample ID: P15-061220-1000

Lab Sample ID: 240-132007-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	86	J	200	1.3	ug/L	1		6010B	Total
Calcium	160000		5000	310	ug/L	1		6010B	Recoverable Total
Iron	2000		100	26	ug/L	1		6010B	Recoverable Total
Magnesium	30000		5000	260	ug/L	1		6010B	Recoverable Total
Manganese	1600		15	2.1	ug/L	1		6010B	Recoverable Total
Sodium	17000	B	5000	560	ug/L	1		6010B	Recoverable Total
Barium	89	J	200	1.3	ug/L	1		6010B	Dissolved
Calcium	160000		5000	310	ug/L	1		6010B	Dissolved
Iron	2000		100	26	ug/L	1		6010B	Dissolved
Magnesium	30000		5000	260	ug/L	1		6010B	Dissolved
Manganese	1600		15	2.1	ug/L	1		6010B	Dissolved
Sodium	18000		5000	560	ug/L	1		6010B	Dissolved
Chloride	7.1		1.0	0.28	mg/L	1		300.0	Total/NA
Sulfate	150		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: P15T-061220-1055

Lab Sample ID: 240-132007-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	90	J	200	1.3	ug/L	1		6010B	Total
Calcium	180000		5000	310	ug/L	1		6010B	Recoverable Total
Iron	1800		100	26	ug/L	1		6010B	Recoverable Total
Magnesium	43000		5000	260	ug/L	1		6010B	Recoverable Total
Manganese	1600		15	2.1	ug/L	1		6010B	Recoverable Total
Sodium	16000	B	5000	560	ug/L	1		6010B	Recoverable Total
Barium	91	J	200	1.3	ug/L	1		6010B	Dissolved
Calcium	180000		5000	310	ug/L	1		6010B	Dissolved
Iron	1800		100	26	ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P15T-061220-1055 (Continued)

Lab Sample ID: 240-132007-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	42000		5000	260	ug/L	1		6010B	Dissolved
Manganese	1500		15	2.1	ug/L	1		6010B	Dissolved
Sodium	16000		5000	560	ug/L	1		6010B	Dissolved
Chloride	6.5		5.0	1.4	mg/L	5		300.0	Total/NA
Sulfate	240		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: 7082-061220-0001

Lab Sample ID: 240-132007-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	92	J	200	1.3	ug/L	1		6010B	Total Recoverable
Calcium	190000		5000	310	ug/L	1		6010B	Total Recoverable
Iron	1800		100	26	ug/L	1		6010B	Total Recoverable
Magnesium	44000		5000	260	ug/L	1		6010B	Total Recoverable
Manganese	1600		15	2.1	ug/L	1		6010B	Total Recoverable
Sodium	16000	B	5000	560	ug/L	1		6010B	Total Recoverable
Barium	90	J	200	1.3	ug/L	1		6010B	Dissolved
Calcium	180000		5000	310	ug/L	1		6010B	Dissolved
Iron	1700		100	26	ug/L	1		6010B	Dissolved
Magnesium	42000		5000	260	ug/L	1		6010B	Dissolved
Manganese	1500		15	2.1	ug/L	1		6010B	Dissolved
Sodium	16000		5000	560	ug/L	1		6010B	Dissolved
Chloride	6.5		5.0	1.4	mg/L	5		300.0	Total/NA
Sulfate	240		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: P3T-061220-1325

Lab Sample ID: 240-132007-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	19	J	200	1.3	ug/L	1		6010B	Total Recoverable
Calcium	170000		5000	310	ug/L	1		6010B	Total Recoverable
Iron	330		100	26	ug/L	1		6010B	Total Recoverable
Magnesium	93000		5000	260	ug/L	1		6010B	Total Recoverable
Manganese	24		15	2.1	ug/L	1		6010B	Total Recoverable
Sodium	160000	B	5000	560	ug/L	1		6010B	Total Recoverable
Barium	17	J	200	1.3	ug/L	1		6010B	Dissolved
Calcium	180000		5000	310	ug/L	1		6010B	Dissolved
Magnesium	96000		5000	260	ug/L	1		6010B	Dissolved
Manganese	2.8	J	15	2.1	ug/L	1		6010B	Dissolved
Sodium	170000		5000	560	ug/L	1		6010B	Dissolved
Chloride	6.8		5.0	1.4	mg/L	5		300.0	Total/NA
Sulfate	730		5.0	1.7	mg/L	5		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P18-061520-0745

Lab Sample ID: 240-132007-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	7.0	J	200	1.3	ug/L	1		6010B	Total
									Recoverable
Calcium	12000		5000	310	ug/L	1		6010B	Total
									Recoverable
Iron	26	J	100	26	ug/L	1		6010B	Total
									Recoverable
Magnesium	3900	J	5000	260	ug/L	1		6010B	Total
									Recoverable
Manganese	22		15	2.1	ug/L	1		6010B	Total
									Recoverable
Sodium	310000	B	5000	560	ug/L	1		6010B	Total
									Recoverable
Barium	7.0	J	200	1.3	ug/L	1		6010B	Dissolved
Calcium	12000		5000	310	ug/L	1		6010B	Dissolved
Magnesium	3900	J	5000	260	ug/L	1		6010B	Dissolved
Manganese	22		15	2.1	ug/L	1		6010B	Dissolved
Sodium	320000		5000	560	ug/L	1		6010B	Dissolved
Chloride	43		5.0	1.4	mg/L	5		300.0	Total/NA
Sulfate	220		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: 7082-061520-0001

Lab Sample ID: 240-132007-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	7.1	J	200	1.3	ug/L	1		6010B	Total
									Recoverable
Calcium	12000		5000	310	ug/L	1		6010B	Total
									Recoverable
Magnesium	3900	J	5000	260	ug/L	1		6010B	Total
									Recoverable
Manganese	24		15	2.1	ug/L	1		6010B	Total
									Recoverable
Sodium	310000	B	5000	560	ug/L	1		6010B	Total
									Recoverable
Barium	8.1	J	200	1.3	ug/L	1		6010B	Dissolved
Calcium	12000		5000	310	ug/L	1		6010B	Dissolved
Magnesium	3900	J	5000	260	ug/L	1		6010B	Dissolved
Manganese	22		15	2.1	ug/L	1		6010B	Dissolved
Sodium	320000		5000	560	ug/L	1		6010B	Dissolved
Chloride	42		5.0	1.4	mg/L	5		300.0	Total/NA
Sulfate	210		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: P2-061520-0925

Lab Sample ID: 240-132007-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	68	J	200	1.3	ug/L	1		6010B	Total
									Recoverable
Calcium	150000		5000	310	ug/L	1		6010B	Total
									Recoverable
Iron	960		100	26	ug/L	1		6010B	Total
									Recoverable
Magnesium	51000		5000	260	ug/L	1		6010B	Total
									Recoverable
Manganese	570		15	2.1	ug/L	1		6010B	Total
									Recoverable
Sodium	91000	B	5000	560	ug/L	1		6010B	Total
									Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P2-061520-0925 (Continued)

Lab Sample ID: 240-132007-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	65	J	200	1.3	ug/L	1		6010B	Dissolved
Calcium	150000		5000	310	ug/L	1		6010B	Dissolved
Iron	850		100	26	ug/L	1		6010B	Dissolved
Magnesium	50000		5000	260	ug/L	1		6010B	Dissolved
Manganese	520		15	2.1	ug/L	1		6010B	Dissolved
Sodium	91000		5000	560	ug/L	1		6010B	Dissolved
Chloride	43		5.0	1.4	mg/L	5		300.0	Total/NA
Sulfate	340		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: P2T-061520-1030

Lab Sample ID: 240-132007-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	18	J	200	1.3	ug/L	1		6010B	Total Recoverable
Calcium	300000		5000	310	ug/L	1		6010B	Total Recoverable
Iron	1400		100	26	ug/L	1		6010B	Total Recoverable
Magnesium	120000		5000	260	ug/L	1		6010B	Total Recoverable
Manganese	670		15	2.1	ug/L	1		6010B	Total Recoverable
Sodium	41000	B	5000	560	ug/L	1		6010B	Total Recoverable
Barium	15	J	200	1.3	ug/L	1		6010B	Dissolved
Calcium	310000		5000	310	ug/L	1		6010B	Dissolved
Iron	700		100	26	ug/L	1		6010B	Dissolved
Magnesium	120000		5000	260	ug/L	1		6010B	Dissolved
Manganese	660		15	2.1	ug/L	1		6010B	Dissolved
Sodium	43000		5000	560	ug/L	1		6010B	Dissolved
Chloride	68		10	2.8	mg/L	10		300.0	Total/NA
Sulfate	870		10	3.5	mg/L	10		300.0	Total/NA

Client Sample ID: P16-061520-1200

Lab Sample ID: 240-132007-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	33	J	200	1.3	ug/L	1		6010B	Total Recoverable
Calcium	230000		5000	310	ug/L	1		6010B	Total Recoverable
Iron	3500		100	26	ug/L	1		6010B	Total Recoverable
Magnesium	67000		5000	260	ug/L	1		6010B	Total Recoverable
Manganese	190		15	2.1	ug/L	1		6010B	Total Recoverable
Sodium	76000	B	5000	560	ug/L	1		6010B	Total Recoverable
Barium	31	J	200	1.3	ug/L	1		6010B	Dissolved
Calcium	230000		5000	310	ug/L	1		6010B	Dissolved
Iron	3300		100	26	ug/L	1		6010B	Dissolved
Magnesium	66000		5000	260	ug/L	1		6010B	Dissolved
Manganese	180		15	2.1	ug/L	1		6010B	Dissolved
Sodium	78000		5000	560	ug/L	1		6010B	Dissolved
Chloride	37		5.0	1.4	mg/L	5		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P16-061520-1200 (Continued)

Lab Sample ID: 240-132007-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	490		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: P16T-061520-1300

Lab Sample ID: 240-132007-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	17	J	200	1.3	ug/L	1		6010B	Total Recoverable
Calcium	150000		5000	310	ug/L	1		6010B	Total Recoverable
Iron	140		100	26	ug/L	1		6010B	Total Recoverable
Magnesium	41000		5000	260	ug/L	1		6010B	Total Recoverable
Manganese	2.5	J	15	2.1	ug/L	1		6010B	Total Recoverable
Sodium	57000	B	5000	560	ug/L	1		6010B	Total Recoverable
Barium	18	J	200	1.3	ug/L	1		6010B	Dissolved
Calcium	160000		5000	310	ug/L	1		6010B	Dissolved
Magnesium	41000		5000	260	ug/L	1		6010B	Dissolved
Manganese	7.3	J	15	2.1	ug/L	1		6010B	Dissolved
Sodium	60000		5000	560	ug/L	1		6010B	Dissolved
Chloride	2.6		1.0	0.28	mg/L	1		300.0	Total/NA
Sulfate	340		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: P2IT-061520-1415

Lab Sample ID: 240-132007-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	34	J	200	1.3	ug/L	1		6010B	Total Recoverable
Calcium	220000		5000	310	ug/L	1		6010B	Total Recoverable
Iron	330		100	26	ug/L	1		6010B	Total Recoverable
Magnesium	54000		5000	260	ug/L	1		6010B	Total Recoverable
Manganese	520		15	2.1	ug/L	1		6010B	Total Recoverable
Sodium	120000	B	5000	560	ug/L	1		6010B	Total Recoverable
Barium	35	J	200	1.3	ug/L	1		6010B	Dissolved
Calcium	210000		5000	310	ug/L	1		6010B	Dissolved
Iron	310		100	26	ug/L	1		6010B	Dissolved
Magnesium	53000		5000	260	ug/L	1		6010B	Dissolved
Manganese	530		15	2.1	ug/L	1		6010B	Dissolved
Sodium	130000		5000	560	ug/L	1		6010B	Dissolved
Chloride	64		5.0	1.4	mg/L	5		300.0	Total/NA
Sulfate	490		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: 7082-061520-0002

Lab Sample ID: 240-132007-15

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P08R-061120-1240

Lab Sample ID: 240-132007-1

Date Collected: 06/11/20 12:40

Matrix: Water

Date Received: 06/17/20 10:00

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	78	J	200	1.3	ug/L		06/19/20 14:00	06/22/20 23:02	1
Calcium	89000		5000	310	ug/L		06/19/20 14:00	06/22/20 23:02	1
Iron	290		100	26	ug/L		06/19/20 14:00	06/22/20 23:02	1
Magnesium	21000		5000	260	ug/L		06/19/20 14:00	06/22/20 23:02	1
Manganese	65		15	2.1	ug/L		06/19/20 14:00	06/22/20 23:02	1
Sodium	150000	B	5000	560	ug/L		06/19/20 14:00	06/22/20 23:02	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	79	J	200	1.3	ug/L		06/19/20 14:00	06/23/20 00:51	1
Calcium	88000		5000	310	ug/L		06/19/20 14:00	06/23/20 00:51	1
Iron	270		100	26	ug/L		06/19/20 14:00	06/23/20 00:51	1
Magnesium	20000		5000	260	ug/L		06/19/20 14:00	06/23/20 00:51	1
Manganese	65		15	2.1	ug/L		06/19/20 14:00	06/23/20 00:51	1
Sodium	150000		5000	560	ug/L		06/19/20 14:00	06/23/20 00:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		5.0	1.4	mg/L			07/02/20 01:49	5
Sulfate	55		5.0	1.7	mg/L			07/02/20 01:49	5

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P14-061120-1040

Lab Sample ID: 240-132007-2

Date Collected: 06/11/20 10:40

Matrix: Water

Date Received: 06/17/20 10:00

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	57	J	200	1.3	ug/L		06/19/20 14:00	06/22/20 23:06	1
Calcium	110000		5000	310	ug/L		06/19/20 14:00	06/22/20 23:06	1
Iron	3900		100	26	ug/L		06/19/20 14:00	06/22/20 23:06	1
Magnesium	24000		5000	260	ug/L		06/19/20 14:00	06/22/20 23:06	1
Manganese	150		15	2.1	ug/L		06/19/20 14:00	06/22/20 23:06	1
Sodium	8200	B	5000	560	ug/L		06/19/20 14:00	06/22/20 23:06	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	57	J	200	1.3	ug/L		06/19/20 14:00	06/23/20 00:56	1
Calcium	110000		5000	310	ug/L		06/19/20 14:00	06/23/20 00:56	1
Iron	1700		100	26	ug/L		06/19/20 14:00	06/23/20 00:56	1
Magnesium	24000		5000	260	ug/L		06/19/20 14:00	06/23/20 00:56	1
Manganese	150		15	2.1	ug/L		06/19/20 14:00	06/23/20 00:56	1
Sodium	8300		5000	560	ug/L		06/19/20 14:00	06/23/20 00:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.1		1.0	0.28	mg/L			07/03/20 08:14	1
Sulfate	49		1.0	0.35	mg/L			07/03/20 08:14	1

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P14T-061120-1430

Lab Sample ID: 240-132007-3

Date Collected: 06/11/20 14:30

Matrix: Water

Date Received: 06/17/20 10:00

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	58	J	200	1.3	ug/L		06/19/20 14:00	06/22/20 23:11	1
Calcium	75000		5000	310	ug/L		06/19/20 14:00	06/22/20 23:11	1
Iron	8600		100	26	ug/L		06/19/20 14:00	06/22/20 23:11	1
Magnesium	9300		5000	260	ug/L		06/19/20 14:00	06/22/20 23:11	1
Manganese	2800		15	2.1	ug/L		06/19/20 14:00	06/22/20 23:11	1
Sodium	3500	J B	5000	560	ug/L		06/19/20 14:00	06/22/20 23:11	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	59	J	200	1.3	ug/L		06/19/20 14:00	06/23/20 01:00	1
Calcium	74000		5000	310	ug/L		06/19/20 14:00	06/23/20 01:00	1
Iron	8300		100	26	ug/L		06/19/20 14:00	06/23/20 01:00	1
Magnesium	9200		5000	260	ug/L		06/19/20 14:00	06/23/20 01:00	1
Manganese	2700		15	2.1	ug/L		06/19/20 14:00	06/23/20 01:00	1
Sodium	3400	J	5000	560	ug/L		06/19/20 14:00	06/23/20 01:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.2		1.0	0.28	mg/L			07/02/20 02:52	1
Sulfate	1.7		1.0	0.35	mg/L			07/02/20 02:52	1

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P15-061220-1000

Lab Sample ID: 240-132007-4

Date Collected: 06/12/20 10:00

Matrix: Water

Date Received: 06/17/20 10:00

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	86	J	200	1.3	ug/L		06/19/20 14:00	06/22/20 22:14	1
Calcium	160000		5000	310	ug/L		06/19/20 14:00	06/22/20 22:14	1
Iron	2000		100	26	ug/L		06/19/20 14:00	06/22/20 22:14	1
Magnesium	30000		5000	260	ug/L		06/19/20 14:00	06/22/20 22:14	1
Manganese	1600		15	2.1	ug/L		06/19/20 14:00	06/22/20 22:14	1
Sodium	17000	B	5000	560	ug/L		06/19/20 14:00	06/22/20 22:14	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	89	J	200	1.3	ug/L		06/19/20 14:00	06/23/20 00:21	1
Calcium	160000		5000	310	ug/L		06/19/20 14:00	06/23/20 00:21	1
Iron	2000		100	26	ug/L		06/19/20 14:00	06/23/20 00:21	1
Magnesium	30000		5000	260	ug/L		06/19/20 14:00	06/23/20 00:21	1
Manganese	1600		15	2.1	ug/L		06/19/20 14:00	06/23/20 00:21	1
Sodium	18000		5000	560	ug/L		06/19/20 14:00	06/23/20 00:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.1		1.0	0.28	mg/L			07/01/20 19:47	1
Sulfate	150		5.0	1.7	mg/L			07/01/20 20:48	5

