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1940102203-015

2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

LANDFILL 2

NEWTON POWER PLANT

NEWTON, ILLINOIS

CCR UNIT 502

2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT NEWTON POWER PLANT LANDFILL 2

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ACRONYMS AND ABBREVIATIONS

§	Section
40 C.F.R.	Title 40 of the Code of Federal Regulations
ASD	Alternate Source Demonstration
CCR	coal combustion residuals
GWPS	groundwater protection standard
LF2	Landfill 2
NA	not applicable
NPP	Newton Power Plant
NRT/OBG	Natural Resource Technology, an OBG Company
Ramboll	Ramboll Americas Engineering Solutions, Inc.
SAP	Sampling and Analysis Plan
SSI	statistically significant increase
TBD	to be determined
TDS	total dissolved solids

EXECUTIVE SUMMARY

This report has been prepared to provide the information required by Title 40 of the Code of Federal Regulations (40 C.F.R.) Section (§) 257.90(e) for Landfill 2 (LF2) located at the Newton Power Plant (NPP) near Newton, Illinois.

Groundwater is being monitored at LF2 in accordance with the Detection Monitoring Program requirements specified in 40 C.F.R. § 257.94.

The background and compliance designations were reevaluated for the wells in the monitoring system and the monitoring system was revised based on groundwater flow conditions.

The following Statistically Significant Increases (SSIs) of 40 C.F.R. § 257 Appendix III parameter concentrations greater than background concentrations were determined:

- Boron at wells G06D, G208, R217D, G220, G222, and G223
- Calcium at wells R217D and G223
- Chloride at wells G06D, G202, G203, G208, R217D, G220, G222, G223, and G224
- Fluoride at wells G208, G220, and G222
- pH at wells R217D
- Sulfate at well R217D
- Total Dissolved Solids (TDS) at wells R217D, G222, and G223

Alternate Source Demonstrations (ASDs) were completed for the SSIs referenced above and LF2 remains in the Detection Monitoring Program.

The background and compliance designations were reevaluated for the wells in the monitoring system and the monitoring system was revised for the third quarter of 2022 compliance determination based on established groundwater flow conditions. The following SSIs of 40 C.F.R. § 257 Appendix III parameter concentrations greater than background concentrations were determined using the revised well designations:

- pH at wells G202, G203, G231, and G232

If an alternate source is identified to be the cause of the SSIs identified above, a written demonstration will be completed within 90 days of SSI determination and included in the 2023 Annual Groundwater Monitoring and Corrective Action Report.

1. INTRODUCTION

This report has been prepared by Ramboll Americas Engineering Solutions, Inc. (Ramboll) on behalf of Illinois Power Generating Company, to provide the information required by 40 C.F.R. § 257.90(e) for LF2 located at the NPP near Newton, Illinois.

In accordance with 40 C.F.R. § 257.90(e), the owner or operator of a coal combustion residuals (CCR) unit must prepare an Annual Groundwater Monitoring and Corrective Action Report for the preceding calendar year that documents the status of the Groundwater Monitoring and Corrective Action Program for the CCR unit, summarizes key actions completed, describes any problems encountered, discusses actions to resolve the problems, and projects key activities for the upcoming year. At a minimum, the annual report must contain the following information, to the extent available:

1. A map, aerial image, or diagram showing the CCR unit and all background (or upgradient) and downgradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR unit.
2. Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken.
3. In addition to all the monitoring data obtained under §§ 257.90 through 257.98, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs.
4. A narrative discussion of any transition between monitoring programs (e.g., the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase relative to background levels).
5. Other information required to be included in the annual report as specified in §§ 257.90 through 257.98.
6. A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit. At a minimum, the summary must specify all of the following:
 - i. At the start of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in §257.94 or the assessment monitoring program in §257.95.
 - ii. At the end of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in §257.94 or the assessment monitoring program in §257.95.
 - iii. If it was determined that there was a statistically significant increase over background for one or more constituents listed in Appendix III of §257 pursuant to §257.94(e):
 - A. Identify those constituents listed in Appendix III of §257 and the names of the monitoring wells associated with such an increase.
 - B. Provide the date when the assessment monitoring program was initiated for the CCR unit.

- iv. If it was determined that there was a statistically significant level above the groundwater protection standard [GWPS] for one or more constituents listed in Appendix IV of §257 pursuant to §257.95(g) include all of the following:
 - A. Identify those constituents listed in Appendix IV of §257 and the names of the monitoring wells associated with such an increase.
 - B. Provide the date when the assessment of corrective measures was initiated for the CCR unit.
 - C. Provide the date when the public meeting was held for the assessment of corrective measures for the CCR unit.
 - D. Provide the date when the assessment of corrective measures was completed for the CCR unit.
- v. Whether a remedy was selected pursuant to §257.97 during the current annual reporting period, and if so, the date of remedy selection.
- vi. Whether remedial activities were initiated or are ongoing pursuant to § 257.98 during the current annual reporting period.

This report provides the required information for LF2 for calendar year 2022.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

No changes have occurred to the monitoring program status in calendar year 2022 and LF2 remains in the Detection Monitoring Program in accordance with 40 C.F.R. § 257.94.

3. KEY ACTIONS COMPLETED IN 2022

The Detection Monitoring Program is summarized in **Table A** on the following page. The groundwater monitoring system, including the CCR unit and all background and compliance monitoring wells, is presented in **Figure 1A**. The background and compliance designations were reevaluated for the wells in the monitoring system and the monitoring system was revised for the third quarter of 2022 compliance determination based on established groundwater flow conditions. The updated monitoring well location map is presented in **Figure 1B**. The well network was increased from 11 to 15 wells; six additional existing wells were identified as background wells for a total of eight background wells, and seven wells, four of which are new to the monitoring program, were identified as compliance wells.

In general, one groundwater sample was collected from each background and compliance well during each monitoring event.¹ All samples were collected and analyzed in accordance with the Sampling and Analysis Plan (SAP) (Natural Resource Technology, an OBG Company [NRT/OBG], 2017a). Potentiometric surface maps for the third quarter of 2021 and both monitoring events in 2022 are included in **Figures 2 through 4**. All monitoring data and analytical results obtained under 40 C.F.R. § 257.90 through 257.98 (as applicable) in the third quarter of 2021 and both monitoring events in 2022 are presented in **Tables 1, 2A, and 2B**. Laboratory reports for the third quarter of 2021 and both 2022 monitoring events are included in **Appendix A**.

Analytical data were evaluated in accordance with the Statistical Analysis Plan (NRT/OBG, 2017b) to determine any SSIs of Appendix III parameters relative to background concentrations. Revised statistical background values are provided in **Table 3** which were applied to the third quarter 2022 analytical results reflecting the revised background and compliance well designations illustrated in **Figure 1B**. A flow chart showing the statistical methodology for determination of background values is included as **Appendix B**.

Potential alternate sources were evaluated as outlined in the 40 C.F.R. § 257.94(e)(2). ASDs were completed and certified by a qualified professional engineer. The dates the ASDs were completed are provided in **Table A**. The ASDs are included in **Appendix C**.

¹ Sampling was limited to G220 during the February 2022 sampling event, G06D, G208, G220, G222, G223, and R217D during the May and June 2022 sampling event, and G231, G232, and G202 during the January 2023 sampling event to confirm SSIs of select Appendix III parameters initially detected at concentrations greater than statistical background values in the preceding sampling event, as allowed by the Statistical Analysis Plan.

Table A. 2021-2022 Detection Monitoring Program Summary

Sampling Date	Analytical Data Receipt Date	Parameters Collected	SSI(s)	SSI(s) Determination Date	ASD Completion Date
November 9 - 12, 2021	December 08, 2021	Appendix III	Boron at wells G06D, G220, G222, and G223; Calcium at wells R217D, and G223; Chloride at wells G06D, G202, G203, G208, R217D, G220, G222, G223, and G224; Fluoride at wells G208 and G220; Sulfate at well G217D/R217	March 8, 2022	June 06, 2022
February 22 - 28, 2022	April 05, 2022	Appendix III	Boron at wells G208, R217D, G220, G222, and G223; Calcium at wells R217D and G223; Chloride at wells G06D, G202, G203, G208, R217D, G220, G222, G223, and G224; Fluoride at wells G208, G220, and G222; Sulfate at well R217D; TDS at wells R217D, G222, and G223	July 04, 2022	October 2, 2022
May 24-26, 2022 and June 15, 2022 ¹	September 09, 2022	Boron at wells G06D, G208, G220, and R217D; Fluoride at wells G208 and G222; Sulfate at well G223 ²	NA	NA	NA
August 15 - 18, 2022	October 21, 2022	Appendix III	pH at wells G202, G203, G231, and G232 ³	January 19, 2023	TBD
November 1 - 2, 2022 ¹	January 10, 2023	Appendix III at wells G231 and G232; pH at well G202 ⁴	NA	NA	NA

Notes:

ASD: Alternate Source Demonstration

NA: not applicable

SSI: statistically significant increase

TBD: to be determined

¹ Groundwater sample analysis was limited to select Appendix III parameters initially detected at concentrations greater than statistical background values in the preceding sampling event to confirm SSIs, as allowed by the Statistical Analysis Plan.

² Sampling was limited to G06D, G208, G220, G222, G223, and R217D during the May to June 2022 sampling event to confirm SSIs of select Appendix III parameters initially detected at concentrations greater than statistical background values in the preceding sampling event, as allowed by the Statistical Analysis Plan.

³ SSI determinations reflect changes to the monitoring well network as presented in **Figure 1B**.

⁴ Sampling was limited to G202, G231, and G232 during the November 2022 sampling event to confirm SSIs of select Appendix III parameters initially detected at concentrations greater than statistical background values in the preceding sampling event, as allowed by the Statistical Analysis Plan.

4. PROBLEMS ENCOUNTERED AND ACTIONS TO RESOLVE THE PROBLEMS

No problems were encountered with the groundwater monitoring program during 2022. Groundwater samples were collected and analyzed in accordance with the SAP and all data were accepted.

5. KEY ACTIVITIES PLANNED FOR 2023

The following key activities are planned for 2023:

- A Groundwater Monitoring Plan will be developed to replace the monitoring plan provided in the Hydrogeologic Monitoring Plan (NRT/OBG, 2017c). The new monitoring plan will be implemented in 2023 and reflect the revised background and compliance well designations.
- Continuation of the Detection Monitoring Program with semi-annual sampling scheduled for the first and third quarters of 2023.
- Complete evaluation of analytical data from the compliance wells using background data to determine whether an SSI of Appendix III parameters detected at concentrations greater than background concentrations has occurred.
- If an SSI is identified, potential alternate sources (*i.e.*, a source other than the CCR unit caused the SSI or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality) will be evaluated.
 - If an alternate source is identified to be the cause of the SSI, a written demonstration will be completed within 90 days of SSI determination and included in the 2023 Annual Groundwater Monitoring and Corrective Action Report.
 - If an alternate source(s) is not identified to be the cause of the SSI, the applicable requirements of 40 C.F.R. §§ 257.94 through 257.98 as may apply in 2023 (*e.g.*, assessment monitoring) will be met, including associated recordkeeping/notifications required by 40 C.F.R. §§ 257.105 through 257.108.
- The following documents were developed in 2022 and will be implemented beginning in the first quarter of 2023:
 - Multi-Site Quality Assurance Project Plan (Ramboll, 2022a)
 - Multi-Site Data Management Plan (Ramboll, 2022b)
 - Multi-Site Statistical Analysis Plan and Certification (Ramboll, 2022c)

6. REFERENCES

Natural Resource Technology, an OBG Company (NRT/OBG), 2017a. Sampling and Analysis Plan, Newton Landfill 2, Newton Power Station, Newton, Illinois, Project No. 2285, Revision 0, October 17, 2017.

Natural Resource Technology, an OBG Company (NRT/OBG), 2017b. Statistical Analysis Plan, Coffeen Power Station, Newton Power Station, Illinois Power Generating Company, October 17, 2017.

Natural Resource Technology, an OBG Company (NRT/OBG), 2017c. Hydrogeologic Monitoring Plan, Newton Primary Ash Pond – CCR Unit ID 501, Newton Landfill 2 – CCR Unit 502, Newton Power Station, Canton, Illinois. October 17, 2017. Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2022a. Multi-Site Quality Assurance Project Plan. December 28, 2022.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2022a. Multi-Site Quality Assurance Project Plan. December 28, 2022.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2022b. Multi-Site Data Management Plan. December 28, 2022.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2022c. Multi-Site Statistical Analysis Plan, 40 C.F.R. § 257. December 28, 2022.

TABLES

TABLE 1
GROUNDWATER ELEVATIONS
2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
NEWTON POWER PLANT
502 - LANDFILL 2
NEWTON, IL

Well ID	Monitored Unit	Well Screen Interval (feet BGS)	Well Type	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
APW05	UA	62.64 - 67.44	Water Level Only	38.93396	-88.28098	08/02/2021	14.79	529.28
APW05	UA	62.64 - 67.44	Water Level Only	38.93396	-88.28098	02/21/2022	14.23	529.84
APW05	UA	62.64 - 67.44	Water Level Only	38.93396	-88.28098	08/11/2022	14.45	529.62
APW06	UA	67.67 - 72.48	Water Level Only	38.93375	-88.28628	08/02/2021	19.76	526.31
APW06	UA	67.67 - 72.48	Water Level Only	38.93375	-88.28628	02/21/2022	19.46	526.61
APW06	UA	67.67 - 72.48	Water Level Only	38.93375	-88.28628	08/11/2022	19.62	526.45
APW07	UA	77.89 - 82.7	Water Level Only	38.92823	-88.29208	08/02/2021	46.10	492.27
APW07	UA	77.89 - 82.7	Water Level Only	38.92823	-88.29208	02/21/2022	45.99	492.38
APW07	UA	77.89 - 82.7	Water Level Only	38.92823	-88.29208	08/11/2022	46.48	491.89
APW08	UA	71.4 - 81.06	Water Level Only	38.92315	-88.29229	08/02/2021	37.38	491.59
APW08	UA	71.4 - 81.06	Water Level Only	38.92315	-88.29229	02/21/2022	36.73	492.24
APW08	UA	71.4 - 81.06	Water Level Only	38.92315	-88.29229	08/11/2022	37.30	491.67
APW09	UA	56.66 - 61.46	Water Level Only	38.92232	-88.28159	08/02/2021	26.75	504.77
APW09	UA	56.66 - 61.46	Water Level Only	38.92232	-88.28159	02/21/2022	25.74	505.78
APW09	UA	56.66 - 61.46	Water Level Only	38.92232	-88.28159	08/11/2022	26.24	505.28
APW10	UA	40.74 - 45.54	Water Level Only	38.92744	-88.27313	08/02/2021	17.88	506.37
APW10	UA	40.74 - 45.54	Water Level Only	38.92744	-88.27313	02/21/2022	16.92	507.33
APW10	UA	40.74 - 45.54	Water Level Only	38.92744	-88.27313	08/11/2022	17.32	506.93
APW11	UA	60 - 65	Water Level Only	38.93281	-88.27545	02/21/2022	23.98	514.65
APW13	UA	58.5 - 63.5	Water Level Only	38.92566	-88.27442	02/21/2022	31.46	506.53
APW14	UA	50 - 55	Water Level Only	38.92406	-88.27799	02/21/2022	19.95	506.34
APW15	UA	98 - 103	Water Level Only	38.92159	-88.28523	02/21/2022	21.02	503.67
APW16	UA	80.5 - 85.5	Water Level Only	38.92032	-88.29129	02/21/2022	39.33	491.85
APW17	UA	87 - 92	Water Level Only	38.92592	-88.29393	02/21/2022	40.34	492.18
APW18	UA	75 - 80	Water Level Only	38.93098	-88.29012	02/21/2022	50.93	492.34
G48MG	UA	71.8 - 76.65	Background	38.93925	-88.29601	08/02/2021	19.18	526.35
G48MG	UA	71.8 - 76.65	Background	38.93925	-88.29601	02/21/2022	18.94	526.59
G48MG	UA	71.8 - 76.65	Background	38.93925	-88.29601	08/11/2022	18.97	526.56
G06D	UA	74.23 - 93.89	Compliance	38.92723	-88.29650	08/02/2021	28.29	503.37
G06D	UA	74.23 - 93.89	Compliance	38.92723	-88.29650	02/21/2022	28.80	502.86
G06D	UA	74.23 - 93.89	Compliance	38.92723	-88.29650	08/11/2022	29.17	502.49
G201	UA	57 - 67	Background	38.93717	-88.29440	08/02/2021	18.32	526.55
G201	UA	57 - 67	Background	38.93717	-88.29440	02/21/2022	17.79	527.08

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G201	UA	57 - 67	Background	38.93717	-88.29440	08/11/2022	17.39	527.48
G202	UA	64 - 74	Compliance	38.93088	-88.29056	08/02/2021	Not Measured	
G202	UA	64 - 74	Compliance	38.93088	-88.29056	02/21/2022	47.10	492.59
G202	UA	64 - 74	Compliance	38.93088	-88.29056	08/11/2022	37.14	502.55
G203	UA	62.5 - 72.5	Compliance	38.92860	-88.29222	08/02/2021	41.18	491.95
G203	UA	62.5 - 72.5	Compliance	38.92860	-88.29222	02/21/2022	40.54	492.59
G203	UA	62.5 - 72.5	Compliance	38.92860	-88.29222	08/11/2022	32.00	501.13
G208	UA	74.93 - 94.71	Background	38.92963	-88.29818	08/02/2021	25.35	509.68
G208	UA	74.93 - 94.71	Background	38.92963	-88.29818	02/21/2022	24.83	510.20
G208	UA	74.93 - 94.71	Background	38.92963	-88.29818	08/11/2022	25.21	509.82
G217D	UA	NA	Background	38.93217	-88.29008	08/11/2022	19.49	518.43
G220	UA	76.37 - 86.05	Background	38.92841	-88.29951	08/02/2021	18.17	516.46
G220	UA	76.37 - 86.05	Background	38.92841	-88.29951	02/21/2022	17.98	516.65
G220	UA	76.37 - 86.05	Background	38.92841	-88.29951	08/11/2022	17.41	517.22
G222	UA	64.57 - 79.24	Background	38.92719	-88.29967	08/02/2021	15.23	519.09
G222	UA	64.57 - 79.24	Background	38.92719	-88.29967	02/21/2022	16.23	518.09
G222	UA	64.57 - 79.24	Background	38.92719	-88.29967	08/11/2022	15.13	519.19
G223	UA	79.09 - 88.75	Background	38.93016	-88.29345	08/02/2021	33.07	500.53
G223	UA	79.09 - 88.75	Background	38.93016	-88.29345	02/21/2022	32.90	500.70
G223	UA	79.09 - 88.75	Background	38.93016	-88.29345	08/11/2022	32.92	500.68
G224	UA	63.51 - 73.17	Background	38.93177	-88.29240	08/02/2021	42.36	491.95
G224	UA	63.51 - 73.17	Background	38.93177	-88.29240	02/21/2022	41.87	492.44
G224	UA	63.51 - 73.17	Background	38.93177	-88.29240	08/11/2022	42.23	492.08
G230	UA	68.23 - 77.65	Compliance	38.93040	-88.29106	08/02/2021	47.79	491.88
G230	UA	68.23 - 77.65	Compliance	38.93040	-88.29106	02/21/2022	47.22	492.45
G230	UA	68.23 - 77.65	Compliance	38.93040	-88.29106	08/11/2022	47.83	491.84
G231	UA	67.07 - 76.53	Compliance	38.92992	-88.29141	08/02/2021	47.15	491.91
G231	UA	67.07 - 76.53	Compliance	38.92992	-88.29141	02/21/2022	46.62	492.44
G231	UA	67.07 - 76.53	Compliance	38.92992	-88.29141	08/11/2022	47.16	491.90
G232	UA	69.85 - 74.44	Compliance	38.92944	-88.29176	08/02/2021	45.55	491.86
G232	UA	69.85 - 74.44	Compliance	38.92944	-88.29176	02/21/2022	44.95	492.46
G232	UA	69.85 - 74.44	Compliance	38.92944	-88.29176	08/11/2022	45.52	491.89
G233	UA	63.41 - 73.05	Compliance	38.92886	-88.29206	08/02/2021	41.48	491.88
G233	UA	63.41 - 73.05	Compliance	38.92886	-88.29206	08/11/2022	41.45	491.91
G234	UA	65.86 - 70.44	Water Level Only	38.92847	-88.29243	08/02/2021	43.00	491.87
G234	UA	65.86 - 70.44	Water Level Only	38.92847	-88.29243	02/21/2022	42.39	492.48
G234	UA	65.86 - 70.44	Water Level Only	38.92847	-88.29243	08/11/2022	43.00	491.87
MW31D	UA	36.07 - 40.75	Water Level Only	38.94521	-88.28039	08/02/2021	9.19	543.72
MW31D	UA	36.07 - 40.75	Water Level Only	38.94521	-88.28039	02/21/2022	7.39	545.52
MW32D	UA	56.75 - 61.23	Water Level Only	38.94323	-88.29297	02/21/2022	16.22	530.51
MW33D	UA	44.91 - 49.52	Water Level Only	38.94150	-88.28875	08/02/2021	12.59	533.76
MW33D	UA	44.91 - 49.52	Water Level	38.94150	-88.28875	02/21/2022	12.98	533.37

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NEWTON, IL

Well ID	Monitored Unit	Well Screen Interval (feet BGS)	Well Type	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
			Only					
MW34D	UA	51.07 - 55.67	Water Level Only	38.94131	-88.30143	02/21/2022	11.97	528.20
MW43D	UA	33.54 - 38.07	Water Level Only	38.93941	-88.30382	02/21/2022	6.45	536.39
R201	UA	58.65 - 78.22	Water Level Only	38.93716	-88.29439	08/02/2021	18.37	526.66
R201	UA	58.65 - 78.22	Water Level Only	38.93716	-88.29439	02/21/2022	17.95	NA
R201	UA	58.65 - 78.22	Water Level Only	38.93716	-88.29439	08/11/2022	17.50	NA
R202	UA	68.53 - 78.23	Water Level Only	38.93088	-88.29058	08/02/2021	47.35	492.03
R202	UA	68.53 - 78.23	Water Level Only	38.93088	-88.29058	02/21/2022	46.81	NA
R202	UA	68.53 - 78.23	Water Level Only	38.93088	-88.29058	08/11/2022	47.16	NA
R217D	UA	60.1 - 65.03	Background	38.93219	-88.29012	08/02/2021	19.62	518.56
R217D	UA	60.1 - 65.03	Background	38.93219	-88.29012	02/21/2022	19.57	518.61
R217D	UA	60.1 - 65.03	Background	38.93219	-88.29012	08/11/2022	19.50	518.68
XPW01	CCR	7 - 17	Water Level Only	38.93221	-88.28553	02/21/2022	10.40	541.36
XPW01	CCR	7 - 17	Water Level Only	38.93221	-88.28553	08/11/2022	10.09	541.67
XPW02	CCR	6 - 16	Water Level Only	38.93234	-88.28289	02/21/2022	6.38	548.05
XPW02	CCR	6 - 16	Water Level Only	38.93234	-88.28289	08/11/2022	7.12	547.31
XPW03	CCR	10 - 20	Water Level Only	38.93106	-88.27641	02/21/2022	9.75	543.90
XPW03	CCR	10 - 20	Water Level Only	38.93106	-88.27641	08/11/2022	9.71	543.94
XPW04	CCR	10 - 20	Water Level Only	38.92989	-88.27407	02/21/2022	11.94	542.57
XPW04	CCR	10 - 20	Water Level Only	38.92989	-88.27407	08/11/2022	12.12	542.39
SG02	SW	NA	Water Level Only	38.92123	-88.29206	02/21/2022	-28.91	535.80
SG02	SW	NA	Water Level Only	38.92123	-88.29206	08/11/2022	-29.11	536.00

Notes:
BGS = below ground surface
BMP = below measuring point
NAVD88 = North American Vertical Datum of 1988
NA = not available/not applicable
Monitored Unit Abbreviations:
CCR = coal combustion residuals
SW = surface water
UA = uppermost aquifer

TABLE 2A
2021 SECOND SEMI-ANNUAL EVENT AND 2022 FIRST SEMI-ANNUAL EVENT ANALYTICAL RESULTS - APPENDIX III PARAMETERS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 NEWTON POWER PLANT
 502 - LANDFILL 2
 NEWTON, IL

Well ID	Well Type	Date	Event ID	Boron, total (mg/L)	Calcium, total (mg/L)	Chloride, total (mg/L)	Fluoride, total (mg/L)	pH (field) (SU)	Sulfate, total (mg/L)	Total Dissolved Solids (mg/L)
Background Value(s)				0.189	160	34.0	1.07	6.6/8.1	760	860
G48MG	Background	11/10/2021	D9	0.0970	64.0	27.0	0.584	7.5	15.0	470
G48MG	Background	02/23/2022	D10	0.120	81.0	24.0	0.573	7.5	11.0	460
G201	Background	11/09/2021	D9	0.140	170	4.10	0.870	7.3	470	960
G201	Background	02/23/2022	D10	0.130	150	4.50 B	0.875	7.4	530	900
G06D	Compliance	11/09/2021	D9	0.190	120	51.0	1.01	7.0	1 U	880
G06D	Compliance	02/22/2022	D9R	--	--	--	--	--	--	760
G06D	Compliance	02/22/2022	D10	0.190	110	53.0	0.943	7.3	1 U	760
G06D	Compliance	06/15/2022	D10R	0.180	--	--	--	7.0	--	--
G202	Compliance	11/10/2021	D9	0.120	120	70.0	0.644	7.4	1 U	800
G202	Compliance	02/23/2022	D10	0.120	120	58.0	0.476	7.5	190	680
G203	Compliance	11/10/2021	D9	0.0860	130	55.0	0.510	7.5	150	800
G203	Compliance	02/24/2022	D10	0.110	120	53.0	0.25 U	7.2	160	650
G208	Compliance	11/12/2021	D9	0.180	97.0	45.0	1.35	7.0	1 U	700
G208	Compliance	02/24/2022	D10	0.210	95.0	58.0	1.46	7.1	1 U	760
G208	Compliance	05/26/2022	D10R	0.200	--	--	1.28	7.0	--	--
G220	Compliance	11/11/2021	D9	0.270	170	39.0	1.33	7.0	7.80	790
G220	Compliance	02/24/2022	D9R	--	96.0	--	--	--	--	--
G220	Compliance	02/24/2022	D10	0.200	96.0	83.0	1.25	7.0	1.80	810
G220	Compliance	05/25/2022	D10R	0.260	--	--	--	7.0	--	--
G222	Compliance	11/11/2021	D9	0.230	120	68.0	0.966	7.2	110	1,100
G222	Compliance	02/22/2022	D10	0.240	130	71.0	1.12	7.5	160	1,100
G222	Compliance	05/25/2022	D10R	--	--	--	1.18	7.4	--	--
G223	Compliance	11/11/2021	D9	0.230	290	310	0.863	6.8	760	2,600
G223	Compliance	02/28/2022	D10	0.250	360	300	0.872	6.8	820	2,400

TABLE 2A
2021 SECOND SEMI-ANNUAL EVENT AND 2022 FIRST SEMI-ANNUAL EVENT ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
NEWTON POWER PLANT
502 - LANDFILL 2
NEWTON, IL

Well ID	Well Type	Date	Event ID	Boron, total (mg/L)	Calcium, total (mg/L)	Chloride, total (mg/L)	Fluoride, total (mg/L)	pH (field) (SU)	Sulfate, total (mg/L)	Total Dissolved Solids (mg/L)
G223	Compliance	05/26/2022	D10R	--	--	--	--	7.0	730	--
G224	Compliance	11/11/2021	D9	0.0890	130	54.0	0.392	7.4	120	760
G224	Compliance	02/22/2022	D10	0.100	140	52.0	0.314 J	7.4	110	690
R217D	Compliance	11/12/2021	D9	0.180	640	99.0	0.296	6.5	2,100	3,500
R217D	Compliance	02/28/2022	D9R	--	--	--	--	6.7	--	--
R217D	Compliance	02/28/2022	D10	0.200	570	86.0	0.321	6.7	2,200	3,500
R217D	Compliance	05/24/2022	D10R	0.200	--	--	--	6.7	--	3,700

Notes:
If an event includes a resample, a statistically significant increase is confirmed if both the sample and the resample exceed the background value.
Exceedance of Background
mg/L = milligrams per liter
SU = Standard Units
- = not analyzed
U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate. Lab reports may or may not report both the limit of detection and the limit of quantitation. Limits are provided in the electronic data deliverable. As such, the U-flagged result value provided in this table may not match the result value provided in the lab report.
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
B = The analyte was found in sample and in associated method blank.