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P15T-061220-1055

Lab Sample ID: 240-132007-5

Date Collected: 06/12/20 10:55

Matrix: Water

Date Received: 06/17/20 10:00

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	90	J	200	1.3	ug/L		06/19/20 14:00	06/22/20 23:15	1
Calcium	180000		5000	310	ug/L		06/19/20 14:00	06/22/20 23:15	1
Iron	1800		100	26	ug/L		06/19/20 14:00	06/22/20 23:15	1
Magnesium	43000		5000	260	ug/L		06/19/20 14:00	06/22/20 23:15	1
Manganese	1600		15	2.1	ug/L		06/19/20 14:00	06/22/20 23:15	1
Sodium	16000	B	5000	560	ug/L		06/19/20 14:00	06/22/20 23:15	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	91	J	200	1.3	ug/L		06/19/20 14:00	06/23/20 01:04	1
Calcium	180000		5000	310	ug/L		06/19/20 14:00	06/23/20 01:04	1
Iron	1800		100	26	ug/L		06/19/20 14:00	06/23/20 01:04	1
Magnesium	42000		5000	260	ug/L		06/19/20 14:00	06/23/20 01:04	1
Manganese	1500		15	2.1	ug/L		06/19/20 14:00	06/23/20 01:04	1
Sodium	16000		5000	560	ug/L		06/19/20 14:00	06/23/20 01:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.5		5.0	1.4	mg/L			07/03/20 16:50	5
Sulfate	240		5.0	1.7	mg/L			07/03/20 16:50	5

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: 7082-061220-0001

Lab Sample ID: 240-132007-6

Date Collected: 06/12/20 00:00

Matrix: Water

Date Received: 06/17/20 10:00

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	92	J	200	1.3	ug/L		06/19/20 14:00	06/22/20 23:20	1
Calcium	190000		5000	310	ug/L		06/19/20 14:00	06/22/20 23:20	1
Iron	1800		100	26	ug/L		06/19/20 14:00	06/22/20 23:20	1
Magnesium	44000		5000	260	ug/L		06/19/20 14:00	06/22/20 23:20	1
Manganese	1600		15	2.1	ug/L		06/19/20 14:00	06/22/20 23:20	1
Sodium	16000	B	5000	560	ug/L		06/19/20 14:00	06/22/20 23:20	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	90	J	200	1.3	ug/L		06/19/20 14:00	06/23/20 01:09	1
Calcium	180000		5000	310	ug/L		06/19/20 14:00	06/23/20 01:09	1
Iron	1700		100	26	ug/L		06/19/20 14:00	06/23/20 01:09	1
Magnesium	42000		5000	260	ug/L		06/19/20 14:00	06/23/20 01:09	1
Manganese	1500		15	2.1	ug/L		06/19/20 14:00	06/23/20 01:09	1
Sodium	16000		5000	560	ug/L		06/19/20 14:00	06/23/20 01:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.5		5.0	1.4	mg/L			07/03/20 17:52	5
Sulfate	240		5.0	1.7	mg/L			07/03/20 17:52	5

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P3T-061220-1325

Lab Sample ID: 240-132007-7

Date Collected: 06/12/20 13:25

Matrix: Water

Date Received: 06/17/20 10:00

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	19	J	200	1.3	ug/L		06/19/20 14:00	06/22/20 23:24	1
Calcium	170000		5000	310	ug/L		06/19/20 14:00	06/22/20 23:24	1
Iron	330		100	26	ug/L		06/19/20 14:00	06/22/20 23:24	1
Magnesium	93000		5000	260	ug/L		06/19/20 14:00	06/22/20 23:24	1
Manganese	24		15	2.1	ug/L		06/19/20 14:00	06/22/20 23:24	1
Sodium	160000	B	5000	560	ug/L		06/19/20 14:00	06/22/20 23:24	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	17	J	200	1.3	ug/L		06/19/20 14:00	06/23/20 01:13	1
Calcium	180000		5000	310	ug/L		06/19/20 14:00	06/23/20 01:13	1
Iron	100	U	100	26	ug/L		06/19/20 14:00	06/23/20 01:13	1
Magnesium	96000		5000	260	ug/L		06/19/20 14:00	06/23/20 01:13	1
Manganese	2.8	J	15	2.1	ug/L		06/19/20 14:00	06/23/20 01:13	1
Sodium	170000		5000	560	ug/L		06/19/20 14:00	06/23/20 01:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.8		5.0	1.4	mg/L			07/03/20 18:13	5
Sulfate	730		5.0	1.7	mg/L			07/03/20 18:13	5

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P18-061520-0745

Lab Sample ID: 240-132007-8

Date Collected: 06/15/20 07:45

Matrix: Water

Date Received: 06/17/20 10:00

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	7.0	J	200	1.3	ug/L		06/19/20 14:00	06/22/20 23:29	1
Calcium	12000		5000	310	ug/L		06/19/20 14:00	06/22/20 23:29	1
Iron	26	J	100	26	ug/L		06/19/20 14:00	06/22/20 23:29	1
Magnesium	3900	J	5000	260	ug/L		06/19/20 14:00	06/22/20 23:29	1
Manganese	22		15	2.1	ug/L		06/19/20 14:00	06/22/20 23:29	1
Sodium	310000	B	5000	560	ug/L		06/19/20 14:00	06/22/20 23:29	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	7.0	J	200	1.3	ug/L		06/19/20 14:00	06/23/20 01:18	1
Calcium	12000		5000	310	ug/L		06/19/20 14:00	06/23/20 01:18	1
Iron	100	U	100	26	ug/L		06/19/20 14:00	06/23/20 01:18	1
Magnesium	3900	J	5000	260	ug/L		06/19/20 14:00	06/23/20 01:18	1
Manganese	22		15	2.1	ug/L		06/19/20 14:00	06/23/20 01:18	1
Sodium	320000		5000	560	ug/L		06/19/20 14:00	06/23/20 01:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43		5.0	1.4	mg/L			07/03/20 18:34	5
Sulfate	220		5.0	1.7	mg/L			07/03/20 18:34	5

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: 7082-061520-0001

Lab Sample ID: 240-132007-9

Date Collected: 06/15/20 00:00

Matrix: Water

Date Received: 06/17/20 10:00

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	7.1	J	200	1.3	ug/L	-	06/19/20 14:00	06/22/20 23:33	1
Calcium	12000		5000	310	ug/L	-	06/19/20 14:00	06/22/20 23:33	1
Iron	100	U	100	26	ug/L	-	06/19/20 14:00	06/22/20 23:33	1
Magnesium	3900	J	5000	260	ug/L	-	06/19/20 14:00	06/22/20 23:33	1
Manganese	24		15	2.1	ug/L	-	06/19/20 14:00	06/22/20 23:33	1
Sodium	310000	B	5000	560	ug/L	-	06/19/20 14:00	06/22/20 23:33	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	8.1	J	200	1.3	ug/L	-	06/19/20 14:00	06/23/20 01:22	1
Calcium	12000		5000	310	ug/L	-	06/19/20 14:00	06/23/20 01:22	1
Iron	100	U	100	26	ug/L	-	06/19/20 14:00	06/23/20 01:22	1
Magnesium	3900	J	5000	260	ug/L	-	06/19/20 14:00	06/23/20 01:22	1
Manganese	22		15	2.1	ug/L	-	06/19/20 14:00	06/23/20 01:22	1
Sodium	320000		5000	560	ug/L	-	06/19/20 14:00	06/23/20 01:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42		5.0	1.4	mg/L	-		07/03/20 18:54	5
Sulfate	210		5.0	1.7	mg/L	-		07/03/20 18:54	5

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P2-061520-0925

Lab Sample ID: 240-132007-10

Date Collected: 06/15/20 09:25

Matrix: Water

Date Received: 06/17/20 10:00

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	68	J	200	1.3	ug/L		06/19/20 14:00	06/22/20 23:37	1
Calcium	150000		5000	310	ug/L		06/19/20 14:00	06/22/20 23:37	1
Iron	960		100	26	ug/L		06/19/20 14:00	06/22/20 23:37	1
Magnesium	51000		5000	260	ug/L		06/19/20 14:00	06/22/20 23:37	1
Manganese	570		15	2.1	ug/L		06/19/20 14:00	06/22/20 23:37	1
Sodium	91000	B	5000	560	ug/L		06/19/20 14:00	06/22/20 23:37	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	65	J	200	1.3	ug/L		06/19/20 14:00	06/23/20 01:27	1
Calcium	150000		5000	310	ug/L		06/19/20 14:00	06/23/20 01:27	1
Iron	850		100	26	ug/L		06/19/20 14:00	06/23/20 01:27	1
Magnesium	50000		5000	260	ug/L		06/19/20 14:00	06/23/20 01:27	1
Manganese	520		15	2.1	ug/L		06/19/20 14:00	06/23/20 01:27	1
Sodium	91000		5000	560	ug/L		06/19/20 14:00	06/23/20 01:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43		5.0	1.4	mg/L			07/03/20 19:15	5
Sulfate	340		5.0	1.7	mg/L			07/03/20 19:15	5

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P2T-061520-1030

Lab Sample ID: 240-132007-11

Date Collected: 06/15/20 10:30

Matrix: Water

Date Received: 06/17/20 10:00

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	18	J	200	1.3	ug/L		06/19/20 14:00	06/22/20 23:42	1
Calcium	300000		5000	310	ug/L		06/19/20 14:00	06/22/20 23:42	1
Iron	1400		100	26	ug/L		06/19/20 14:00	06/22/20 23:42	1
Magnesium	120000		5000	260	ug/L		06/19/20 14:00	06/22/20 23:42	1
Manganese	670		15	2.1	ug/L		06/19/20 14:00	06/22/20 23:42	1
Sodium	41000	B	5000	560	ug/L		06/19/20 14:00	06/22/20 23:42	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	15	J	200	1.3	ug/L		06/19/20 14:00	06/23/20 01:39	1
Calcium	310000		5000	310	ug/L		06/19/20 14:00	06/23/20 01:39	1
Iron	700		100	26	ug/L		06/19/20 14:00	06/23/20 08:35	1
Magnesium	120000		5000	260	ug/L		06/19/20 14:00	06/23/20 01:39	1
Manganese	660		15	2.1	ug/L		06/19/20 14:00	06/23/20 01:39	1
Sodium	43000		5000	560	ug/L		06/19/20 14:00	06/23/20 01:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68		10	2.8	mg/L			07/03/20 20:17	10
Sulfate	870		10	3.5	mg/L			07/03/20 20:17	10

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P16-061520-1200

Lab Sample ID: 240-132007-12

Date Collected: 06/15/20 12:00

Matrix: Water

Date Received: 06/17/20 10:00

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	33	J	200	1.3	ug/L		06/19/20 14:00	06/22/20 23:55	1
Calcium	230000		5000	310	ug/L		06/19/20 14:00	06/22/20 23:55	1
Iron	3500		100	26	ug/L		06/19/20 14:00	06/22/20 23:55	1
Magnesium	67000		5000	260	ug/L		06/19/20 14:00	06/22/20 23:55	1
Manganese	190		15	2.1	ug/L		06/19/20 14:00	06/22/20 23:55	1
Sodium	76000	B	5000	560	ug/L		06/19/20 14:00	06/22/20 23:55	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	31	J	200	1.3	ug/L		06/19/20 14:00	06/23/20 01:44	1
Calcium	230000		5000	310	ug/L		06/19/20 14:00	06/23/20 01:44	1
Iron	3300		100	26	ug/L		06/19/20 14:00	06/23/20 08:39	1
Magnesium	66000		5000	260	ug/L		06/19/20 14:00	06/23/20 01:44	1
Manganese	180		15	2.1	ug/L		06/19/20 14:00	06/23/20 01:44	1
Sodium	78000		5000	560	ug/L		06/19/20 14:00	06/23/20 01:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37		5.0	1.4	mg/L			07/03/20 20:38	5
Sulfate	490		5.0	1.7	mg/L			07/03/20 20:38	5

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P16T-061520-1300

Lab Sample ID: 240-132007-13

Date Collected: 06/15/20 13:00

Matrix: Water

Date Received: 06/17/20 10:00

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	17	J	200	1.3	ug/L		06/19/20 14:00	06/22/20 23:59	1
Calcium	150000		5000	310	ug/L		06/19/20 14:00	06/22/20 23:59	1
Iron	140		100	26	ug/L		06/19/20 14:00	06/22/20 23:59	1
Magnesium	41000		5000	260	ug/L		06/19/20 14:00	06/22/20 23:59	1
Manganese	2.5	J	15	2.1	ug/L		06/19/20 14:00	06/22/20 23:59	1
Sodium	57000	B	5000	560	ug/L		06/19/20 14:00	06/22/20 23:59	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	18	J	200	1.3	ug/L		06/19/20 14:00	06/23/20 01:48	1
Calcium	160000		5000	310	ug/L		06/19/20 14:00	06/23/20 01:48	1
Iron	100	U	100	26	ug/L		06/19/20 14:00	06/23/20 08:44	1
Magnesium	41000		5000	260	ug/L		06/19/20 14:00	06/23/20 01:48	1
Manganese	7.3	J	15	2.1	ug/L		06/19/20 14:00	06/23/20 01:48	1
Sodium	60000		5000	560	ug/L		06/19/20 14:00	06/23/20 01:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.6		1.0	0.28	mg/L			07/06/20 15:16	1
Sulfate	340		5.0	1.7	mg/L			07/03/20 20:59	5

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P2IT-061520-1415

Lab Sample ID: 240-132007-14

Date Collected: 06/15/20 14:15

Matrix: Water

Date Received: 06/17/20 10:00

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	34	J	200	1.3	ug/L		06/19/20 14:00	06/23/20 00:04	1
Calcium	220000		5000	310	ug/L		06/19/20 14:00	06/23/20 00:04	1
Iron	330		100	26	ug/L		06/19/20 14:00	06/23/20 00:04	1
Magnesium	54000		5000	260	ug/L		06/19/20 14:00	06/23/20 00:04	1
Manganese	520		15	2.1	ug/L		06/19/20 14:00	06/23/20 00:04	1
Sodium	120000	B	5000	560	ug/L		06/19/20 14:00	06/23/20 00:04	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	35	J	200	1.3	ug/L		06/19/20 14:00	06/23/20 01:53	1
Calcium	210000		5000	310	ug/L		06/19/20 14:00	06/23/20 01:53	1
Iron	310		100	26	ug/L		06/19/20 14:00	06/23/20 08:48	1
Magnesium	53000		5000	260	ug/L		06/19/20 14:00	06/23/20 01:53	1
Manganese	530		15	2.1	ug/L		06/19/20 14:00	06/23/20 01:53	1
Sodium	130000		5000	560	ug/L		06/19/20 14:00	06/23/20 01:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	64		5.0	1.4	mg/L			07/03/20 21:19	5
Sulfate	490		5.0	1.7	mg/L			07/03/20 21:19	5

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: 7082-061520-0002

Lab Sample ID: 240-132007-15

Date Collected: 06/15/20 14:30

Matrix: Water

Date Received: 06/17/20 10:00

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	200	U	200	1.3	ug/L		06/19/20 14:00	06/23/20 00:08	1
Calcium	5000	U	5000	310	ug/L		06/19/20 14:00	06/23/20 00:08	1
Iron	100	U	100	26	ug/L		06/19/20 14:00	06/23/20 00:08	1
Magnesium	5000	U	5000	260	ug/L		06/19/20 14:00	06/23/20 00:08	1
Manganese	15	U	15	2.1	ug/L		06/19/20 14:00	06/23/20 00:08	1
Sodium	5000	U	5000	560	ug/L		06/19/20 14:00	06/23/20 00:08	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	200	U	200	1.3	ug/L		06/19/20 14:00	06/23/20 01:57	1
Calcium	5000	U	5000	310	ug/L		06/19/20 14:00	06/23/20 01:57	1
Iron	100	U	100	26	ug/L		06/19/20 14:00	06/23/20 08:53	1
Magnesium	5000	U	5000	260	ug/L		06/19/20 14:00	06/23/20 01:57	1
Manganese	15	U	15	2.1	ug/L		06/19/20 14:00	06/23/20 01:57	1
Sodium	5000	U	5000	560	ug/L		06/19/20 14:00	06/23/20 01:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	0.28	mg/L			07/03/20 21:40	1
Sulfate	1.0	U	1.0	0.35	mg/L			07/03/20 21:40	1

QC Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-439165/1-A
Matrix: Water
Analysis Batch: 439547

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 439165

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	200	U	200	1.3	ug/L	-	06/19/20 14:00	06/22/20 21:53	1
Calcium	5000	U	5000	310	ug/L	-	06/19/20 14:00	06/22/20 21:53	1
Iron	100	U	100	26	ug/L	-	06/19/20 14:00	06/22/20 21:53	1
Magnesium	5000	U	5000	260	ug/L	-	06/19/20 14:00	06/22/20 21:53	1
Manganese	15	U	15	2.1	ug/L	-	06/19/20 14:00	06/22/20 21:53	1
Sodium	1430	J	5000	560	ug/L	-	06/19/20 14:00	06/22/20 21:53	1

Lab Sample ID: LCS 240-439165/2-A
Matrix: Water
Analysis Batch: 439547

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 439165

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	2000	1980		ug/L	-	99	80 - 120
Calcium	50000	47300		ug/L	-	95	80 - 120
Iron	10000	9290		ug/L	-	93	80 - 120
Magnesium	50000	46800		ug/L	-	94	80 - 120
Manganese	1000	999		ug/L	-	100	80 - 120
Sodium	50000	46200		ug/L	-	92	80 - 120

Lab Sample ID: 240-132007-4 MS
Matrix: Water
Analysis Batch: 439547

Client Sample ID: P15-061220-1000
Prep Type: Total Recoverable
Prep Batch: 439165

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Barium	86	J	2000	2160		ug/L	-	104	75 - 125
Calcium	160000		50000	206000		ug/L	-	97	75 - 125
Iron	2000		10000	11500		ug/L	-	94	75 - 125
Magnesium	30000		50000	77300		ug/L	-	95	75 - 125
Manganese	1600		1000	2610		ug/L	-	101	75 - 125
Sodium	17000	B	50000	65400		ug/L	-	97	75 - 125

Lab Sample ID: 240-132007-4 MSD
Matrix: Water
Analysis Batch: 439547

Client Sample ID: P15-061220-1000
Prep Type: Total Recoverable
Prep Batch: 439165

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Barium	86	J	2000	2160		ug/L	-	104	75 - 125	0	20
Calcium	160000		50000	203000		ug/L	-	89	75 - 125	2	20
Iron	2000		10000	11500		ug/L	-	95	75 - 125	0	20
Magnesium	30000		50000	77900		ug/L	-	96	75 - 125	1	20
Manganese	1600		1000	2630		ug/L	-	102	75 - 125	1	20
Sodium	17000	B	50000	65200		ug/L	-	97	75 - 125	0	20

Lab Sample ID: MB 240-439172/1-A
Matrix: Water
Analysis Batch: 439547

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 439172

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	200	U	200	1.3	ug/L	-	06/19/20 14:00	06/23/20 00:13	1

Eurofins TestAmerica, Canton

QC Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 240-439172/1-A
Matrix: Water
Analysis Batch: 439547

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 439172

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Calcium	5000	U	5000	310	ug/L		06/19/20 14:00	06/23/20 00:13	1
Iron	100	U	100	26	ug/L		06/19/20 14:00	06/23/20 00:13	1
Magnesium	5000	U	5000	260	ug/L		06/19/20 14:00	06/23/20 00:13	1
Manganese	15	U	15	2.1	ug/L		06/19/20 14:00	06/23/20 00:13	1
Sodium	5000	U	5000	560	ug/L		06/19/20 14:00	06/23/20 00:13	1

Lab Sample ID: LCS 240-439172/2-A
Matrix: Water
Analysis Batch: 439547

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 439172

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	50000	46800		ug/L		94	80 - 120
Iron	10000	8980		ug/L		90	80 - 120
Magnesium	50000	46100		ug/L		92	80 - 120
Manganese	1000	1000		ug/L		100	80 - 120
Sodium	50000	47200		ug/L		94	80 - 120

Lab Sample ID: 240-132007-4 MS
Matrix: Water
Analysis Batch: 439547

Client Sample ID: P15-061220-1000
Prep Type: Dissolved
Prep Batch: 439172

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	160000		50000	205000		ug/L		87	75 - 125
Iron	2000		10000	11100		ug/L		91	75 - 125
Magnesium	30000		50000	76000		ug/L		92	75 - 125
Manganese	1600		1000	2560		ug/L		96	75 - 125
Sodium	18000		50000	66100		ug/L		97	75 - 125

Lab Sample ID: 240-132007-4 MSD
Matrix: Water
Analysis Batch: 439547

Client Sample ID: P15-061220-1000
Prep Type: Dissolved
Prep Batch: 439172

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
										RPD	Limit
Barium	89	J	2000	2180		ug/L		105	75 - 125	2	20
Calcium	160000		50000	201000		ug/L		80	75 - 125	2	20
Iron	2000		10000	11200		ug/L		92	75 - 125	1	20
Magnesium	30000		50000	76000		ug/L		92	75 - 125	0	20
Manganese	1600		1000	2560		ug/L		96	75 - 125	0	20
Sodium	18000		50000	66500		ug/L		98	75 - 125	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-440765/3
Matrix: Water
Analysis Batch: 440765

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	1.0	U	1.0	0.28	mg/L			07/01/20 11:44	1

Eurofins TestAmerica, Canton

QC Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 240-440765/3
Matrix: Water
Analysis Batch: 440765

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	0.35	mg/L			07/01/20 11:44	1

Lab Sample ID: LCS 240-440765/4
Matrix: Water
Analysis Batch: 440765

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.1		mg/L		100	90 - 110
Sulfate	50.0	51.3		mg/L		103	90 - 110

Lab Sample ID: 240-132007-4 MS
Matrix: Water
Analysis Batch: 440765

Client Sample ID: P15-061220-1000
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	7.1		50.0	60.4		mg/L		106	80 - 120

Lab Sample ID: 240-132007-4 MS
Matrix: Water
Analysis Batch: 440765

Client Sample ID: P15-061220-1000
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	150		250	400		mg/L		100	80 - 120

Lab Sample ID: 240-132007-4 MSD
Matrix: Water
Analysis Batch: 440765

Client Sample ID: P15-061220-1000
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	7.1		50.0	62.0		mg/L		110	80 - 120	3	15

Lab Sample ID: 240-132007-4 MSD
Matrix: Water
Analysis Batch: 440765

Client Sample ID: P15-061220-1000
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	150		250	406		mg/L		103	80 - 120	2	15

Lab Sample ID: MB 240-440767/3
Matrix: Water
Analysis Batch: 440767

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	0.28	mg/L			07/03/20 16:09	1
Sulfate	1.0	U	1.0	0.35	mg/L			07/03/20 16:09	1

QC Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-440767/4
Matrix: Water
Analysis Batch: 440767

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.4		mg/L		99	90 - 110
Sulfate	50.0	50.7		mg/L		101	90 - 110

Lab Sample ID: 240-132007-5 MS
Matrix: Water
Analysis Batch: 440767

Client Sample ID: P15T-061220-1055
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	6.5		250	262		mg/L		102	80 - 120
Sulfate	240		250	486		mg/L		99	80 - 120

Lab Sample ID: 240-132007-5 MSD
Matrix: Water
Analysis Batch: 440767

Client Sample ID: P15T-061220-1055
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	6.5		250	266		mg/L		104	80 - 120	1	15
Sulfate	240		250	487		mg/L		99	80 - 120	0	15

Lab Sample ID: 240-132007-15 MS
Matrix: Water
Analysis Batch: 440767

Client Sample ID: 7082-061520-0002
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.0	U	50.0	53.2		mg/L		106	80 - 120
Sulfate	1.0	U	50.0	53.5		mg/L		107	80 - 120

Lab Sample ID: 240-132007-15 MSD
Matrix: Water
Analysis Batch: 440767

Client Sample ID: 7082-061520-0002
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	1.0	U	50.0	53.4		mg/L		107	80 - 120	0	15
Sulfate	1.0	U	50.0	53.9		mg/L		108	80 - 120	1	15

Lab Sample ID: MB 240-441180/3
Matrix: Water
Analysis Batch: 441180

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	0.28	mg/L			07/02/20 23:10	1
Sulfate	1.0	U	1.0	0.35	mg/L			07/02/20 23:10	1

Lab Sample ID: LCS 240-441180/4
Matrix: Water
Analysis Batch: 441180

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.4		mg/L		99	90 - 110
Sulfate	50.0	50.7		mg/L		101	90 - 110

Eurofins TestAmerica, Canton

QC Sample Results

Client: Haley & Aldrich, Inc.
 Project/Site: Racer Elyria

Job ID: 240-132007-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-441354/3
Matrix: Water
Analysis Batch: 441354

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0	0.28	mg/L			07/06/20 14:36	1

Lab Sample ID: LCS 240-441354/4
Matrix: Water
Analysis Batch: 441354

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.5		mg/L		99	90 - 110

Lab Sample ID: 240-132007-13 MS
Matrix: Water
Analysis Batch: 441354

Client Sample ID: P16T-061520-1300
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.6		50.0	56.6		mg/L		108	80 - 120

Lab Sample ID: 240-132007-13 MSD
Matrix: Water
Analysis Batch: 441354

Client Sample ID: P16T-061520-1300
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2.6		50.0	55.6		mg/L		106	80 - 120	2	15

QC Association Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Metals

Prep Batch: 439165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132007-1	P08R-061120-1240	Total Recoverable	Water	3005A	
240-132007-2	P14-061120-1040	Total Recoverable	Water	3005A	
240-132007-3	P14T-061120-1430	Total Recoverable	Water	3005A	
240-132007-4	P15-061220-1000	Total Recoverable	Water	3005A	
240-132007-5	P15T-061220-1055	Total Recoverable	Water	3005A	
240-132007-6	7082-061220-0001	Total Recoverable	Water	3005A	
240-132007-7	P3T-061220-1325	Total Recoverable	Water	3005A	
240-132007-8	P18-061520-0745	Total Recoverable	Water	3005A	
240-132007-9	7082-061520-0001	Total Recoverable	Water	3005A	
240-132007-10	P2-061520-0925	Total Recoverable	Water	3005A	
240-132007-11	P2T-061520-1030	Total Recoverable	Water	3005A	
240-132007-12	P16-061520-1200	Total Recoverable	Water	3005A	
240-132007-13	P16T-061520-1300	Total Recoverable	Water	3005A	
240-132007-14	P2IT-061520-1415	Total Recoverable	Water	3005A	
240-132007-15	7082-061520-0002	Total Recoverable	Water	3005A	
MB 240-439165/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-439165/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-132007-4 MS	P15-061220-1000	Total Recoverable	Water	3005A	
240-132007-4 MSD	P15-061220-1000	Total Recoverable	Water	3005A	

Prep Batch: 439172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132007-1	P08R-061120-1240	Dissolved	Water	3005A	
240-132007-2	P14-061120-1040	Dissolved	Water	3005A	
240-132007-3	P14T-061120-1430	Dissolved	Water	3005A	
240-132007-4	P15-061220-1000	Dissolved	Water	3005A	
240-132007-5	P15T-061220-1055	Dissolved	Water	3005A	
240-132007-6	7082-061220-0001	Dissolved	Water	3005A	
240-132007-7	P3T-061220-1325	Dissolved	Water	3005A	
240-132007-8	P18-061520-0745	Dissolved	Water	3005A	
240-132007-9	7082-061520-0001	Dissolved	Water	3005A	
240-132007-10	P2-061520-0925	Dissolved	Water	3005A	
240-132007-11	P2T-061520-1030	Dissolved	Water	3005A	
240-132007-12	P16-061520-1200	Dissolved	Water	3005A	
240-132007-13	P16T-061520-1300	Dissolved	Water	3005A	
240-132007-14	P2IT-061520-1415	Dissolved	Water	3005A	
240-132007-15	7082-061520-0002	Dissolved	Water	3005A	
MB 240-439172/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-439172/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-132007-4 MS	P15-061220-1000	Dissolved	Water	3005A	
240-132007-4 MSD	P15-061220-1000	Dissolved	Water	3005A	

Analysis Batch: 439547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132007-1	P08R-061120-1240	Dissolved	Water	6010B	439172
240-132007-1	P08R-061120-1240	Total Recoverable	Water	6010B	439165
240-132007-2	P14-061120-1040	Dissolved	Water	6010B	439172
240-132007-2	P14-061120-1040	Total Recoverable	Water	6010B	439165
240-132007-3	P14T-061120-1430	Dissolved	Water	6010B	439172
240-132007-3	P14T-061120-1430	Total Recoverable	Water	6010B	439165
240-132007-4	P15-061220-1000	Dissolved	Water	6010B	439172

Eurofins TestAmerica, Canton

QC Association Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Metals (Continued)

Analysis Batch: 439547 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132007-4	P15-061220-1000	Total Recoverable	Water	6010B	439165
240-132007-5	P15T-061220-1055	Dissolved	Water	6010B	439172
240-132007-5	P15T-061220-1055	Total Recoverable	Water	6010B	439165
240-132007-6	7082-061220-0001	Dissolved	Water	6010B	439172
240-132007-6	7082-061220-0001	Total Recoverable	Water	6010B	439165
240-132007-7	P3T-061220-1325	Dissolved	Water	6010B	439172
240-132007-7	P3T-061220-1325	Total Recoverable	Water	6010B	439165
240-132007-8	P18-061520-0745	Dissolved	Water	6010B	439172
240-132007-8	P18-061520-0745	Total Recoverable	Water	6010B	439165
240-132007-9	7082-061520-0001	Dissolved	Water	6010B	439172
240-132007-9	7082-061520-0001	Total Recoverable	Water	6010B	439165
240-132007-10	P2-061520-0925	Dissolved	Water	6010B	439172
240-132007-10	P2-061520-0925	Total Recoverable	Water	6010B	439165
240-132007-11	P2T-061520-1030	Dissolved	Water	6010B	439172
240-132007-11	P2T-061520-1030	Total Recoverable	Water	6010B	439165
240-132007-12	P16-061520-1200	Dissolved	Water	6010B	439172
240-132007-12	P16-061520-1200	Total Recoverable	Water	6010B	439165
240-132007-13	P16T-061520-1300	Dissolved	Water	6010B	439172
240-132007-13	P16T-061520-1300	Total Recoverable	Water	6010B	439165
240-132007-14	P2IT-061520-1415	Dissolved	Water	6010B	439172
240-132007-14	P2IT-061520-1415	Total Recoverable	Water	6010B	439165
240-132007-15	7082-061520-0002	Dissolved	Water	6010B	439172
240-132007-15	7082-061520-0002	Total Recoverable	Water	6010B	439165
MB 240-439165/1-A	Method Blank	Total Recoverable	Water	6010B	439165
MB 240-439172/1-A	Method Blank	Total Recoverable	Water	6010B	439172
LCS 240-439165/2-A	Lab Control Sample	Total Recoverable	Water	6010B	439165
LCS 240-439172/2-A	Lab Control Sample	Total Recoverable	Water	6010B	439172
240-132007-4 MS	P15-061220-1000	Dissolved	Water	6010B	439172
240-132007-4 MS	P15-061220-1000	Total Recoverable	Water	6010B	439165
240-132007-4 MSD	P15-061220-1000	Dissolved	Water	6010B	439172
240-132007-4 MSD	P15-061220-1000	Total Recoverable	Water	6010B	439165

Analysis Batch: 439691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132007-11	P2T-061520-1030	Dissolved	Water	6010B	439172
240-132007-12	P16-061520-1200	Dissolved	Water	6010B	439172
240-132007-13	P16T-061520-1300	Dissolved	Water	6010B	439172
240-132007-14	P2IT-061520-1415	Dissolved	Water	6010B	439172
240-132007-15	7082-061520-0002	Dissolved	Water	6010B	439172

General Chemistry

Analysis Batch: 440765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132007-1	P08R-061120-1240	Total/NA	Water	300.0	
240-132007-3	P14T-061120-1430	Total/NA	Water	300.0	
240-132007-4	P15-061220-1000	Total/NA	Water	300.0	
240-132007-4	P15-061220-1000	Total/NA	Water	300.0	
MB 240-440765/3	Method Blank	Total/NA	Water	300.0	
LCS 240-440765/4	Lab Control Sample	Total/NA	Water	300.0	
240-132007-4 MS	P15-061220-1000	Total/NA	Water	300.0	

Eurofins TestAmerica, Canton

QC Association Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

General Chemistry (Continued)

Analysis Batch: 440765 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132007-4 MS	P15-061220-1000	Total/NA	Water	300.0	
240-132007-4 MSD	P15-061220-1000	Total/NA	Water	300.0	
240-132007-4 MSD	P15-061220-1000	Total/NA	Water	300.0	

Analysis Batch: 440767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132007-5	P15T-061220-1055	Total/NA	Water	300.0	
240-132007-6	7082-061220-0001	Total/NA	Water	300.0	
240-132007-7	P3T-061220-1325	Total/NA	Water	300.0	
240-132007-8	P18-061520-0745	Total/NA	Water	300.0	
240-132007-9	7082-061520-0001	Total/NA	Water	300.0	
240-132007-10	P2-061520-0925	Total/NA	Water	300.0	
240-132007-11	P2T-061520-1030	Total/NA	Water	300.0	
240-132007-12	P16-061520-1200	Total/NA	Water	300.0	
240-132007-13	P16T-061520-1300	Total/NA	Water	300.0	
240-132007-14	P2IT-061520-1415	Total/NA	Water	300.0	
240-132007-15	7082-061520-0002	Total/NA	Water	300.0	
MB 240-440767/3	Method Blank	Total/NA	Water	300.0	
LCS 240-440767/4	Lab Control Sample	Total/NA	Water	300.0	
240-132007-5 MS	P15T-061220-1055	Total/NA	Water	300.0	
240-132007-5 MSD	P15T-061220-1055	Total/NA	Water	300.0	
240-132007-15 MS	7082-061520-0002	Total/NA	Water	300.0	
240-132007-15 MSD	7082-061520-0002	Total/NA	Water	300.0	