TABLE 2B
2022 SECOND SEMI-ANNUAL EVENT ANALYTICAL RESULTS - APPENDIX III PARAMETERS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 NEWTON POWER PLANT
 502 - LANDFILL 2
 NEWTON, IL

Well ID	Well Type	Date	Event ID	Boron, total (mg/L)	Calcium, total (mg/L)	Chloride, total (mg/L)	Fluoride, total (mg/L)	pH (field) (SU)	Sulfate, total (mg/L)	Total Dissolved Solids (mg/L)
Background Value(s)				0.317	750	310	1.48	6.6/7.7	2200	4,100
G48MG	Background	08/16/2022	D11	0.180	150	27.0	0.411	7.6	5.60	550
G201	Background	08/17/2022	D11	0.140	160	4.40	0.715	7.3	520	900
G208	Background	08/15/2022	D11	0.180	95.0	55.0	1.03	6.8	0.24 J	820
G220	Background	08/15/2022	D11	0.290	120	41.0	1.26	6.9	0.47 J	730
G222	Background	08/16/2022	D11	0.280	140	69.0	1.03	7.8	120	1,100
G223	Background	08/15/2022	D11	0.250	320	310	0.884	6.8	710	2,500
G224	Background	08/15/2022	D11	0.140	140	55.0	0.327	7.0	120	670
R217D	Background	08/15/2022	D11	0.200	570	100	0.247 J	6.8	2,100	4,100
G06D	Compliance	08/16/2022	D11	0.240	110	56.0	0.722	7.3	0.42 J	870
G202	Compliance	08/17/2022	D11	0.150	100	57.0	0.367	8.1	85.0	770
G202	Compliance	11/02/2022	D11R	--	--	--	--	8.0	--	720
G203	Compliance	08/17/2022	D11	0.100	120	54.0	0.263	8.0	120	660
G230	Compliance	08/17/2022	D11	0.130	150	100	0.579	7.7	320	1,100
G231	Compliance	08/17/2022	D11	0.110	110	81.0	0.430	7.8	220	810
G231	Compliance	11/01/2022	D11R	0.110	120	64.0	0.573	8.1	180	700
G232	Compliance	08/17/2022	D11	0.130	100	85.0	0.651	8.0	330	950
G232	Compliance	11/02/2022	D11R	0.150	130	70.0	0.763	8.0	350	1,000
G233	Compliance	08/18/2022	D11	0.150	190	54.0	0.494	7.2	620	1,500

Notes:
 If an event includes a resample, a statistically significant increase (SSI) is confirmed if both the sample and the resample exceed the background value.
 Exceedance of Background
 mg/L = milligrams per liter
 SU = Standard Units
 - = not analyzed
 J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

TABLE 3
STATISTICAL BACKGROUND VALUES
2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
NEWTON POWER PLANT
502 - LANDFILL 2
NEWTON, IL

Parameter	Q1					Q3				
	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Background Value (LPL/UPL)	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Background Value (LPL/UPL)
Boron (mg/L)	12/15/2015 - 06/14/2017	16	0	Parametric UPL (log-transformed)	0.189	02/19/2019 - 08/17/2022	70	0	Parametric UPL	0.317
Calcium (mg/L)	12/15/2015 - 06/14/2017	16	0	Non-parametric UPL	160	02/19/2019 - 08/17/2022	66	0	Non-Parametric UPL	750
Chloride (mg/L)	12/15/2015 - 06/14/2017	16	0	Non-parametric UPL	34.0	02/19/2019 - 08/17/2022	69	0	Non-Parametric UPL	310
Fluoride (mg/L)	12/15/2015 - 06/14/2017	16	0	Parametric UPL	1.07	02/19/2019 - 08/17/2022	71	3	Parametric UPL	1.48
pH (field) (SU)	12/15/2015 - 06/14/2017	16	0	Parametric UPL	6.6/8.1	02/19/2019 - 08/17/2022	75	0	Parametric LPL/UPL	6.6/7.7
Sulfate (mg/L)	12/15/2015 - 06/14/2017	16	6	Non-parametric UPL	760	02/19/2019 - 08/17/2022	65	8	Non-Parametric UPL	2200
Total Dissolved Solids (mg/L)	12/15/2015 - 06/14/2017	16	0	Non-parametric UPL	860	02/19/2019 - 08/17/2022	68	0	Non-Parametric UPL	4,100

Notes:
LPL = lower prediction limit (applicable for pH only)
mg/L = milligrams per liter
SU = standard units
UPL = upper prediction limit

FIGURES



- COMPLIANCE MONITORING WELL BACKGROUND
- MONITORING WELL
- MONITORING WELL
- 40 C.F.R. § 257 REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE

0 250 500
Feet

MONITORING WELL LOCATION
MAP (Q1)

2022 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
LANDFILL 2
NEWTON POWER PLANT
NEWTON, ILLINOIS

FIGURE 1A

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- 40 C.F.R. § 257 REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE



UPDATED MONITORING WELL
LOCATION MAP (Q3)

2022 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
LANDFILL 2
NEWTON POWER PLANT
NEWTON, ILLINOIS

FIGURE 1B

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



PROJECT: 169000X.XXX | DATED: 5/27/2022 | DESIGNER: galammc
Y:\Mapping\Projects\2212285\WGD\GW_Contours\Round_2021\Newton\LF_502\NEW LF GWE Contours D9A4D 20211108.mxd



- BACKGROUND WELL
- COMPLIANCE WELL
- PORE WATER WELL
- MONITORING WELL
- STAFF GAGE, CCR UNIT
- STAFF GAGE, RIVER
- GROUNDWATER ELEVATION CONTOUR (5-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- 40 C.F.R. § 257 REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE

NOTES:
1. ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
2. NM = NOT MEASURED
3. ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)



**POTENTIOMETRIC SURFACE MAP
NOVEMBER 8, 2021**

**2022 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
LANDFILL 2
NEWTON POWER PLANT
NEWTON, ILLINOIS**

FIGURE 2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- COMPLIANCE WELL
- BACKGROUND WELL
- PORE WATER WELL
- MONITORING WELL
- STAFF GAGE, CCR UNIT
- STAFF GAGE, RIVER
- GROUNDWATER ELEVATION CONTOUR (5-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- 40 C.F.R. § 257 REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE

NOTES:
1. ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
2. ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)



POTENTIOMETRIC SURFACE MAP
FEBRUARY 21, 2022

2022 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
LANDFILL 2
NEWTON POWER PLANT
NEWTON, ILLINOIS

FIGURE 3

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



Y:\Mapping\Projects\2212285\MXD\GW_Contours\Round_2022\Newton\LF_502\NEW LF 502 Pot Surface 20220811.mxd

PROJECT: 169000XXXXX | DATED: 1/13/2023 | DESIGNER: galammc



- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- MONITORING WELL
- STAFF GAGE, CCR UNIT
- STAFF GAGE, LAKE
- GROUNDWATER ELEVATION CONTOUR (5-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- 40 C.F.R. § 257 REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE

NOTES:

1. ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.

2. ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)



**POTENTIOMETRIC SURFACE MAP
AUGUST 11, 2022**

**2022 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
LANDFILL 2
NEWTON POWER PLANT
NEWTON, ILLINOIS**

FIGURE 4

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

APPENDICES

APPENDIX A LABORATORY REPORTS



Pace Analytical Services, LLC

2231 W. Altorfer Drive

Peoria, IL 61615

(800)752-6651

January 21, 2022

Steve Wiskes
Ramboll - Milwaukee
234 W Florida Street, 5th Floor
Milwaukee, WI 53204

Dear Steve Wiskes:

Please find enclosed the **revised** analytical results for the sample(s) the laboratory received. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of Pace Analytical Services, LLC.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

Pace Analytical Services appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the Director of Client Services, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lgrant@pdclab.com.

Gail Schindler

Gail Schindler
Project Manager
(309) 692-9688 x1716
gschindler@pdclab.com



Pace Analytical Services, LLC

2231 W. Altorfer Drive

Peoria, IL 61615

(800)752-6651

**SAMPLE RECEIPT CHECK LIST**

Items not applicable will be marked as in compliance

Work Order EK02067

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided



Work Order EK02562

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided



Work Order EK02715

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided



Work Order EK02783

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
YES	Case narrative provided



Pace Analytical Services, LLC

2231 W. Altorfer Drive

Peoria, IL 61615

(800)752-6651

Case Narrative

L1R Total Dissolved Solids was originally set within hold time but the weight back did not meet QC criteria . The sample was reanalyzed outside hold time.
Sulfate result for L1R corrected due to incorrect dilution.



Pace Analytical Services, LLC

2231 W. Altorfer Drive

Peoria, IL 61615

(800)752-6651



ANALYTICAL RESULTS

Sample: EK02067-01
Name: R201
Matrix: Ground Water - Grab

Sampled: 11/09/21 12:45
Received: 11/09/21 20:24
PO #: 662721

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	21	mg/L		11/19/21 17:42	5	5.0	11/19/21 17:42	CRD	EPA 300.0 REV 2.1
Sulfate	150	mg/L		11/19/21 18:00	25	25	11/19/21 18:00	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	18.53	Feet		11/09/21 12:45	1		11/09/21 12:45	FIELD	Field
Dissolved oxygen, Field	0.50	mg/L		11/09/21 12:45	1		11/09/21 12:45	FIELD	Field
Oxidation Reduction Potential	-151	mV		11/09/21 12:45	1	-500	11/09/21 12:45	FIELD	Field
pH, Field Measured	7.30	pH Units		11/09/21 12:45	1		11/09/21 12:45	FIELD	Field
Specific Conductance, Field Measured	1182	umhos/cm		11/09/21 12:45	1		11/09/21 12:45	FIELD	Field
Temperature, Field Measured	14.9	°C		11/09/21 12:45	1		11/09/21 12:45	FIELD	Field
Turbidity, Field Measured	30.4	NTU		11/09/21 12:45	1	0.00	11/09/21 12:45	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	510	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Fluoride	1.54	mg/L		11/29/21 14:05	1	0.250	11/29/21 14:05	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	810	mg/L		11/12/21 09:28	1	26	11/12/21 13:26	ADM	SM 2540C
Total Metals - PIA									
Boron	230	ug/L		11/18/21 08:26	5	10	11/22/21 14:04	JMW	EPA 6020A
Calcium	100	mg/L		11/18/21 08:26	5	0.15	11/22/21 14:04	JMW	EPA 6020A
Magnesium	45	mg/L		11/18/21 08:26	5	0.10	11/23/21 13:10	JMW	EPA 6020A
Potassium	1.6	mg/L		11/18/21 08:26	5	0.10	11/22/21 14:04	JMW	EPA 6020A
Sodium	140	mg/L		11/18/21 08:26	5	0.10	11/22/21 14:04	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EK02067-02
Name: G201
Matrix: Ground Water - Grab

Sampled: 11/09/21 12:34
Received: 11/09/21 20:24
PO #: 662721

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	4.1	mg/L		11/19/21 18:18	1	1.0	11/19/21 18:18	CRD	EPA 300.0 REV 2.1
Sulfate	470	mg/L		11/19/21 19:31	100	100	11/19/21 19:31	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	18.29	Feet		11/09/21 12:34	1		11/09/21 12:34	FIELD	Field
Dissolved oxygen, Field	1.6	mg/L		11/09/21 12:34	1		11/09/21 12:34	FIELD	Field
Oxidation Reduction Potential	-101	mV		11/09/21 12:34	1	-500	11/09/21 12:34	FIELD	Field
pH, Field Measured	7.35	pH Units		11/09/21 12:34	1		11/09/21 12:34	FIELD	Field
Specific Conductance, Field Measured	971.2	umhos/cm		11/09/21 12:34	1		11/09/21 12:34	FIELD	Field
Temperature, Field Measured	16.2	°C		11/09/21 12:34	1		11/09/21 12:34	FIELD	Field
Turbidity, Field Measured	5.15	NTU		11/09/21 12:34	1	0.00	11/09/21 12:34	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	160	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Fluoride	0.870	mg/L		11/29/21 14:06	1	0.250	11/29/21 14:06	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	960	mg/L		11/12/21 09:28	1	26	11/12/21 13:26	ADM	SM 2540C
Total Metals - PIA									
Boron	140	ug/L		11/16/21 12:23	5	10	11/22/21 11:19	JMW	EPA 6020A
Calcium	170	mg/L		11/16/21 12:23	5	0.15	11/22/21 11:19	JMW	EPA 6020A
Magnesium	22	mg/L		11/16/21 12:23	5	0.10	11/22/21 11:19	JMW	EPA 6020A
Potassium	1.8	mg/L		11/16/21 12:23	5	0.10	11/22/21 11:19	JMW	EPA 6020A
Sodium	95	mg/L		11/16/21 12:23	5	0.10	11/22/21 11:19	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EK02067-03
Name: G06D
Matrix: Ground Water - Grab

Sampled: 11/09/21 10:59
Received: 11/09/21 20:24
PO #: 662721

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	51	mg/L	Q4	11/19/21 20:44	10	10	11/19/21 20:44	CRD	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/19/21 19:49	1	1.0	11/19/21 19:49	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	28.11	Feet		11/09/21 10:59	1		11/09/21 10:59	FIELD	Field
Dissolved oxygen, Field	0.91	mg/L		11/09/21 10:59	1		11/09/21 10:59	FIELD	Field
Oxidation Reduction Potential	-105	mV		11/09/21 10:59	1	-500	11/09/21 10:59	FIELD	Field
pH, Field Measured	7.03	pH Units		11/09/21 10:59	1		11/09/21 10:59	FIELD	Field
Specific Conductance, Field Measured	1185	umhos/cm		11/09/21 10:59	1		11/09/21 10:59	FIELD	Field
Temperature, Field Measured	13.9	°C		11/09/21 10:59	1		11/09/21 10:59	FIELD	Field
Turbidity, Field Measured	352	NTU		11/09/21 10:59	1	0.00	11/09/21 10:59	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	760	mg/L	M	11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L	M	11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Fluoride	1.01	mg/L		11/29/21 14:07	1	0.250	11/29/21 14:07	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	880	mg/L		11/12/21 09:28	1	26	11/12/21 13:26	ADM	SM 2540C
Total Metals - PIA									
Boron	190	ug/L		11/16/21 12:23	5	10	11/22/21 11:23	JMW	EPA 6020A
Calcium	120	mg/L		11/16/21 12:23	5	0.15	11/22/21 11:23	JMW	EPA 6020A
Magnesium	53	mg/L		11/16/21 12:23	5	0.10	11/22/21 11:23	JMW	EPA 6020A
Potassium	2.8	mg/L		11/16/21 12:23	5	0.10	11/22/21 11:23	JMW	EPA 6020A
Sodium	150	mg/L		11/16/21 12:23	5	0.10	11/22/21 11:23	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EK02562-01
Name: G202
Matrix: Ground Water - Grab

Sampled: 11/10/21 12:21
Received: 11/11/21 12:35
PO #: 662721

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	70	mg/L		11/12/21 11:04	25	25	11/12/21 11:04	CRD	EPA 300.0 REV 2.1
Fluoride	0.644	mg/L		11/22/21 14:52	1	0.250	11/22/21 14:52	CRD	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/12/21 10:10	1	1.0	11/12/21 10:10	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	47.89	Feet		11/10/21 12:21	1		11/10/21 12:21	FIELD	Field
Dissolved oxygen, Field	0.98	mg/L		11/10/21 12:21	1		11/10/21 12:21	FIELD	Field
Oxidation Reduction Potential	-113	mV		11/10/21 12:21	1	-500	11/10/21 12:21	FIELD	Field
pH, Field Measured	7.45	pH Units		11/10/21 12:21	1		11/10/21 12:21	FIELD	Field
Specific Conductance, Field Measured	1269	umhos/cm		11/10/21 12:21	1		11/10/21 12:21	FIELD	Field
Temperature, Field Measured	15.4	°C		11/10/21 12:21	1		11/10/21 12:21	FIELD	Field
Turbidity, Field Measured	2.04	NTU		11/10/21 12:21	1	0.00	11/10/21 12:21	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	460	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Solids - total dissolved solids (TDS)	800	mg/L	M	11/12/21 13:23	1	26	11/12/21 14:52	JAA	SM 2540C
Total Metals - PIA									
Boron	120	ug/L		11/18/21 08:26	5	10	11/22/21 13:10	JMW	EPA 6020A
Calcium	120	mg/L		11/18/21 08:26	5	0.15	11/22/21 13:10	JMW	EPA 6020A
Magnesium	48	mg/L		11/18/21 08:26	5	0.10	11/22/21 13:10	JMW	EPA 6020A
Potassium	1.7	mg/L		11/18/21 08:26	5	0.10	11/22/21 13:10	JMW	EPA 6020A
Sodium	100	mg/L		11/18/21 08:26	5	0.10	11/22/21 13:10	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EK02562-02
Name: R202
Matrix: Ground Water - Grab

Sampled: 11/10/21 11:01
Received: 11/11/21 12:35
PO #: 662721

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	62	mg/L		11/23/21 21:21	10	10	11/23/21 21:21	CRD	EPA 300.0 REV 2.1
Fluoride	0.617	mg/L		11/22/21 15:28	1	0.250	11/22/21 15:28	CRD	EPA 300.0 REV 2.1
Sulfate	34	mg/L		11/23/21 21:21	10	10	11/23/21 21:21	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	47.58	Feet		11/10/21 11:01	1		11/10/21 11:01	FIELD	Field
Dissolved oxygen, Field	0.38	mg/L		11/10/21 11:01	1		11/10/21 11:01	FIELD	Field
Oxidation Reduction Potential	< -500	mV		11/10/21 11:01	1	-500	11/10/21 11:01	FIELD	Field
pH, Field Measured	7.35	pH Units		11/10/21 11:01	1		11/10/21 11:01	FIELD	Field
Specific Conductance, Field Measured	1160	umhos/cm		11/10/21 11:01	1		11/10/21 11:01	FIELD	Field
Temperature, Field Measured	14.9	°C		11/10/21 11:01	1		11/10/21 11:01	FIELD	Field
Turbidity, Field Measured	2.23	NTU		11/10/21 11:01	1	0.00	11/10/21 11:01	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	510	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Solids - total dissolved solids (TDS)	650	mg/L		11/12/21 13:23	1	26	11/12/21 14:52	JAA	SM 2540C
Total Metals - PIA									
Boron	110	ug/L		11/18/21 08:26	5	10	11/22/21 13:25	JMW	EPA 6020A
Calcium	100	mg/L		11/18/21 08:26	5	0.15	11/22/21 13:25	JMW	EPA 6020A
Magnesium	44	mg/L		11/18/21 08:26	5	0.10	11/22/21 13:25	JMW	EPA 6020A
Potassium	1.6	mg/L		11/18/21 08:26	5	0.10	11/22/21 13:25	JMW	EPA 6020A
Sodium	110	mg/L		11/18/21 08:26	5	0.10	11/22/21 13:25	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EK02562-03
Name: G203
Matrix: Ground Water - Grab

Sampled: 11/10/21 13:43
Received: 11/11/21 12:35
PO #: 662721

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	55	mg/L		11/22/21 16:59	25	25	11/22/21 16:59	CRD	EPA 300.0 REV 2.1
Fluoride	0.510	mg/L		11/22/21 16:05	1	0.250	11/22/21 16:05	CRD	EPA 300.0 REV 2.1
Sulfate	150	mg/L		11/22/21 16:59	25	25	11/22/21 16:59	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	41.29	Feet		11/10/21 13:43	1		11/10/21 13:43	FIELD	Field
Dissolved oxygen, Field	1.3	mg/L		11/10/21 13:43	1		11/10/21 13:43	FIELD	Field
Oxidation Reduction Potential	-102	mV		11/10/21 13:43	1	-500	11/10/21 13:43	FIELD	Field
pH, Field Measured	7.48	pH Units		11/10/21 13:43	1		11/10/21 13:43	FIELD	Field
Specific Conductance, Field Measured	1220	umhos/cm		11/10/21 13:43	1		11/10/21 13:43	FIELD	Field
Temperature, Field Measured	15.5	°C		11/10/21 13:43	1		11/10/21 13:43	FIELD	Field
Turbidity, Field Measured	6.09	NTU		11/10/21 13:43	1	0.00	11/10/21 13:43	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	440	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Solids - total dissolved solids (TDS)	800	mg/L		11/12/21 13:23	1	26	11/12/21 14:52	JAA	SM 2540C
Total Metals - PIA									
Boron	86	ug/L		11/18/21 08:26	5	10	11/22/21 13:29	JMW	EPA 6020A
Calcium	130	mg/L		11/18/21 08:26	5	0.15	11/22/21 13:29	JMW	EPA 6020A
Magnesium	50	mg/L		11/18/21 08:26	5	0.10	11/22/21 13:29	JMW	EPA 6020A
Potassium	1.5	mg/L		11/18/21 08:26	5	0.10	11/22/21 13:29	JMW	EPA 6020A
Sodium	85	mg/L		11/18/21 08:26	5	0.10	11/22/21 13:29	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EK02562-04
Name: G48MG
Matrix: Ground Water - Grab

Sampled: 11/10/21 15:34
Received: 11/11/21 12:35
PO #: 662721

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	27	mg/L		11/22/21 17:35	10	10	11/22/21 17:35	CRD	EPA 300.0 REV 2.1
Fluoride	0.584	mg/L		11/22/21 17:17	1	0.250	11/22/21 17:17	CRD	EPA 300.0 REV 2.1
Sulfate	15	mg/L		11/22/21 17:35	10	10	11/22/21 17:35	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	19.21	Feet		11/10/21 15:34	1		11/10/21 15:34	FIELD	Field
Dissolved oxygen, Field	1.7	mg/L		11/10/21 15:34	1		11/10/21 15:34	FIELD	Field
Oxidation Reduction Potential	-102	mV		11/10/21 15:34	1	-500	11/10/21 15:34	FIELD	Field
pH, Field Measured	7.48	pH Units		11/10/21 15:34	1		11/10/21 15:34	FIELD	Field
Specific Conductance, Field Measured	817.5	umhos/cm		11/10/21 15:34	1		11/10/21 15:34	FIELD	Field
Temperature, Field Measured	16.3	°C		11/10/21 15:34	1		11/10/21 15:34	FIELD	Field
Turbidity, Field Measured	512	NTU		11/10/21 15:34	1	0.00	11/10/21 15:34	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	400	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Solids - total dissolved solids (TDS)	470	mg/L		11/12/21 13:23	1	26	11/12/21 14:52	JAA	SM 2540C
Total Metals - PIA									
Boron	97	ug/L		11/18/21 08:26	5	10	11/22/21 13:32	JMW	EPA 6020A
Calcium	64	mg/L		11/18/21 08:26	5	0.15	11/22/21 13:32	JMW	EPA 6020A
Magnesium	27	mg/L		11/18/21 08:26	5	0.10	11/22/21 13:32	JMW	EPA 6020A
Potassium	3.6	mg/L		11/18/21 08:26	5	0.10	11/22/21 13:32	JMW	EPA 6020A
Sodium	110	mg/L		11/18/21 08:26	5	0.10	11/22/21 13:32	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EK02715-01
Name: G220
Matrix: Ground Water - Grab

Sampled: 11/11/21 14:49
Received: 11/12/21 09:21
PO #: 662721

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	39	mg/L		11/22/21 22:29	10	10	11/22/21 22:29	CRD	EPA 300.0 REV 2.1
Fluoride	1.33	mg/L		11/22/21 21:35	1	0.250	11/22/21 21:35	CRD	EPA 300.0 REV 2.1
Sulfate	7.8	mg/L		11/22/21 21:35	1	1.0	11/22/21 21:35	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	18.36	Feet		11/11/21 14:49	1		11/11/21 14:49	FIELD	Field
Dissolved oxygen, Field	0.0	mg/L		11/11/21 14:49	1		11/11/21 14:49	FIELD	Field
Oxidation Reduction Potential	-136	mV		11/11/21 14:49	1	-500	11/11/21 14:49	FIELD	Field
pH, Field Measured	7.03	pH Units		11/11/21 14:49	1		11/11/21 14:49	FIELD	Field
Specific Conductance, Field Measured	1320	umhos/cm		11/11/21 14:49	1		11/11/21 14:49	FIELD	Field
Temperature, Field Measured	15.8	°C		11/11/21 14:49	1		11/11/21 14:49	FIELD	Field
Turbidity, Field Measured	2050	NTU		11/11/21 14:49	1	0.00	11/11/21 14:49	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	640	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Solids - total dissolved solids (TDS)	790	mg/L		11/15/21 16:06	1	26	11/15/21 17:13	JAA	SM 2540C
Total Metals - PIA									
Boron	270	ug/L		11/18/21 08:26	5	10	11/22/21 13:36	JMW	EPA 6020A
Calcium	170	mg/L		11/18/21 08:26	5	0.15	11/22/21 13:36	JMW	EPA 6020A
Magnesium	77	mg/L		11/18/21 08:26	5	0.10	11/22/21 13:36	JMW	EPA 6020A
Potassium	5.7	mg/L		11/18/21 08:26	5	0.10	11/22/21 13:36	JMW	EPA 6020A
Sodium	140	mg/L		11/18/21 08:26	5	0.10	11/22/21 13:36	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EK02715-02
Name: G222
Matrix: Ground Water - Grab