Analysis Batch: 441180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132007-2	P14-061120-1040	Total/NA	Water	300.0	
MB 240-441180/3	Method Blank	Total/NA	Water	300.0	
LCS 240-441180/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 441354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-132007-13	P16T-061520-1300	Total/NA	Water	300.0	
MB 240-441354/3	Method Blank	Total/NA	Water	300.0	
LCS 240-441354/4	Lab Control Sample	Total/NA	Water	300.0	
240-132007-13 MS	P16T-061520-1300	Total/NA	Water	300.0	
240-132007-13 MSD	P16T-061520-1300	Total/NA	Water	300.0	

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P08R-061120-1240

Lab Sample ID: 240-132007-1

Date Collected: 06/11/20 12:40

Matrix: Water

Date Received: 06/17/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439547	06/23/20 00:51	KLC	TAL CAN
Total Recoverable	Prep	3005A			439165	06/19/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	439547	06/22/20 23:02	KLC	TAL CAN
Total/NA	Analysis	300.0		5	440765	07/02/20 01:49	JWW	TAL CAN

Client Sample ID: P14-061120-1040

Lab Sample ID: 240-132007-2

Date Collected: 06/11/20 10:40

Matrix: Water

Date Received: 06/17/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439547	06/23/20 00:56	KLC	TAL CAN
Total Recoverable	Prep	3005A			439165	06/19/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	439547	06/22/20 23:06	KLC	TAL CAN
Total/NA	Analysis	300.0		1	441180	07/03/20 08:14	JWW	TAL CAN

Client Sample ID: P14T-061120-1430

Lab Sample ID: 240-132007-3

Date Collected: 06/11/20 14:30

Matrix: Water

Date Received: 06/17/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439547	06/23/20 01:00	KLC	TAL CAN
Total Recoverable	Prep	3005A			439165	06/19/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	439547	06/22/20 23:11	KLC	TAL CAN
Total/NA	Analysis	300.0		1	440765	07/02/20 02:52	JWW	TAL CAN

Client Sample ID: P15-061220-1000

Lab Sample ID: 240-132007-4

Date Collected: 06/12/20 10:00

Matrix: Water

Date Received: 06/17/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439547	06/23/20 00:21	KLC	TAL CAN
Total Recoverable	Prep	3005A			439165	06/19/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	439547	06/22/20 22:14	KLC	TAL CAN
Total/NA	Analysis	300.0		1	440765	07/01/20 19:47	JWW	TAL CAN
Total/NA	Analysis	300.0		5	440765	07/01/20 20:48	JWW	TAL CAN

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P15T-061220-1055

Lab Sample ID: 240-132007-5

Date Collected: 06/12/20 10:55

Matrix: Water

Date Received: 06/17/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439547	06/23/20 01:04	KLC	TAL CAN
Total Recoverable	Prep	3005A			439165	06/19/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	439547	06/22/20 23:15	KLC	TAL CAN
Total/NA	Analysis	300.0		5	440767	07/03/20 16:50	LKG	TAL CAN

Client Sample ID: 7082-061220-0001

Lab Sample ID: 240-132007-6

Date Collected: 06/12/20 00:00

Matrix: Water

Date Received: 06/17/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439547	06/23/20 01:09	KLC	TAL CAN
Total Recoverable	Prep	3005A			439165	06/19/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	439547	06/22/20 23:20	KLC	TAL CAN
Total/NA	Analysis	300.0		5	440767	07/03/20 17:52	LKG	TAL CAN

Client Sample ID: P3T-061220-1325

Lab Sample ID: 240-132007-7

Date Collected: 06/12/20 13:25

Matrix: Water

Date Received: 06/17/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439547	06/23/20 01:13	KLC	TAL CAN
Total Recoverable	Prep	3005A			439165	06/19/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	439547	06/22/20 23:24	KLC	TAL CAN
Total/NA	Analysis	300.0		5	440767	07/03/20 18:13	LKG	TAL CAN

Client Sample ID: P18-061520-0745

Lab Sample ID: 240-132007-8

Date Collected: 06/15/20 07:45

Matrix: Water

Date Received: 06/17/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439547	06/23/20 01:18	KLC	TAL CAN
Total Recoverable	Prep	3005A			439165	06/19/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	439547	06/22/20 23:29	KLC	TAL CAN
Total/NA	Analysis	300.0		5	440767	07/03/20 18:34	LKG	TAL CAN

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: 7082-061520-0001

Lab Sample ID: 240-132007-9

Date Collected: 06/15/20 00:00

Matrix: Water

Date Received: 06/17/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439547	06/23/20 01:22	KLC	TAL CAN
Total Recoverable	Prep	3005A			439165	06/19/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	439547	06/22/20 23:33	KLC	TAL CAN
Total/NA	Analysis	300.0		5	440767	07/03/20 18:54	LKG	TAL CAN

Client Sample ID: P2-061520-0925

Lab Sample ID: 240-132007-10

Date Collected: 06/15/20 09:25

Matrix: Water

Date Received: 06/17/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439547	06/23/20 01:27	KLC	TAL CAN
Total Recoverable	Prep	3005A			439165	06/19/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	439547	06/22/20 23:37	KLC	TAL CAN
Total/NA	Analysis	300.0		5	440767	07/03/20 19:15	LKG	TAL CAN

Client Sample ID: P2T-061520-1030

Lab Sample ID: 240-132007-11

Date Collected: 06/15/20 10:30

Matrix: Water

Date Received: 06/17/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439547	06/23/20 01:39	KLC	TAL CAN
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439691	06/23/20 08:35	WKD	TAL CAN
Total Recoverable	Prep	3005A			439165	06/19/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	439547	06/22/20 23:42	KLC	TAL CAN
Total/NA	Analysis	300.0		10	440767	07/03/20 20:17	LKG	TAL CAN

Client Sample ID: P16-061520-1200

Lab Sample ID: 240-132007-12

Date Collected: 06/15/20 12:00

Matrix: Water

Date Received: 06/17/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439547	06/23/20 01:44	KLC	TAL CAN
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439691	06/23/20 08:39	WKD	TAL CAN
Total Recoverable	Prep	3005A			439165	06/19/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	439547	06/22/20 23:55	KLC	TAL CAN
Total/NA	Analysis	300.0		5	440767	07/03/20 20:38	LKG	TAL CAN

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Client Sample ID: P16T-061520-1300

Lab Sample ID: 240-132007-13

Date Collected: 06/15/20 13:00

Matrix: Water

Date Received: 06/17/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439547	06/23/20 01:48	KLC	TAL CAN
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439691	06/23/20 08:44	WKD	TAL CAN
Total Recoverable	Prep	3005A			439165	06/19/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	439547	06/22/20 23:59	KLC	TAL CAN
Total/NA	Analysis	300.0		5	440767	07/03/20 20:59	LKG	TAL CAN
Total/NA	Analysis	300.0		1	441354	07/06/20 15:16	LKG	TAL CAN

Client Sample ID: P2IT-061520-1415

Lab Sample ID: 240-132007-14

Date Collected: 06/15/20 14:15

Matrix: Water

Date Received: 06/17/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439547	06/23/20 01:53	KLC	TAL CAN
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439691	06/23/20 08:48	WKD	TAL CAN
Total Recoverable	Prep	3005A			439165	06/19/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	439547	06/23/20 00:04	KLC	TAL CAN
Total/NA	Analysis	300.0		5	440767	07/03/20 21:19	LKG	TAL CAN

Client Sample ID: 7082-061520-0002

Lab Sample ID: 240-132007-15

Date Collected: 06/15/20 14:30

Matrix: Water

Date Received: 06/17/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439547	06/23/20 01:57	KLC	TAL CAN
Dissolved	Prep	3005A			439172	06/19/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	439691	06/23/20 08:53	WKD	TAL CAN
Total Recoverable	Prep	3005A			439165	06/19/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	439547	06/23/20 00:08	KLC	TAL CAN
Total/NA	Analysis	300.0		1	440767	07/03/20 21:40	LKG	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-132007-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-20 *
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20


* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Chain of Custody Record



2.4/3-3 4554

Client Information		Lab PM: Howell, Leslie		Carrier Tracking No(s):		COC No: 240-72568-29403.1					
Company: Sam Partyka		E-Mail: leslie.howell@testamerica.com		Page: 1 of 3		Job #:					
Address: 6500 Rockside Road Suite 200		City: Cleveland		State, Zip: OH, 44131		Preservation Codes: A - HCL B - NiOH M - Hexane N - None					
Phone: 216-886-7400 (Tel) 216-739-0560 (Fax)		Email: acorrell@haleyaldrich.com		Project #: 24014712		Barcode: 					
Site: Racer Elyria		Due Date Requested: 5/10		TAT Requested (days): 5/10		240-132007 Chain of Custody					
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Organic, Other)	Analysis Requested				Total Number of cont	Other: Dissolved Metals 0.45 Filter * = Total Metals 5 Filter Special Instructions/Note:	
					Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - Select Metals	300.0 2BD - Chloride & Sulfate			4500 - ON - C - Cyanide Total
P08R - 061120 - 1240	6-11-20	1240	G	Water	X	X	X	X	X	3	
P14 - 061120 - 1040	6-11-20	1040	G	Water	X	X	X	X	X	3	
P14T - 061120 - 1930	6-11-20	1430	G	Water	X	X	X	X	X	3	
P15 - 061220 - 1000	6-12-20	1000	G	Water	X	X	X	X	X	4	ms/msd *
P15T - 061220 - 1055	6-12-20	1055	G	Water	X	X	X	X	X	3	
7082 - 061220 - 0001	6-12-20		G	Water	X	X	X	X	X	3	DUP
P3T - 061220 - 1325	6-12-20	1325	G	Water	X	X	X	X	X	3	
P18 - 061520 - 0745	6-15-20	0745	G	Water	X	X	X	X	X	3	
7082 - 061520 - 0001	6-15-20		G	Water	X	X	X	X	X	3	DUP
P2 - 061520 - 0925	6-15-20	0925	G	Water	X	X	X	X	X	3	
P2T - 061520 - 1030	6-15-20	1030	G	Water	X	X	X	X	X	3	

Special Instructions/Note: **Selec Metals = Barium, Calcium, Iron, Magnesium, Manganese, Sodium**

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements:

Relinquished by:	Date/Time:	Company:	Method of Shipment:
<i>[Signature]</i>	6/16/20 @ 1700	H+A	
<i>[Signature]</i>	6-17-20 1000	Company	
<i>[Signature]</i>		Company	

Cooler Temperature(s) °C and Other Remarks:



Chain of Custody Record



2-4/33
 45/54

Client Information		Sampler: <u>S. PARTYKA</u>		Lab PM: <u>Howell, Leslie</u>		Carrier Tracking No(s):		COC No: <u>240-72558-29403.3</u>	
Client Contact: <u>Anthony Correll</u>		Phone: <u>440.610.4601</u>		E-Mail: <u>leslie.howell@testamericainc.com</u>		Page: <u>3 of 3</u>		Job #:	
Company: <u>Haley & Aldrich, Inc.</u>		Address: <u>6500 Rockside Road Suite 200</u>		City: <u>Cleveland</u>		State, Zip: <u>OH, 44131</u>		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA L - EDA Z - other (specify) Other:	
Due Date Requested:		TAT Requested (days): <u>STD</u>		PO #: <u>129862-01B</u>		WO #:		Total Number of containers: <u>3</u>	
Project #: <u>24014712</u>		SSOW#:		Sample Date		Sample Time		Sample Type (C=comp, G=grab)	
Matrix (W=water, S=solid, O=wastewater, IRT=Tissue, A=Air)		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Preservation Code	
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Preservation Code	
<u>P16-061520-1200</u>		<u>6-15-20</u>		<u>1200</u>		<u>G</u>		<u>Water</u>	
<u>P16T-061520-1300</u>		<u>6-15-20</u>		<u>1300</u>		<u>G</u>		<u>Water</u>	
<u>P21T-061520-1415</u>		<u>6-15-20</u>		<u>1415</u>		<u>G</u>		<u>Water</u>	
<u>7082-061520-0002</u>		<u>6-15-20</u>		<u>1430</u>		<u>G</u>		<u>Water</u>	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements:		Analysis Requested		Special Instructions/Note: <u>Select Metals = Barium, Calcium, Iron, Magnesium, Manganese, Sodium</u> <u>3 A</u> <u>3 A</u> <u>3 EB</u> <u>3 A</u> <u>Filtered w/ 5 A</u> <u>Dissolved w/ 0.45 A</u> <u>Special Instructions/Note:</u>	
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:		Company:	
Relinquished by:		Date:		Time:		Received by:		Date/Time:	
Relinquished by:		Date:		Time:		Received by:		Date/Time:	
Relinquished by:		Date:		Time:		Received by:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Company:		Date/Time:	



Eurofins TestAmerica Canton Sample Receipt Form/Narrative

Login #: 132007

Canton Facility

Client: Haley & Aldrich Site Name:

Cooler unpacked by:

Cooler Received on: 6-17-20 Opened on: 6-17-20

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # Foam Box Client Cooler Box Other
Packing material used: Bubble Wrap Foam Plastic Bag None Other
COOLANT: Wet Ice Blue Ice Dry Ice Water None

- 1. Cooler temperature upon receipt
IR GUN# IR-10 (CF +0.7°C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
IR GUN #IR-11 (CF +0.9°C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2 Yes No
- Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
- Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
- Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC902937
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? Yes No NA Larger than this.
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Yes No
16. Was a LL Hg or Me Hg trip blank present? Yes No

Tests that are not checked for pH by Receiving: VOAs Oil and Grease TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

AMM

18. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

VOA Sample Preservation - Date/Time VOAs Frozen:

Temperature readings:

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
P08R-061120-1240	240-132007-B-1	Plastic 500ml - with Nitric Acid	<2			
P08R-061120-1240	240-132007-C-1	Plastic 1 liter - Nitric Acid	<2			
P14-061120-1040	240-132007-B-2	Plastic 500ml - with Nitric Acid	<2			
P14-061120-1040	240-132007-C-2	Plastic 1 liter - Nitric Acid	<2			
P14T-061120-1430	240-132007-B-3	Plastic 500ml - with Nitric Acid	<2			
P14T-061120-1430	240-132007-C-3	Plastic 1 liter - Nitric Acid	<2			
P15T-061220-1055	240-132007-B-5	Plastic 500ml - with Nitric Acid	<2			
P15T-061220-1055	240-132007-C-5	Plastic 1 liter - Nitric Acid	<2			
7082-061220-0001	240-132007-B-6	Plastic 500ml - with Nitric Acid	<2			
7082-061220-0001	240-132007-C-6	Plastic 1 liter - Nitric Acid	<2			
P3T-061220-1325	240-132007-B-7	Plastic 500ml - with Nitric Acid	<2			
P3T-061220-1325	240-132007-C-7	Plastic 1 liter - Nitric Acid	<2			
P18-061520-0745	240-132007-B-8	Plastic 500ml - with Nitric Acid	<2			
P18-061520-0745	240-132007-C-8	Plastic 1 liter - Nitric Acid	<2			
7082-061520-0001	240-132007-B-9	Plastic 500ml - with Nitric Acid	<2			
7082-061520-0001	240-132007-C-9	Plastic 1 liter - Nitric Acid	<2			
P2-061520-0925	240-132007-B-10	Plastic 500ml - with Nitric Acid	<2			
P2-061520-0925	240-132007-C-10	Plastic 1 liter - Nitric Acid	<2			
P2T-061520-1030	240-132007-B-11	Plastic 500ml - with Nitric Acid	<2			
P2T-061520-1030	240-132007-C-11	Plastic 1 liter - Nitric Acid	<2			
P16-061520-1200	240-132007-B-12	Plastic 500ml - with Nitric Acid	<2			
P16-061520-1200	240-132007-C-12	Plastic 1 liter - Nitric Acid	<2			
P16T-061520-1300	240-132007-B-13	Plastic 500ml - with Nitric Acid	<2			
P16T-061520-1300	240-132007-C-13	Plastic 1 liter - Nitric Acid	<2			
P2IT-061520-1415	240-132007-B-14	Plastic 500ml - with Nitric Acid	<2			
P2IT-061520-1415	240-132007-C-14	Plastic 1 liter - Nitric Acid	<2			
7082-061520-0002	240-132007-B-15	Plastic 500ml - with Nitric Acid	<2			
7082-061520-0002	240-132007-C-15	Plastic 1 liter - Nitric Acid	<2			

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-140822-1
Client Project/Site: Racer Elyria

For:

Haley & Aldrich, Inc.
6500 Rockside Road
Suite 200
Cleveland, Ohio 44131

Attn: Ms. Emily Guzik



*Authorized for release by:
11/30/2020 11:58:21 AM*

Leslie Howell, Project Manager I
(330)966-9266
Leslie.Howell@Eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Method Summary	6
Sample Summary	7
Detection Summary	8
Client Sample Results	11
QC Sample Results	24
QC Association Summary	27
Lab Chronicle	30
Certification Summary	33
Chain of Custody	34

Definitions/Glossary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Job ID: 240-140822-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: Haley & Aldrich, Inc.