Sampled: 11/11/21 12:10
Received: 11/12/21 09:21
PO #: 662721

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	68	mg/L		11/22/21 23:05	25	25	11/22/21 23:05	CRD	EPA 300.0 REV 2.1
Fluoride	0.966	mg/L		11/22/21 22:47	1	0.250	11/22/21 22:47	CRD	EPA 300.0 REV 2.1
Sulfate	110	mg/L		11/22/21 23:05	25	25	11/22/21 23:05	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	16.47	Feet		11/11/21 12:10	1		11/11/21 12:10	FIELD	Field
Dissolved oxygen, Field	0.10	mg/L		11/11/21 12:10	1		11/11/21 12:10	FIELD	Field
Oxidation Reduction Potential	-149	mV		11/11/21 12:10	1	-500	11/11/21 12:10	FIELD	Field
pH, Field Measured	7.25	pH Units		11/11/21 12:10	1		11/11/21 12:10	FIELD	Field
Specific Conductance, Field Measured	1806	umhos/cm		11/11/21 12:10	1		11/11/21 12:10	FIELD	Field
Temperature, Field Measured	15.3	°C		11/11/21 12:10	1		11/11/21 12:10	FIELD	Field
Turbidity, Field Measured	2.83	NTU		11/11/21 12:10	1	0.00	11/11/21 12:10	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	790	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Solids - total dissolved solids (TDS)	1100	mg/L		11/16/21 10:33	1	26	11/16/21 11:55	JAA	SM 2540C
Total Metals - PIA									
Boron	230	ug/L		11/22/21 14:51	5	10	11/24/21 10:46	JMW	EPA 6020A
Calcium	120	mg/L		11/22/21 14:51	5	0.15	11/24/21 10:46	JMW	EPA 6020A
Magnesium	54	mg/L		11/22/21 14:51	5	0.10	11/24/21 10:46	JMW	EPA 6020A
Potassium	2.4	mg/L		11/22/21 14:51	5	0.10	11/24/21 10:46	JMW	EPA 6020A
Sodium	190	mg/L		11/22/21 14:51	5	0.10	11/24/21 10:46	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EK02715-03
Name: G223
Matrix: Ground Water - Grab

Sampled: 11/11/21 15:06
Received: 11/12/21 09:21
PO #: 662721

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	310	mg/L		11/22/21 23:41	50	50	11/22/21 23:41	CRD	EPA 300.0 REV 2.1
Sulfate	760	mg/L		11/23/21 21:39	100	100	11/23/21 21:39	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	32.68	Feet		11/11/21 15:06	1		11/11/21 15:06	FIELD	Field
Dissolved oxygen, Field	0.26	mg/L		11/11/21 15:06	1		11/11/21 15:06	FIELD	Field
Oxidation Reduction Potential	-134	mV		11/11/21 15:06	1	-500	11/11/21 15:06	FIELD	Field
pH, Field Measured	6.82	pH Units		11/11/21 15:06	1		11/11/21 15:06	FIELD	Field
Specific Conductance, Field Measured	3362	umhos/cm		11/11/21 15:06	1		11/11/21 15:06	FIELD	Field
Temperature, Field Measured	15.1	°C		11/11/21 15:06	1		11/11/21 15:06	FIELD	Field
Turbidity, Field Measured	11.4	NTU		11/11/21 15:06	1	0.00	11/11/21 15:06	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	750	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Fluoride	0.863	mg/L		11/29/21 14:30	1	0.250	11/29/21 14:30	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	2600	mg/L		11/16/21 10:33	1	26	11/16/21 11:55	JAA	SM 2540C
Total Metals - PIA									
Boron	230	ug/L		11/22/21 14:51	5	10	11/24/21 10:50	JMW	EPA 6020A
Calcium	290	mg/L		11/22/21 14:51	5	0.15	11/24/21 10:50	JMW	EPA 6020A
Magnesium	120	mg/L		11/22/21 14:51	5	0.10	11/24/21 10:50	JMW	EPA 6020A
Potassium	3.1	mg/L		11/22/21 14:51	5	0.10	11/24/21 10:50	JMW	EPA 6020A
Sodium	270	mg/L		11/22/21 14:51	5	0.10	11/24/21 10:50	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EK02715-04
Name: G224
Matrix: Ground Water - Grab

Sampled: 11/11/21 12:19
Received: 11/12/21 09:21
PO #: 662721

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	54	mg/L		11/23/21 00:18	25	25	11/23/21 00:18	CRD	EPA 300.0 REV 2.1
Fluoride	0.392	mg/L		11/23/21 00:00	1	0.250	11/23/21 00:00	CRD	EPA 300.0 REV 2.1
Sulfate	120	mg/L		11/23/21 00:18	25	25	11/23/21 00:18	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	42.21	Feet		11/11/21 12:19	1		11/11/21 12:19	FIELD	Field
Dissolved oxygen, Field	0.81	mg/L		11/11/21 12:19	1		11/11/21 12:19	FIELD	Field
Oxidation Reduction Potential	-98.3	mV		11/11/21 12:19	1	-500	11/11/21 12:19	FIELD	Field
pH, Field Measured	7.38	pH Units		11/11/21 12:19	1		11/11/21 12:19	FIELD	Field
Specific Conductance, Field Measured	1238	umhos/cm		11/11/21 12:19	1		11/11/21 12:19	FIELD	Field
Temperature, Field Measured	14.6	°C		11/11/21 12:19	1		11/11/21 12:19	FIELD	Field
Turbidity, Field Measured	56.6	NTU		11/11/21 12:19	1	0.00	11/11/21 12:19	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	460	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Solids - total dissolved solids (TDS)	760	mg/L		11/16/21 10:33	1	26	11/16/21 11:55	JAA	SM 2540C
Total Metals - PIA									
Boron	89	ug/L		11/23/21 15:21	5	10	11/30/21 08:58	JMW	EPA 6020A
Calcium	130	mg/L		11/23/21 15:21	5	0.15	11/29/21 09:31	JMW	EPA 6020A
Magnesium	51	mg/L		11/23/21 15:21	5	0.10	11/29/21 09:31	JMW	EPA 6020A
Potassium	2.4	mg/L		11/23/21 15:21	5	0.10	11/29/21 09:31	JMW	EPA 6020A
Sodium	75	mg/L		11/23/21 15:21	5	0.15	11/29/21 09:31	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EK02715-05

Name: G224 DUPLICATE

Matrix: Ground Water - Field Duplicate

Sampled: 11/11/21 12:19

Received: 11/12/21 09:21

PO #: 662721

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	51	mg/L		11/23/21 00:54	25	25	11/23/21 00:54	CRD	EPA 300.0 REV 2.1
Fluoride	0.387	mg/L		11/23/21 00:36	1	0.250	11/23/21 00:36	CRD	EPA 300.0 REV 2.1
Sulfate	120	mg/L		11/23/21 00:54	25	25	11/23/21 00:54	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	42.21	Feet		11/11/21 12:19	1		11/11/21 12:19	FIELD	Field
Dissolved oxygen, Field	0.81	mg/L		11/11/21 12:19	1		11/11/21 12:19	FIELD	Field
Oxidation Reduction Potential	-98.3	mV		11/11/21 12:19	1	-500	11/11/21 12:19	FIELD	Field
pH, Field Measured	7.38	pH Units		11/11/21 12:19	1		11/11/21 12:19	FIELD	Field
Specific Conductance, Field Measured	1238	umhos/cm		11/11/21 12:19	1		11/11/21 12:19	FIELD	Field
Temperature, Field Measured	14.6	°C		11/11/21 12:19	1		11/11/21 12:19	FIELD	Field
Turbidity, Field Measured	56.6	NTU		11/11/21 12:19	1	0.00	11/11/21 12:19	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	450	mg/L	M	11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L	M	11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Solids - total dissolved solids (TDS)	780	mg/L		11/16/21 10:33	1	26	11/16/21 11:55	JAA	SM 2540C
Total Metals - PIA									
Boron	91	ug/L		11/23/21 15:21	5	10	11/30/21 09:02	JMW	EPA 6020A
Calcium	130	mg/L		11/23/21 15:21	5	0.15	11/29/21 09:34	JMW	EPA 6020A
Magnesium	53	mg/L		11/23/21 15:21	5	0.10	11/29/21 09:34	JMW	EPA 6020A
Potassium	2.4	mg/L		11/23/21 15:21	5	0.10	11/29/21 09:34	JMW	EPA 6020A
Sodium	78	mg/L		11/23/21 15:21	5	0.15	11/29/21 09:34	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EK02783-01
Name: G208
Matrix: Ground Water - Grab

Sampled: 11/12/21 10:26
Received: 11/12/21 12:24
PO #: 662721

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	45	mg/L		11/23/21 20:12	25	25	11/23/21 20:12	CRD	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/23/21 19:53	1	1.0	11/23/21 19:53	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	25.06	Feet		11/12/21 10:26	1		11/12/21 10:26	FIELD	Field
Dissolved oxygen, Field	0.20	mg/L		11/12/21 10:26	1		11/12/21 10:26	FIELD	Field
Oxidation Reduction Potential	-117	mV		11/12/21 10:26	1	-500	11/12/21 10:26	FIELD	Field
pH, Field Measured	7.01	pH Units		11/12/21 10:26	1		11/12/21 10:26	FIELD	Field
Specific Conductance, Field Measured	1441	umhos/cm		11/12/21 10:26	1		11/12/21 10:26	FIELD	Field
Temperature, Field Measured	14.8	°C		11/12/21 10:26	1		11/12/21 10:26	FIELD	Field
Turbidity, Field Measured	< 0.00	NTU		11/12/21 10:26	1	0.00	11/12/21 10:26	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	710	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Fluoride	1.35	mg/L		12/01/21 10:34	1	0.250	12/01/21 10:34	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	700	mg/L		11/17/21 11:24	1	26	11/17/21 16:00	ADM	SM 2540C
Total Metals - PIA									
Boron	180	ug/L		11/23/21 15:21	5	10	11/30/21 09:06	JMW	EPA 6020A
Calcium	97	mg/L		11/23/21 15:21	5	0.15	11/29/21 09:38	JMW	EPA 6020A
Magnesium	40	mg/L		11/23/21 15:21	5	0.10	11/29/21 09:38	JMW	EPA 6020A
Potassium	2.1	mg/L		11/23/21 15:21	5	0.10	11/29/21 09:38	JMW	EPA 6020A
Sodium	160	mg/L		11/23/21 15:21	5	0.15	11/29/21 09:38	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EK02783-02
Name: R217D
Matrix: Ground Water - Grab

Sampled: 11/12/21 09:28
Received: 11/12/21 12:24
PO #: 662721

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	99	mg/L		11/23/21 20:30	10	10	11/23/21 20:30	CRD	EPA 300.0 REV 2.1
Sulfate	2100	mg/L		11/23/21 20:48	250	250	11/23/21 20:48	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	19.73	Feet		11/12/21 09:28	1		11/12/21 09:28	FIELD	Field
Dissolved oxygen, Field	1.9	mg/L		11/12/21 09:28	1		11/12/21 09:28	FIELD	Field
Oxidation Reduction Potential	14.0	mV		11/12/21 09:28	1	-500	11/12/21 09:28	FIELD	Field
pH, Field Measured	6.52	pH Units		11/12/21 09:28	1		11/12/21 09:28	FIELD	Field
Specific Conductance, Field Measured	4070	umhos/cm		11/12/21 09:28	1		11/12/21 09:28	FIELD	Field
Temperature, Field Measured	14.6	°C		11/12/21 09:28	1		11/12/21 09:28	FIELD	Field
Turbidity, Field Measured	31.4	NTU		11/12/21 09:28	1	0.00	11/12/21 09:28	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	550	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Fluoride	0.296	mg/L		12/01/21 10:48	1	0.250	12/01/21 10:48	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	3500	mg/L		11/17/21 11:24	1	26	11/17/21 16:00	ADM	SM 2540C
Total Metals - PIA									
Boron	180	ug/L		11/23/21 15:21	5	10	11/30/21 09:09	JMW	EPA 6020A
Calcium	640	mg/L		11/23/21 15:21	100	3.0	12/01/21 07:32	JMW	EPA 6020A
Magnesium	260	mg/L		11/23/21 15:21	5	0.10	11/29/21 09:42	JMW	EPA 6020A
Potassium	7.4	mg/L		11/23/21 15:21	5	0.10	11/29/21 09:42	JMW	EPA 6020A
Sodium	170	mg/L		11/23/21 15:21	5	0.15	11/29/21 09:42	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EK02783-03
Name: L301
Matrix: Ground Water - Grab

Sampled: 11/12/21 10:00
Received: 11/12/21 12:24
PO #: 662721

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	21	mg/L		11/23/21 21:06	10	10	11/23/21 21:06	CRD	EPA 300.0 REV 2.1
Sulfate	2200	mg/L		11/23/21 21:24	500	500	11/23/21 21:24	CRD	EPA 300.0 REV 2.1
Field - PIA									
Dissolved oxygen, Field	0.19	mg/L		11/12/21 10:00	1		11/12/21 10:00	FIELD	Field
Oxidation Reduction Potential	-180	mV		11/12/21 10:00	1	-500	11/12/21 10:00	FIELD	Field
pH, Field Measured	10.2	pH Units		11/12/21 10:00	1		11/12/21 10:00	FIELD	Field
Specific Conductance, Field Measured	5091	umhos/cm		11/12/21 10:00	1		11/12/21 10:00	FIELD	Field
Temperature, Field Measured	15.2	°C		11/12/21 10:00	1		11/12/21 10:00	FIELD	Field
Turbidity, Field Measured	0.390	NTU		11/12/21 10:00	1	0.00	11/12/21 10:00	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	< 10	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO3	220	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Fluoride	0.325	mg/L		12/01/21 10:50	1	0.250	12/01/21 10:50	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	3800	mg/L		11/17/21 11:24	1	26	11/17/21 16:00	ADM	SM 2540C
Total Metals - PIA									
Boron	58000	ug/L		11/23/21 15:21	100	200	12/01/21 07:36	JMW	EPA 6020A
Calcium	43	mg/L		11/23/21 15:21	5	0.15	11/29/21 09:45	JMW	EPA 6020A
Magnesium	2.7	mg/L		11/23/21 15:21	5	0.10	11/29/21 09:45	JMW	EPA 6020A
Potassium	79	mg/L		11/23/21 15:21	5	0.10	11/29/21 09:45	JMW	EPA 6020A
Sodium	1100	mg/L		11/23/21 15:21	100	2.0	12/01/21 07:36	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EK02783-04
Name: L1R
Matrix: Ground Water - Grab

Sampled: 11/12/21 09:33
Received: 11/12/21 12:24
PO #: 662721

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	9600	mg/L		11/23/21 21:42	1000	1000	11/23/21 21:42	CRD	EPA 300.0 REV 2.1
Sulfate	21000	mg/L		11/24/21 15:30	5000	5000	11/24/21 15:30	CRD	EPA 300.0 REV 2.1
Field - PIA									
Dissolved oxygen, Field	2.8	mg/L		11/12/21 09:33	1		11/12/21 09:33	FIELD	Field
Oxidation Reduction Potential	-216	mV		11/12/21 09:33	1	-500	11/12/21 09:33	FIELD	Field
pH, Field Measured	10.8	pH Units		11/12/21 09:33	1		11/12/21 09:33	FIELD	Field
Specific Conductance, Field Measured	50340	umhos/cm		11/12/21 09:33	1		11/12/21 09:33	FIELD	Field
Temperature, Field Measured	14.2	°C		11/12/21 09:33	1		11/12/21 09:33	FIELD	Field
Turbidity, Field Measured	79.9	NTU		11/12/21 09:33	1	0.00	11/12/21 09:33	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	< 10	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO3	520	mg/L		11/15/21 10:30	1	10	11/15/21 10:30	JAA	SM 2320B 1997
Fluoride	0.392	mg/L		12/01/21 10:52	1	0.250	12/01/21 10:52	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	46000	mg/L	H	11/23/21 10:36	1	510	11/23/21 12:49	ADM	SM 2540C
Total Metals - PIA									
Boron	7000	ug/L		11/23/21 15:21	5	20	11/29/21 09:49	JMW	EPA 6020A
Calcium	560	mg/L		11/23/21 15:21	100	3.0	12/01/21 07:40	JMW	EPA 6020A
Magnesium	4.0	mg/L		11/23/21 15:21	5	0.10	11/29/21 09:49	JMW	EPA 6020A
Potassium	1700	mg/L		11/23/21 15:21	100	2.0	12/01/21 07:40	JMW	EPA 6020A
Sodium	16000	mg/L		11/23/21 15:21	1000	20	12/01/21 09:38	JMW	EPA 6020A



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B148254 - No Prep - SM 2540C</u>									
Blank (B148254-BLK1)				Prepared & Analyzed: 11/12/21					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B148254-BS1)				Prepared & Analyzed: 11/12/21					
Solids - total dissolved solids (TDS)	993	mg/L		1000		99	84.9-109		
Duplicate (B148254-DUP2)				Prepared & Analyzed: 11/12/21					
Solids - total dissolved solids (TDS)	870	mg/L			880			1	5
<u>Batch B148321 - No Prep - SM 2540C</u>									
Blank (B148321-BLK1)				Prepared & Analyzed: 11/12/21					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B148321-BS1)				Prepared & Analyzed: 11/12/21					
Solids - total dissolved solids (TDS)	967	mg/L		1000		97	84.9-109		
Duplicate (B148321-DUP1)				Prepared & Analyzed: 11/12/21					
Solids - total dissolved solids (TDS)	680	mg/L	M		800			16	5
Duplicate (B148321-DUP2)				Prepared & Analyzed: 11/12/21					
Solids - total dissolved solids (TDS)	670	mg/L			650			3	5
<u>Batch B148446 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B148446-CCB1)				Prepared & Analyzed: 11/12/21					
Sulfate	0.0986	mg/L							
Chloride	0.852	mg/L							
Calibration Check (B148446-CCV1)				Prepared & Analyzed: 11/12/21					
Sulfate	5.01	mg/L		5.000		100	90-110		
Chloride	4.88	mg/L		5.000		98	90-110		
<u>Batch B148461 - No Prep - SM 2540C</u>									
Blank (B148461-BLK1)				Prepared & Analyzed: 11/15/21					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B148461-BS1)				Prepared & Analyzed: 11/15/21					
Solids - total dissolved solids (TDS)	1010	mg/L		1000		101	84.9-109		
<u>Batch B148496 - No Prep - SM 2320B 1997</u>									
Blank (B148496-BLK1)				Prepared & Analyzed: 11/15/21					
Alkalinity - bicarbonate as CaCO ₃	2.50	mg/L							
Blank (B148496-BLK2)				Prepared & Analyzed: 11/15/21					
Alkalinity - bicarbonate as CaCO ₃	2.50	mg/L							
Duplicate (B148496-DUP2)				Prepared & Analyzed: 11/15/21					
Alkalinity - bicarbonate as CaCO ₃	488	mg/L	M		762			44	10
Duplicate (B148496-DUP3)				Prepared & Analyzed: 11/15/21					
Alkalinity - bicarbonate as CaCO ₃	812	mg/L	M		450			57	10
<u>Batch B148497 - No Prep - SM 2320B 1997</u>									



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B148497 - No Prep - SM 2320B 1997</u>									
Blank (B148497-BLK1)				Prepared & Analyzed: 11/15/21					
Alkalinity - carbonate as CaCO ₃	2.50	mg/L							
Blank (B148497-BLK2)				Prepared & Analyzed: 11/15/21					
Alkalinity - carbonate as CaCO ₃	2.50	mg/L							
Duplicate (B148497-DUP2)				Sample: EK02067-03 Prepared & Analyzed: 11/15/21					
Alkalinity - carbonate as CaCO ₃	< 10	mg/L	M		ND				10
Duplicate (B148497-DUP3)				Sample: EK02715-05 Prepared & Analyzed: 11/15/21					
Alkalinity - carbonate as CaCO ₃	< 10	mg/L	M		ND				10
<u>Batch B148547 - No Prep - SM 2540C</u>									
Blank (B148547-BLK1)				Prepared & Analyzed: 11/16/21					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B148547-BS1)				Prepared & Analyzed: 11/16/21					
Solids - total dissolved solids (TDS)	953	mg/L		1000		95	84.9-109		
Duplicate (B148547-DUP2)				Sample: EK02715-02 Prepared & Analyzed: 11/16/21					
Solids - total dissolved solids (TDS)	1120	mg/L			1090			3	5
<u>Batch B148552 - SW 3015 - EPA 6020A</u>									
Blank (B148552-BLK1)				Prepared: 11/16/21 Analyzed: 11/22/21					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B148552-BS1)				Prepared: 11/16/21 Analyzed: 11/22/21					
Boron	560	ug/L		555.6		101	80-120		
Calcium	5.87	mg/L		5.556		106	80-120		
Magnesium	5.94	mg/L		5.556		107	80-120		
Potassium	5.63	mg/L		5.556		101	80-120		
Sodium	5.68	mg/L		5.556		102	80-120		
<u>Batch B148708 - No Prep - SM 2540C</u>									
Blank (B148708-BLK1)				Prepared & Analyzed: 11/17/21					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B148708-BS1)				Prepared & Analyzed: 11/17/21					
Solids - total dissolved solids (TDS)	940	mg/L		1000		94	84.9-109		
<u>Batch B148807 - SW 3015 - EPA 6020A</u>									
Blank (B148807-BLK1)				Prepared: 11/18/21 Analyzed: 11/22/21					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B148807-BS1)				Prepared: 11/18/21 Analyzed: 11/22/21					



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B148807 - SW 3015 - EPA 6020A</u>									
LCS (B148807-BS1)				Prepared: 11/18/21 Analyzed: 11/22/21					
Boron	557	ug/L		555.6		100	80-120		
Calcium	5.77	mg/L		5.556		104	80-120		
Magnesium	5.86	mg/L		5.556		105	80-120		
Potassium	5.53	mg/L		5.556		100	80-120		
Sodium	5.63	mg/L		5.556		101	80-120		
<u>Batch B149081 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B149081-CCB1)				Prepared & Analyzed: 11/19/21					
Sulfate	0.00	mg/L							
Chloride	0.400	mg/L							
Calibration Check (B149081-CCV1)				Prepared & Analyzed: 11/19/21					
Chloride	4.84	mg/L		5.000		97	90-110		
Sulfate	4.94	mg/L		5.000		99	90-110		
<u>Batch B149173 - SW 3015 - EPA 6020A</u>									
Blank (B149173-BLK1)				Prepared: 11/22/21 Analyzed: 11/24/21					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B149173-BS1)				Prepared: 11/22/21 Analyzed: 11/24/21					
Boron	543	ug/L		555.6		98	80-120		
Calcium	5.67	mg/L		5.556		102	80-120		
Magnesium	5.86	mg/L		5.556		106	80-120		
Potassium	5.37	mg/L		5.556		97	80-120		
Sodium	5.85	mg/L		5.556		105	80-120		
<u>Batch B149258 - No Prep - SM 2540C</u>									
Blank (B149258-BLK1)				Prepared & Analyzed: 11/23/21					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B149258-BS1)				Prepared & Analyzed: 11/23/21					
Solids - total dissolved solids (TDS)	960	mg/L		1000		96	84.9-109		
<u>Batch B149316 - SW 3015 - EPA 6020A</u>									
Blank (B149316-BLK1)				Prepared: 11/23/21 Analyzed: 11/29/21					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B149316-BS1)				Prepared: 11/23/21 Analyzed: 11/29/21					
Boron	485	ug/L		555.6		87	80-120		
Calcium	5.53	mg/L		5.556		100	80-120		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B149316 - SW 3015 - EPA 6020A</u>									
LCS (B149316-BS1)				Prepared: 11/23/21 Analyzed: 11/29/21					
Magnesium	5.73	mg/L		5.556		103	80-120		
Potassium	5.80	mg/L		5.556		104	80-120		
Sodium	5.71	mg/L		5.556		103	80-120		
<u>Batch B149322 - IC No Prep - EPA 300.0 REV 2.1</u>									
Blank (B149322-BLK1)				Prepared & Analyzed: 11/22/21					
Chloride	< 1.0	mg/L							
Sulfate	< 1.0	mg/L							
Fluoride	< 0.250	mg/L							
Blank (B149322-BLK2)				Prepared & Analyzed: 11/22/21					
Chloride	< 1.0	mg/L							
Fluoride	< 0.250	mg/L							
Sulfate	< 1.0	mg/L							
Calibration Blank (B149322-CCB1)				Prepared & Analyzed: 11/22/21					
Fluoride	0.00	mg/L							
Chloride	0.494	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B149322-CCV1)				Prepared & Analyzed: 11/22/21					
Fluoride	5.23	mg/L		5.000		105	90-110		
Sulfate	4.99	mg/L		5.000		100	90-110		
Chloride	4.98	mg/L		5.000		100	90-110		
MRL Check (B149322-MRL1)				Prepared & Analyzed: 11/22/21					
Sulfate	0.322	mg/L		0.2500		129	0-200		
Chloride	< 1.0	mg/L		0.2500			0-200		
Fluoride	0.480	mg/L		0.2500		192	0-200		
MRL Check (B149322-MRL2)				Prepared & Analyzed: 11/22/21					
Fluoride	0.484	mg/L		0.2500		194	0-200		
Chloride	< 1.0	mg/L		0.2500			0-200		
Sulfate	0.340	mg/L		0.2500		136	0-200		
<u>Batch B149324 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B149324-CCB1)				Prepared & Analyzed: 11/22/21					
Sulfate	0.00	mg/L							
Chloride	0.797	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B149324-CCV1)				Prepared & Analyzed: 11/22/21					
Sulfate	4.88	mg/L		5.000		98	90-110		
Fluoride	5.03	mg/L		5.000		101	90-110		
Chloride	4.67	mg/L		5.000		93	90-110		
<u>Batch B149425 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B149425-CCB1)				Prepared & Analyzed: 11/23/21					
Chloride	0.269	mg/L							
Sulfate	0.00	mg/L							



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B149425 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Check (B149425-CCV1)				Prepared & Analyzed: 11/23/21					
Chloride	4.87	mg/L		5.000		97	90-110		
Sulfate	4.98	mg/L		5.000		100	90-110		
<u>Batch B149430 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B149430-CCB1)				Prepared & Analyzed: 11/23/21					
Chloride	0.371	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B149430-CCV1)				Prepared & Analyzed: 11/23/21					
Sulfate	5.04	mg/L		5.000		101	90-110		
Chloride	4.95	mg/L		5.000		99	90-110		
<u>Batch B149494 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B149494-CCB1)				Prepared & Analyzed: 11/24/21					
Sulfate	0.00	mg/L							
Calibration Check (B149494-CCV1)				Prepared & Analyzed: 11/24/21					
Sulfate	4.85	mg/L		5.000		97	90-110		
<u>Batch B149496 - No Prep - SM 4500F C 1997</u>									
Calibration Blank (B149496-CCB2)				Prepared & Analyzed: 11/29/21					
Fluoride	0.0170	mg/L							
Calibration Check (B149496-CCV2)				Prepared & Analyzed: 11/29/21					
Fluoride	0.743	mg/L		0.7000		106	90-110		
<u>Batch B149741 - No Prep - SM 4500F C 1997</u>									
Calibration Blank (B149741-CCB1)				Prepared & Analyzed: 12/01/21					
Fluoride	0.00400	mg/L							
Calibration Blank (B149741-CCB2)				Prepared & Analyzed: 12/01/21					
Fluoride	0.00600	mg/L							
Calibration Check (B149741-CCV1)				Prepared & Analyzed: 12/01/21					
Fluoride	0.728	mg/L		0.7000		104	90-110		
Calibration Check (B149741-CCV2)				Prepared & Analyzed: 12/01/21					
Fluoride	0.749	mg/L		0.7000		107	90-110		
Matrix Spike (B149741-MS1)				Sample: EK02783-01		Prepared & Analyzed: 12/01/21			
Fluoride	2.52	mg/L		1.000	1.35	117	80-120		
Matrix Spike Dup (B149741-MSD1)				Sample: EK02783-01		Prepared & Analyzed: 12/01/21			
Fluoride	2.54	mg/L		1.000	1.35	119	80-120	0.9	20
<u>Batch B151425 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B151425-CCB1)				Prepared & Analyzed: 12/17/21					
Sulfate	0.00	mg/L							
Calibration Check (B151425-CCV1)				Prepared & Analyzed: 12/17/21					
Sulfate	4.95	mg/L		5.000		99	90-110		



Pace Analytical Services, LLC

2231 W. Altorfer Drive

Peoria, IL 61615

(800)752-6651



NOTES

Specifications regarding method revisions and method modifications used for analysis are available upon request. Please contact your project manager.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050

TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615

TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553

Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)

Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807

USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050

Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Qualifiers

- H Test performed after the expiration of the appropriate regulatory/advisory maximum allowable hold time.
- M Analyte failed to meet the required acceptance criteria for duplicate analysis.
- Q4 The matrix spike recovery result is unusable since the analyte concentration in the sample is greater than four times the spike level. The associated blank spike was acceptable.