Project: Racer Elyria

Report Number: 240-140822-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 11/23/2020 10:20 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the coolers at receipt were 1.7° C, 1.9° C and 2.2° C.

DISSOLVED METALS (ICP)

Samples P14T-111820-1200 (240-140822-1), P14-111820-1245 (240-140822-2), P15-111820-1445 (240-140822-3), P15T-111820-1545 (240-140822-4), P18-111920-0900 (240-140822-5), P3T-111920-0950 (240-140822-6), P2-112020-0800 (240-140822-7), 7082-112020-0001 (240-140822-8), P2T-112020-0850 (240-140822-9), P16T-112020-0930 (240-140822-10), P16-112020-1030 (240-140822-11), P21T-112020-1120 (240-140822-12) and P08R-112020-1330 (240-140822-13) were analyzed for dissolved metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 11/24/2020 and analyzed on 11/28/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL RECOVERABLE METALS (ICP)

Samples P14T-111820-1200 (240-140822-1), P14-111820-1245 (240-140822-2), P15-111820-1445 (240-140822-3), P15T-111820-1545 (240-140822-4), P18-111920-0900 (240-140822-5), P3T-111920-0950 (240-140822-6), P2T-112020-0850 (240-140822-9), P16T-112020-0930 (240-140822-10), P16-112020-1030 (240-140822-11), P21T-112020-1120 (240-140822-12) and P08R-112020-1330 (240-140822-13) were analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were

Case Narrative

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Job ID: 240-140822-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

prepared on 11/24/2020 and analyzed on 11/28/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL CYANIDE

Samples P14T-111820-1200 (240-140822-1), P14-111820-1245 (240-140822-2), P15-111820-1445 (240-140822-3), P15T-111820-1545 (240-140822-4), P18-111920-0900 (240-140822-5), P3T-111920-0950 (240-140822-6), P2T-112020-0850 (240-140822-9), P16T-112020-0930 (240-140822-10), P16-112020-1030 (240-140822-11), P21T-112020-1120 (240-140822-12) and P08R-112020-1330 (240-140822-13) were analyzed for total cyanide in accordance with SM 4500_CN-E. The samples were prepared and analyzed on 11/24/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



Method Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL CAN
4500 CN E-2011	Cyanide, Total: Colorimetric Method	SM	TAL CAN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CAN
Distill/CN	Distillation, Cyanide	None	TAL CAN

Protocol References:

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-140822-1	P14T-111820-1200	Water	11/18/20 12:00	11/23/20 10:20	
240-140822-2	P14-111820-1245	Water	11/18/20 12:45	11/23/20 10:20	
240-140822-3	P15-111820-1445	Water	11/18/20 14:45	11/23/20 10:20	
240-140822-4	P15T-111820-1545	Water	11/18/20 15:45	11/23/20 10:20	
240-140822-5	P18-111920-0900	Water	11/19/20 09:00	11/23/20 10:20	
240-140822-6	P3T-111920-0950	Water	11/19/20 09:50	11/23/20 10:20	
240-140822-7	P2-112020-0800	Water	11/20/20 08:00	11/23/20 10:20	
240-140822-8	7082-112020-0001	Water	11/20/20 00:00	11/23/20 10:20	
240-140822-9	P2T-112020-0850	Water	11/20/20 08:50	11/23/20 10:20	
240-140822-10	P16T-112020-0930	Water	11/20/20 09:30	11/23/20 10:20	
240-140822-11	P16-112020-1030	Water	11/20/20 10:30	11/23/20 10:20	
240-140822-12	P21T-112020-1120	Water	11/20/20 11:20	11/23/20 10:20	
240-140822-13	P08R-112020-1330	Water	11/20/20 13:30	11/23/20 10:20	

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P14T-111820-1200

Lab Sample ID: 240-140822-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1200	J	5000	560	ug/L	1		6010B	Total
									Recoverable
Nickel	3.7	J	40	2.2	ug/L	1		6010B	Total
									Recoverable
Potassium	1200	J	5000	560	ug/L	1		6010B	Dissolved
Nickel	2.8	J	40	2.2	ug/L	1		6010B	Dissolved

Client Sample ID: P14-111820-1245

Lab Sample ID: 240-140822-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1300	J	5000	560	ug/L	1		6010B	Total
									Recoverable
Potassium	1300	J	5000	560	ug/L	1		6010B	Dissolved

Client Sample ID: P15-111820-1445

Lab Sample ID: 240-140822-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	12000		5000	560	ug/L	1		6010B	Total
									Recoverable
Nickel	5.8	J	40	2.2	ug/L	1		6010B	Total
									Recoverable
Potassium	12000		5000	560	ug/L	1		6010B	Dissolved
Nickel	6.3	J	40	2.2	ug/L	1		6010B	Dissolved

Client Sample ID: P15T-111820-1545

Lab Sample ID: 240-140822-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	3200	J	5000	560	ug/L	1		6010B	Total
									Recoverable
Nickel	8.7	J	40	2.2	ug/L	1		6010B	Total
									Recoverable
Potassium	3000	J	5000	560	ug/L	1		6010B	Dissolved
Nickel	4.9	J	40	2.2	ug/L	1		6010B	Dissolved

Client Sample ID: P18-111920-0900

Lab Sample ID: 240-140822-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	3300	J	5000	560	ug/L	1		6010B	Total
									Recoverable
Nickel	230		40	2.2	ug/L	1		6010B	Total
									Recoverable
Potassium	3400	J	5000	560	ug/L	1		6010B	Dissolved
Nickel	240		40	2.2	ug/L	1		6010B	Dissolved

Client Sample ID: P3T-111920-0950

Lab Sample ID: 240-140822-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1600	J	5000	560	ug/L	1		6010B	Total
									Recoverable
Potassium	1800	J	5000	560	ug/L	1		6010B	Dissolved
Nickel	2.5	J	40	2.2	ug/L	1		6010B	Dissolved

Client Sample ID: P2-112020-0800

Lab Sample ID: 240-140822-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	3800	J	5000	560	ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P2-112020-0800 (Continued)

Lab Sample ID: 240-140822-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	6.2	J	40	2.2	ug/L	1		6010B	Dissolved

Client Sample ID: 7082-112020-0001

Lab Sample ID: 240-140822-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	3600	J	5000	560	ug/L	1		6010B	Dissolved
Nickel	6.2	J	40	2.2	ug/L	1		6010B	Dissolved

Client Sample ID: P2T-112020-0850

Lab Sample ID: 240-140822-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1500	J	5000	560	ug/L	1		6010B	Total Recoverable
Nickel	13	J	40	2.2	ug/L	1		6010B	Total Recoverable
Potassium	1300	J	5000	560	ug/L	1		6010B	Dissolved
Nickel	10	J	40	2.2	ug/L	1		6010B	Dissolved

Client Sample ID: P16T-112020-0930

Lab Sample ID: 240-140822-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1300	J	5000	560	ug/L	1		6010B	Total Recoverable
Nickel	3.7	J	40	2.2	ug/L	1		6010B	Total Recoverable
Potassium	1300	J	5000	560	ug/L	1		6010B	Dissolved
Nickel	2.9	J	40	2.2	ug/L	1		6010B	Dissolved

Client Sample ID: P16-112020-1030

Lab Sample ID: 240-140822-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	2100	J	5000	560	ug/L	1		6010B	Total Recoverable
Nickel	56		40	2.2	ug/L	1		6010B	Total Recoverable
Potassium	2100	J	5000	560	ug/L	1		6010B	Dissolved
Nickel	58		40	2.2	ug/L	1		6010B	Dissolved

Client Sample ID: P21T-112020-1120

Lab Sample ID: 240-140822-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	2500	J	5000	560	ug/L	1		6010B	Total Recoverable
Nickel	260		40	2.2	ug/L	1		6010B	Total Recoverable
Potassium	2400	J	5000	560	ug/L	1		6010B	Dissolved
Nickel	240		40	2.2	ug/L	1		6010B	Dissolved

Client Sample ID: P08R-112020-1330

Lab Sample ID: 240-140822-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	2900	J	5000	560	ug/L	1		6010B	Total Recoverable
Nickel	3.8	J	40	2.2	ug/L	1		6010B	Total Recoverable
Potassium	3100	J	5000	560	ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P08R-112020-1330 (Continued)

Lab Sample ID: 240-140822-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	3.8	J	40	2.2	ug/L	1		6010B	Dissolved

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Client Sample Results

Client: Haley & Aldrich, Inc.
 Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P14T-111820-1200

Lab Sample ID: 240-140822-1

Date Collected: 11/18/20 12:00

Matrix: Water

Date Received: 11/23/20 10:20

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 01:26	1
Potassium	1200	J	5000	560	ug/L		11/24/20 14:00	11/28/20 01:26	1
Nickel	3.7	J	40	2.2	ug/L		11/24/20 14:00	11/28/20 01:26	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 01:31	1
Potassium	1200	J	5000	560	ug/L		11/24/20 14:00	11/28/20 01:31	1
Nickel	2.8	J	40	2.2	ug/L		11/24/20 14:00	11/28/20 01:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0060	mg/L		11/24/20 16:21	11/24/20 18:04	1



Client Sample Results

Client: Haley & Aldrich, Inc.
 Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P14-111820-1245

Lab Sample ID: 240-140822-2

Date Collected: 11/18/20 12:45

Matrix: Water

Date Received: 11/23/20 10:20

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 01:35	1
Potassium	1300	J	5000	560	ug/L		11/24/20 14:00	11/28/20 01:35	1
Nickel	40	U	40	2.2	ug/L		11/24/20 14:00	11/28/20 01:35	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 01:39	1
Potassium	1300	J	5000	560	ug/L		11/24/20 14:00	11/28/20 01:39	1
Nickel	40	U	40	2.2	ug/L		11/24/20 14:00	11/28/20 01:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0060	mg/L		11/24/20 16:21	11/24/20 18:06	1



Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P15-111820-1445

Lab Sample ID: 240-140822-3

Date Collected: 11/18/20 14:45

Matrix: Water

Date Received: 11/23/20 10:20

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 00:48	1
Potassium	12000		5000	560	ug/L		11/24/20 14:00	11/28/20 00:48	1
Nickel	5.8	J	40	2.2	ug/L		11/24/20 14:00	11/28/20 00:48	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 01:14	1
Potassium	12000		5000	560	ug/L		11/24/20 14:00	11/28/20 01:14	1
Nickel	6.3	J	40	2.2	ug/L		11/24/20 14:00	11/28/20 01:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0060	mg/L		11/24/20 16:21	11/24/20 17:48	1



Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P15T-111820-1545

Lab Sample ID: 240-140822-4

Date Collected: 11/18/20 15:45

Matrix: Water

Date Received: 11/23/20 10:20

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 01:43	1
Potassium	3200	J	5000	560	ug/L		11/24/20 14:00	11/28/20 01:43	1
Nickel	8.7	J	40	2.2	ug/L		11/24/20 14:00	11/28/20 01:43	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 01:48	1
Potassium	3000	J	5000	560	ug/L		11/24/20 14:00	11/28/20 01:48	1
Nickel	4.9	J	40	2.2	ug/L		11/24/20 14:00	11/28/20 01:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0060	mg/L		11/24/20 16:21	11/24/20 18:09	1



Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P18-111920-0900

Lab Sample ID: 240-140822-5

Date Collected: 11/19/20 09:00

Matrix: Water

Date Received: 11/23/20 10:20

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 02:00	1
Potassium	3300	J	5000	560	ug/L		11/24/20 14:00	11/28/20 02:00	1
Nickel	230		40	2.2	ug/L		11/24/20 14:00	11/28/20 02:00	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 02:05	1
Potassium	3400	J	5000	560	ug/L		11/24/20 14:00	11/28/20 02:05	1
Nickel	240		40	2.2	ug/L		11/24/20 14:00	11/28/20 02:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0060	mg/L		11/24/20 16:21	11/24/20 18:11	1



Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P3T-111920-0950

Lab Sample ID: 240-140822-6

Date Collected: 11/19/20 09:50

Matrix: Water

Date Received: 11/23/20 10:20

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 02:09	1
Potassium	1600	J	5000	560	ug/L		11/24/20 14:00	11/28/20 02:09	1
Nickel	40	U	40	2.2	ug/L		11/24/20 14:00	11/28/20 02:09	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 02:13	1
Potassium	1800	J	5000	560	ug/L		11/24/20 14:00	11/28/20 02:13	1
Nickel	2.5	J	40	2.2	ug/L		11/24/20 14:00	11/28/20 02:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0060	mg/L		11/24/20 21:17	11/24/20 22:16	1



Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P2-112020-0800

Lab Sample ID: 240-140822-7

Date Collected: 11/20/20 08:00

Matrix: Water

Date Received: 11/23/20 10:20

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 02:18	1
Potassium	3800	J	5000	560	ug/L		11/24/20 14:00	11/28/20 02:18	1
Nickel	6.2	J	40	2.2	ug/L		11/24/20 14:00	11/28/20 02:18	1

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: 7082-112020-0001

Lab Sample ID: 240-140822-8

Date Collected: 11/20/20 00:00

Matrix: Water

Date Received: 11/23/20 10:20

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 02:22	1
Potassium	3600	J	5000	560	ug/L		11/24/20 14:00	11/28/20 02:22	1
Nickel	6.2	J	40	2.2	ug/L		11/24/20 14:00	11/28/20 02:22	1

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P2T-112020-0850

Lab Sample ID: 240-140822-9

Date Collected: 11/20/20 08:50

Matrix: Water

Date Received: 11/23/20 10:20

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 02:26	1
Potassium	1500	J	5000	560	ug/L		11/24/20 14:00	11/28/20 02:26	1
Nickel	13	J	40	2.2	ug/L		11/24/20 14:00	11/28/20 02:26	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 02:31	1
Potassium	1300	J	5000	560	ug/L		11/24/20 14:00	11/28/20 02:31	1
Nickel	10	J	40	2.2	ug/L		11/24/20 14:00	11/28/20 02:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0060	mg/L		11/24/20 21:17	11/24/20 22:21	1



Client Sample Results

Client: Haley & Aldrich, Inc.
 Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P16T-112020-0930

Lab Sample ID: 240-140822-10

Date Collected: 11/20/20 09:30

Matrix: Water

Date Received: 11/23/20 10:20

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 02:35	1
Potassium	1300	J	5000	560	ug/L		11/24/20 14:00	11/28/20 02:35	1
Nickel	3.7	J	40	2.2	ug/L		11/24/20 14:00	11/28/20 02:35	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 02:39	1
Potassium	1300	J	5000	560	ug/L		11/24/20 14:00	11/28/20 02:39	1
Nickel	2.9	J	40	2.2	ug/L		11/24/20 14:00	11/28/20 02:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0060	mg/L		11/24/20 21:17	11/24/20 22:23	1



Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P16-112020-1030

Lab Sample ID: 240-140822-11

Date Collected: 11/20/20 10:30

Matrix: Water

Date Received: 11/23/20 10:20

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 02:52	1
Potassium	2100	J	5000	560	ug/L		11/24/20 14:00	11/28/20 02:52	1
Nickel	56		40	2.2	ug/L		11/24/20 14:00	11/28/20 02:52	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 02:56	1
Potassium	2100	J	5000	560	ug/L		11/24/20 14:00	11/28/20 02:56	1
Nickel	58		40	2.2	ug/L		11/24/20 14:00	11/28/20 02:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0060	mg/L		11/24/20 21:17	11/24/20 22:25	1



Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P21T-112020-1120

Lab Sample ID: 240-140822-12

Date Collected: 11/20/20 11:20

Matrix: Water

Date Received: 11/23/20 10:20

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 04:47	1
Potassium	2500	J	5000	560	ug/L		11/24/20 14:00	11/28/20 04:47	1
Nickel	260		40	2.2	ug/L		11/24/20 14:00	11/28/20 04:47	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 04:52	1
Potassium	2400	J	5000	560	ug/L		11/24/20 14:00	11/28/20 04:52	1
Nickel	240		40	2.2	ug/L		11/24/20 14:00	11/28/20 04:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0060	mg/L		11/24/20 21:17	11/24/20 22:26	1



Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P08R-112020-1330

Lab Sample ID: 240-140822-13

Date Collected: 11/20/20 13:30

Matrix: Water

Date Received: 11/23/20 10:20

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 04:56	1
Potassium	2900	J	5000	560	ug/L		11/24/20 14:00	11/28/20 04:56	1
Nickel	3.8	J	40	2.2	ug/L		11/24/20 14:00	11/28/20 04:56	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 05:00	1
Potassium	3100	J	5000	560	ug/L		11/24/20 14:00	11/28/20 05:00	1
Nickel	3.8	J	40	2.2	ug/L		11/24/20 14:00	11/28/20 05:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0060	mg/L		11/24/20 21:17	11/24/20 22:28	1



QC Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-462632/1-A
Matrix: Water
Analysis Batch: 463168

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 462632

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 00:40	1
Potassium	5000	U	5000	560	ug/L		11/24/20 14:00	11/28/20 00:40	1
Nickel	40	U	40	2.2	ug/L		11/24/20 14:00	11/28/20 00:40	1

Lab Sample ID: LCS 240-462632/2-A
Matrix: Water
Analysis Batch: 463168

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 462632

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	50000	46600		ug/L		93	80 - 120
Nickel	1000	962		ug/L		96	80 - 120

Lab Sample ID: 240-140822-3 MS
Matrix: Water
Analysis Batch: 463168

Client Sample ID: P15-111820-1445
Prep Type: Total Recoverable
Prep Batch: 462632

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	12000		50000	60000		ug/L		97	75 - 125
Nickel	5.8	J	1000	984		ug/L		98	75 - 125

Lab Sample ID: 240-140822-3 MSD
Matrix: Water
Analysis Batch: 463168

Client Sample ID: P15-111820-1445
Prep Type: Total Recoverable
Prep Batch: 462632

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Potassium	12000		50000	60700		ug/L		98	75 - 125	1	20
Nickel	5.8	J	1000	992		ug/L		99	75 - 125	1	20

Lab Sample ID: MB 240-462634/1-A
Matrix: Water
Analysis Batch: 463168

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 462634

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chromium	5.0	U	5.0	0.63	ug/L		11/24/20 14:00	11/28/20 03:01	1
Potassium	5000	U	5000	560	ug/L		11/24/20 14:00	11/28/20 03:01	1
Nickel	40	U	40	2.2	ug/L		11/24/20 14:00	11/28/20 03:01	1

Lab Sample ID: LCS 240-462634/2-A
Matrix: Water
Analysis Batch: 463168

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 462634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	50000	47200		ug/L		94	80 - 120
Nickel	1000	1000		ug/L		100	80 - 120

QC Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 240-140822-3 MS
Matrix: Water
Analysis Batch: 463168

Client Sample ID: P15-111820-1445
Prep Type: Dissolved
Prep Batch: 462632

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Chromium	5.0	U	1000	896		ug/L		90	75 - 125	
Potassium	12000		50000	56800		ug/L		89	75 - 125	
Nickel	6.3	J	1000	931		ug/L		92	75 - 125	

Lab Sample ID: 240-140822-3 MSD
Matrix: Water
Analysis Batch: 463168

Client Sample ID: P15-111820-1445
Prep Type: Dissolved
Prep Batch: 462632

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit
Chromium	5.0	U	1000	858		ug/L		86	75 - 125		4
Potassium	12000		50000	54800		ug/L		85	75 - 125		4
Nickel	6.3	J	1000	890		ug/L		88	75 - 125		5

Method: 4500 CN E-2011 - Cyanide, Total: Colorimetric Method

Lab Sample ID: MB 240-462675/1-A
Matrix: Water
Analysis Batch: 462693

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462675

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cyanide, Total	0.010	U	0.010	0.0060	mg/L		11/24/20 16:21	11/24/20 17:18	1

Lab Sample ID: LCS 240-462675/2-A
Matrix: Water
Analysis Batch: 462693

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462675

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	
							Result	Qualifier
Cyanide, Total	0.238	0.241		mg/L		101	85 - 115	

Lab Sample ID: 240-140822-3 MS
Matrix: Water
Analysis Batch: 462693

Client Sample ID: P15-111820-1445
Prep Type: Total/NA
Prep Batch: 462675

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Cyanide, Total	0.010	U	0.0400	0.0406		mg/L		102	22 - 135	

Lab Sample ID: 240-140822-3 MSD
Matrix: Water
Analysis Batch: 462693

Client Sample ID: P15-111820-1445
Prep Type: Total/NA
Prep Batch: 462675

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit
Cyanide, Total	0.010	U	0.0400	0.0406		mg/L		102	22 - 135		0

Lab Sample ID: MB 240-462692/1-A
Matrix: Water
Analysis Batch: 462695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462692

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cyanide, Total	0.010	U	0.010	0.0060	mg/L		11/24/20 21:17	11/24/20 22:13	1

Eurofins TestAmerica, Canton

QC Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Method: 4500 CN E-2011 - Cyanide, Total: Colorimetric Method (Continued)

Lab Sample ID: LCS 240-462692/2-A
Matrix: Water
Analysis Batch: 462695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462692
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	0.238	0.250		mg/L		105	85 - 115

Lab Sample ID: 240-140822-6 MS
Matrix: Water
Analysis Batch: 462695

Client Sample ID: P3T-111920-0950
Prep Type: Total/NA
Prep Batch: 462692
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	0.010	U	0.0400	0.0429		mg/L		107	22 - 135

Lab Sample ID: 240-140822-6 MSD
Matrix: Water
Analysis Batch: 462695

Client Sample ID: P3T-111920-0950
Prep Type: Total/NA
Prep Batch: 462692
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Cyanide, Total	0.010	U	0.0400	0.0418		mg/L		105	22 - 135	3	40

Lab Sample ID: MRL 240-462693/10
Matrix: Water
Analysis Batch: 462693

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	0.0100	0.00990	J	mg/L		99	70 - 130

QC Association Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Metals

Prep Batch: 462632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-140822-1	P14T-111820-1200	Dissolved	Water	3005A	
240-140822-1	P14T-111820-1200	Total Recoverable	Water	3005A	
240-140822-2	P14-111820-1245	Dissolved	Water	3005A	
240-140822-2	P14-111820-1245	Total Recoverable	Water	3005A	
240-140822-3	P15-111820-1445	Dissolved	Water	3005A	
240-140822-3	P15-111820-1445	Total Recoverable	Water	3005A	
240-140822-4	P15T-111820-1545	Dissolved	Water	3005A	
240-140822-4	P15T-111820-1545	Total Recoverable	Water	3005A	
240-140822-5	P18-111920-0900	Dissolved	Water	3005A	
240-140822-5	P18-111920-0900	Total Recoverable	Water	3005A	
240-140822-6	P3T-111920-0950	Dissolved	Water	3005A	
240-140822-6	P3T-111920-0950	Total Recoverable	Water	3005A	
240-140822-7	P2-112020-0800	Dissolved	Water	3005A	
240-140822-8	7082-112020-0001	Dissolved	Water	3005A	
240-140822-9	P2T-112020-0850	Dissolved	Water	3005A	
240-140822-9	P2T-112020-0850	Total Recoverable	Water	3005A	
240-140822-10	P16T-112020-0930	Dissolved	Water	3005A	
240-140822-10	P16T-112020-0930	Total Recoverable	Water	3005A	
240-140822-11	P16-112020-1030	Dissolved	Water	3005A	
240-140822-11	P16-112020-1030	Total Recoverable	Water	3005A	
MB 240-462632/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-462632/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-140822-3 MS	P15-111820-1445	Dissolved	Water	3005A	
240-140822-3 MS	P15-111820-1445	Total Recoverable	Water	3005A	
240-140822-3 MSD	P15-111820-1445	Dissolved	Water	3005A	
240-140822-3 MSD	P15-111820-1445	Total Recoverable	Water	3005A	

Prep Batch: 462634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-140822-12	P21T-112020-1120	Dissolved	Water	3005A	
240-140822-12	P21T-112020-1120	Total Recoverable	Water	3005A	
240-140822-13	P08R-112020-1330	Dissolved	Water	3005A	
240-140822-13	P08R-112020-1330	Total Recoverable	Water	3005A	
MB 240-462634/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-462634/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 463168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-140822-1	P14T-111820-1200	Dissolved	Water	6010B	462632
240-140822-1	P14T-111820-1200	Total Recoverable	Water	6010B	462632
240-140822-2	P14-111820-1245	Dissolved	Water	6010B	462632
240-140822-2	P14-111820-1245	Total Recoverable	Water	6010B	462632
240-140822-3	P15-111820-1445	Dissolved	Water	6010B	462632
240-140822-3	P15-111820-1445	Total Recoverable	Water	6010B	462632
240-140822-4	P15T-111820-1545	Dissolved	Water	6010B	462632
240-140822-4	P15T-111820-1545	Total Recoverable	Water	6010B	462632
240-140822-5	P18-111920-0900	Dissolved	Water	6010B	462632
240-140822-5	P18-111920-0900	Total Recoverable	Water	6010B	462632
240-140822-6	P3T-111920-0950	Dissolved	Water	6010B	462632
240-140822-6	P3T-111920-0950	Total Recoverable	Water	6010B	462632
240-140822-7	P2-112020-0800	Dissolved	Water	6010B	462632

Eurofins TestAmerica, Canton

QC Association Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Metals (Continued)

Analysis Batch: 463168 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-140822-8	7082-112020-0001	Dissolved	Water	6010B	462632
240-140822-9	P2T-112020-0850	Dissolved	Water	6010B	462632
240-140822-9	P2T-112020-0850	Total Recoverable	Water	6010B	462632
240-140822-10	P16T-112020-0930	Dissolved	Water	6010B	462632
240-140822-10	P16T-112020-0930	Total Recoverable	Water	6010B	462632
240-140822-11	P16-112020-1030	Dissolved	Water	6010B	462632
240-140822-11	P16-112020-1030	Total Recoverable	Water	6010B	462632
240-140822-12	P21T-112020-1120	Dissolved	Water	6010B	462634
240-140822-12	P21T-112020-1120	Total Recoverable	Water	6010B	462634
240-140822-13	P08R-112020-1330	Dissolved	Water	6010B	462634
240-140822-13	P08R-112020-1330	Total Recoverable	Water	6010B	462634
MB 240-462632/1-A	Method Blank	Total Recoverable	Water	6010B	462632
MB 240-462634/1-A	Method Blank	Total Recoverable	Water	6010B	462634
LCS 240-462632/2-A	Lab Control Sample	Total Recoverable	Water	6010B	462632
LCS 240-462634/2-A	Lab Control Sample	Total Recoverable	Water	6010B	462634
240-140822-3 MS	P15-111820-1445	Dissolved	Water	6010B	462632
240-140822-3 MS	P15-111820-1445	Total Recoverable	Water	6010B	462632
240-140822-3 MSD	P15-111820-1445	Dissolved	Water	6010B	462632
240-140822-3 MSD	P15-111820-1445	Total Recoverable	Water	6010B	462632

General Chemistry

Prep Batch: 462675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-140822-1	P14T-111820-1200	Total/NA	Water	Distill/CN	
240-140822-2	P14-111820-1245	Total/NA	Water	Distill/CN	
240-140822-3	P15-111820-1445	Total/NA	Water	Distill/CN	
240-140822-4	P15T-111820-1545	Total/NA	Water	Distill/CN	
240-140822-5	P18-111920-0900	Total/NA	Water	Distill/CN	
MB 240-462675/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 240-462675/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
240-140822-3 MS	P15-111820-1445	Total/NA	Water	Distill/CN	
240-140822-3 MSD	P15-111820-1445	Total/NA	Water	Distill/CN	

Prep Batch: 462692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-140822-6	P3T-111920-0950	Total/NA	Water	Distill/CN	
240-140822-9	P2T-112020-0850	Total/NA	Water	Distill/CN	
240-140822-10	P16T-112020-0930	Total/NA	Water	Distill/CN	
240-140822-11	P16-112020-1030	Total/NA	Water	Distill/CN	
240-140822-12	P21T-112020-1120	Total/NA	Water	Distill/CN	
240-140822-13	P08R-112020-1330	Total/NA	Water	Distill/CN	
MB 240-462692/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 240-462692/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
240-140822-6 MS	P3T-111920-0950	Total/NA	Water	Distill/CN	
240-140822-6 MSD	P3T-111920-0950	Total/NA	Water	Distill/CN	

Analysis Batch: 462693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-140822-1	P14T-111820-1200	Total/NA	Water	4500 CN E-2011	462675
240-140822-2	P14-111820-1245	Total/NA	Water	4500 CN E-2011	462675

Eurofins TestAmerica, Canton

QC Association Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

General Chemistry (Continued)

Analysis Batch: 462693 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-140822-3	P15-111820-1445	Total/NA	Water	4500 CN E-2011	462675
240-140822-4	P15T-111820-1545	Total/NA	Water	4500 CN E-2011	462675
240-140822-5	P18-111920-0900	Total/NA	Water	4500 CN E-2011	462675
MB 240-462675/1-A	Method Blank	Total/NA	Water	4500 CN E-2011	462675
LCS 240-462675/2-A	Lab Control Sample	Total/NA	Water	4500 CN E-2011	462675
MRL 240-462693/10	Lab Control Sample	Total/NA	Water	4500 CN E-2011	
240-140822-3 MS	P15-111820-1445	Total/NA	Water	4500 CN E-2011	462675
240-140822-3 MSD	P15-111820-1445	Total/NA	Water	4500 CN E-2011	462675

Analysis Batch: 462695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-140822-6	P3T-111920-0950	Total/NA	Water	4500 CN E-2011	462692
240-140822-9	P2T-112020-0850	Total/NA	Water	4500 CN E-2011	462692
240-140822-10	P16T-112020-0930	Total/NA	Water	4500 CN E-2011	462692
240-140822-11	P16-112020-1030	Total/NA	Water	4500 CN E-2011	462692
240-140822-12	P21T-112020-1120	Total/NA	Water	4500 CN E-2011	462692
240-140822-13	P08R-112020-1330	Total/NA	Water	4500 CN E-2011	462692
MB 240-462692/1-A	Method Blank	Total/NA	Water	4500 CN E-2011	462692
LCS 240-462692/2-A	Lab Control Sample	Total/NA	Water	4500 CN E-2011	462692
240-140822-6 MS	P3T-111920-0950	Total/NA	Water	4500 CN E-2011	462692
240-140822-6 MSD	P3T-111920-0950	Total/NA	Water	4500 CN E-2011	462692

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P14T-111820-1200

Lab Sample ID: 240-140822-1

Date Collected: 11/18/20 12:00

Matrix: Water

Date Received: 11/23/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	463168	11/28/20 01:31	WKD	TAL CAN
Total Recoverable	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	463168	11/28/20 01:26	WKD	TAL CAN
Total/NA	Prep	Distill/CN			462675	11/24/20 16:21	AGC	TAL CAN
Total/NA	Analysis	4500 CN E-2011		1	462693	11/24/20 18:04	AGC	TAL CAN

Client Sample ID: P14-111820-1245

Lab Sample ID: 240-140822-2

Date Collected: 11/18/20 12:45

Matrix: Water

Date Received: 11/23/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	463168	11/28/20 01:39	WKD	TAL CAN
Total Recoverable	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	463168	11/28/20 01:35	WKD	TAL CAN
Total/NA	Prep	Distill/CN			462675	11/24/20 16:21	AGC	TAL CAN
Total/NA	Analysis	4500 CN E-2011		1	462693	11/24/20 18:06	AGC	TAL CAN

Client Sample ID: P15-111820-1445

Lab Sample ID: 240-140822-3

Date Collected: 11/18/20 14:45

Matrix: Water

Date Received: 11/23/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	463168	11/28/20 01:14	WKD	TAL CAN
Total Recoverable	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	463168	11/28/20 00:48	WKD	TAL CAN
Total/NA	Prep	Distill/CN			462675	11/24/20 16:21	AGC	TAL CAN
Total/NA	Analysis	4500 CN E-2011		1	462693	11/24/20 17:48	AGC	TAL CAN

Client Sample ID: P15T-111820-1545

Lab Sample ID: 240-140822-4

Date Collected: 11/18/20 15:45

Matrix: Water

Date Received: 11/23/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	463168	11/28/20 01:48	WKD	TAL CAN
Total Recoverable	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	463168	11/28/20 01:43	WKD	TAL CAN
Total/NA	Prep	Distill/CN			462675	11/24/20 16:21	AGC	TAL CAN
Total/NA	Analysis	4500 CN E-2011		1	462693	11/24/20 18:09	AGC	TAL CAN

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P18-111920-0900

Lab Sample ID: 240-140822-5

Date Collected: 11/19/20 09:00

Matrix: Water

Date Received: 11/23/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	463168	11/28/20 02:05	WKD	TAL CAN
Total Recoverable	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	463168	11/28/20 02:00	WKD	TAL CAN
Total/NA	Prep	Distill/CN			462675	11/24/20 16:21	AGC	TAL CAN
Total/NA	Analysis	4500 CN E-2011		1	462693	11/24/20 18:11	AGC	TAL CAN

Client Sample ID: P3T-111920-0950

Lab Sample ID: 240-140822-6

Date Collected: 11/19/20 09:50

Matrix: Water

Date Received: 11/23/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	463168	11/28/20 02:13	WKD	TAL CAN
Total Recoverable	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	463168	11/28/20 02:09	WKD	TAL CAN
Total/NA	Prep	Distill/CN			462692	11/24/20 21:17	AGC	TAL CAN
Total/NA	Analysis	4500 CN E-2011		1	462695	11/24/20 22:16	AGC	TAL CAN

Client Sample ID: P2-112020-0800

Lab Sample ID: 240-140822-7

Date Collected: 11/20/20 08:00

Matrix: Water

Date Received: 11/23/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	463168	11/28/20 02:18	WKD	TAL CAN

Client Sample ID: 7082-112020-0001

Lab Sample ID: 240-140822-8

Date Collected: 11/20/20 00:00

Matrix: Water

Date Received: 11/23/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	463168	11/28/20 02:22	WKD	TAL CAN

Client Sample ID: P2T-112020-0850

Lab Sample ID: 240-140822-9

Date Collected: 11/20/20 08:50

Matrix: Water

Date Received: 11/23/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	463168	11/28/20 02:31	WKD	TAL CAN
Total Recoverable	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	463168	11/28/20 02:26	WKD	TAL CAN
Total/NA	Prep	Distill/CN			462692	11/24/20 21:17	AGC	TAL CAN
Total/NA	Analysis	4500 CN E-2011		1	462695	11/24/20 22:21	AGC	TAL CAN