Gail G Schindler

Certified by: Gail Schindler, Project Manager



Multiparameter Meter Field Calibration Checklist

Field Personnel	Joe Reed		Date:	11/9/21	
Weather conditions:	mostly cloudy 55-60°F wind SSW 5-10 mph		Signature:	Joe Reed	
Make/Model	AquaTroll 600		S/N	606127	
Instrument unpacked/RDO sensor installed from storage solution and rinsed with pH 4 buffer then triple rinsed with DI water prior. Instrument then subjected to calibration check/calibration regiment (pH 4, then pH 7, then pH 10, followed by Spec Con., ORP, and RDO) instrument and calibration cup rinsed between each buffer.					
Sources					
pH Buffers					
Primary Source:					
pH: 4a	4.00	pH: 7a	7.00	pH: 10a	10.00
Range:	+/- 0.02	Range:	+/- 0.02	Range:	+/- 0.02
Manufacturer:	MSI	Manufacturer:	MSI	Manufacturer:	MSI
Lot #:	L159-11	Lot #:	L146-06	Lot #:	K344-09
exp:	10-Jun-23	exp:	1-Jun-23	exp:	17-Dec-22
Secondary Source:					
pH: 4b	4.00	pH: 7b	7.00	pH: 10b	10.00
Range:	+/- 0.01	Range:	+/- 0.01	Range:	+/- 0.01
Manufacturer:	Geotech	Manufacturer:	Geotech	Manufacturer:	Geotech
Lot #:	1GD680	Lot #:	OGJ268	Lot #:	OGJ170
exp:	Apr-23	exp:	Oct-22	exp:	Oct-22
Spec Con.					
μS/cm: DI water	0	μS/cm: SC1000	1000	μS/cm: SC2000	2000
Range:	Not Measured	Range:	+/- 1	Range:	+/- 1 %
Manufacturer:	PDC Laboratories, Inc	Manufacturer:	RICCA Chemical	Manufacturer:	Geotech
Received:		Lot #:	4101A25	Lot #:	1GF629
		exp:	Dec-22	exp:	Jun-22
RDO					
Sodium Sulfite in DI Water		ORP		Zobell's Standard	
Value:	0	Value*:	15°C		
Range:	+/- 0.01	Range:		+/- 10 mV	
Manufacturer:	Fisher Chemical	Manufacturer:		In-Situ	
Lot #:	168261	Lot #:		1GF668	
Prepared by:	PDC Tech Services, Inc:	exp:		Mar-22	
Turbidity (if required)					
0 NTU	0 (DI Water)	1 NTU	1	10 NTU	10
Range:	Not Measured	Range:		Range:	
Manufacturer:	PDC Laboratories, Inc	Manufacturer:		Manufacturer:	
Lot #:	NA	Lot #:		Lot #:	
exp:	NA	exp:		exp:	
Notes:					
*See bottle for chart of values based on Temperature					

Multiparameter Meter Calibration Checklist (continued)

Values are tested at the beginning of the day, at mid-day, and at the end of the day to document potential drift.

CCV checks are conducted ~ every 4 hours, unless only one well is read then is not required.

Initial Calibration Check/Calibration: **930**

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	4.06	s.u.	±0.1 s.u.	Pass	No	N/A
7a	7.01	s.u.	±0.1 s.u.			
10a	9.99	s.u.	±0.1 s.u.			
SC Zero (DI)	9.13	µS/cm	0<25 µS/cm			
SC 2000	2012.3	µS/cm	±5%			
ORP	239.0	mV	±15 mV			
DO (Zero pt)	0.05	mg/L	±0.1			
DO (Saturated)	98.1	%	97-100%			
Turbidity (DI)	0.84	NTU	<2 NTU			

ICV (Initial Calibration Verification)

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	3.99	s.u.	±0.15 s.u.	Pass	None
7b	7.01	s.u.	±0.15 s.u.		
10b	9.97	s.u.	±0.15 s.u.		
SC1000	1009.3	µS/cm	±5%		

CCV (Continued Calibration Verification):

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4		s.u.	±0.1 s.u.			
7		s.u.	±0.1 s.u.			
10		s.u.	±0.1 s.u.			
SC 1000		µS/cm	±5%			
DO (Zero pt)		mg/L	±0.1 mg/L			
Turbidity (DI)		NTU	<2 NTU			

CCV (Continued Calibration Verification):

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4		s.u.	±0.1 s.u.			
7*		s.u.	±0.1 s.u.			
10		s.u.	±0.1 s.u.			
SC 1000		µS/cm	±5%			
DO (Zero pt)		mg/L	±0.1 mg/L			
Turbidity (DI)		NTU	<2 NTU			

Comments:

Signature:

Joseph R. Reed

Date:

11/9/21

Multiparameter Meter Field Calibration Checklist

Field Personnel	MJN	Date:	4/9/21
Weather conditions:	53°, cloudy, wind E 5 mph	Signature:	<i>[Signature]</i>
Make/Model	AquaTroll 600	S/N	846000

Instrument unpacked/RDO sensor installed from storage solution and rinsed with pH 4 buffer then triple rinsed with DI water prior. Instrument then subjected to calibration check/calibration regiment (pH 4, then pH 7, then pH 10, followed by Spec Con., ORP, and RDO) instrument and calibration cup rinsed between each buffer.

Sources

pH Buffers					
Primary Source:					
pH: 4a	4.00	pH: 7a	7.00	pH: 10a	10.00
Range:	+/- 0.02	Range:	+/- 0.02	Range:	+/- 0.02
Manufacturer:	MSI	Manufacturer:	MSI	Manufacturer:	MSI
Lot #:	L159-11	Lot #:	L146-06	Lot #:	K344-09
exp:	10-Jun-23	exp:	1-Jun-23	exp:	17-Dec-22

Secondary Source:					
pH: 4b	4.00	pH: 7b	7.00	pH: 10b	10.00
Range:	+/- 0.01	Range:	+/- 0.01	Range:	+/- 0.01
Manufacturer:	Geotech	Manufacturer:	Geotech	Manufacturer:	Geotech
Lot #:	1GD680	Lot #:	0GJ268	Lot #:	0GJ170
exp:	Apr-23	exp:	Oct-22	exp:	Oct-22

Spec Con.					
μS/cm: DI water	0	μS/cm: SC1000	1000	μS/cm: SC2000	2000
Range:	Not Measured	Range:	+/- 1	Range:	+/- 1 %
Manufacturer:	PDC Laboratories, Inc	Manufacturer:	RICCA Chemical	Manufacturer:	Geotech
Received:		Lot #:	4101A25	Lot #:	1GF629
		exp:	Dec-22	exp:	Jun-22

RDO	Sodium Sulfite in DI Water	ORP	Zobell's Standard
Value:	0	Value*:	
Range:	+/- 0.01	Range:	+/- 10 mV
Manufacturer:	Fisher Chemical	Manufacturer:	In-Situ
Lot #:	168261	Lot #:	1GF668
Prepared by:	PDC Tech Services, Inc:	exp:	Mar-22

Turbidity (if required)					
0 NTU	0 (DI Water)	1 NTU	1	10 NTU	10
Range:	Not Measured	Range:		Range:	
Manufacturer:	PDC Laboratories, Inc	Manufacturer:		Manufacturer:	
Lot #:	NA	Lot #:		Lot #:	
exp:	NA	exp:		exp:	

Notes: *See bottle for chart of values based on Temperature

Multiparameter Meter Calibration Checklist (continued)

Values are tested at the beginning of the day, at mid-day, and at the end of the day to document potential drift.

CCV checks are conducted ~ every 4 hours, unless only one well is read then is not required.

Initial Calibration Check/Calibration: 0813

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	4.05	s.u.	±0.1 s.u.	P	NO	
7a	7.09	s.u.	±0.1 s.u.	↓	↓	
10a	10.09	s.u.	±0.1 s.u.	↓	↓	
SC Zero (DI)	5.34	µS/cm	0<25 µS/cm	↓	↓	
SC 2000	20.06	µS/cm	±5%	↓	↓	
ORP	245	mV	±15 mV	↓	↓	
DO (Zero pt)	0.06	mg/L	±0.1	↓	↓	
DO (Saturated)	99.32	%	97-100%	↓	↓	
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	

ICV (Initial Calibration Verification) 0816

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.06	s.u.	±0.15 s.u.	P	
7b	6.99	s.u.	±0.15 s.u.	↓	
10b	10.03	s.u.	±0.15 s.u.	↓	
SC1000	100	µS/cm	±5%	↓	

CCV (Continued Calibration Verification): 1204

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.07	s.u.	±0.1 s.u.	P	NO	
7	7.10	s.u.	±0.1 s.u.	↓	↓	
10	10.08	s.u.	±0.1 s.u.	↓	↓	
SC 1000	1009	µS/cm	±5%	↓	↓	
DO (Zero pt)	0.06	mg/L	±0.1 mg/L	↓	↓	
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	

CCV (Continued Calibration Verification): 1648

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.06	s.u.	±0.1 s.u.	P	NO	
7*	7.08	s.u.	±0.1 s.u.	↓	↓	
10	10.08	s.u.	±0.1 s.u.	↓	↓	
SC 1000	1036	µS/cm	±5%	↓	↓	
DO (Zero pt)	0.05	mg/L	±0.1 mg/L	↓	↓	
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	

Comments:

Signature:



Date:

11/9/21

Multiparameter Meter Field Calibration Checklist

Field Personnel	Aaron Pemberlon		Date:	11/10/2021	
Weather conditions:	52° - 64° F cloudy Wind East 5 mph		Signature:		
Make/Model	AquaTroll 600		S/N	606129	
Instrument unpacked/RDO sensor installed from storage solution and rinsed with pH 4 buffer then triple rinsed with DI water prior. Instrument then subjected to calibration check/calibration regiment (pH 4, then pH 7, then pH 10, followed by Spec Con., ORP, and RDO) instrument and calibration cup rinsed between each buffer.					
Sources					
pH Buffers					
Primary Source:					
pH: 4a	4.00	pH: 7a	7.00	pH: 10a	10.00
Range:	+/- 0.02	Range:	+/- 0.02	Range:	+/- 0.02
Manufacturer:	MSI	Manufacturer:	MSI	Manufacturer:	MSI
Lot #:	L159-11	Lot #:	L146-06	Lot #:	K344-09
exp:	10-Jun-23	exp:	1-Jun-23	exp:	17-Dec-22
Secondary Source:					
pH: 4b	4.00	pH: 7b	7.00	pH: 10b	10.00
Range:	+/- 0.01	Range:	+/- 0.01	Range:	+/- 0.01
Manufacturer:	Geotech	Manufacturer:	Geotech	Manufacturer:	Geotech
Lot #:	1GD680	Lot #:	0GJ268	Lot #:	0GJ170
exp:	Apr-23	exp:	Oct-22	exp:	Oct-22
Spec Con.					
μS/cm: DI water	0	μS/cm: SC1000	1000	μS/cm: SC2000	2000
Range:	Not Measured	Range:	+/- 1	Range:	+/- 1 %
Manufacturer:	PDC Laboratories, Inc	Manufacturer:	RICCA Chemical	Manufacturer:	Geotech
Received:		Lot #:	4101A25	Lot #:	1GF629
		exp:	Dec-22	exp:	Jun-22
RDO					
	Sodium Sulfite in DI Water		ORP		Zobell's Standard
Value:	0		Value*:		242 @ 15°C
Range:	+/- 0.01		Range:		+/- 10 mV
Manufacturer:	Fisher Chemical		Manufacturer:		In-Situ
Lot #:	168261		Lot #:		1GF668
Prepared by:	PDC Tech Services, Inc:		exp:		Mar-22
Turbidity (if required)					
0 NTU	0 (DI Water)	1 NTU	1	10 NTU	10
Range:	Not Measured	Range:		Range:	
Manufacturer:	PDC Laboratories, Inc	Manufacturer:		Manufacturer:	
Lot #:	NA	Lot #:		Lot #:	
exp:	NA	exp:		exp:	
Notes:					
*See bottle for chart of values based on Temperature					

Multiparameter Meter Calibration Checklist (continued)

Values are tested at the beginning of the day, at mid-day, and at the end of the day to document potential drift.
CCV checks are conducted ~ every 4 hours, unless only one well is read then is not required.

Initial Calibration Check/Calibration: 0821

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	4.04	s.u.	±0.1 s.u.	Pass	Yes	4.00
7a	7.14	s.u.	±0.1 s.u.	Fail	Yes	7.06
10a	10.14	s.u.	±0.1 s.u.	Pass	Yes	10.08
SC Zero (DI)	1.14	µS/cm	0<25 µS/cm	Pass	No	-
SC 2000	2038.6	µS/cm	±5%	-	-	-
ORP	238.7	mV	±15 mV	-	-	-
DO (Zero pt)	0.08	mg/L	±0.1	-	-	-
DO (Saturated)	98.87	%	97-100%	-	-	-
Turbidity (DI)	-	NTU	<2 NTU	-	-	-

ICV (Initial Calibration Verification)

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.04	s.u.	±0.15 s.u.	Pass	-
7b	6.95	s.u.	±0.15 s.u.	-	-
10b	10.01	s.u.	±0.15 s.u.	-	-
SC1000	995.05	µS/cm	±5%	-	-

CCV (Continued Calibration Verification):

1231

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.03	s.u.	±0.1 s.u.	Pass	No	-
7	7.00	s.u.	±0.1 s.u.	-	-	-
10	10.02	s.u.	±0.1 s.u.	-	-	-
SC 1000	999.82	µS/cm	±5%	-	-	-
DO (Zero pt)	0.07	mg/L	±0.1 mg/L	-	-	-
Turbidity (DI)	-	NTU	<2 NTU	-	-	-

CCV (Continued Calibration Verification):

1631

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.09	s.u.	±0.1 s.u.	Pass	No	-
7*	7.10	s.u.	±0.1 s.u.	-	-	-
10	10.10	s.u.	±0.1 s.u.	-	-	-
SC 1000	1006.2	µS/cm	±5%	-	-	-
DO (Zero pt)	0.06	mg/L	±0.1 mg/L	-	-	-
Turbidity (DI)	-	NTU	<2 NTU	-	-	-

Comments:

Turbidity taken with Lamotte Turbidity meter

Signature:



Date:

11/16/2021

Multiparameter Meter Field Calibration Checklist

Field Personnel	MJN	Date:	11/10/21
Weather conditions:	49°, partly cloudy, NW 3 mph wind.	Signature:	<i>[Signature]</i>
Make/Model	AquaTroll 600	S/N	846000

Instrument unpacked/RDO sensor installed from storage solution and rinsed with pH 4 buffer then triple rinsed with DI water prior. Instrument then subjected to calibration check/calibration regiment (pH 4, then pH 7, then pH 10, followed by Spec Con., ORP, and RDO) instrument and calibration cup rinsed between each buffer.

Sources

pH Buffers

Primary Source:

pH: 4a	4.00	pH: 7a	7.00	pH: 10a	10.00
Range:	+/- 0.02	Range:	+/- 0.02	Range:	+/- 0.02
Manufacturer:	MSI	Manufacturer:	MSI	Manufacturer:	MSI
Lot #:	L159-11	Lot #:	L146-06	Lot #:	K344-09
exp:	10-Jun-23	exp:	1-Jun-23	exp:	17-Dec-22

Secondary Source:

pH: 4b	4.00	pH: 7b	7.00	pH: 10b	10.00
Range:	+/- 0.01	Range:	+/- 0.01	Range:	+/- 0.01
Manufacturer:	Geotech	Manufacturer:	Geotech	Manufacturer:	Geotech
Lot #:	1GD680	Lot #:	OGJ268	Lot #:	OGJ170
exp:	Apr-23	exp:	Oct-22	exp:	Oct-22

Spec Con.

μS/cm: DI water	0	μS/cm: SC1000	1000	μS/cm: SC2000	2000
Range:	Not Measured	Range:	+/- 1	Range:	+/- 1 %
Manufacturer:	PDC Laboratories, Inc	Manufacturer:	RICCA Chemical	Manufacturer:	Geotech
Received:		Lot #:	4101A25	Lot #:	1GF629
		exp:	Dec-22	exp:	Jun-22

RDO

Sodium Sulfite in DI Water

ORP

Zobell's Standard

Value:	0	Value*:	
Range:	+/- 0.01	Range:	+/- 10 mV
Manufacturer:	Fisher Chemical	Manufacturer:	In-Situ
Lot #:	168261	Lot #:	1GF668
Prepared by:	PDC Tech Services, Inc:	exp:	Mar-22

Turbidity (if required)

0 NTU	0 (DI Water)	1 NTU	1	10 NTU	10
Range:	Not Measured	Range:		Range:	
Manufacturer:	PDC Laboratories, Inc	Manufacturer:		Manufacturer:	
Lot #:	NA	Lot #:		Lot #:	
exp:	NA	exp:		exp:	

Notes: *See bottle for chart of values based on Temperature

Multiparameter Meter Calibration Checklist (continued)

Values are tested at the beginning of the day, at mid-day, and at the end of the day to document potential drift.

CCV checks are conducted ~ every 4 hours, unless only one well is read then is not required.

Initial Calibration Check/Calibration: 0810

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	4.06	s.u.	±0.1 s.u.	Pass	Yes	4.00
7a	7.10	s.u.	±0.1 s.u.	Pass	Yes	7.06
10a	10.17	s.u.	±0.1 s.u.	Fail	Yes	9.99
SC Zero (DI)	6.89	µS/cm	0<25 µS/cm	Pass	NO	N/A
SC 2000	2016	µS/cm	±5%			
ORP	249	mV	±15 mV			
DO (Zero pt)	0.04	mg/L	±0.1			
DO (Saturated)	98.37	%	97-100%			
Turbidity (DI)	0.00	NTU	<2 NTU			

ICV (Initial Calibration Verification) 0820

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.00	s.u.	±0.15 s.u.	Pass	none
7b	6.89	s.u.	±0.15 s.u.		
10b	9.96	s.u.	±0.15 s.u.		
SC1000	1001	µS/cm	±5%		

CCV (Continued Calibration Verification): 1438

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.02	s.u.	±0.1 s.u.	P	NO	N/A
7	7.05	s.u.	±0.1 s.u.			
10	10.01	s.u.	±0.1 s.u.			
SC 1000	1016	µS/cm	±5%			
DO (Zero pt)	0.09	mg/L	±0.1 mg/L			
Turbidity (DI)	0.00	NTU	<2 NTU			

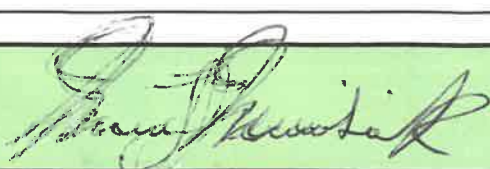
CCV (Continued Calibration Verification): 1620

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	3.96	s.u.	±0.1 s.u.	P	NO	N/A
7*	6.97	s.u.	±0.1 s.u.			
10	9.92	s.u.	±0.1 s.u.			
SC 1000	981	µS/cm	±5%			
DO (Zero pt)	0.06	mg/L	±0.1 mg/L			
Turbidity (DI)	0.00	NTU	<2 NTU			

Comments:

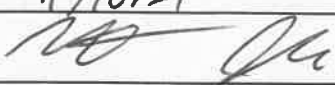
Signature:



Date:

11/10/21

Multiparameter Meter Field Calibration Checklist

Field Personnel	Matt Julien	Date:	11/10/21
Weather conditions:	52°F - 65°F cloudy wind E 5-10 mph	Signature:	
Make/Model	AquaTroll 600	S/N	762098

Instrument unpacked/RDO sensor installed from storage solution and rinsed with pH 4 buffer then triple rinsed with DI water prior. Instrument then subjected to calibration check/calibration regiment (pH 4, then pH 7, then pH 10, followed by Spec Con., ORP, and RDO) instrument and calibration cup rinsed between each buffer.

Sources

pH Buffers					
Primary Source:					
pH: 4a	4.00	pH: 7a	7.00	pH: 10a	10.00
Range:	+/- 0.02	Range:	+/- 0.02	Range:	+/- 0.02
Manufacturer:	MSI	Manufacturer:	MSI	Manufacturer:	MSI
Lot #:	L159-11	Lot #:	L146-06	Lot #:	K344-09
exp:	10-Jun-23	exp:	1-Jun-23	exp:	17-Dec-22

Secondary Source:					
pH: 4b	4.00	pH: 7b	7.00	pH: 10b	10.00
Range:	+/- 0.01	Range:	+/- 0.01	Range:	+/- 0.01
Manufacturer:	Geotech	Manufacturer:	Geotech	Manufacturer:	Geotech
Lot #:	1GD680	Lot #:	0GJ268	Lot #:	0GJ170
exp:	Apr-23	exp:	Oct-22	exp:	Oct-22

Spec Con.					
μS/cm: DI water	0	μS/cm: SC1000	1000	μS/cm: SC2000	2000
Range:	Not Measured	Range:	+/- 1	Range:	+/- 1 %
Manufacturer:	PDC Laboratories, Inc	Manufacturer:	RICCA Chemical	Manufacturer:	Geotech
Received:		Lot #:	4101A25	Lot #:	1GF629
		exp:	Dec-22	exp:	Jun-22

RDO	Sodium Sulfite in DI Water	ORP	Zobell's Standard
Value:	0	Value*:	
Range:	+/- 0.01	Range:	+/- 10 mV
Manufacturer:	Fisher Chemical	Manufacturer:	In-Situ
Lot #:	168261	Lot #:	1GF668
Prepared by:	PDC Tech Services, Inc:	exp:	Mar-22

Turbidity (if required)					
0 NTU	0 (DI Water)	1 NTU	1	10 NTU	10
Range:	Not Measured	Range:		Range:	
Manufacturer:	PDC Laboratories, Inc	Manufacturer:		Manufacturer:	
Lot #:	NA	Lot #:		Lot #:	
exp:	NA	exp:		exp:	

Notes: *See bottle for chart of values based on Temperature

Multiparameter Meter Calibration Checklist (continued)

Values are tested at the beginning of the day, at mid-day, and at the end of the day to document potential drift.

CCV checks are conducted ~ every 4 hours, unless only one well is read then is not required.

Initial Calibration Check/Calibration:

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	4.02	s.u.	±0.1 s.u.	Pass	No	N/A
7a	7.04	s.u.	±0.1 s.u.	↓	↓	↓
10a	10.00	s.u.	±0.1 s.u.	↓	↓	↓
SC Zero (DI)	23.68	µS/cm	0<25 µS/cm	↓	↓	↓
SC 2000	2001.7	µS/cm	±5%	↓	↓	↓
ORP	231.1 @ 14°C	mV	±15 mV	↓	↓	↓
DO (Zero pt)	0.00	mg/L	±0.1	↓	↓	↓
DO (Saturated)	99.71%	%	97-100%	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	↓

ICV (Initial Calibration Verification) 0930

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.13	s.u.	±0.15 s.u.	Pass	None
7b	6.93	s.u.	±0.15 s.u.	↓	↓
10b	9.99	s.u.	±0.15 s.u.	↓	↓
SC1000	999.54	µS/cm	±5%	↓	↓

CCV (Continued Calibration Verification):

14:00

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.06	s.u.	±0.1 s.u.	Pass	No	N/A
7	7.07	s.u.	±0.1 s.u.	↓	↓	↓
10	10.04	s.u.	±0.1 s.u.	↓	↓	↓
SC 1000	980.03	µS/cm	±5%	↓	↓	↓
DO (Zero pt)	0.02	mg/L	±0.1 mg/L	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	↓

CCV (Continued Calibration Verification):

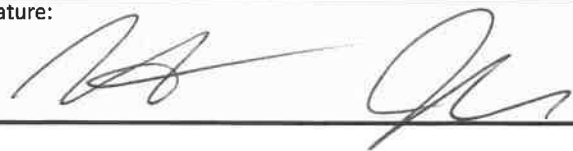
1730

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.05	s.u.	±0.1 s.u.	Pass	No	N/A
7*	7.07	s.u.	±0.1 s.u.	↓	↓	↓
10	10.04	s.u.	±0.1 s.u.	↓	↓	↓
SC 1000	978.53	µS/cm	±5%	↓	↓	↓
DO (Zero pt)	0.03	mg/L	±0.1 mg/L	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	↓

Comments:

Signature:



Date:

11/10/21

Multiparameter Meter Field Calibration Checklist

Field Personnel	Matt Julian Joe Reed	Date:	11/9/21
Weather conditions:	53°-62° M. cloudy wind SSW 5-10 mph	Signature:	
Make/Model	AquaTroll 600	S/N	762098

Instrument unpacked/RDO sensor installed from storage solution and rinsed with pH 4 buffer then triple rinsed with DI water prior. Instrument then subjected to calibration check/calibration regiment (pH 4, then pH 7, then pH 10, followed by Spec Con., ORP, and RDO) instrument and calibration cup rinsed between each buffer.

Sources

pH Buffers					
Primary Source:					
pH: 4a	4.00	pH: 7a	7.00	pH: 10a	10.00
Range:	+/- 0.02	Range:	+/- 0.02	Range:	+/- 0.02
Manufacturer:	MSI	Manufacturer:	MSI	Manufacturer:	MSI
Lot #:	L159-11	Lot #:	L146-06	Lot #:	K344-09
exp:	10-Jun-23	exp:	1-Jun-23	exp:	17-Dec-22

Secondary Source:					
pH: 4b	4.00	pH: 7b	7.00	pH: 10b	10.00
Range:	+/- 0.01	Range:	+/- 0.01	Range:	+/- 0.01
Manufacturer:	Geotech	Manufacturer:	Geotech	Manufacturer:	Geotech
Lot #:	1GD680	Lot #:	0GJ268	Lot #:	0GJ170
exp:	Apr-23	exp:	Oct-22	exp:	Oct-22

Spec Con.					
μS/cm: DI water	0	μS/cm: SC1000	1000	μS/cm: SC2000	2000
Range:	Not Measured	Range:	+/- 1	Range:	+/- 1 %
Manufacturer:	PDC Laboratories, Inc	Manufacturer:	RICCA Chemical	Manufacturer:	Geotech
Received:		Lot #:	4101A25	Lot #:	1GF629
		exp:	Dec-22	exp:	Jun-22

RDO	Sodium Sulfite in DI Water	ORP	Zobell's Standard
Value:	0	Value*: 242 @ 15°C	
Range:	+/- 0.01	Range:	+/- 10 mV
Manufacturer:	Fisher Chemical	Manufacturer:	In-Situ
Lot #:	168261	Lot #:	1GF668
Prepared by:	PDC Tech Services, Inc:	exp:	Mar-22

Turbidity (if required)					
0 NTU	0 (DI Water)	1 NTU	1	10 NTU	10
Range:	Not Measured	Range:		Range:	
Manufacturer:	PDC Laboratories, Inc	Manufacturer:		Manufacturer:	
Lot #:	NA	Lot #:		Lot #:	
exp:	NA	exp:		exp:	

Notes: *See bottle for chart of values based on Temperature

Multiparameter Meter Calibration Checklist (continued)

Values are tested at the beginning of the day, at mid-day, and at the end of the day to document potential drift.
CCV checks are conducted ~ every 4 hours, unless only one well is read then is not required.