Eurofins TestAmerica, Canton

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Racer Elyria

Job ID: 240-140822-1

Client Sample ID: P16T-112020-0930

Lab Sample ID: 240-140822-10

Date Collected: 11/20/20 09:30

Matrix: Water

Date Received: 11/23/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	463168	11/28/20 02:39	WKD	TAL CAN
Total Recoverable	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	463168	11/28/20 02:35	WKD	TAL CAN
Total/NA	Prep	Distill/CN			462692	11/24/20 21:17	AGC	TAL CAN
Total/NA	Analysis	4500 CN E-2011		1	462695	11/24/20 22:23	AGC	TAL CAN

Client Sample ID: P16-112020-1030

Lab Sample ID: 240-140822-11

Date Collected: 11/20/20 10:30

Matrix: Water

Date Received: 11/23/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	463168	11/28/20 02:56	WKD	TAL CAN
Total Recoverable	Prep	3005A			462632	11/24/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	463168	11/28/20 02:52	WKD	TAL CAN
Total/NA	Prep	Distill/CN			462692	11/24/20 21:17	AGC	TAL CAN
Total/NA	Analysis	4500 CN E-2011		1	462695	11/24/20 22:25	AGC	TAL CAN

Client Sample ID: P21T-112020-1120

Lab Sample ID: 240-140822-12

Date Collected: 11/20/20 11:20

Matrix: Water

Date Received: 11/23/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			462634	11/24/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	463168	11/28/20 04:52	WKD	TAL CAN
Total Recoverable	Prep	3005A			462634	11/24/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	463168	11/28/20 04:47	WKD	TAL CAN
Total/NA	Prep	Distill/CN			462692	11/24/20 21:17	AGC	TAL CAN
Total/NA	Analysis	4500 CN E-2011		1	462695	11/24/20 22:26	AGC	TAL CAN

Client Sample ID: P08R-112020-1330

Lab Sample ID: 240-140822-13

Date Collected: 11/20/20 13:30

Matrix: Water

Date Received: 11/23/20 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			462634	11/24/20 14:00	MRL	TAL CAN
Dissolved	Analysis	6010B		1	463168	11/28/20 05:00	WKD	TAL CAN
Total Recoverable	Prep	3005A			462634	11/24/20 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010B		1	463168	11/28/20 04:56	WKD	TAL CAN
Total/NA	Prep	Distill/CN			462692	11/24/20 21:17	AGC	TAL CAN
Total/NA	Analysis	4500 CN E-2011		1	462695	11/24/20 22:28	AGC	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Eurofins TestAmerica, Canton

Accreditation/Certification Summary

Client: Haley & Aldrich, Inc.
 Project/Site: Racer Elyria

Job ID: 240-140822-1

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-21
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20



Chain of Custody Record



1.0/1.9

Client Information		Sample: S.PARTYKA		Lab PM: Howell, Leslie		Carrier Tracking No(s):		COC No: 240-77125-30809.2	
Client Contact: Sam Partyka		Phone: 440.60.4634		E-Mail: Leslie.Howell@Eurofins.com		Analysis Request: Analysis Request		Page: 1 of 2	
Company: Haley & Aldrich, Inc.		Due Date Requested:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Job #:	
Address: 6500 Rockside Road Suite 200		TAT Requested (days):		60108 - (MOD) Ba,Ca,Fe,Mg,Mn,Na		300.0_28D - (MOD) Chloride & Sulfate		Total Number of Containers	
City: Cleveland		PO #: 129862-040 016		4500_CN_E - Cyanide, Total		60108 - Dissolved-Ba,Ca,Fe,Mg,Mn,Na		Preservation Codes:	
State, Zip: OH, 44131		WO #: 24014712		60108 - (MCD) Select Metals		60108 - (MCD) Ba,Ca,Fe,Mg,Mn,Na		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2SO4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Phone: 292.21k@haleyaldrich.com		Project #: 24014712		60108 - (MOD) Ba,Ca,Fe,Mg,Mn,Na		60108 - (MOD) Ba,Ca,Fe,Mg,Mn,Na		Other:	
Site: Racer Elyria		SSOW#:		Field Filtered Sample (Yes or No)		60108 - (MOD) Ba,Ca,Fe,Mg,Mn,Na		Special Instructions/Note:	
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (Water, Seawater, Other)	
P14 - 111820 - 1200		11-18-20		1200		G1		Water	
P14 - 111820 - 1245		11-18-20		1245		G1		Water	
P15 - 111820 - 1445		11-18-20		1445		G1		Water	
P15T - 111820 - 1545		11-18-20		1545		G1		Water	
P18 - 111920 - 0900		11-19-20		0900		G1		Water	
P3T - 111920 - 0950		11-19-20		0950		G1		Water	
P2 - 112020 - 0800		11-20-20		0800		G1		Water	
7082 - 112020 - 0021		11-20-20		-		G1		Water	
P2T - 112020 - 0850		11-20-20		0850		G1		Water	
P16T - 112020 - 0930		11-20-20		0930		G1		Water	
P16 - 112020 - 1030		11-20-20		1030		G1		Water	
Possible Hazard Identification									
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological									
Deliverable Requested: I, II, III, IV, Other (specify)									
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)									
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months									
Special Instructions/QC Requirements:									
Method of Shipment:									
Relinquished by: [Signature]		Date: 11-20-20		Time: 10:00		Company: HQA		Received by: [Signature]	
Relinquished by: [Signature]		Date: 11/23/20		Time: 10:20		Company: HQA		Received by: [Signature]	
Relinquished by: [Signature]		Date: 11/23/20		Time: 10:20		Company: HQA		Received by: [Signature]	
Custody Seals Intact: Yes		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:					





#N/A
#N/A
#N/A
#N/A

Regulatory Program: DW NPDES RCRA Other: TestAmerica's services under this CoC shall be performed in accordance with the T&Cs within Blanket Service Agreement #2019-22-TestAmerica by and between Haley & Aldrich, Inc., its subsidiaries and affiliates, and TestAmerica Laboratories Inc.

Client Contact
 H&A Client Name Here: RACE TRUST
 Address: 1400 Lowell St.
 City/State/Zip: ELYRIA, OH
 Phone: _____
 FAX: _____
 H&A Project Number: 129862-016
 Site: RACE ELRYIA
 H&A P O #: 129862-016

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)		Perform MS/MSD (Y/N)		Sample Specific Notes
						Y	N	Y	N	
P21T-12020-120	11-20-20	1200	G	WT	3	X		X		Metals List:
P28K-12020-1330	11-20-20	1330	G	WT	3	X		X		Potassium Nickel
										Sodium, Fe w/0.45A

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other
Possible Hazard Identification: Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments:

Sample Disposal
 Return to Client Disposal by Lab Archive for _____ Months

Cooler Temp. (°C): Obs'd: _____
 Received by: _____ Date/Time: 11/20/20 1000
 Received by: _____ Date/Time: 11/23/20 2000
 Received in Laboratory by: _____ Date/Time: 11-23-20 1020



Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 140822

Client Haley & Pritch Site Name _____
 Cooler Received on 11-23-20 Opened on 11-24-20
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Cooler unpacked by: Math Smid

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # 1A Foam Box _____ Client Cooler _____ Box _____ Other _____
 Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
 COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt See Multiple Cooler Form
 IR GUN # IR-11 (CF +0.9 °C) Observed Cooler Temp. 1.0 °C Corrected Cooler Temp. 1.9 °C
 IR GUN # IR-12 (CF +0.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
 -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
 -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA
 -Were tamper/custody seals intact and uncompromised? Yes No NA

Tests that are not checked for pH by Receiving:
 VOAs
 Oil and Grease
 TOC

3. Shippers' packing slip attached to the cooler(s)? Yes No
 4. Did custody papers accompany the sample(s)? Yes No
 5. Were the custody papers relinquished & signed in the appropriate place? Yes No
 6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
 7. Did all bottles arrive in good condition (Unbroken)? Yes No
 8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
 9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? Yes No
 10. Were correct bottle(s) used for the test(s) indicated? Yes No
 11. Sufficient quantity received to perform indicated analyses? Yes No
 12. Are these work share samples and all listed on the COC? Yes No

If yes, Questions 13-17 have been checked at the originating laboratory.

13. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC907861
 14. Were VOAs on the COC? Yes No
 15. Were air bubbles >6 mm in any VOA vials? Yes No NA Larger than this.
 16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
 17. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page

Samples processed by: _____

Received 2 ea cyanides for Pd, no metals
Received 2 ea metals for 7082-0001, and no cyanide ASH (11-24-20)

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
 Sample(s) _____ were received in a broken container.
 Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
 Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
P14T-111820-1200	240-140822-A-1	Plastic 250ml - with Sodium Hydroxide	>12	_____	_____	_____
P14T-111820-1200	240-140822-N-1	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
P14T-111820-1200	240-140822-O-1	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____	_____
P14-111820-1245	240-140822-A-2	Plastic 250ml - with Sodium Hydroxide	>12	_____	_____	_____
P14-111820-1245	240-140822-B-2	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
P14-111820-1245	240-140822-C-2	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____	_____
P15-111820-1445	240-140822-A-3	Plastic 250ml - with Sodium Hydroxide	>12	_____	_____	_____
P15-111820-1445	240-140822-B-3	Plastic 250ml - with Sodium Hydroxide	>12	_____	_____	_____
P15-111820-1445	240-140822-C-3	Plastic 250ml - with Sodium Hydroxide	>12	_____	_____	_____
P15-111820-1445	240-140822-D-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
P15-111820-1445	240-140822-E-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
P15-111820-1445	240-140822-F-3	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
P15-111820-1445	240-140822-G-3	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____	_____
P15-111820-1445	240-140822-H-3	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____	_____
P15-111820-1445	240-140822-I-3	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____	_____
P15T-111820-1545	240-140822-A-4	Plastic 250ml - with Sodium Hydroxide	>12	_____	_____	_____
P15T-111820-1545	240-140822-B-4	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
P15T-111820-1545	240-140822-C-4	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____	_____
P18-111920-0900	240-140822-A-5	Plastic 250ml - with Sodium Hydroxide	>12	_____	_____	_____
P18-111920-0900	240-140822-B-5	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
P18-111920-0900	240-140822-C-5	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____	_____
P3T-111920-0950	240-140822-A-6	Plastic 250ml - with Sodium Hydroxide	>12	_____	_____	_____
P3T-111920-0950	240-140822-B-6	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
P3T-111920-0950	240-140822-C-6	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____	_____
P2-112020-0800	240-140822-A-7	Plastic 250ml - with Sodium Hydroxide	>12	_____	_____	_____
P2-112020-0800	240-140822-B-7	Plastic 250ml - with Sodium Hydroxide	>12	_____	_____	_____
P2-112020-0800	240-140822-C-7	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____	_____
7082-112020-0001	240-140822-A-8	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
7082-112020-0001	240-140822-B-8	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
7082-112020-0001	240-140822-C-8	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____	_____
P2T-112020-0850	240-140822-A-9	Plastic 250ml - with Sodium Hydroxide	>12	_____	_____	_____
P2T-112020-0850	240-140822-B-9	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
P2T-112020-0850	240-140822-C-9	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____	_____
P16T-112020-0930	240-140822-A-10	Plastic 250ml - with Sodium Hydroxide	>12	_____	_____	_____
P16T-112020-0930	240-140822-B-10	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____

Client Sample ID	Lab ID	Container Type	Container		Preservative	
			pH	Temp	Added (mls)	Lot #
P16T-112020-0930	240-140822-C-10	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____	_____
P16-112020-1030	240-140822-A-11	Plastic 250ml - with Sodium Hydroxide	>12	_____	_____	_____
P16-112020-1030	240-140822-B-11	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
P16-112020-1030	240-140822-C-11	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____	_____
P21T-112020-1120	240-140822-A-12	Plastic 250ml - with Sodium Hydroxide	>12	_____	_____	_____
P21T-112020-1120	240-140822-B-12	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
P21T-112020-1120	240-140822-C-12	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____	_____
P08R-112020-1330	240-140822-A-13	Plastic 250ml - with Sodium Hydroxide	>12	_____	_____	_____
P08R-112020-1330	240-140822-B-13	Plastic 500ml - with Nitric Acid	<2	_____	_____	_____
P08R-112020-1330	240-140822-C-13	Plastic 500ml - w/ Nitric - Dis.	<2	_____	_____	_____

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

APPENDIX E

Data Quality Assessment and Validation Report

Data Usability Summary Report

Project Name: RACER Elyria

Analytical Laboratory: Eurofins TestAmerica Laboratories, Inc. – North Canton, OH

Validation Performed by: Anastasia Barr

Validation Reviewed by: Katherine Miller

Validation Date: 04 September 2020

Haley & Aldrich, Inc., prepared this Data Usability Summary Report (DUSR) to summarize the review and validation of the Racer Elyria groundwater samples collected on 11, 12, and 15 June 2020. The analytical results for the Sample Delivery Group(s) (SDG) listed below were reviewed to determine the data's usability.

This data validation and usability assessment was performed as per the guidance and requirements established by the U.S. Environmental Protection Agency's (EPA) "*National Functional Guidelines for Inorganic Data Review*". The following quality assurance/quality control (QA/QC) criteria from the analysis of the project samples were reviewed as applicable:

1. Sample Delivery Group Number 240-132007-1
 - Holding Times/Preservation
 - Reporting Limits and Sample Dilution
 - Blank Sample Analysis
 - Laboratory Control Samples
 - Matrix Spike Samples
 - Laboratory and Field Duplicate Sample Analysis
 - System Performance and Overall Assessment

Analytical precision and accuracy were evaluated based on the laboratory control or matrix spike analyses performed concurrently with the project samples or based on field duplicates collected at the site.

Data reported in this sampling event were reported to the laboratory method detection limit (MDL). Results found between the MDL and reporting limit (RL) are flagged "J" as estimated.

Sample data were qualified in accordance with laboratory's standard operating procedures (SOPs). The results presented in each laboratory report were found to be compliant with the data quality objectives for the project and therefore usable; any exceptions are noted in the following pages.

1. Sample Delivery Group Number 240-132007-1

1.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of SDG number 240-132007-1, dated 07 July 2020. Samples were collected, preserved, and shipped following standard chain of custody (COC) protocol. Samples were also received appropriately, identified correctly, and analyzed according to the chain of custody. COCs were appropriately signed and dated by the field and/or laboratory personnel.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Collection Date	Matrix	Method(s)
P08R-061120-1240	N	240-132007-1	6/11/2020	WG	A, B
P14-061120-1040	N	240-132007-2	6/11/2020	WG	A, B
P14T-061120-1430	N	240-132007-3	6/11/2020	WG	A, B
P15-061220-1000	N	240-132007-4	6/12/2020	WG	A, B
P15T-061220-1055	N	240-132007-5	6/12/2020	WG	A, B
7082-061220-0001	FD	240-132007-6	6/12/2020	WG	A, B
P3T-061220-1325	N	240-132007-7	6/12/2020	WG	A, B
P18-061520-0745	N	240-132007-8	6/15/2020	WG	A, B
7082-061520-0001	FD	240-132007-9	6/15/2020	WG	A, B
P2-061520-0925	N	240-132007-10	6/15/2020	WG	A, B
P2T-061520-1030	N	240-132007-11	6/15/2020	WG	A, B
P16-061520-1200	N	240-132007-12	6/15/2020	WG	A, B
P16T-061520-1300	N	240-132007-13	6/15/2020	WG	A, B
P21T-061520-1415	N	240-132007-14	6/15/2020	WG	A, B
7082-061520-0002	EB	240-132007-15	6/15/2020	WQ	A, B

Method Holding Time		
A.	Chloride and Sulfate by EPA 300	28 days
B.	Total and Dissolved Metals by EPA 6010B	180 days

1.2 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified as per each method's protocol.

Cooler temperature on arrival to the laboratory was: 3.3 and 5.4 degrees Celsius.

1.3 REPORTING LIMITS AND SAMPLE DILUTION

All dilutions were reviewed and found to be justified. Only detected analytes were reported from a dilution.

1.4 BLANK SAMPLE ANALYSIS

Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination. Method blank samples had no detections, indicating that no contamination from laboratory activities occurred with the following exceptions:

Blank Type	Batch ID	Analyte Detected in Blank	Concentration (ug/L)	Qualifier	Affected Samples
Method Blank	439547	Sodium, Total	1430 J	None	Best Professional Judgement as sodium detected in most samples at high concentrations.

Equipment blanks are prepared to identify contamination that may have been introduced while decontaminating sampling equipment. The analysis of the blank samples for field quality control was free of target compounds.

1.5 LABORATORY CONTROL SAMPLES

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences. Compounds associated with the LCS analyses exhibited recoveries and within the specified limits.

- An LCSD was not reported for EPA 300 or EPA 6010B. Because a site-specific matrix spike duplicate and field duplicate was analyzed, this data set is supported by precision quality control information.

1.6 MATRIX SPIKE SAMPLES

Matrix spike/matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method and evaluate the effects of the sample matrix on the sample preparation procedures and measurement methodologies. The sample(s) below were used for MS/MSD:

Lab Sample Number	Matrix Spike/ Matrix Spike Duplicate Sample Client ID	Method(s)
240-132007-4	P15-061220-1000	EPA 6010B, EPA 300
240-132007-5	P15T-061220-1055	EPA 300
240-132007-13	P16T-061520-1300	EPA 300
240-132007-15	7082-061520-0002	EPA 300

The MS/MSD recoveries and the RPD between the MS and MSD results were within the specified limits.

1.7 LABORATORY AND FIELD DUPLICATE SAMPLES

The laboratory duplicate sample analysis is used by the laboratory at the time of analysis to demonstrate acceptable method precision. The laboratory did not analyze any laboratory duplicates in this SDG.

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. The following sample(s) were used for field duplicate analysis and the RPDs were all below 35% for water (or the absolute difference rule was satisfied if detects were less than 5x the RL). Any exceptions are noted below and qualified.

Primary Sample ID	Duplicate Sample ID	Method(s)
P15T-061220-1055	7082-061220-0001	EPA 6010B, EPA 200
P18-061520-0745	7082-061520-0001	EPA 6010B, EPA 200

1.8 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to comply with the data quality objectives for the project and the guidelines specified by the analytical method. Based on the review of this report, the data are 100% useable. No qualifiers were applied to this SDG are shown below.

Glossary

- Sample Types:
 - N Primary Sample
 - FD Field Duplicate Sample
 - EB Equipment Blank Sample
- Units:
 - $\mu\text{g/L}$ or ug/L micrograms per liter
 - mg/L milligrams per liter
- Matrices:
 - WG Groundwater
 - WQ Quality Control
- Table Footnotes
 - NA Not applicable
 - ND Non-detect
 - NR Not reported
- Abbreviations
 - DUSR Data Usability Summary Report
 - SDG Sample Delivery Group
 - EPA Environmental Protection Agency
 - NFG National Functional Guidelines
 - QA/QC Quality Assurance/Quality Control
 - RL Reporting Limit
 - MDL Method Detection Limit
 - SOP Standard Operating Procedures
 - COC Chain of Custody
 - % Percent
 - %R Percent Recovery
 - RPD Relative Percent Difference
 - LCS/LCSD Laboratory Control Sample/Laboratory Control Sample Duplicate
 - MS/MSD Matrix Spike/Matrix Spike Duplicate

Qualifiers

Results are qualified with the following codes in accordance with EPA National Functional Guidelines:

- Concentration (C) Qualifiers:
 - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit. This can also be displayed as less than the associated compound quantitation limit (<RL or <MDL), or “ND”.
 - B The compound was found in the sample and its associated blank. Its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers:
 - E The compound was quantitated above the calibration range.
 - D The concentration is based on a diluted sample analysis.
- Validation Qualifiers:
 - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
 - J+ The result is an estimated quantity, but the result may be biased high.
 - J- The result is an estimated quantity, but the result may be biased low.
 - UJ The compound was not detected above the reported sample quantitation limit; however, the reported limit is estimated and may or may not represent the actual limit of quantitation.
 - NJ The analysis indicated the presence of a compound for which there was presumptive evidence to make a tentative identification; the associated numerical value is therefore an estimated concentration only.
 - R The sample results were rejected as unusable; the compound may or may not be present in the sample.

References

1. United States Environmental Protection Agency, 2017a. National Functional Guidelines for Inorganic Superfund Methods Data Review. EPA-540-R-2017-001. January.

Data Usability Summary Report

Project Name: RACER Elyria

Project Description: Groundwater Samples

Sample Date(s): 18 through 30 November 2020

Analytical Laboratory: Eurofins TestAmerica Laboratories, Inc. – North Canton, OH

Validation Performed by: Alexis Rainery

Validation Reviewed by: Katherine Miller

Validation Date: 17 December 2020

Haley & Aldrich, Inc. prepared this Data Usability Summary Report (DUSR) to summarize the review and validation of the samples described above. The analytical results for Sample Delivery Group(s) (SDG) listed below were reviewed to determine the data's usability:

1. Sample Delivery Group Number 240-140820-1
2. Sample Delivery Group Number 240-140822-1

This data validation and usability assessment was performed per the guidance and requirements established by the U.S. Environmental Protection Agency's (USEPA) *National Functional Guidelines (NFG) for Inorganic Data Review*, herein referred to as the specified limits (see references section).

Data reported in this sampling event were reported to the laboratory method detection limit (MDL). Results found between the MDL and RL are flagged "J" as estimated.

Sample data were qualified in accordance with laboratory's standard operating procedures (SOP). The results presented in each laboratory report were found to be compliant with the data quality objectives for the project and therefore usable; any exceptions are noted in the following pages.

For more detailed quality control (QC) information see Explanations section.

1. Sample Delivery Group Number 240-140820-1

1.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of SDG number 240-140820-1, dated 30 November 2020. Samples were collected, preserved, and shipped following standard chain of custody (COC) protocol. Samples were also received appropriately, identified correctly, and analyzed according to the COC.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Collection Date	Matrix	Methods
P12TR-111820-1330	N	240-140820-1	11/18/2020	GW	A, B, C
P12-111820-1400	N	240-140820-2	11/18/2020	GW	A, B, C
P18T-111920-0800	N	240-140820-3	11/19/2020	GW	A, B, C
P3R-11920-1030	N	240-140820-4	11/19/2020	GW	A, B, C
7082-111920-0002	FD	240-140820-5	11/19/2020	GW	A, B, C
P21-112020-1200	N	240-140820-6	11/19/2020	GW	A, B, C
7082-111920-0900	EB	240-140820-7	11/19/2020	WQ	A, B, C
P08T-112020-1245	N	240-140820-8	11/20/2020	GW	A, B, C

Method Holding Time			
A.	Total and Dissolved Metals	SW 6010B	180 days
B.	Chloride and Sulfate	EPA 300.0	28 days
C.	Total Cyanide	SM 4500 CN E-2011	14 days

1.2 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified per method protocol.

1.3 REPORTING LIMITS AND SAMPLE DILUTIONS

All dilutions were reviewed and found to be justified. Only detected analytes were reported from a dilution.

1.4 LABORATORY CONTROL SAMPLES

[Refer to section E 1.3.](#) Compounds associated with the laboratory control samples/laboratory control sample duplicates (LCS) analyses exhibited recoveries and within the specified limits with the following exceptions:

- No LCSD was reported for this SDG; this data set is therefore supported by other means of precision quality control, such as a site-specific matrix spike duplicate and field duplicate.

1.5 MATRIX SPIKE SAMPLES

[Refer to section E 1.4.](#) The sample(s) below were used for matrix spike/matrix spike duplicate (MS/MSD):

Lab Sample Number	Matrix Spike/ Matrix Spike Duplicate Sample Client ID	Method(s)
240-140820-1	P12TR-111820-1330	Total and Dissolved Metals by SW 6010B
240-140820-8	P08T-112020-1245	Chloride and Sulfate by EPA 300.0

The MS/MSD recoveries and the RPD between the MS and MSD results were within the specified limits.

1.6 BLANK SAMPLE ANALYSIS

[Refer to section E 1.6.](#) Method blank samples had no detections, indicating that no contamination from laboratory activities occurred.

The analysis of the blank samples for field quality control was free of target compounds, with the following exceptions:

Blank Type	Date of Blank	Analyte Detected in Blank	Concentration (ug/L)	Qualifier	Affected Samples
Equipment Blank	11/19	Total Sodium	830	NA	None, samples are > 10x the blank
		Dissolved Sodium	750		

1.7 LABORATORY AND FIELD DUPLICATE SAMPLE ANALYSIS

[Refer to section E 1.7.](#) The laboratory did not analyze any laboratory duplicates in this SDG.

The following sample(s) were used for field duplicate analysis. RPDs were all below 35 percent for water (or the absolute difference rule was satisfied if detects were less than 5x the RL). Any exceptions are noted below and qualified.

Primary Sample ID	Duplicate Sample ID	Method(s)
P3R-11920-1030	7082-111920-0002	Total and Dissolved Metals by SW 6010B Chloride and Sulfate by EPA 300.0 Total Cyanide by SM 4500 CN E-2011

1.8 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to comply with the data quality objects for the project and the guidelines specified by the analytical method. Based on the review of this report, the data are useable and acceptable as no data was rejected. No qualifiers were applied to any data in this report.

2. Sample Delivery Group Number 240-140822-1

2.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of SDG number 240-140822-1, dated 30 November 2020. Samples were collected, preserved, and shipped following standard chain of custody (COC) protocol. Samples were also received appropriately, identified correctly, and analyzed according to the COC. Issues noted with sample management are listed below:

- Analysis by SM 4500 CN E-2011 was requested for all samples, but was not performed on P2-112020-0800 and 7082-112020-0001.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Collection Date	Matrix	Methods
P14T-111820-1200	N	240-140822-1	11/18/2020	GW	A, B
P14-111820-1245	N	240-140822-2	11/18/2020	GW	A, B
P15-111820-1445	N	240-140822-3	11/18/2020	GW	A, B
P15T-111820-1545	N	240-140822-4	11/18/2020	GW	A, B
P18-111920-0900	N	240-140822-5	11/19/2020	GW	A, B
P3T-111920-0950	N	240-140822-6	11/19/2020	GW	A, B
P2-112020-0800	N	240-140822-7	11/20/2020	GW	A
7082-112020-0001	FD	240-140822-8	11/20/2020	GW	A
P2T-112020-0850	N	240-140822-9	11/20/2020	GW	A, B
P16T-112020-0930	N	240-140822-10	11/20/2020	GW	A, B
P16-112020-1030	N	240-140822-11	11/20/2020	GW	A, B
P21T-112020-1120	N	240-140822-12	11/20/2020	GW	A, B
P08R-112020-1330	N	240-140822-13	11/20/2020	GW	A, B

Method Holding Time			
A.	Total and Dissolved Metals	SW 6010B	180 days
B.	Total Cyanide	SM 4500 CN E-2011	14 days

2.2 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified per method protocol.

2.3 REPORTING LIMITS AND SAMPLE DILUTIONS

No dilutions were performed for the analysis of the samples in this report.

2.4 LABORATORY CONTROL SAMPLES

[Refer to section E 1.3.](#) Compounds associated with the laboratory control samples/laboratory control sample duplicates (LCS) analyses exhibited recoveries and within the specified limits with the following exceptions:

- No LCSD was reported for this SDG; this data set is therefore supported by other means of precision quality control, such as a site-specific matrix spike duplicate and field duplicate.

2.5 MATRIX SPIKE SAMPLES

[Refer to section E 1.4.](#) The sample(s) below were used for matrix spike/matrix spike duplicate (MS/MSD):

Lab Sample Number	Matrix Spike/ Matrix Spike Duplicate Sample Client ID	Method(s)
240-140822-3	P15-111820-1445	Total and Dissolved Metals by SW 6010B Total Cyanide by SM 4500 CN E-2011
240-140822-6	P3T-111920-0950	Total Cyanide by SM 4500 CN E-2011

The MS/MSD recoveries and the RPD between the MS and MSD results were within the specified limits.

2.6 BLANK SAMPLE ANALYSIS

[Refer to section E 1.6.](#) Method blank samples had no detections, indicating that no contamination from laboratory activities occurred.

2.7 LABORATORY AND FIELD DUPLICATE SAMPLE ANALYSIS

[Refer to section E 1.7.](#) The laboratory did not analyze any laboratory duplicates in this SDG.

The following sample(s) were used for field duplicate analysis. RPDs were all below 35 percent for water (or the absolute difference rule was satisfied if detects were less than 5x the RL). Any exceptions are noted below and qualified.

Primary Sample ID	Duplicate Sample ID	Method(s)
P2-112020-0800	7082-112020-0001	Dissolved Metals by SW6010B

2.8 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to comply with the data quality objects for the project and the guidelines specified by the analytical method. Based on the review of this report, the data are useable and acceptable as no data was rejected. No qualifiers were applied to any data in this report.

Explanations

The following explanations include more detailed information regarding each of the sections in the DUSR above. Not all sections in the Explanations are represented:

- E 1.1 Reporting Basis (Wet/Dry)
 - Soil samples can be reported on either a wet (as received) or dry weight basis. Dry weight data indicate calculations were made to compensate for the moisture content of the soil sample.
 - Percent (%) solids should be appropriately considered when evaluating analytical results for non-aqueous samples. Sediments with high moisture content may or may not be successfully analyzed by routine analytical methods. Samples should have $\geq 30\%$ solids to be appropriately quantified.
- E 1.2 Surrogate Recovery Compliance
 - Surrogates, also known as system monitoring compounds, are compounds added to each sample prior to sample preparation to determine the efficiency of the extraction procedure by evaluating the percent recovery (%R) of the compounds.
- E 1.3 Laboratory Control Samples
 - The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences.
- E 1.4 Matrix Spike Samples
 - Matrix spike/matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method and evaluate the effects of the sample matrix on the sample preparation procedures and measurement methodologies.
 - For inorganic methods, when a matrix spike recovery falls outside of the control limits and the sample result is less than four times the spike added, a post digestion spike (PDS) is performed.
- E 1.6 Blank Sample Analysis
 - Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination.
 - Field blanks are prepared to identify contamination that may have been introduced during field activity. Equipment blanks are prepared to identify contamination that may have been introduced while decontaminating sampling equipment. Trip blanks are prepared when volatile analysis is requested to identify contamination that may have been introduced during transport.
- E 1.7 Laboratory and Field Duplicate Sample Analysis
 - The laboratory duplicate sample analysis is used by the laboratory at the time of the analysis to demonstrate acceptable method precision.
 - The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method.

Glossary

Not all of the following symbols, acronyms, or qualifiers occur in this document.

- Sample Types:
 - EB Equipment Blank Sample
 - FB Field Blank Sample
 - FD Field Duplicate Sample
 - N Primary Sample
 - TB Trip Blank Sample
- Units:
 - $\mu\text{g}/\text{kg}$ microgram per kilogram
 - $\mu\text{g}/\text{L}$ microgram per liter
 - $\mu\text{g}/\text{cm}^3$ microgram per centimeter cubed
 - mg/kg milligram per kilogram
 - mg/L milligram per liter
 - ppb v/v parts per billion volume/volume
- Matrices:
 - AA Ambient Air
 - GS Soil Gas
 - GW Groundwater
 - IA Indoor Air
 - SE Sediment
 - SO Soil
- Table Footnotes
 - NA Not applicable
 - ND Non-detect
 - NR Not reported
- Abbreviations
 - %D Percent Difference
 - %R Percent Recovery
 - %RSD Percent Relative Standard Deviation
 - Abs Diff Absolute Difference
 - CCB Continuing Calibration Blank
 - CCV Continuing Calibration Verification
 - CCVL Continuing Calibration Verification Low
 - COC Chain of Custody
 - CRI Collision Reaction Interface
 - DUSR Data Usability Summary Report
 - EMPC Estimated Maximum Possible Concentration
 - GC Gas Chromatograph
 - GPC Gel Permeation Chromatography
 - ICAL Initial Calibration
 - ICB Initial Calibration Blank
 - ICP/MS Inductively Coupled Plasma/ Mass Spectrometry
 - ICV Initial Calibration Verification
 - ICVL Initial Calibration Verification Low

– IPA	Isopropyl Alcohol
– LCS/LCSD	Laboratory Control Sample/Laboratory Control Sample Duplicate
– MDL	Laboratory Method Detection Limit
– MS/MSD	Matrix Spike/Matrix Spike Duplicate
– ND	Non-Detect
– NFG	National Functional Guidelines
– PCB	Polychlorinated Biphenyl
– PDS	Post Digestion Spike
– PEM	Performance Evaluation Mixture
– PFAS	Per- and Polyfluoroalkyl Substances
– QAPP	Quality Assurance Project Plan
– QC	Quality Control
– RL	Laboratory Reporting Limit
– RPD	Relative Percent Difference
– RT	Retention Time
– RRF	Relative Response Factors
– SDG	Sample Delivery Group
– SOP	Laboratory Standard Operating Procedures
– SPE	Solid Phase Extraction
– USEPA	U.S. Environmental Protection Agency

Qualifiers

The qualifiers below are from the USEPA National Functional Guidelines and the data in the DUSR may contain these qualifiers:

- Concentration (C) Qualifiers:
 - U The compound was analyzed for but not detected. The associated value is either the compound quantitation limit if not detected by the analytical instrument or could be the reported or blank concentration if qualified by blank contamination. This can also be displayed as less than the associated compound quantitation limit (<RL or <MDL), or “ND”.
 - B The compound was found in the sample and its associated blank. Its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers:
 - E The compound was quantitated above the calibration range.
 - D The concentration is based on a diluted sample analysis.
- Validation Qualifiers:
 - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
 - J+ The result is an estimated quantity, but the result may be biased high.
 - J- The result is an estimated quantity, but the result may be biased low.
 - UJ The compound was not detected above the reported sample quantitation limit; however, the reported limit is estimated and may or may not represent the actual limit of quantitation.
 - NJ The analysis indicated the presence of a compound for which there is presumptive evidence to make a tentative identification; the associated numerical value is an estimated concentration only.
 - R The sample results were rejected as unusable; the compound may or may not be present in the sample.

References

1. United States Environmental Protection Agency, 2017b. National Functional Guidelines for Inorganic Superfund Methods Data Review. EPA-540-R-2017-001. January.