Initial Calibration Check/Calibration: 09:15

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	3.97	s.u.	±0.1 s.u.	Pass	No	N/A
7a	6.99	s.u.	±0.1 s.u.	↓	↓	↓
10a	10.02	s.u.	±0.1 s.u.	↓	↓	↓
SC Zero (DI)	22.98	µS/cm	0<25 µS/cm	↓	↓	↓
SC 2000	1999.2	µS/cm	±5%	↓	↓	↓
ORP	237.2015	mV	±15 mV	↓	↓	↓
DO (Zero pt)	0.01	mg/L	±0.1	↓	↓	↓
DO (Saturated)	98.10	%	97-100%	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	↓

ICV (Initial Calibration Verification) 09:27

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.13	s.u.	±0.15 s.u.	Pass	None
7b	6.86	s.u.	±0.15 s.u.	↓	↓
10b	9.87	s.u.	±0.15 s.u.	↓	↓
SC1000	976.96	µS/cm	±5%	↓	↓

CCV (Continued Calibration Verification): 12:56

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.00	s.u.	±0.1 s.u.	Pass	No	N/A
7	7.02	s.u.	±0.1 s.u.	↓	↓	↓
10	10.08	s.u.	±0.1 s.u.	↓	↓	↓
SC 1000	972.61	µS/cm	±5%	↓	↓	↓
DO (Zero pt)	0.01	mg/L	±0.1 mg/L	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	↓

CCV (Continued Calibration Verification): 16:30

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.02	s.u.	±0.1 s.u.	Pass	No	N/A
7*	7.03	s.u.	±0.1 s.u.	↓	↓	↓
10	10.09	s.u.	±0.1 s.u.	↓	↓	↓
SC 1000	976.31	µS/cm	±5%	↓	↓	↓
DO (Zero pt)	0.02	mg/L	±0.1 mg/L	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	↓

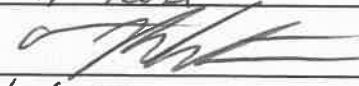
Comments:

Signature:

Date:

11/9/21

Multiparameter Meter Field Calibration Checklist

Field Personnel	Hoyan Pemberton		Date:	11/11/2021	
Weather conditions:	55° cloudy, rain wind SW at 14 mph		Signature:		
Make/Model	AquaTroll 600		S/N	606127	
Instrument unpacked/RDO sensor installed from storage solution and rinsed with pH 4 buffer then triple rinsed with DI water prior. Instrument then subjected to calibration check/calibration regiment (pH 4, then pH 7, then pH 10, followed by Spec Con., ORP, and RDO) instrument and calibration cup rinsed between each buffer.					
Sources					
pH Buffers					
Primary Source:					
pH: 4a	4.00	pH: 7a	7.00	pH: 10a	10.00
Range:	+/- 0.02	Range:	+/- 0.02	Range:	+/- 0.02
Manufacturer:	MSI	Manufacturer:	MSI	Manufacturer:	MSI
Lot #:	L159-11	Lot #:	L146-06	Lot #:	K344-09
exp:	10-Jun-23	exp:	1-Jun-23	exp:	17-Dec-22
Secondary Source:					
pH: 4b	4.00	pH: 7b	7.00	pH: 10b	10.00
Range:	+/- 0.01	Range:	+/- 0.01	Range:	+/- 0.01
Manufacturer:	Geotech	Manufacturer:	Geotech	Manufacturer:	Geotech
Lot #:	1GD680	Lot #:	0GJ268	Lot #:	0GJ170
exp:	Apr-23	exp:	Oct-22	exp:	Oct-22
Spec Con.					
µS/cm: DI water	0	µS/cm: SC1000	1000	µS/cm: SC2000	2000
Range:	Not Measured	Range:	+/- 1	Range:	+/- 1 %
Manufacturer:	PDC Laboratories, Inc	Manufacturer:	RICCA Chemical	Manufacturer:	Geotech
Received:		Lot #:	4101A25	Lot #:	1GF629
		exp:	Dec-22	exp:	Jun-22
RDO					
Sodium Sulfite in DI Water		ORP		Zobell's Standard	
Value:	0	Value*:	242 @ 15°C		
Range:	+/- 0.01	Range:	+/- 10 mV		
Manufacturer:	Fisher Chemical	Manufacturer:	In-Situ		
Lot #:	168261	Lot #:	1GF668		
Prepared by:	PDC Tech Services, Inc:	exp:	Mar-22		
Turbidity (if required)					
0 NTU	0 (DI Water)	1 NTU	1	10 NTU	10
Range:	Not Measured	Range:		Range:	
Manufacturer:	PDC Laboratories, Inc	Manufacturer:		Manufacturer:	
Lot #:	NA	Lot #:		Lot #:	
exp:	NA	exp:		exp:	
Notes:					
*See bottle for chart of values based on Temperature					

Multiparameter Meter Calibration Checklist (continued)

Values are tested at the beginning of the day, at mid-day, and at the end of the day to document potential drift.

CCV checks are conducted ~ every 4 hours, unless only one well is read then is not required.

Initial Calibration Check/Calibration: 0125

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	4.03	s.u.	±0.1 s.u.	pass	No	✓
7a	7.06	s.u.	±0.1 s.u.	↓	↓	✓
10a	10.07	s.u.	±0.1 s.u.	↓	↓	✓
SC Zero (DI)	12.56	µS/cm	0<25 µS/cm	↓	↓	✓
SC 2000	2006.7	µS/cm	±5%	↓	↓	✓
ORP	242.7	mV	±15 mV	↓	↓	✓
DO (Zero pt)	0.08	mg/L	±0.1	↓	↓	✓
DO (Saturated)	11.87	%	97-100%	↓	↓	✓
Turbidity (DI)	—	NTU	<2 NTU	—	—	—

ICV (Initial Calibration Verification)

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.02	s.u.	±0.15 s.u.	pass	✓
7b	6.07	s.u.	±0.15 s.u.	↓	✓
10b	10.05	s.u.	±0.15 s.u.	↓	✓
SC1000	966.55	µS/cm	±5%	↓	✓

CCV (Continued Calibration Verification):

1310

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.05	s.u.	±0.1 s.u.	pass	No	✓
7	7.07	s.u.	±0.1 s.u.	↓	↓	✓
10	10.06	s.u.	±0.1 s.u.	↓	↓	✓
SC 1000	969.33	µS/cm	±5%	↓	↓	✓
DO (Zero pt)	0.09	mg/L	±0.1 mg/L	—	—	✓
Turbidity (DI)	—	NTU	<2 NTU	—	—	—

CCV (Continued Calibration Verification):

1655

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.02	s.u.	±0.1 s.u.	pass	No	✓
7*	7.08	s.u.	±0.1 s.u.	↓	↓	✓
10	10.06	s.u.	±0.1 s.u.	↓	↓	✓
SC 1000	973.62	µS/cm	±5%	↓	↓	✓
DO (Zero pt)	0.08	mg/L	±0.1 mg/L	—	—	✓
Turbidity (DI)	—	NTU	<2 NTU	—	—	—

Comments:

Turbidity readings taken on Lomax
turbidity meter

Signature:



Date:

11/11/2021

Multiparameter Meter Field Calibration Checklist

Field Personnel	MUN	Date:	11/11/21
Weather conditions:	56°, cloudy, raining. NE 5 mph wind	Signature:	<i>[Signature]</i>
Make/Model	AquaTroll 600	S/N	846000

Instrument unpacked/RDO sensor installed from storage solution and rinsed with pH 4 buffer then triple rinsed with DI water prior. Instrument then subjected to calibration check/calibration regiment (pH 4, then pH 7, then pH 10, followed by Spec Con., ORP, and RDO) instrument and calibration cup rinsed between each buffer.

Sources

pH Buffers					
Primary Source:					
pH: 4a	4.00	pH: 7a	7.00	pH: 10a	10.00
Range:	+/- 0.02	Range:	+/- 0.02	Range:	+/- 0.02
Manufacturer:	MSI	Manufacturer:	MSI	Manufacturer:	MSI
Lot #:	L159-11	Lot #:	L146-06	Lot #:	K344-09
exp:	10-Jun-23	exp:	1-Jun-23	exp:	17-Dec-22

Secondary Source:					
pH: 4b	4.00	pH: 7b	7.00	pH: 10b	10.00
Range:	+/- 0.01	Range:	+/- 0.01	Range:	+/- 0.01
Manufacturer:	Geotech	Manufacturer:	Geotech	Manufacturer:	Geotech
Lot #:	1GD680	Lot #:	0GJ268	Lot #:	0GJ170
exp:	Apr-23	exp:	Oct-22	exp:	Oct-22

Spec Con.					
μS/cm: DI water	0	μS/cm: SC1000	1000	μS/cm: SC2000	2000
Range:	Not Measured	Range:	+/- 1	Range:	+/- 1 %
Manufacturer:	PDC Laboratories, Inc	Manufacturer:	RICCA Chemical	Manufacturer:	Geotech
Received:		Lot #:	4101A25	Lot #:	1GF629
		exp:	Dec-22	exp:	Jun-22

RDO	Sodium Sulfite in DI Water	ORP	Zobell's Standard
Value:	0	Value*:	
Range:	+/- 0.01	Range:	+/- 10 mV
Manufacturer:	Fisher Chemical	Manufacturer:	In-Situ
Lot #:	168261	Lot #:	1GF668
Prepared by:	PDC Tech Services, Inc:	exp:	Mar-22

Turbidity (if required)					
0 NTU	0 (DI Water)	1 NTU	1	10 NTU	10
Range:	Not Measured	Range:		Range:	
Manufacturer:	PDC Laboratories, Inc	Manufacturer:		Manufacturer:	
Lot #:	NA	Lot #:		Lot #:	
exp:	NA	exp:		exp:	

Notes: *See bottle for chart of values based on Temperature

Multiparameter Meter Calibration Checklist (continued)

Values are tested at the beginning of the day, at mid-day, and at the end of the day to document potential drift.

CCV checks are conducted ~ every 4 hours, unless only one well is read then is not required.

Initial Calibration Check/Calibration: 0907

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	3.97	s.u.	±0.1 s.u.	P	NO	NA
7a	6.99	s.u.	±0.1 s.u.	↓	↓	↓
10a	9.96	s.u.	±0.1 s.u.	↓	↓	↓
SC Zero (DI)	0.76	µS/cm	0<25 µS/cm	↓	↓	↓
SC 2000	2021	µS/cm	±5%	↓	↓	↓
ORP	249	mV	±15 mV	↓	↓	↓
DO (Zero pt)	0.04	mg/L	±0.1	↓	↓	↓
DO (Saturated)	98.37	%	97-100%	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	↓

ICV (Initial Calibration Verification) 0908

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.01	s.u.	±0.15 s.u.	P	None
7b	6.89	s.u.	±0.15 s.u.	↓	↓
10b	9.89	s.u.	±0.15 s.u.	↓	↓
SC1000	1004	µS/cm	±5%	↓	↓

CCV (Continued Calibration Verification): 1215

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.02	s.u.	±0.1 s.u.	P	NO	NA
7	6.98	s.u.	±0.1 s.u.	↓	↓	↓
10	9.99	s.u.	±0.1 s.u.	↓	↓	↓
SC 1000	1004	µS/cm	±5%	↓	↓	↓
DO (Zero pt)	0.06	mg/L	±0.1 mg/L	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	↓

CCV (Continued Calibration Verification): 1632

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.02	s.u.	±0.1 s.u.	P	NO	NA
7*	7.04	s.u.	±0.1 s.u.	↓	↓	↓
10	9.96	s.u.	±0.1 s.u.	↓	↓	↓
SC 1000	1059	µS/cm	±5%	↓	↓	↓
DO (Zero pt)	0.08	mg/L	±0.1 mg/L	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	↓

Comments:

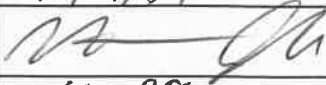
Signature:



Date:

11/11/21

Multiparameter Meter Field Calibration Checklist

Field Personnel	Matt Julien	Date:	11/11/21
Weather conditions:	47°-50°F cloudy - P. cloudy wind W 15-20 mph	Signature:	
Make/Model	AquaTroll 600	S/N	762098

Instrument unpacked/RDO sensor installed from storage solution and rinsed with pH 4 buffer then triple rinsed with DI water prior. Instrument then subjected to calibration check/calibration regiment (pH 4, then pH 7, then pH 10, followed by Spec Con., ORP, and RDO) instrument and calibration cup rinsed between each buffer.

Sources

pH Buffers					
Primary Source:					
pH: 4a	4.00	pH: 7a	7.00	pH: 10a	10.00
Range:	+/- 0.02	Range:	+/- 0.02	Range:	+/- 0.02
Manufacturer:	MSI	Manufacturer:	MSI	Manufacturer:	MSI
Lot #:	L159-11	Lot #:	L146-06	Lot #:	K344-09
exp:	10-Jun-23	exp:	1-Jun-23	exp:	17-Dec-22

Secondary Source:					
pH: 4b	4.00	pH: 7b	7.00	pH: 10b	10.00
Range:	+/- 0.01	Range:	+/- 0.01	Range:	+/- 0.01
Manufacturer:	Geotech	Manufacturer:	Geotech	Manufacturer:	Geotech
Lot #:	1GD680	Lot #:	0GJ268	Lot #:	0GJ170
exp:	Apr-23	exp:	Oct-22	exp:	Oct-22

Spec Con.					
μS/cm: DI water	0	μS/cm: SC1000	1000	μS/cm: SC2000	2000
Range:	Not Measured	Range:	+/- 1	Range:	+/- 1 %
Manufacturer:	PDC Laboratories, Inc	Manufacturer:	RICCA Chemical	Manufacturer:	Geotech
Received:		Lot #:	4101A25	Lot #:	1GF629
		exp:	Dec-22	exp:	Jun-22

RDO	Sodium Sulfite in DI Water	ORP	Zobell's Standard
Value:	0	Value*: 241.162	
Range:	+/- 0.01	Range:	+/- 10 mV
Manufacturer:	Fisher Chemical	Manufacturer:	In-Situ
Lot #:	168261	Lot #:	1GF668
Prepared by:	PDC Tech Services, Inc:	exp:	Mar-22

Turbidity (if required)					
0 NTU	0 (DI Water)	1 NTU	1	10 NTU	10
Range:	Not Measured	Range:		Range:	
Manufacturer:	PDC Laboratories, Inc	Manufacturer:		Manufacturer:	
Lot #:	NA	Lot #:		Lot #:	
exp:	NA	exp:		exp:	

Notes: *See bottle for chart of values based on Temperature

Multiparameter Meter Calibration Checklist (continued)

Values are tested at the beginning of the day, at mid-day, and at the end of the day to document potential drift.

CCV checks are conducted ~ every 4 hours, unless only one well is read then is not required.

Initial Calibration Check/Calibration: 09:41

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	3.97	s.u.	±0.1 s.u.	PASS	No	N/A
7a	7.01	s.u.	±0.1 s.u.	↓	↓	↓
10a	10.01	s.u.	±0.1 s.u.	↓	↓	↓
SC Zero (DI)	20.79	µS/cm	0<25 µS/cm	↓	↓	↓
SC 2000	1966.6	µS/cm	±5%	↓	↓	↓
ORP	239.1	mV	±15 mV	↓	↓	↓
DO (Zero pt)	0.02	mg/L	±0.1	↓	↓	↓
DO (Saturated)	97.62	%	97-100%	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	↓

ICV (Initial Calibration Verification) 09:50

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.02	s.u.	±0.15 s.u.	PASS	None
7b	6.92	s.u.	±0.15 s.u.	↓	↓
10b	9.95	s.u.	±0.15 s.u.	↓	↓
SC1000	970.50	µS/cm	±5%	↓	↓

CCV (Continued Calibration Verification): 13:25

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.00	s.u.	±0.1 s.u.	PASS	No	N/A
7	7.05	s.u.	±0.1 s.u.	↓	↓	↓
10	10.06	s.u.	±0.1 s.u.	↓	↓	↓
SC 1000	984.60	µS/cm	±5%	↓	↓	↓
DO (Zero pt)	0.01	mg/L	±0.1 mg/L	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	↓

CCV (Continued Calibration Verification): 16:46

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.01	s.u.	±0.1 s.u.	PASS	No	N/A
7*	7.06	s.u.	±0.1 s.u.	↓	↓	↓
10	10.06	s.u.	±0.1 s.u.	↓	↓	↓
SC 1000	981.51	µS/cm	±5%	↓	↓	↓
DO (Zero pt)	0.02	mg/L	±0.1 mg/L	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	↓

Comments:

Signature:

Date:

11/11/21

Multiparameter Meter Field Calibration Checklist

Field Personnel	Aaron Pemberton		Date:	11/12/2021	
Weather conditions:	46°-50°F Sunny Wind SW 14 mph		Signature:		
Make/Model	AquaTroll 600		S/N	606127	
Instrument unpacked/RDO sensor installed from storage solution and rinsed with pH 4 buffer then triple rinsed with DI water prior. Instrument then subjected to calibration check/calibration regiment (pH 4, then pH 7, then pH 10, followed by Spec Con., ORP, and RDO) instrument and calibration cup rinsed between each buffer.					
Sources					
pH Buffers					
Primary Source:					
pH: 4a	4.00	pH: 7a	7.00	pH: 10a	10.00
Range:	+/- 0.02	Range:	+/- 0.02	Range:	+/- 0.02
Manufacturer:	MSI	Manufacturer:	MSI	Manufacturer:	MSI
Lot #:	L159-11	Lot #:	L146-06	Lot #:	K344-09
exp:	10-Jun-23	exp:	1-Jun-23	exp:	17-Dec-22
Secondary Source:					
pH: 4b	4.00	pH: 7b	7.00	pH: 10b	10.00
Range:	+/- 0.01	Range:	+/- 0.01	Range:	+/- 0.01
Manufacturer:	Geotech	Manufacturer:	Geotech	Manufacturer:	Geotech
Lot #:	1GD680	Lot #:	0GJ268	Lot #:	0GJ170
exp:	Apr-23	exp:	Oct-22	exp:	Oct-22
Spec Con.					
µS/cm: DI water	0	µS/cm: SC1000	1000	µS/cm: SC2000	2000
Range:	Not Measured	Range:	+/- 1	Range:	+/- 1 %
Manufacturer:	PDC Laboratories, Inc	Manufacturer:	RICCA Chemical	Manufacturer:	Geotech
Received:		Lot #:	4101A25	Lot #:	1GF629
		exp:	Dec-22	exp:	Jun-22
RDO					
Sodium Sulfite in DI Water		ORP		Zobell's Standard	
Value:	0	Value*:	249	10°	
Range:	+/- 0.01	Range:		+/- 10 mV	
Manufacturer:	Fisher Chemical	Manufacturer:		In-Situ	
Lot #:	168261	Lot #:		1GF668	
Prepared by:	PDC Tech Services, Inc:	exp:		Mar-22	
Turbidity (if required)					
0 NTU	0 (DI Water)	1 NTU	1	10 NTU	10
Range:	Not Measured	Range:		Range:	
Manufacturer:	PDC Laboratories, Inc	Manufacturer:		Manufacturer:	
Lot #:	NA	Lot #:		Lot #:	
exp:	NA	exp:		exp:	
Notes:					
*See bottle for chart of values based on Temperature					

Multiparameter Meter Calibration Checklist (continued)

Values are tested at the beginning of the day, at mid-day, and at the end of the day to document potential drift.

CCV checks are conducted ~ every 4 hours, unless only one well is read then is not required.

Initial Calibration Check/Calibration: 0830						
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	3.99	s.u.	±0.1 s.u.	pass	NO	-
7a	7.01	s.u.	±0.1 s.u.	↓	↓	-
10a	10.00	s.u.	±0.1 s.u.	↓	↓	-
SC Zero (DI)	23.83	µS/cm	0<25 µS/cm	↓	↓	-
SC 2000	2060.3	µS/cm	±5%	↓	↓	-
ORP	251.6	mV	±15 mV	↓	↓	-
DO (Zero pt)	0.09	mg/L	±0.1	↓	↓	-
DO (Saturated)	98.27	%	97-100%	↓	↓	-
Turbidity (DI)	-	NTU	<2 NTU	-	-	-

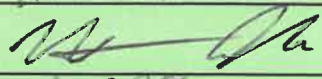
ICV (Initial Calibration Verification)						
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	
4b	4.01	s.u.	±0.15 s.u.	pass	-	
7b	6.95	s.u.	±0.15 s.u.	↓	-	
10b	10.02	s.u.	±0.15 s.u.	↓	-	
SC1000	1015.7	µS/cm	±5%	↓	-	

CCV (Continued Calibration Verification):				1114 Approx. every 4 hrs, unless only one well		
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	11.08	s.u.	±0.1 s.u.	pass	NO	-
7	7.09	s.u.	±0.1 s.u.	↓	↓	-
10	10.08	s.u.	±0.1 s.u.	↓	↓	-
SC 1000	1018.7	µS/cm	±5%	↓	↓	-
DO (Zero pt)	0.08	mg/L	±0.1 mg/L	↓	↓	-
Turbidity (DI)	-	NTU	<2 NTU	-	-	-

CCV (Continued Calibration Verification):				Approx. every 4 hrs, unless only one well		
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4		s.u.	±0.1 s.u.			
7*		s.u.	±0.1 s.u.			
10		s.u.	±0.1 s.u.			
SC 1000		µS/cm	±5%			
DO (Zero pt)		mg/L	±0.1 mg/L			
Turbidity (DI)		NTU	<2 NTU			
Comments:	Turbidity broken with Lammertke turbidity meter					

Signature: 	Date: 11/12/21
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Multiparameter Meter Field Calibration Checklist

Field Personnel	Matt Sullivan	Date:	11/12/21
Weather conditions:	47° - 50° F sunny wind 5-15-20 mph	Signature:	
Make/Model	AquaTroll 600	S/N	762098

Instrument unpacked/RDO sensor installed from storage solution and rinsed with pH 4 buffer then triple rinsed with DI water prior. Instrument then subjected to calibration check/calibration regiment (pH 4, then pH 7, then pH 10, followed by Spec Con., ORP, and RDO) instrument and calibration cup rinsed between each buffer.

Sources

pH Buffers					
Primary Source:					
pH: 4a	4.00	pH: 7a	7.00	pH: 10a	10.00
Range:	+/- 0.02	Range:	+/- 0.02	Range:	+/- 0.02
Manufacturer:	MSI	Manufacturer:	MSI	Manufacturer:	MSI
Lot #:	L159-11	Lot #:	L146-06	Lot #:	K344-09
exp:	10-Jun-23	exp:	1-Jun-23	exp:	17-Dec-22

Secondary Source:					
pH: 4b	4.00	pH: 7b	7.00	pH: 10b	10.00
Range:	+/- 0.01	Range:	+/- 0.01	Range:	+/- 0.01
Manufacturer:	Geotech	Manufacturer:	Geotech	Manufacturer:	Geotech
Lot #:	1GD680	Lot #:	0GJ268	Lot #:	0GJ170
exp:	Apr-23	exp:	Oct-22	exp:	Oct-22

Spec Con.					
µS/cm: DI water	0	µS/cm: SC1000	1000	µS/cm: SC2000	2000
Range:	Not Measured	Range:	+/- 1	Range:	+/- 1 %
Manufacturer:	PDC Laboratories, Inc	Manufacturer:	RICCA Chemical	Manufacturer:	Geotech
Received:		Lot #:	4101A25	Lot #:	1GF629
		exp:	Dec-22	exp:	Jun-22

RDO	Sodium Sulfite in DI Water	ORP	Zobell's Standard
Value:	0	Value*: 2470/08	
Range:	+/- 0.01	Range:	+/- 10 mV
Manufacturer:	Fisher Chemical	Manufacturer:	In-Situ
Lot #:	168261	Lot #:	1GF668
Prepared by:	PDC Tech Services, Inc:	exp:	Mar-22

Turbidity (if required)					
0 NTU	0 (DI Water)	1 NTU	1	10 NTU	10
Range:	Not Measured	Range:		Range:	
Manufacturer:	PDC Laboratories, Inc	Manufacturer:		Manufacturer:	
Lot #:	NA	Lot #:		Lot #:	
exp:	NA	exp:		exp:	

Notes: *See bottle for chart of values based on Temperature

Multiparameter Meter Calibration Checklist (continued)

Values are tested at the beginning of the day, at mid-day, and at the end of the day to document potential drift.
CCV checks are conducted ~ every 4 hours, unless only one well is read then is not required.

Initial Calibration Check/Calibration:

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	4.02	s.u.	±0.1 s.u.	Pass	No	N/A
7a	7.08	s.u.	±0.1 s.u.	↓	↓	↓
10a	10.09	s.u.	±0.1 s.u.	↓	↓	↓
SC Zero (DI)	11.04	µS/cm	0<25 µS/cm	↓	↓	↓
SC 2000	1796.2	µS/cm	±5%	↓	↓	↓
ORP	250.90 mV	mV	±15 mV	↓	↓	↓
DO (Zero pt)	0.02	mg/L	±0.1	↓	↓	↓
DO (Saturated)	97.32	%	97-100%	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	↓

ICV (Initial Calibration Verification) 08:55

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	3.99	s.u.	±0.15 s.u.	Pass	None
7b	6.87	s.u.	±0.15 s.u.	↓	↓
10b	9.97	s.u.	±0.15 s.u.	↓	↓
SC1000	982.70	µS/cm	±5%	↓	↓

CCV (Continued Calibration Verification):

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4		s.u.	±0.1 s.u.			
7		s.u.	±0.1 s.u.			
10		s.u.	±0.1 s.u.			
SC 1000		µS/cm	±5%			
DO (Zero pt)		mg/L	±0.1 mg/L			
Turbidity (DI)		NTU	<2 NTU			

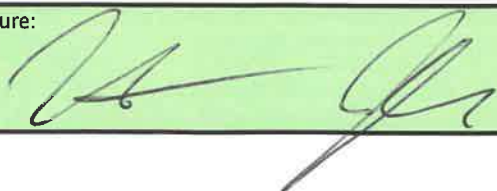
CCV (Continued Calibration Verification):

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4		s.u.	±0.1 s.u.			
7*		s.u.	±0.1 s.u.			
10		s.u.	±0.1 s.u.			
SC 1000		µS/cm	±5%			
DO (Zero pt)		mg/L	±0.1 mg/L			
Turbidity (DI)		NTU	<2 NTU			

Comments:

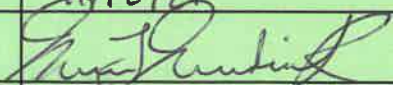
Signature:



Date:

11/12/21

Multiparameter Meter Field Calibration Checklist

Field Personnel	MON		Date:	11/12/21	
Weather conditions:	45°, sunny, NE 7 mph with		Signature:		
Make/Model	AquaTroll 600		S/N	346000	
Instrument unpacked/RDO sensor installed from storage solution and rinsed with pH 4 buffer then triple rinsed with DI water prior. Instrument then subjected to calibration check/calibration regiment (pH 4, then pH 7, then pH 10, followed by Spec Con., ORP, and RDO) instrument and calibration cup rinsed between each buffer.					
Sources					
pH Buffers					
Primary Source:					
pH: 4a	4.00	pH: 7a	7.00	pH: 10a	10.00
Range:	+/- 0.02	Range:	+/- 0.02	Range:	+/- 0.02
Manufacturer:	MSI	Manufacturer:	MSI	Manufacturer:	MSI
Lot #:	L159-11	Lot #:	L146-06	Lot #:	K344-09
exp:	10-Jun-23	exp:	1-Jun-23	exp:	17-Dec-22
Secondary Source:					
pH: 4b	4.00	pH: 7b	7.00	pH: 10b	10.00
Range:	+/- 0.01	Range:	+/- 0.01	Range:	+/- 0.01
Manufacturer:	Geotech	Manufacturer:	Geotech	Manufacturer:	Geotech
Lot #:	1GD680	Lot #:	0GJ268	Lot #:	0GJ170
exp:	Apr-23	exp:	Oct-22	exp:	Oct-22
Spec Con.					
µS/cm: DI water	0	µS/cm: SC1000	1000	µS/cm: SC2000	2000
Range:	Not Measured	Range:	+/- 1	Range:	+/- 1 %
Manufacturer:	PDC Laboratories, Inc	Manufacturer:	RICCA Chemical	Manufacturer:	Geotech
Received:		Lot #:	4101A25	Lot #:	1GF629
		exp:	Dec-22	exp:	Jun-22
RDO					
Sodium Sulfite in DI Water		ORP		Zobell's Standard	
Value:	0	Value*:			
Range:	+/- 0.01	Range:		+/- 10 mV	
Manufacturer:	Fisher Chemical	Manufacturer:		In-Situ	
Lot #:	168261	Lot #:		1GF668	
Prepared by:	PDC Tech Services, Inc:	exp:		Mar-22	
Turbidity (if required)					
0 NTU	0 (DI Water)	1 NTU	1	10 NTU	10
Range:	Not Measured	Range:		Range:	
Manufacturer:	PDC Laboratories, Inc	Manufacturer:		Manufacturer:	
Lot #:	NA	Lot #:		Lot #:	
exp:	NA	exp:		exp:	
Notes:					
*See bottle for chart of values based on Temperature					

Multiparameter Meter Calibration Checklist (continued)

Values are tested at the beginning of the day, at mid-day, and at the end of the day to document potential drift.
CCV checks are conducted ~ every 4 hours, unless only one well is read then is not required.

Initial Calibration Check/Calibration: 0821

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	4.02	s.u.	±0.1 s.u.	P	No	
7a	7.06	s.u.	±0.1 s.u.	P	No	
10a	10.08	s.u.	±0.1 s.u.	P	No	
SC Zero (DI)	5.36	µS/cm	0<25 µS/cm	P	No	
SC 2000	2006	µS/cm	±5%	P	No	
ORP	249	mV	±15 mV	P	No	
DO (Zero pt)	0.04	mg/L	±0.1	P	No	
DO (Saturated)	98.33	%	97-100%	P	No	
Turbidity (DI)	0.00	NTU	<2 NTU	P	No	

ICV (Initial Calibration Verification) 0824

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.00	s.u.	±0.15 s.u.	P	
7b	7.02	s.u.	±0.15 s.u.	P	
10b	9.99	s.u.	±0.15 s.u.	P	
SC1000	1017	µS/cm	±5%	P	

CCV (Continued Calibration Verification): 1007

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	3.97	s.u.	±0.1 s.u.	P	No	
7	7.01	s.u.	±0.1 s.u.	P	No	
10	9.95	s.u.	±0.1 s.u.	P	No	
SC 1000	965	µS/cm	±5%	P	No	
DO (Zero pt)	0.05	mg/L	±0.1 mg/L	P	No	
Turbidity (DI)	0.00	NTU	<2 NTU	P	No	

CCV (Continued Calibration Verification):

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4		s.u.	±0.1 s.u.			
7*		s.u.	±0.1 s.u.			
10		s.u.	±0.1 s.u.			
SC 1000		µS/cm	±5%			
DO (Zero pt)		mg/L	±0.1 mg/L			
Turbidity (DI)		NTU	<2 NTU			

Comments:

Signature:



Date:

11/12/21

[illegible]

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: Newton Landfill 2 Client: RAMBOLL
 Project Number: 2285 Task #: Unit 502 Start Date: 11/19/21 Time: 10:05
 Field Personnel: Monte Julien Joe Reed Finish Date: 11/19/21 Time: 10:59

WELL INFORMATION		EVENT TYPE		PURGE INFORMATION	
Well ID: <u>G06D</u>		☐ Well Development		Purge Method: ☐ Bailer ☒ Pump	
Casing ID: <u>2</u>	Inches	☒ Low-Flow / Low-Stress Sampling		Bailer Type: <u>n/a</u>	
Screen Interval: <u>n/a</u>		☐ Well Volume Approach Sampling		Pump Type and Serial #: <u>n/a</u>	
Borehole Diameter: <u>n/a</u>	Inches	☐ Other (Specify below)		Tube/Pump Intake Depth: <u>n/a</u>	
Filter Pack Interval: <u>n/a</u>				Stabilized Pumping Rate: <u>100 mL/min</u>	

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION			
INITIAL		FINAL		Volume Calculation Type: ☒ Well Casing ☐ Borehole			
Depth	Date/Time	Depth	Date/Time	Volume Per Foot:	Standing Water Column:	Gallons	feet
LNAPL	<u>11/19/21</u> <u>n/a</u>	<u>n/a</u>	<u>n/a</u>				
Groundwater	<u>28.04</u> <u>28.11</u> <u>11/19/21</u> <u>10:05</u>	<u>35.37</u>	<u>11/19/21</u> <u>10:59</u>		1 Well Volume: <u>n/a</u>	<u>n/a</u>	<u>n/a</u>
DNAPL	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>		5 Well Volumes: <u>n/a</u>	<u>n/a</u>	<u>n/a</u>
Casing Base	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>		Total Volumes Produced: <u>n/a</u>	<u>n/a</u>	<u>n/a</u>
Water Level Serial #:	<u>Heron d4464-1</u>	<u>#4778-1</u>		Well Purged Dry? ☐ Yes ☒ No			
				Water Quality Probe Type and Serial # <u>Aquatrol 600</u> <u>#762098</u>			

WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (mL)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>10:10</u>	<u>0</u>	<u>28.11</u>	<u>0</u>	<u>13.87</u>	<u>7.03</u>	<u>15162.7</u>	<u>1.06</u>	<u>371.12</u>	<u>-107.5</u>	<u>moderate</u>
purge	<u>10:36</u>	<u>2600</u>	<u>31.86</u>	<u>3.75</u>	<u>13.88</u>	<u>7.03</u>	<u>1162.7</u>	<u>1.04</u>	<u>365.72</u>	<u>-118.9</u>	<u>moderate</u>
	<u>10:38</u>	<u>2800</u>	<u>32.19</u>	<u>4.08</u>	<u>13.87</u>	<u>7.03</u>	<u>1183.4</u>	<u>0.91</u>	<u>352.18</u>	<u>-105.0</u>	<u>moderate</u>
	<u>10:40</u>	<u>3000</u>	<u>32.52</u>	<u>4.41</u>							

NOTES		ABBREVIATIONS	
<u>3 bottles filled</u> <u>Drawdown did not stabilize.</u> <u>ADD MS/MSD/Dup</u>		Cond - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius	

Monitoring Well Evaluation Checklist

Site	Newton Landfill 2 Unit 502	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	11/9/21			X	
Well Number	G06D				

<u>Stick-up Monitoring Wells</u>	Yes	No	NA	<u>Comments</u>
1. Outer protective Casing				
Not corroded		X		some rust
Not dented	X			
Not cracked	X			
Not loose	X			
2. Inner casing				
Not corroded	X			
Not dented	X			
Not cracked	X			
Not loose		X		MOVES when touched
3. Are there weep holes in outer casing?	X			
4. Weep holes able to drain?	X			
5. Is there a lockable cap present?		X		
6. Is there a lock present?	X			
7. Bumper posts in good condition?	X			

<u>Flushmount Monitoring Wells</u>	Yes	No	NA	
8. Can the lid be secured tightly?				
9. Does the lid have a gasket that seals?				
10. No water in the flushmount?				
11. Is the well cap lockable?				
12. Is there a lock present?				

<u>All Monitoring Wells</u>	Yes	No	NA	
Downhole Condition				
12. Water level measuring point clearly marked?	X			
13. No obstructions in well?	X			
14. No plant roots or vegetation in well?	X			
15. No sediment in bottom of well?			X	
If present, how much sediment?		ft		
16. Installed as total depth.		ft		
17. Measured total depth of well.		n/a	ft	not measured because pump already installed

General Condition	Yes	No	NA	
18. Concrete pad installed?	X			
19. Concrete pad	X			
Slope away from casing?	X			
Not deteriorated?	X			
Not heaved or below surrounding grade?	X			
20. No surface seal settling?	X			
21. Well clearly visible and labeled?	X			
Comments:				

* Major well repair are those that require a subcontractor or separate mobilization to complete

11/9/21

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: Newton Landfill 2 Client: RAMBOLL
 Project Number: 2285 Task #: Unit 502 Start Date: 11/19/21 Time: 11:43
 Field Personnel: Matt Galien Joe Reed Finish Date: 11/19/21 Time: 12:34

WELL INFORMATION		EVENT TYPE		PURGE INFORMATION	
Well ID: <u>G201</u>	☐ Well Development	Purge Method: ☐ Bailer ☒ Pump			
Casing ID: <u>2</u> Inches	☒ Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>			
Screen Interval: <u>10</u>	☐ Well Volume Approach Sampling	Pump Type and Serial #: <u>n/a</u>			
Borehole Diameter: <u>n/a</u> Inches	☐ Other (Specify below)	Tube/Pump Intake Depth: <u>n/a</u>			
Filter Pack Interval: <u>n/a</u>		Stabilized Pumping Rate: <u>100 ml/min</u>			

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION			
INITIAL		FINAL		Volume Calculation Type: ☒ Well Casing ☐ Borehole			
Depth FT BTOC	Date/Time (24-Hour)	Depth FT BTOC	Date/Time (24-Hour)	Volume Per Foot:	n/a		
LNAPL	n/a	n/a	n/a	Standing Water Column:	n/a feet		
Groundwater	<u>18.29</u>	<u>11/19/21 11:43</u>	<u>18.45</u>	1 Well Volume:	n/a	Gallons	3 Well Volumes: n/a Gallons
DNAPL	n/a	n/a	n/a	Well Volumes:	n/a	Gallons	10 Well Volumes: n/a Gallons
Casing Base	n/a	n/a	n/a	Total Volumes Produced:	n/a	Gallons	
Water Level Serial #: <u>Heon</u>	<u>dipper-1</u>	<u>#4778-T</u>	<u>#4778-T</u>	Well Purged Dry? ☐ Yes ☒ No			
				Water Quality Probe Type and Serial #	<u>Aquatool 600 #762098</u>		

WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (mls)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>11:44</u>	<u>0</u>	<u>18.29</u>	<u>0</u>	<u>16.32</u>	<u>7.35</u>	<u>1053.4</u>	<u>2.61</u>	<u>9.93</u>	<u>-78.4</u>	<u>clear</u>
purge	<u>11:59</u>	<u>1500</u>	<u>18.40</u>	<u>0.11</u>	<u>16.31</u>	<u>7.35</u>	<u>1030.6</u>	<u>2.19</u>	<u>5.65</u>	<u>-84.9</u>	<u>clear</u>
	<u>12:01</u>	<u>1700</u>	<u>18.40</u>	<u>0.11</u>	<u>16.30</u>	<u>7.35</u>	<u>986.59</u>	<u>1.98</u>	<u>7.93</u>	<u>-89.8</u>	<u>clear</u>
	<u>12:03</u>	<u>1900</u>	<u>18.40</u>	<u>0.12</u>	<u>16.30</u>	<u>7.35</u>	<u>977.93</u>	<u>1.76</u>	<u>5.13</u>	<u>-94.4</u>	<u>clear</u>
	<u>12:05</u>	<u>2100</u>	<u>18.41</u>	<u>0.12</u>	<u>16.28</u>	<u>7.35</u>	<u>971.50</u>	<u>1.65</u>	<u>5.44</u>	<u>-98.4</u>	<u>clear</u>
	<u>12:07</u>	<u>2300</u>	<u>18.41</u>	<u>0.12</u>	<u>16.25</u>	<u>7.35</u>	<u>971.25</u>	<u>1.56</u>	<u>5.15</u>	<u>-101.0</u>	<u>clear</u>
	<u>12:09</u>	<u>2500</u>	<u>18.41</u>	<u>0.12</u>							

NOTES

ABBREVIATIONS	
Cond - Actual Conductivity	ORP - Oxidation-Reduction Potential
FT BTOC - Feet Below Top of Casing	SEC - Specific Electrical Conductance
na - Not Applicable	SU - Standard Units
nm - Not Measured	Temp - Temperature
	°C - Degrees Celsius

440 11/19/21

Monitoring Well Evaluation Checklist

Site	Newton Landfill 2 Unit 502	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	11/9/21			X	
Well Number	G201				

<u>Stick-up Monitoring Wells</u>	Yes	No	NA	<u>Comments</u>
1. Outer protective Casing				
Not corroded		X		over 50% rusted
Not dented	X			
Not cracked	X			
Not loose	X			
2. Inner casing				
Not corroded	X			
Not dented	X			
Not cracked	X			
Not loose		X		moves when touched
3. Are there weep holes in outer casing?		X		
4. Weep holes able to drain?			X	
5. Is there a lockable cap present?		X		
6. Is there a lock present?	X			
7. Bumper posts in good condition?	X			

<u>Flushmount Monitoring Wells</u>	Yes	No	NA	
8. Can the lid be secured tightly?				
9. Does the lid have a gasket that seals?				
10. No water in the flushmount?				
11. Is the well cap lockable?				
12. Is there a lock present?				

<u>All Monitoring Wells</u>	Yes	No	NA	
Downhole Condition				
12. Water level measuring point clearly marked?	X			
13. No obstructions in well?	X	X		
14. No plant roots or vegetation in well?	X			
15. No sediment in bottom of well?			X	
If present, how much sediment?		ft		
16. Installed as total depth.		70.00 ft		
17. Measured total depth of well.		n/a ft		not measured because pump already installed
General Condition				
18. Concrete pad installed?	X			
19. Concrete pad	X			
Slope away from casing?	X			
Not deteriorated?	X			
Not heaved or below surrounding grade?	X			
20. No surface seal settling?	X			
21. Well clearly visible and labeled?	X			
Comments:				

* Major well repair are those that require a subcontractor or separate mobilization to complete

ME
11/9/21

PROJECT INFORMATION											
Site: Newton Landfill 2		Client: RAMBOLL		Task #: Unit 502		Start Date: 11/19/21		Time: 1143			
Project Number: 2285				Finish Date: 11/19/21				Time: 1243			
Field Personnel:											
WELL INFORMATION			EVENT TYPE			PURGE INFORMATION					
Well ID: R201		☐ Well Development			Purge Method: ☐ Bailer ☒ Pump						
Casing ID: 2		☒ Low-Flow / Low-Stress Sampling			Bailer Type: n/a						
Screen Interval: 10		☐ Well Volume Approach Sampling			Pump Type and Serial #: n/a						
Borehole Diameter: n/a		☐ Other (Specify below)			Tubel/Pump Intake Depth: n/a						
Filter Pack Interval: n/a					Stabilized Pumping Rate: 100 ml/min						
DEPTH MEASUREMENTS			VOLUME CALCULATION AND PRODUCTION INFORMATION								
INITIAL			FINAL								
Depth FT BTOC	Date/Time (24-Hour)	Depth FT BTOC	Date/Time (24-Hour)	Volume Per Foot: Standing Water Column:	n/a	Gallons	3 Well Volumes:	n/a	Gallons		
LNAPL				1 Well Volume: n/a	n/a		3 Well Volumes: n/a	n/a			
Groundwater	11/19/21	26.75	11/19/21	5 Well Volumes: n/a	n/a		10 Well Volumes: n/a	n/a			
DNAPL				Total Volumes Produced: n/a	n/a						
Casing Base				Well Purged Dry? ☐ Yes ☒ No							
Water Level Serial #:			Water Quality Probe Type and Serial # Aquatrol 600 #60627								
WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (mls)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Initial	1145	0	18.53	✓ 14.94	✓ 14.94	7.29	1161.7	0.60	33.40	-146.2	mostly clear
Purge	1206	1500	29.07	✓ 14.96	✓ 14.96	7.29	1179.9	0.58	28.88	-149.8	" "
	1207	1600	22.14	✓ 14.91	✓ 14.91	7.30	1182.3	0.50	30.44	-151.3	" "
	1208	1700	22.21								
				NOTES				ABBREVIATIONS			
				Cond. - Actual Conductivity				ORP - Oxidation-Reduction Potential			
				FT BTOC - Feet Below Top of Casing				SEC - Specific Electrical Conductance			
				na - Not Applicable				SU - Standard Units			
				mm - Not Measured				Temp - Temperature			

Monitoring Well Evaluation Checklist

Site	Newton Landfill 2 Unit 502	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	11/9/21			X	
Well Number	R201				

<u>Stick-up Monitoring Wells</u>	Yes	No	NA	<u>Comments</u>
1. Outer protective Casing				
Not corroded		X		rust 20%
Not dented	X			
Not cracked	X			
Not loose	X			
2. Inner casing				
Not corroded	X			
Not dented	X			
Not cracked	X			
Not loose	X			
3. Are there weep holes in outer casing?	X			
4. Weep holes able to drain?	X			
5. Is there a lockable cap present?		X		
6. Is there a lock present?	X			
7. Bumper posts in good condition?	X			

<u>Flushmount Monitoring Wells</u>	Yes	No	NA	
8. Can the lid be secured tightly?				
9. Does the lid have a gasket that seals?				
10. No water in the flushmount?				
11. Is the well cap lockable?				
12. Is there a lock present?				

<u>All Monitoring Wells</u>	Yes	No	NA	
Downhole Condition				
12. Water level measuring point clearly marked?	X			
13. No obstructions in well?	X			
14. No plant roots or vegetation in well?	X			
15. No sediment in bottom of well?			X	
If present, how much sediment?		ft		
16. Installed as total depth.				
17. Measured total depth of well.		n/a	ft	not measured because pump already installed

<u>General Condition</u>	Yes	No	NA	
18. Concrete pad installed?	X			
19. Concrete pad	X			
Slope away from casing?	X			
Not deteriorated?	X			
Not heaved or below surrounding grade?	X			
20. No surface seal settling?	X			
21. Well clearly visible and labeled?	X			
Comments:				

* Major well repair are those that require a subcontractor or separate mobilization to complete

ME
 11/9/21

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION											
Site: Newton Landfill 2		Client: RAMBOLL		Task #: Unit 502		Start Date: 11/10/21		Time: 11:20			
Project Number: 2285		Finish Date: 11/10/21		Time: 12:24							
Field Personnel: Mark Julez											
WELL INFORMATION			EVENT TYPE			PURGE INFORMATION					
Well ID: G202			☐ Well Development ☒ Low-Flow / Low-Stress Sampling ☐ Well Volume Approach Sampling ☐ Other (Specify below)			Purge Method: ☐ Bailor ☒ Pump Bailer Type: n/a Pump Type and Serial #: n/a Tube/Pump Intake Depth: n/a Stabilized Pumping Rate: 100 ml/min					
Casing ID: 2			Inches								
Screen Interval: 10			Inches								
Borehole Diameter: n/a			Inches								
Filter Pack Interval: n/a			Inches								
DEPTH MEASUREMENTS			VOLUME CALCULATION AND PRODUCTION INFORMATION								
INITIAL			FINAL								
Depth	Date/Time	Depth	Date/Time	Volume Per Foot	Standing Water Column	1 Well Volume	3 Well Volumes	10 Well Volumes	Gallons		
FT BTOT	(24-Hour)	FT BTOT	(24-Hour)	n/a	n/a	n/a	n/a	n/a	n/a		
LNAPL	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
Groundwater	47.89	11/10/21/12:00	47.82	11/10/21/12:21	n/a	n/a	n/a	n/a	n/a		
DNAPL	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
Casing Base	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
Water Level Serial #: Heron digger-T #4778-T			Water Quality Probe Type and Serial #: Aquatroll 600 #762098								
WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (mls)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	11:20	0	47.89	0	15.49	7.60	1244.4	1.82	2.56	-89.5	clear
purge	11:43	2300	47.82	-0.05	15.46	7.54	1263.2	1.47	2.06	-100.2	clear
	11:45	2500	47.82	-0.05	15.44	7.51	1266.2	1.30	1.15	-103.9	clear
	11:47	2700	47.82	-0.05	15.42	7.49	1270.2	1.14	1.39	-109.0	clear
	11:49	2900	47.82	-0.05	15.41	7.47	1269.5	1.04	0.56	-111.8	clear
	11:51	3100	47.82	-0.05	15.40	7.45	1269.3	0.98	2.04	-113.1	clear
	11:53	3300	47.82	-0.05							
NOTES											
ABBREVIATIONS											
Cond - Actual Conductivity FT BTOT - Feet Below Top of Casing na - Not Applicable nm - Not Measured °C - Degrees Celsius ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature											

MPR
11/10/21

Monitoring Well Evaluation Checklist

Site	Newton Landfill 2 Unit 502	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	11/10/21			X	
Well Number	G202				

<u>Stick-up Monitoring Wells</u>	Yes	No	NA	<u>Comments</u>
1. Outer protective Casing				
Not corroded		X		80% to rusted
Not dented	X			
Not cracked	X			
Not loose	X			
2. Inner casing				
Not corroded	X			
Not dented	X			
Not cracked	X			
Not loose	X			
3. Are there weep holes in outer casing?	Yes	No	NA	
4. Weep holes able to drain?		X		
5. Is there a lockable cap present?		X		
6. Is there a lock present?	X			
7. Bumper posts in good condition?	X			

<u>Flushmount Monitoring Wells</u>	Yes	No	NA	
8. Can the lid be secured tightly?				MKT 11/10/21
9. Does the lid have a gasket that seals?				
10. No water in the flushmount?				
11. Is the well cap lockable?				
12. Is there a lock present?				

<u>All Monitoring Wells</u>	Yes	No	NA	
Downhole Condition				
12. Water level measuring point clearly marked?	X			
13. No obstructions in well?		X		
14. No plant roots or vegetation in well?	X			
15. No sediment in bottom of well?			X	
If present, how much sediment?				
16. Installed as total depth.				
17. Measured total depth of well.				
	ft			
	70.00 ft			
	n/a ft			not measured because pump already installed

<u>General Condition</u>	Yes	No	NA	
18. Concrete pad installed?	X			
19. Concrete pad	X			
Slope away from casing?	X			
Not deteriorated?	X			
Not heaved or below surrounding grade?	X			
20. No surface seal settling?	X			
21. Well clearly visible and labeled?	X			
Comments:				

* Major well repair are those that require a subcontractor or separate mobilization to complete

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: Newton Landfill 2 Client: RAMBOLL

Project Number: 2285 Task #: Unit 502 Start Date: 11/10/21 Time: 1005

Field Personnel: Matt Julien Finish Date: 11/10/21 Time: 1101

WELL INFORMATION

Well ID: R202

Casing ID: 2 Inches

Screen Interval: 10

Borehole Diameter: n/a

Filter Pack Interval: n/a

EVENT TYPE

☐ Well Development

☒ Low-Flow / Low-Stress Sampling

☐ Well Volume Approach Sampling

☐ Other (Specify below)

PURGE INFORMATION

Purge Method: ☐ Bailer ☒ Pump

Bailer Type: n/a

Pump Type and Serial #: n/a

Tube/Pump Intake Depth: n/a

Stabilized Pumping Rate: 100 m/min

DEPTH MEASUREMENTS

	INITIAL		FINAL	
	Depth FT BTOC	Date/Time (24-Hour)	Depth FT BTOC	Date/Time (24-Hour)
LNAPL	n/a	n/a	n/a	n/a
Groundwater	47.58	11/10/21/1005	47.55	11/10/21/1101
DNAPL	n/a	n/a	n/a	n/a
Casing Base	n/a	n/a	n/a	n/a

VOLUME CALCULATION AND PRODUCTION INFORMATION

Volume Calculation Type: ☒ Well Casing ☐ Borehole

Volume Per Foot: n/a

Standing Water Column: n/a feet

1 Well Volume: n/a Gallons 3 Well Volumes: n/a Gallons

5 Well Volumes: n/a Gallons 10 Well Volumes: n/a Gallons

Total Volumes Produced: n/a Gallons

Well Purged Dry? ☐ Yes ☒ No

Water Level Serial #: Heron differ-T #4778-T Water Quality Probe Type and Serial #: Aquatool 600 #762098

WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (mls)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	1005	0	47.58	0		7.33	1190.5	0.49	5.89	-120.4	clear
purge	1021	1600	47.55	-0.03	14.84	7.33	1307.3	0.45	4.28	-124.0	clear
	1023	1800	47.55	-0.03	14.86	7.34	1187.5	0.40	2.78	-126.1	clear
	1025	+2000	47.55	-0.03	14.86	7.34	1168.4	0.39	2.52	-127.3	clear
	1027	2200	47.55	-0.03	14.87	7.35	1159.6	0.38	2.23	-128.9	clear
	1029	2400	47.55	-0.03	14.88	7.35					

NOTES

ABBREVIATIONS

Cond - Actual Conductivity
 FT BTOC - Feet Below Top of Casing
 na - Not Applicable
 nm - Not Measured
 °C - Degrees Celsius

ORP - Oxidation-Reduction Potential
 SEC - Specific Electrical Conductance
 SU - Standard Units
 Temp - Temperature

11/10/21

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Monitoring Well Evaluation Checklist

Site	Newton Landfill 2 Unit 502	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	11/10/21			X	
Well Number	R202				

<u>Stick-up Monitoring Wells</u>	Yes	No	NA	<u>Comments</u>
1. Outer protective Casing				
Not corroded		X		5% rusted
Not dented	X			
Not cracked	X			
Not loose	X			
2. Inner casing				
Not corroded	X			
Not dented	X			
Not cracked	X			
Not loose	X			
3. Are there weep holes in outer casing?		X		
4. Weep holes able to drain?			X	
5. Is there a lockable cap present?		X		
6. Is there a lock present?	X			
7. Bumper posts in good condition?	X			

<u>Flushmount Monitoring Wells</u>	Yes	No	NA	
8. Can the lid be secured tightly?				
9. Does the lid have a gasket that seals?				
10. No water in the flushmount?				
11. Is the well cap lockable?				
12. Is there a lock present?				

<u>All Monitoring Wells</u>	Yes	No	NA	
Downhole Condition				
12. Water level measuring point clearly marked?	X			
13. No obstructions in well?		X		
14. No plant roots or vegetation in well?	X			
15. No sediment in bottom of well?			X	
If present, how much sediment?		ft		
16. Installed as total depth.				
17. Measured total depth of well.		n/a ft		not measured because pump already installed
General Condition				
18. Concrete pad installed?	X			
19. Concrete pad	X			
Slope away from casing?	X			
Not deteriorated?	X			
Not heaved or below surrounding grade?	X			
20. No surface seal settling?	X			
21. Well clearly visible and labeled?	X			
Comments:				

* Major well repair are those that require a subcontractor or separate mobilization to complete

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11/10/21

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: Newton Landfill 2 Client: RAMBOLL

Project Number: 2285 Task #: Unit 502 Start Date: 11/10/21 Time: 1252

Field Personnel: Matt Julien Finish Date: 11/10/21 Time: 1343

WELL INFORMATION		EVENT TYPE		PURGE INFORMATION	
Well ID: G203		☐ Well Development		Purge Method: ☐ Baller ☒ Pump	
Casing ID: 2	Inches	☒ Low-Flow / Low-Stress Sampling		Baller Type: n/a	
Screen Interval: 10		☐ Well Volume Approach Sampling		Pump Type and Serial #: n/a	
Borehole Diameter: n/a	Inches	☐ Other (Specify below)		Tube/Pump Intake Depth: n/a	
Filter Pack Interval: n/a				Stabilized Pumping Rate: 100 ml/min	

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION			
INITIAL		FINAL		Volume Calculation Type: ☒ Well Casing ☐ Borehole			
Depth FT BTOC	Date/Time (24-Hour)	Depth FT BTOC	Date/Time (24-Hour)	Volume Per Foot: n/a	Standing Water Column: n/a feet		
LNAPL	n/a	n/a	n/a	1 Well Volume: n/a	Gallons	3 Well Volumes: n/a	Gallons
Groundwater	41.29	11/10/21/1352	41.26	5 Well Volumes: n/a	Gallons	10 Well Volumes: n/a	Gallons
DNAPL	n/a	n/a	n/a	Total Volumes Produced: n/a			
Casing Base	n/a	n/a	n/a	Well Purged Dry? ☐ Yes ☒ No	762098		
Water Level Serial #: Heron				Water Quality Probe Type and Serial # Aquatru 1 600 #762098			

WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (mls)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (us/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	1252	0	41.29	0		7.44	1343.2	1.06	43.40	-98.7	slightly
purge	1307	1500	41.26	-0.03	15.66	7.46	1214.0	1.21	6.38	-99.4	clear
	1309	1700	41.26	-0.03	15.57	7.45	1214.8	1.38	5.45	-101.0	clear
	1311	1900	41.26	-0.03	15.54	7.48	1220.4	1.27	6.09	-102.4	clear
	1313	2100	41.26	-0.03	15.50						

NOTES		ABBREVIATIONS	
Faulty check valve. sample flows back down water line slightly after draw		Cond - Actual Conductivity SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius	

Monitoring Well Evaluation Checklist

Site	Newton Landfill 2 Unit 502	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	11/10/21			☒	
Well Number	G203				

<u>Stick-up Monitoring Wells</u>	Yes	No	NA	Comments
1. Outer protective Casing				
Not corroded		☒		90% wasted
Not dented	☒			
Not cracked	☒			
Not loose	☒			
2. Inner casing				
Not corroded	☒			
Not dented	☒			
Not cracked	☒			
Not loose	☒			
3. Are there weep holes in outer casing?		No	NA	
4. Weep holes able to drain?		☒		
5. Is there a lockable cap present?		X		
6. Is there a lock present?	☒			
7. Bumper posts in good condition?	☒			

<u>Flushmount Monitoring Wells</u>	Yes	No	NA	Comments
8. Can the lid be secured tightly?				
9. Does the lid have a gasket that seals?				
10. No water in the flushmount?				
11. Is the well cap lockable?				
12. Is there a lock present?				

<u>All Monitoring Wells</u>	Yes	No	NA	Comments
Downhole Condition				
12. Water level measuring point clearly marked?	☒			
13. No obstructions in well?	☒	☒		
14. No plant roots or vegetation in well?	☒			
15. No sediment in bottom of well?			☒	
If present, how much sediment?				
16. Installed as total depth.				
17. Measured total depth of well.				

<u>General Condition</u>	Yes	No	NA	Comments
18. Concrete pad installed?	☒			
19. Concrete pad	☒			
Slope away from casing?	☒			
Not deteriorated?	☒			
Not heaved or below surrounding grade?	☒			
20. No surface seal settling?	☒			
21. Well clearly visible and labeled?	☒			

Comments:

* Major well repair are those that require a subcontractor or separate mobilization to complete

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION											
Site: Newton Landfill 2		Client: RAMBOLL		Task #: Unit 502		Start Date: 11/10/21		Time: 1459			
Project Number: 2285		Field Personnel: Matt Julien		Finish Date: 11/10/21		Time: 1534					
WELL INFORMATION			EVENT TYPE			PURGE INFORMATION					
Well ID: G48MG			☐ Well Development			Purge Method: ☐ Bailor ☒ Pump					
Casing ID: 2			☒ Low-Flow / Low-Stress Sampling			Bailer Type: n/a					
Screen Interval: 4.85			☐ Well Volume Approach Sampling			Pump Type and Serial #: n/a					
Borehole Diameter: n/a			☐ Other (Specify below)			Tube/Pump Intake Depth: n/a					
Filter Pack Interval: n/a						Stabilized Pumping Rate: 100 ml/min					
DEPTH MEASUREMENTS					VOLUME CALCULATION AND PRODUCTION INFORMATION						
INITIAL			FINAL		Volume Calculation Type: ☒ Well Casing ☐ Borehole						
Depth FT BTOC	Date/Time (24-Hour)	Depth FT BTOC	Date/Time (24-Hour)	Volume Per Foot:	n/a						
LNAPL	n/a	n/a	n/a	Standing Water Column:	n/a feet						
Groundwater	19.21	11/10/21/1459	19.18	1 Well Volume:	n/a	Gallons	3 Well Volumes:	n/a	Gallons		
DNAPL	n/a	n/a	n/a	5 Well Volumes:	n/a	Gallons	10 Well Volumes:	n/a	Gallons		
Casing Base	n/a	n/a	n/a	Total Volumes Produced:	n/a	Gallons					
Water Level Serial #: 4004	Upper-T	# 4778-T	Water Quality Probe Type and Serial #	Aquatroll 600 #762098							
WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (mls)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	1459	0	19.21	0	16.34	7.49	823.95	1.84	497.05	-106.4	poor
purge	1514	1500	19.18	-0.03	16.32	7.48	823.89	1.78	513.10	-113.2	poor
	1518	1900	19.18	-0.03	16.31	7.48	817.51	1.68	512.25	-101.5	poor
NOTES										ABBREVIATIONS	
										Cond - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature °C - Degrees Celsius	

11/10/21

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Monitoring Well Evaluation Checklist

Site	Newton Landfill 2 Unit 502	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	11/10/21			X	
Well Number	G48MG				

<u>Stick-up Monitoring Wells</u>	Yes	No	NA	<u>Comments</u>
1. Outer protective Casing				
Not corroded		X		5% rusted
Not dented	X			
Not cracked	X			
Not loose	X			
2. Inner casing				
Not corroded	X			
Not dented	X			
Not cracked	X			
Not loose	X			
3. Are there weep holes in outer casing?		X		
4. Weep holes able to drain?			X	
5. Is there a lockable cap present?	X			
6. Is there a lock present?	X			
7. Bumper posts in good condition?	X			

<u>Flushmount Monitoring Wells</u>	Yes	No	NA	
8. Can the lid be secured tightly?				
9. Does the lid have a gasket that seals?				
10. No water in the flushmount?				
11. Is the well cap lockable?				
12. Is there a lock present?				

<u>All Monitoring Wells</u>	Yes	No	NA	
Downhole Condition				
12. Water level measuring point clearly marked?	X			
13. No obstructions in well?		X		
14. No plant roots or vegetation in well?	X			
15. No sediment in bottom of well?			X	
If present, how much sediment?				ft
16. Installed as total depth.				77.00 ft
17. Measured total depth of well.				n/a ft not measured because pump already installed
General Condition				
18. Concrete pad installed?	X			
19. Concrete pad	X			
Slope away from casing?	X			
Not deteriorated?	X			
Not heaved or below surrounding grade?	X			
20. No surface seal settling?	X			
21. Well clearly visible and labeled?	X			
Comments:				

* Major well repair are those that require a subcontractor or separate mobilization to complete

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11/18/21

PROJECT INFORMATION

Newton Low-Flow Sampling Form
G208

Monitoring Well Evaluation Checklist

Site	Newton Landfill 2 Unit 502	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	11/12/21			X	
Well Number	G208				

<u>Stick-up Monitoring Wells</u>	Yes	No	NA	<u>Comments</u>
1. Outer protective Casing				
Not corroded		X		
Not dented	X			
Not cracked	X			
Not loose	X			
2. Inner casing				
Not corroded	X			
Not dented	X			
Not cracked	X			
Not loose	X			
3. Are there weep holes in outer casing?		X		
4. Weep holes able to drain?			X	
5. Is there a lockable cap present?		X		
6. Is there a lock present?	X			
7. Bumper posts in good condition?	X			

<u>Flushmount Monitoring Wells</u>	Yes	No	NA	
8. Can the lid be secured tightly?				
9. Does the lid have a gasket that seals?				
10. No water in the flushmount?				
11. Is the well cap lockable?				
12. Is there a lock present?				

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<u>All Monitoring Wells</u>	Yes	No	NA	
Downhole Condition				
12. Water level measuring point clearly marked?		X		
13. No obstructions in well?	X			
14. No plant roots or vegetation in well?	X			
15. No sediment in bottom of well?			X	
If present, how much sediment?				
16. Installed as total depth.				94.77 ft
17. Measured total depth of well.				n/a ft not measured because pump already installed
General Condition				
18. Concrete pad installed?	X			
19. Concrete pad	X			
Slope away from casing?	X			
Not deteriorated?	X			
Not heaved or below surrounding grade?	X			
20. No surface seal settling?	X			
21. Well clearly visible and labeled?	X			
Comments:				

* Major well repair are those that require a subcontractor or separate mobilization to complete

PROJECT INFORMATION

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Monitoring Well Evaluation Checklist

Site	Newton Landfill 2 Unit 502	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	11/12/21			✓	
Well Number	R217D				

<u>Stick-up Monitoring Wells</u>	Yes	No	NA	<u>Comments</u>
1. Outer protective Casing				
Not corroded	✓			
Not dented	✓			
Not cracked	✓			
Not loose		✓		NOT flush when closed
2. Inner casing				
Not corroded	✓			
Not dented	✓			
Not cracked	✓			
Not loose	✓			
3. Are there weep holes in outer casing?	Yes	No	NA	
4. Weep holes able to drain?	✓			
5. Is there a lockable cap present?	✓			
6. Is there a lock present?	✓			
7. Bumper posts in good condition?	✓			

<u>Flushmount Monitoring Wells</u>	Yes	No	NA	
8. Can the lid be secured tightly?				
9. Does the lid have a gasket that seals?				
10. No water in the flushmount?				
11. Is the well cap lockable?				
12. Is there a lock present?				

<u>All Monitoring Wells</u>	Yes	No	NA	
Downhole Condition	✓			
12. Water level measuring point clearly marked?	✓			
13. No obstructions in well?	✓			
14. No plant roots or vegetation in well?	✓			
15. No sediment in bottom of well?	✓			
If present, how much sediment?	ft			
16. Installed as total depth.	ft			
17. Measured total depth of well.	n/a	ft		not measured because pump already installed

General Condition	Yes	No	NA	
18. Concrete pad installed?	✓			
19. Concrete pad	✓			
Slope away from casing?	✓			
Not deteriorated?	✓			
Not heaved or below surrounding grade?	✓			
20. No surface seal settling?	✓			
21. Well clearly visible and labeled?	✓			
Comments:				

* Major well repair are those that require a subcontractor or separate mobilization to complete

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION											
Site: Newton Landfill 2		Client: RAMBOLL		Start Date: 11/11/21		Time: 13:37					
Project Number: 2285		Task #: Unit 502		Finish Date: 11/11/21		Time: 1449					
Field Personnel: Matt Talley											
WELL INFORMATION			EVENT TYPE			PURGE INFORMATION					
Well ID: G220			☐ Well Development ☒ Low-Flow / Low-Stress Sampling ☐ Well Volume Approach Sampling ☐ Other (Specify below)			Purge Method: ☐ Bailor ☒ Pump Bailer Type: n/a Pump Type and Serial #: n/a Tube/Pump Intake Depth: n/a Stabilized Pumping Rate: 100 ml/min					
Casing ID: 2			Inches								
Screen Interval: 9.68			Inches								
Borehole Diameter: n/a			Inches								
Filter Pack Interval: n/a			Inches								
DEPTH MEASUREMENTS			VOLUME CALCULATION AND PRODUCTION INFORMATION								
INITIAL			FINAL								
Depth	FT BTOC	Date/Time (24-Hour)	Depth	FT BTOC	Date/Time (24-Hour)	Volume Per Foot:	Volume Calculation Type:	☒ Well Casing	☐ Borehole		
LNAPL	n/a	11/11/21 13:37	n/a	n/a	11/11/21 1449	1 Well Volume: n/a	Standing Water Column: n/a	feet			
Groundwater	18.70	11/11/21 13:37	28.26	n/a	n/a	5 Well Volumes: n/a	10 Well Volumes: n/a	Gallons			
DNAPL	n/a	n/a	n/a	n/a	n/a	Total Volumes Produced: n/a		Gallons			
Casing Base	n/a	n/a	n/a	n/a	n/a	Well Purged Dry? ☐ Yes ☒ No					
Water Level Serial #: Heron dipper			Water Quality Probe Type and Serial #: Aquatrol 600 #762098								
WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (mls)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Initial	13:37	0	18.36	0	15.85	7.13	1321.9	0.05	337.91	-137.7	moderate
purge	13:59	2200	22.16	3.80	15.77	7.10	1329.3	0.02	1042.1	-137.8	poor
	14:01	2400	22.48	4.12	15.72	7.09	1370.8	0.01	1932.4	-140.5	poor
	14:03	2600	22.76	4.40	15.73	7.06	1333.8	0.00	2436.8	-139.8	poor
	14:05	2800	23.04	4.68	15.71	7.03	1328.1	0.00	1979.4	-137.7	poor
	14:07	3000	23.35	4.99	15.75	7.03	1324.3	0.00	1931.3	-137.0	poor
	14:09	3200	23.64	5.28	15.79	7.03	1320.5	0.00	2051.5	-136.5	poor
	14:11	3400	23.96	5.60							
NOTES											
Attempted to sample. Appears that there may be a clog. Unable to sample. 13:51 11/11/21. Reattempted 11/11/21											
ABBREVIATIONS											
Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable nm - Not Measured °C - Degrees Celsius ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature											

Monitoring Well Evaluation Checklist

Site	Newton Landfill 2 Unit 502	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	11/9/21			X	
Well Number	G220				

<u>Stick-up Monitoring Wells</u>	Yes	No	NA	<u>Comments</u>
1. Outer protective Casing				
Not corroded		X		slight rust
Not dented	X			
Not cracked	X			
Not loose	X			
2. Inner casing				
Not corroded	X			
Not dented	X			
Not cracked	X			
Not loose	X			
3. Are there weep holes in outer casing?	X	X		me 11/9/21
4. Weep holes able to drain?	X		X	me 11/9/21
5. Is there a lockable cap present?		X		me 11/9/21
6. Is there a lock present?	X			
7. Bumper posts in good condition?	X			

<u>Flushmount Monitoring Wells</u>	Yes	No	NA	
8. Can the lid be secured tightly?				
9. Does the lid have a gasket that seals?				
10. No water in the flushmount?				
11. Is the well cap lockable?				
12. Is there a lock present?				

<u>All Monitoring Wells</u>	Yes	No	NA	
Downhole Condition				
12. Water level measuring point clearly marked? me 11/9/21	X	X		
13. No obstructions in well?	X			
14. No plant roots or vegetation in well?	X			
15. No sediment in bottom of well?			X	
If present, how much sediment?				ft
16. Installed as total depth.				86.11 ft
17. Measured total depth of well.				n/a ft not measured because pump already installed

<u>General Condition</u>	Yes	No	NA	
18. Concrete pad installed?	X			
19. Concrete pad	X			
Slope away from casing?	X			
Not deteriorated?	X			
Not heaved or below surrounding grade?	X			
20. No surface seal settling?	X			
21. Well clearly visible and labeled?	X			
Comments:				

* Major well repair are those that require a subcontractor or separate mobilization to complete

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION											
Site: <u>Newton Landfill 2</u>		Client: <u>RAMBOLL</u>		Task #: <u>Unit 502</u>		Start Date: <u>11/11/21</u>		Time: <u>10:40</u>			
Project Number: <u>2285</u>		Finish Date: <u>11/11/21</u>		Time: <u>12:10</u>							
Field Personnel: <u>Matt J. Viera</u>											
WELL INFORMATION			EVENT TYPE			PURGE INFORMATION					
Well ID: <u>G222</u>			☐ Well Development ☒ Low-Flow / Low-Stress Sampling ☐ Well Volume Approach Sampling ☐ Other (Specify below)			Purge Method: ☐ Bailor ☒ Pump Bailer Type: <u>n/a</u> Pump Type and Serial #: <u>n/a</u> Tube/Pump Intake Depth: <u>n/a</u> Stabilized Pumping Rate: <u>95 n/min</u>					
Casing ID: <u>2</u> Inches											
Screen Interval: <u>14.67</u>											
Borehole Diameter: <u>n/a</u> Inches											
Filter Pack Interval: <u>n/a</u>											
VOLUME CALCULATION AND PRODUCTION INFORMATION											
Volume Calculation Type: ☒ Well Casing ☐ Borehole											
Volume Per Foot: <u>n/a</u> feet											
Standing Water Column: <u>n/a</u> Gallons 3 Well Volumes: <u>n/a</u> Gallons											
1 Well Volume: <u>n/a</u> Gallons 10 Well Volumes: <u>n/a</u> Gallons											
5 Well Volumes: <u>n/a</u> Gallons											
Total Volumes Produced: <u>n/a</u> Gallons											
Well Purged Dry? ☐ Yes ☒ No											
Water Level Serial #: <u>Heresh chopper - T #4778-T</u> Water Quality Probe Type and Serial # <u>Aquatrak 600 #7622098</u>											
WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (mils)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>10:40</u>	<u>0</u>	<u>16.47</u>	<u>0</u>	<u>15.29</u>	<u>7.25</u>	<u>1806.7</u>	<u>0.10</u>	<u>3.19</u>	<u>-149.3</u>	<u>clear</u>
purge	<u>11:36</u>	<u>4200</u>	<u>23.81</u>	<u>7.34</u>	<u>15.33</u>	<u>7.25</u>	<u>1806.4</u>	<u>0.10</u>	<u>2.71</u>	<u>-149.5</u>	<u>clear</u>
	<u>11:38</u>	<u>4350</u>	<u>23.88</u>	<u>7.41</u>	<u>15.31</u>	<u>7.25</u>	<u>1806.5</u>	<u>0.10</u>	<u>2.83</u>	<u>-149.3</u>	<u>clear</u>
	<u>11:40</u>	<u>4500</u>	<u>23.95</u>	<u>7.48</u>							
NOTES <u>Drawdown did not stabilize</u>											
ABBREVIATIONS											
Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing n/a - Not Applicable mm - Not Measured °C - Degrees Celsius ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature											

11/11/21

11/11/21

Monitoring Well Evaluation Checklist

Site	Newton Landfill 2 Unit 502	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	11/11/21			X	
Well Number	G222				

<u>Stick-up Monitoring Wells</u>	Yes	No	NA	<u>Comments</u>
1. Outer protective Casing				
Not corroded	X	X		some rust
Not dented	X			
Not cracked	X			
Not loose	X			
2. Inner casing				
Not corroded	X			
Not dented	X			
Not cracked	X			
Not loose	X			
3. Are there weep holes in outer casing?	Yes	No	NA	
4. Weep holes able to drain?		X		
5. Is there a lockable cap present?		X		
6. Is there a lock present?	X			
7. Bumper posts in good condition?	X			

<u>Flushmount Monitoring Wells</u>	Yes	No	NA	
8. Can the lid be secured tightly?				all n/11/21
9. Does the lid have a gasket that seals?				
10. No water in the flushmount?				
11. Is the well cap lockable?				
12. Is there a lock present?				

<u>All Monitoring Wells</u>	Yes	No	NA	
Downhole Condition				
12. Water level measuring point clearly marked?	X			
13. No obstructions in well?		X		
14. No plant roots or vegetation in well?	X			
15. No sediment in bottom of well?	X			
If present, how much sediment?	ft			
16. Installed as total depth.	79.31 ft			
17. Measured total depth of well.	n/a ft	not measured because pump already installed		

<u>General Condition</u>	Yes	No	NA	
18. Concrete pad installed?	X			
19. Concrete pad	X			
Slope away from casing?	X			
Not deteriorated?	X			
Not heaved or below surrounding grade?	X			
20. No surface seal settling?	X			
21. Well clearly visible and labeled?	X			
<u>Comments:</u>				

* Major well repair are those that require a subcontractor or separate mobilization to complete

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: Newton Landfill 2 Client: RAMBOLL
 Project Number: 2285 Task #: Unit 502 Start Date: 11/11/21 Time: 1428
 Field Personnel: MUN Finish Date: 11/11/21 Time: 1506

WELL INFORMATION		EVENT TYPE		PURGE INFORMATION	
Well ID: G223	☐ Well Development	Purge Method: ☐ Bailer ☒ Pump			
Casing ID: 2	☒ Low-Flow / Low-Stress Sampling	Bailer Type: n/a			
Screen Interval: 9.66	☐ Well Volume Approach Sampling	Pump Type and Serial #: n/a			
Borehole Diameter: n/a	☐ Other (Specify below)	Tube/Pump Intake Depth: n/a			
Filter Pack Interval: n/a		Stabilized Pumping Rate: 100ml/min			

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION			
INITIAL		FINAL		Volume Calculation Type: ☒ Well Casing ☐ Borehole			
Depth FT BTOC	Date/Time (24-Hour)	Depth FT BTOC	Date/Time (24-Hour)	Volume Per Foot: n/a	Standing Water Column: n/a feet		
n/a	n/a	n/a	n/a	1 Well Volume: n/a Gallons	3 Well Volumes: n/a Gallons		
32.68	11/11/21 1428	36.02	11/11/21 1506	5 Well Volumes: n/a Gallons	10 Well Volumes: n/a Gallons		
n/a	n/a	n/a	n/a	Total Volumes Produced: n/a Gallons			
n/a	n/a	n/a	n/a	Well Purged Dry? ☐ Yes ☒ No			

WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (mls)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	1428	0	32.68	0							
purge	1440	1200	34.73	2.05	15.10	6.82	3350.2	0.35	8.95	-116.1	Slight color
	1442	1400	34.86	0.13	15.10	6.81	3363.3	0.29	9.48	-127.8	Slight color
	1444	1600	34.99	0.13	15.07	6.82	3367.1	0.26	11.36	-133.9	Slight color

NOTES		ABBREVIATIONS	
		Cond - Actual Conductivity	ORP - Oxidation-Reduction Potential
		FT BTOC - Feet Below Top of Casing	SEC - Specific Electrical Conductance
		na - Not Applicable	SU - Standard Units
		nm - Not Measured	Temp - Temperature °C - Degrees Celsius

Monitoring Well Evaluation Checklist

Site	Newton Landfill 2 Unit 502	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	11/11/21			✓	
Well Number	G223				

<u>Stick-up Monitoring Wells</u>	Yes	No	NA	<u>Comments</u>
1. Outer protective Casing				
Not corroded	✓			
Not dented	✓			
Not cracked	✓			
Not loose	✓			
2. Inner casing				
Not corroded	✓			
Not dented	✓			
Not cracked	✓			
Not loose	✓			
3. Are there weep holes in outer casing?	✓			
4. Weep holes able to drain?	✓			
5. Is there a lockable cap present?	✓			
6. Is there a lock present?	✓			
7. Bumper posts in good condition?	✓			

<u>Flushmount Monitoring Wells</u>	Yes	No	NA	
8. Can the lid be secured tightly?				
9. Does the lid have a gasket that seals?				
10. No water in the flushmount?				
11. Is the well cap lockable?				
12. Is there a lock present?				

<u>All Monitoring Wells</u>	Yes	No	NA	
Downhole Condition				
12. Water level measuring point clearly marked?	✓			
13. No obstructions in well?	✓			
14. No plant roots or vegetation in well?	✓			
15. No sediment in bottom of well?	✓			
If present, how much sediment?				
16. Installed as total depth.				89.09 ft
17. Measured total depth of well.				n/a ft not measured because pump already installed
General Condition				
18. Concrete pad installed?	✓			
19. Concrete pad	✓			
Slope away from casing?	✓			
Not deteriorated?	✓			
Not heaved or below surrounding grade?	✓			
20. No surface seal settling?	✓			
21. Well clearly visible and labeled?	✓			
Comments:				

* Major well repair are those that require a subcontractor or separate mobilization to complete

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION											
Site: <u>Newton Landfill 2</u>		Client: <u>RAMBOLL</u>		Task #: <u>Unit 502</u>		Start Date: <u>11/11/21</u>		Time: <u>1116</u>			
Project Number: <u>2285</u>		Finish Date: <u>11/11/21</u>		Time: <u>1219</u>							
Field Personnel: <u>MJN</u>											
WELL INFORMATION			EVENT TYPE		PURGE INFORMATION						
Well ID: <u>G224</u>			☐ Well Development	Purge Method: ☐ Bailer ☒ Pump							
Casing ID: <u>2</u> Inches			☒ Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>							
Screen Interval: <u>9.66</u>			☐ Well Volume Approach Sampling	Pump Type and Serial #: <u>n/a</u>							
Borehole Diameter: <u>n/a</u> Inches			☐ Other (Specify below)	Tube/Pump Intake Depth: <u>n/a</u>							
Filter Pack Interval: <u>n/a</u>				Stabilized Pumping Rate: <u>100 mL/min</u>							
DEPTH MEASUREMENTS			VOLUME CALCULATION AND PRODUCTION INFORMATION								
INITIAL			Volume Calculation Type: ☒ Well Casing ☐ Borehole								
Depth	Date/Time	Depth	Date/Time	Volume Per Foot: <u>n/a</u> feet							
FT BTOC	(24-Hour)	FT BTOC	(24-Hour)								
LNAPL	n/a	n/a	n/a								
Groundwater	<u>42.21</u>	<u>11/11/21</u>	<u>1116</u>	1 Well Volume:	<u>n/a</u>	Gallons	3 Well Volumes:	<u>n/a</u>	Gallons		
DNAPL	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	5 Well Volumes:	<u>n/a</u>	Gallons	10 Well Volumes:	<u>n/a</u>	Gallons		
Casing Base	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	Total Volumes Produced:	<u>n/a</u>	Gallons					
Water Level Serial #: <u>267860</u>				Well Purged Dry?	☐ Yes ☒ No						
Water Quality Probe Type and Serial #: <u>AT-346000</u>											
WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (mils)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>1116</u>	<u>0</u>	<u>42.21</u>	<u>0</u>	<u>14.76</u>	<u>7.60</u>	<u>125.2</u>	<u>5.30</u>	<u>24.07</u>	<u>-38.8</u>	<u>slight over</u>
purge	<u>1131</u>	<u>1500</u>	<u>42.21</u>	<u>0</u>	<u>14.66</u>	<u>7.52</u>	<u>122.5</u>	<u>3.50</u>	<u>17.31</u>	<u>-74.4</u>	<u>slight cloudy</u>
	<u>1133</u>	<u>1760</u>	<u>42.21</u>	<u>0</u>	<u>14.56</u>	<u>7.42</u>	<u>124.8</u>	<u>1.82</u>	<u>10.99</u>	<u>-96.9</u>	<u>clear</u>
	<u>1135</u>	<u>1900</u>	<u>42.21</u>	<u>0</u>	<u>14.59</u>	<u>7.40</u>	<u>124.3</u>	<u>1.13</u>	<u>15.27</u>	<u>-98.4</u>	<u>clear</u>
	<u>1137</u>	<u>2106</u>	<u>42.21</u>	<u>0</u>	<u>14.59</u>	<u>7.37</u>	<u>123.7</u>	<u>0.95</u>	<u>62.83</u>	<u>-96.4</u>	<u>clear/cloudy</u>
	<u>1139</u>	<u>2300</u>	<u>42.21</u>	<u>0</u>	<u>14.58</u>	<u>7.38</u>	<u>123.6</u>	<u>0.81</u>	<u>56.55</u>	<u>-98.3</u>	<u>cloudy</u>
	<u>1141</u>	<u>2500</u>	<u>42.21</u>	<u>0</u>							
	<u>12</u>										
NOTES				ABBREVIATIONS							
<u>Duplicates included.</u> 				Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable mm - Not Measured °C - Degrees Celsius							
				ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units Temp - Temperature							

Monitoring Well Evaluation Checklist

Site	Newton Landfill 2 Unit 502	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	11/11/21			✓	
Well Number	G224				

<u>Stick-up Monitoring Wells</u>	Yes	No	NA	<u>Comments</u>
1. Outer protective Casing				
Not corroded	✓			
Not dented	✓			
Not cracked	✓			
Not loose	✓			
2. Inner casing				
Not corroded	✓			
Not dented	✓			
Not cracked	✓			
Not loose	✓			
3. Are there weep holes in outer casing?				
4. Weep holes able to drain?				
5. Is there a lockable cap present?	✓			
6. Is there a lock present?	✓			
7. Bumper posts in good condition?	✓			

<u>Flushmount Monitoring Wells</u>	Yes	No	NA	
8. Can the lid be secured tightly?				
9. Does the lid have a gasket that seals?				
10. No water in the flushmount?				
11. Is the well cap lockable?				
12. Is there a lock present?				

<u>All Monitoring Wells</u>	Yes	No	NA	
Downhole Condition				
12. Water level measuring point clearly marked?	✓			
13. No obstructions in well?	✓			
14. No plant roots or vegetation in well?	✓			
15. No sediment in bottom of well?	✓			
If present, how much sediment?				
16. Installed as total depth.				
17. Measured total depth of well.				

<u>General Condition</u>	Yes	No	NA	
18. Concrete pad installed?	✓			
19. Concrete pad	✓			
Slope away from casing?	✓			
Not deteriorated?	✓			
Not heaved or below surrounding grade?	✓			
20. No surface seal settling?	✓			
21. Well clearly visible and labeled?	✓			
Comments:				

* Major well repair are those that require a subcontractor or separate mobilization to complete

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: Newton LF2 Client: RAMBOLL
 Project Number: 2285 Task #: _____ Start Date: 11/12/21 Time: 0935
 Field Personnel: Karen Penabazoula Finish Date: 11/12/21 Time: 1000

WELL INFORMATION		EVENT TYPE		PURGE INFORMATION	
Well ID: <u>L301</u>	☐ Well Development	Purge Method: ☐ Bailor ☐ Pump			
Casing ID: <u>n/a</u>	☐ Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>			
Screen Interval: <u>n/a</u>	☐ Well Volume Approach Sampling	Pump Type and Serial #: <u>n/a</u>			
Borehole Diameter: <u>n/a</u>	☒ Other (Specify below)	Tube/Pump Intake Depth: <u>n/a</u>			
Filter Pack Interval: <u>n/a</u>	Leachate	Stabilized Pumping Rate: <u>n/a</u>			

DEPTH MEASUREMENTS				VOLUME CALCULATION AND PRODUCTION INFORMATION			
INITIAL		FINAL		Volume Calculation Type: ☐ Well Casing ☐ Borehole			
Depth FT BTOC	Date/Time (24-Hour)	Depth FT BTOC	Date/Time (24-Hour)	Volume Per Foot: n/a	Standing Water Column: n/a feet		
LNAPL	n/a	n/a	n/a	1 Well Volume: n/a	Gallons	3 Well Volumes: n/a	Gallons
Groundwater	n/a	n/a	n/a	5 Well Volumes: n/a	Gallons	10 Well Volumes: n/a	Gallons
DNAPL	n/a	n/a	n/a	Total Volumes Produced: n/a	Gallons		
Casing Base	n/a	n/a	n/a	Well Purged Dry? ☐ Yes ☒ No			
Water Level Serial #: <u>N/H</u>				Water Quality Probe Type and Serial #: <u>Appl 11/12/21 606127</u>			

WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (ml)	Depth to Water (Feet)	Drawdown (Feet)	Temp (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
initial	<u>0935</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>15.23</u>	<u>10.16</u>	<u>5091.3</u>	<u>0.19</u>	<u>0.34</u>	<u>-180.5</u>	<u>clear</u>
	<u>0947</u>										
	<u>0947</u>										
	<u>11/12/21</u>										

NOTES		ABBREVIATIONS	
Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Not Applicable mm - Not Measured		ORP - Oxidation-Reduction Potential	SEC - Specific Electrical Conductance
		Temp - Temperature	SU - Standard Units
		°C - Degrees Celsius	

EK02562 -04 KEG

CHAIN OF CUSTODY # 1

DATE: 11/11/21

PAGE: 1 OF 1

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RAMBOLL
234 W. FLORIDA STREET, 6th FLOOR
MILWAUKEE, WI 53204
TEL: 414.837.3607

RAMBOLL - MILWAUKEE
NRT NEWTON COR LF2

CHAIN OF CUSTODY # 1
DATE: 11/12/21

LABORATORY SAMPLES SUBMITTED TO:
PDC Laboratories, Inc.

ADDRESS:
2231 W Altorfer Drive
City: Peoria, IL 61615

TEL: 309-683-1716
FAX: 309-692-9689

TURNAROUND TIME
☐ STANDARD ☐ 24 HR ☒ 5 DAYS

E-MAIL: gschindler@pdcilab.com

CLIENT PROJECT NAME

Newton Landfill 2
PROJECT CONTACT:
Gail Schindler

SAMPLER(S) (SIGNATURE)

PROJECT NUMBER / TASK NUMBER:

2285 / Unit 502
QUOTE NO.:

PAGE: 1 OF 1

Data Package: Level 2 Level 4

Preservatives: A = none, B = HCL, C = H₂SO₄,
D = HNO₃, E = methanol, F = Sodium Bisulfate,
G = zinc acetate, H = other

Preservation Code
(pick letter)
Filtered (Yor N)

SPECIAL REQUIREMENTS

REQUESTED ANALYSIS

Method Number and Analytes

LAB USE ONLY	SAMPLE ID	QC SAMPLE	FIELD COMMENTS	SAMPLE DATE	TIME	MATRIX	SAMPLE TYPE	SAMPLE INTERVAL (ft)		#Cont	Method Number and Analytes											
								TOP	BOTTOM		A	A	D	A	N	N	N	N	N	N	N	N
	G220			11/11/21	1449	GW	Grab			2												
	G222			11/11/21	1210	GW	Grab			2												
	G223			11/11/21	1506	GW	Grab			2												
	G224			11/11/21	1219	GW	Grab			2												
	G224 Duplicate			11/11/21	1219	GW	Grab			2												

Submitted by (Signature)

Submitted by (Signature)

Submitted by (Signature)

Received by (Signature)

Received by (Signature)

Received by (Signature)

Date: 11/12/21

Time:

Date:

Time:

Date: 11/12/21

Time: 1415

2.2

CKU010

CHAIN OF CUSTODY #
DATE: 11/12/21

RAMBOLL - MILWAUKEE
NRT NEWTON CCR LF2

RAMBOLL
234 W. FLORIDA STREET, 5th FLOOR
MILWAUKEE, WI 53204
TEL: 414.837.3607

PAGE: 1 OF 1

PROJECT NUMBER / TASK NUMBER:

CLIENT PROJECT NAME

LABORATORY SAMPLES SUBMITTED TO:

PDC Laboratories, Inc.

ADDRESS:

2231 W Altorfer Drive

CITY:

Peoria, IL 61615

TEL:

309-683-1716

FAX:

309-692-9689

E-MAIL

gschindler@pdcclab.com

TURNAROUND TIME

☐ STANDARD

☐ 24 HR

☐ 48

☒ 5 DAYS

Data Package: Level 2 Level 4

Preservatives: A = none, B = HCL, C = H₂SO₄,
D = HNO₃, E = methanol, F = Sodium Bisulfate,
G = zinc acetate, H = other
Filtered (Yor N)

Preservation Code
(pick letter)

REQUESTED ANALYSIS

Method Number and Analytes

A A D A
N N N N

SPECIAL REQUIREMENTS

LAB USE ONLY	SAMPLE ID	QC SAMPLE	FIELD COMMENTS	SAMPLE		MATRIX	SAMPLE TYPE	SAMPLE INTERVAL (H)		#Cont
				DATE	TIME			TOP	BOTTOM	
	G208			11/12/21	1026	GW	Gr20			2
	A217D			11/12/21	0928	GW	Gr20			2
	L301			11/12/21	1000	LENT	Gr20			2
	L1R			11/12/21	0933	LENT	Gr20			2

300.0-CLF, SO4

2540C-TDS

6020-B, Ca, K, Mg, Na

2320-AIK CO3, AIK HCO3

Date: 11/12/21 Time: 1439

Date: Time:

Date: 11/12/21 Time: 1439

Date: Time:



Pace Analytical Services, LLC

2231 W. Altorfer Drive

Peoria, IL 61615

(800)752-6651

April 05, 2022

Terry Hanratty
Vistra - Newton
Newton Energy Center 6725 N. 500th St
Newton, IL 62448

Dear Terry Hanratty:

Please find enclosed the **revised** analytical results for the sample(s) the laboratory received. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of Pace Analytical Services, LLC.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

Pace Analytical Services appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the Director of Client Services, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Gail Schindler

Gail Schindler
Project Manager
(309) 692-9688 x1716
gail.schindler@pacelabs.com



Pace Analytical Services, LLC

2231 W. Altorfer Drive

Peoria, IL 61615

(800)752-6651

**SAMPLE RECEIPT CHECK LIST**

Items not applicable will be marked as in compliance

Work Order FB01790

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
YES	Case narrative provided



Work Order FB04079

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
YES	Case narrative provided



Work Order FB04360

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
YES	Case narrative provided



Work Order FC00024

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
YES	Case narrative provided



Case Narrative

ORP not measured in field at L1R

Well Cross Reference:

G222 FB04074-06 = FB04079-03

G224 FB04074-08 = FB04079-05

Well Cross Reference:

G201 FB04356-01 = FB04360-05

G202 FB04356-02 = FB04360-07

R201 FB04356-04 = FB04360-06

R202 FB04356-05 = FB04360-08

G230 FB04356-06 = FB04360-09

G231 FB04356-07 = FB04360-10

G232 FB04356-08 = FB04360-11

G203 FB04356-09 = FB04360-01

G208 FB04356-10 = FB04360-02

G220 FB04356-11 = FB04360-03

G220 depth to water on field sheet appears to be incorrect based on historical readings. Changed the water level to match DTW when collecting site-wide measurements.

Well Cross Reference:

R217D FC00022-04 = FC00024-01

G223 FC00022-07 = FC00024-02

Revised Report - added Q4 qualifier to Ca, Mg, Na for FC00024-02



Pace Analytical Services, LLC

2231 W. Altorfer Drive

Peoria, IL 61615

(800)752-6651



ANALYTICAL RESULTS

Sample: FB01790-01

Name: L1R

Matrix: Leachate - Grab

Sampled: 02/09/22 12:26

Received: 02/09/22 17:02

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	9000	mg/L		02/15/22 13:12	2500	2500	02/15/22 13:12	CRD	EPA 300.0 REV 2.1
Sulfate	21000	mg/L		02/11/22 16:59	2500	2500	02/11/22 16:59	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	54.64	Feet		02/09/22 12:26	1		02/09/22 12:26	FIELD	Field
Dissolved oxygen, Field	2.0	mg/L		02/09/22 12:26	1		02/09/22 12:26	FIELD	Field
pH, Field Measured	10.8	pH Units		02/09/22 12:26	1		02/09/22 12:26	FIELD	Field
Specific Conductance, Field Measured	4730	umhos/cm		02/09/22 12:26	1		02/09/22 12:26	FIELD	Field
Temperature, Field Measured	15.7	°C		02/09/22 12:26	1		02/09/22 12:26	FIELD	Field
Turbidity, Field Measured	>1000	NTU		02/09/22 12:26	1	0.00	02/09/22 12:26	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	38	mg/L		02/15/22 07:51	1	10	02/15/22 07:51	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO3	580	mg/L		02/15/22 07:51	1	10	02/15/22 07:51	ADM/JAA	SM 2320B 1997
Fluoride	0.311	mg/L		02/21/22 15:25	1	0.250	02/21/22 15:25	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	47000	mg/L	H	02/17/22 12:34	1	510	02/17/22 14:11	ADM	SM 2540C
Total Metals - PIA									
Boron	13000	ug/L		02/17/22 08:20	5	18	02/21/22 09:39	JMW	EPA 6020A
Calcium	1300	mg/L		02/17/22 08:20	100	7.2	02/21/22 10:33	JMW	EPA 6020A
Magnesium	32	mg/L		02/17/22 08:20	5	0.18	02/21/22 09:39	JMW	EPA 6020A
Potassium	1800	mg/L		02/17/22 08:20	100	3.6	02/21/22 10:33	JMW	EPA 6020A
Sodium	15000	mg/L		02/17/22 08:20	100	8.1	02/21/22 10:33	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04079-01

Name: G234

Alias: NEW_257_502

Sampled: 02/22/22 16:00

Received: 02/23/22 12:50

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	53	mg/L		03/07/22 21:56	25	25	03/07/22 21:56	CRD	EPA 300.0 REV 2.1
Fluoride	0.550	mg/L		03/07/22 21:38	1	0.250	03/07/22 21:38	CRD	EPA 300.0 REV 2.1
Sulfate	150	mg/L		03/07/22 21:56	25	25	03/07/22 21:56	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	42.4	Feet		02/22/22 16:00	1		02/22/22 16:00	FIELD	Field
Dissolved oxygen, Field	0.17	mg/L		02/22/22 16:00	1		02/22/22 16:00	FIELD	Field
Oxidation Reduction Potential	-96.1	mV		02/22/22 16:00	1	-500	02/22/22 16:00	FIELD	Field
pH, Field Measured	7.66	pH Units		02/22/22 16:00	1		02/22/22 16:00	FIELD	Field
Specific Conductance, Field Measured	1400	umhos/cm		02/22/22 16:00	1		02/22/22 16:00	FIELD	Field
Temperature, Field Measured	13.0	°C		02/22/22 16:00	1		02/22/22 16:00	FIELD	Field
Turbidity, Field Measured	143	NTU		02/22/22 16:00	1	0.00	02/22/22 16:00	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	420	mg/L		02/24/22 08:38	1	10	02/24/22 08:38	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		02/24/22 08:38	1	10	02/24/22 08:38	ADM/JAA	SM 2320B 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1400	mg/L		02/25/22 08:58	1	26	02/25/22 11:09	JLC1/AD M	SM 2540C
Total Metals - PIA									
Boron	110	ug/L		02/24/22 09:18	5	10	03/02/22 13:21	JMW	EPA 6020A
Calcium	120	mg/L		02/24/22 09:18	5	0.20	03/02/22 13:21	JMW	EPA 6020A
Magnesium	51	mg/L		02/24/22 09:18	5	0.10	03/02/22 13:21	JMW	EPA 6020A
Potassium	3.1	mg/L		02/24/22 09:18	5	0.10	03/02/22 13:21	JMW	EPA 6020A
Sodium	120	mg/L		02/24/22 09:18	5	0.10	03/03/22 16:58	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04079-02

Name: G233

Alias: NEW_257_502

Sampled: 02/22/22 16:50

Received: 02/23/22 12:50

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	94	mg/L		03/07/22 22:32	10	10	03/07/22 22:32	CRD	EPA 300.0 REV 2.1
Fluoride	0.516	mg/L		03/07/22 22:14	1	0.250	03/07/22 22:14	CRD	EPA 300.0 REV 2.1
Sulfate	620	mg/L		03/08/22 22:33	100	100	03/08/22 22:33	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	41.3	Feet		02/22/22 16:50	1		02/22/22 16:50	FIELD	Field
Dissolved oxygen, Field	0.19	mg/L		02/22/22 16:50	1		02/22/22 16:50	FIELD	Field
Oxidation Reduction Potential	-93.0	mV		02/22/22 16:50	1	-500	02/22/22 16:50	FIELD	Field
pH, Field Measured	7.38	pH Units		02/22/22 16:50	1		02/22/22 16:50	FIELD	Field
Specific Conductance, Field Measured	2315	umhos/cm		02/22/22 16:50	1		02/22/22 16:50	FIELD	Field
Temperature, Field Measured	12.4	°C		02/22/22 16:50	1		02/22/22 16:50	FIELD	Field
Turbidity, Field Measured	65.5	NTU		02/22/22 16:50	1	0.00	02/22/22 16:50	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	440	mg/L		02/24/22 08:38	1	10	02/24/22 08:38	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		02/24/22 08:38	1	10	02/24/22 08:38	ADM/JAA	SM 2320B 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1400	mg/L		02/25/22 08:58	1	26	02/25/22 11:09	JLC1/AD M	SM 2540C
Total Metals - PIA									
Boron	160	ug/L		02/24/22 09:18	5	10	03/02/22 13:24	JMW	EPA 6020A
Calcium	190	mg/L		02/24/22 09:18	5	0.20	03/02/22 13:24	JMW	EPA 6020A
Magnesium	80	mg/L		02/24/22 09:18	5	0.10	03/02/22 13:24	JMW	EPA 6020A
Potassium	3.9	mg/L		02/24/22 09:18	5	0.10	03/02/22 13:24	JMW	EPA 6020A
Sodium	200	mg/L		02/24/22 09:18	5	0.10	03/03/22 17:01	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04079-03

Name: G222

Alias: NEW_257_502

Sampled: 02/22/22 15:30

Received: 02/23/22 12:50

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	71	mg/L		03/07/22 23:08	10	10	03/07/22 23:08	CRD	EPA 300.0 REV 2.1
Fluoride	1.12	mg/L		03/07/22 22:50	1	0.250	03/07/22 22:50	CRD	EPA 300.0 REV 2.1
Sulfate	160	mg/L		03/08/22 22:51	25	25	03/08/22 22:51	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	16.19	Feet		02/22/22 15:30	1		02/22/22 15:30	FIELD	Field
Dissolved oxygen, Field	4.2	mg/L		02/22/22 15:30	1		02/22/22 15:30	FIELD	Field
Oxidation Reduction Potential	104	mV		02/22/22 15:30	1	-500	02/22/22 15:30	FIELD	Field
pH, Field Measured	7.48	pH Units		02/22/22 15:30	1		02/22/22 15:30	FIELD	Field
Specific Conductance, Field Measured	1344	umhos/cm		02/22/22 15:30	1		02/22/22 15:30	FIELD	Field
Temperature, Field Measured	13.8	°C		02/22/22 15:30	1		02/22/22 15:30	FIELD	Field
Turbidity, Field Measured	90.5	NTU		02/22/22 15:30	1	0.00	02/22/22 15:30	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	690	mg/L		02/24/22 08:38	1	10	02/24/22 08:38	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		02/24/22 08:38	1	10	02/24/22 08:38	ADM/JAA	SM 2320B 1997
Solids - total dissolved solids (TDS)	1100	mg/L		02/25/22 08:58	1	26	02/25/22 11:09	JLC1/ADM	SM 2540C
Total Metals - PIA									
Boron	240	ug/L		02/24/22 09:18	5	10	03/02/22 13:28	JMW	EPA 6020A
Calcium	130	mg/L		02/24/22 09:18	5	0.20	03/02/22 13:28	JMW	EPA 6020A
Magnesium	64	mg/L		02/24/22 09:18	5	0.10	03/02/22 13:28	JMW	EPA 6020A
Potassium	3.5	mg/L		02/24/22 09:18	5	0.10	03/02/22 13:28	JMW	EPA 6020A
Sodium	220	mg/L		02/24/22 09:18	5	0.10	03/03/22 17:04	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04079-04

Name: G06D

Alias: NEW_257_502

Sampled: 02/22/22 13:52

Received: 02/23/22 12:50

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	53	mg/L	Q4	03/08/22 00:58	10	10	03/08/22 00:58	CRD	EPA 300.0 REV 2.1
Fluoride	0.943	mg/L		03/07/22 23:26	1	0.250	03/07/22 23:26	CRD	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		03/09/22 00:04	1	1.0	03/09/22 00:04	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	28.8	Feet		02/22/22 13:52	1		02/22/22 13:52	FIELD	Field
Dissolved oxygen, Field	1.6	mg/L		02/22/22 13:52	1		02/22/22 13:52	FIELD	Field
Oxidation Reduction Potential	-98.9	mV		02/22/22 13:52	1	-500	02/22/22 13:52	FIELD	Field
pH, Field Measured	7.29	pH Units		02/22/22 13:52	1		02/22/22 13:52	FIELD	Field
Specific Conductance, Field Measured	1331	umhos/cm		02/22/22 13:52	1		02/22/22 13:52	FIELD	Field
Temperature, Field Measured	13.5	°C		02/22/22 13:52	1		02/22/22 13:52	FIELD	Field
Turbidity, Field Measured	19.0	NTU		02/22/22 13:52	1	0.00	02/22/22 13:52	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	720	mg/L		02/24/22 08:38	1	10	02/24/22 08:38	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		02/24/22 08:38	1	10	02/24/22 08:38	ADM/JAA	SM 2320B 1997
Solids - total dissolved solids (TDS)	760	mg/L		02/25/22 08:58	1	26	02/25/22 11:09	JLC1/ADM	SM 2540C
Total Metals - PIA									
Boron	190	ug/L		02/24/22 09:18	5	10	03/02/22 13:32	JMW	EPA 6020A
Calcium	110	mg/L		02/24/22 09:18	5	0.20	03/02/22 13:32	JMW	EPA 6020A
Magnesium	51	mg/L		02/24/22 09:18	5	0.10	03/02/22 13:32	JMW	EPA 6020A
Potassium	2.8	mg/L		02/24/22 09:18	5	0.10	03/02/22 13:32	JMW	EPA 6020A
Sodium	160	mg/L		02/24/22 09:18	5	0.10	03/03/22 17:07	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04079-05

Name: G224

Alias: NEW_257_502

Sampled: 02/22/22 16:10

Received: 02/23/22 12:50

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	52	mg/L		03/10/22 02:04	25	25	03/10/22 02:04	CRD	EPA 300.0 REV 2.1
Fluoride	0.314	mg/L		03/10/22 00:44	1	0.250	03/10/22 00:44	CRD	EPA 300.0 REV 2.1
Sulfate	110	mg/L		03/10/22 02:04	25	25	03/10/22 02:04	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	41.77	Feet		02/22/22 16:10	1		02/22/22 16:10	FIELD	Field
Dissolved oxygen, Field	1.4	mg/L		02/22/22 16:10	1		02/22/22 16:10	FIELD	Field
Oxidation Reduction Potential	-32.8	mV		02/22/22 16:10	1	-500	02/22/22 16:10	FIELD	Field
pH, Field Measured	7.38	pH Units		02/22/22 16:10	1		02/22/22 16:10	FIELD	Field
Specific Conductance, Field Measured	1209	umhos/cm		02/22/22 16:10	1		02/22/22 16:10	FIELD	Field
Temperature, Field Measured	12.0	°C		02/22/22 16:10	1		02/22/22 16:10	FIELD	Field
Turbidity, Field Measured	536	NTU		02/22/22 16:10	1	0.00	02/22/22 16:10	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	410	mg/L		03/07/22 14:02	1	10	03/07/22 14:02	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		03/07/22 14:02	1	10	03/07/22 14:02	ADM/JAA	SM 2320B 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	690	mg/L		02/25/22 08:58	1	26	02/25/22 11:09	JLC1	SM 2540C
Total Metals - PIA									
Boron	100	ug/L		02/24/22 09:18	5	10	03/02/22 13:35	JMW	EPA 6020A
Calcium	140	mg/L		02/24/22 09:18	5	0.20	03/02/22 13:35	JMW	EPA 6020A
Magnesium	57	mg/L		02/24/22 09:18	5	0.10	03/02/22 13:35	JMW	EPA 6020A
Potassium	3.2	mg/L		02/24/22 09:18	5	0.10	03/02/22 13:35	JMW	EPA 6020A
Sodium	79	mg/L		02/24/22 09:18	5	0.10	03/03/22 17:10	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04079-06
Name: G224 DUPLICATE
Alias: NEW_257_502

Sampled: 02/22/22 16:10
Received: 02/23/22 12:50
Matrix: Ground Water - Field Duplicate

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	44	mg/L		03/08/22 01:36	25	25	03/08/22 01:36	CRD	EPA 300.0 REV 2.1
Fluoride	0.486	mg/L		03/08/22 01:17	1	0.250	03/08/22 01:17	CRD	EPA 300.0 REV 2.1
Sulfate	110	mg/L		03/08/22 01:36	25	25	03/08/22 01:36	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	41.77	Feet		02/22/22 16:10	1		02/22/22 16:10	FIELD	Field
Dissolved oxygen, Field	1.4	mg/L		02/22/22 16:10	1		02/22/22 16:10	FIELD	Field
Oxidation Reduction Potential	-32.8	mV		02/22/22 16:10	1	-500	02/22/22 16:10	FIELD	Field
pH, Field Measured	7.38	pH Units		02/22/22 16:10	1		02/22/22 16:10	FIELD	Field
Specific Conductance, Field Measured	1209	umhos/cm		02/22/22 16:10	1		02/22/22 16:10	FIELD	Field
Temperature, Field Measured	12.0	°C		02/22/22 16:10	1		02/22/22 16:10	FIELD	Field
Turbidity, Field Measured	536	NTU		02/22/22 16:10	1	0.00	02/22/22 16:10	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	440	mg/L		02/24/22 08:38	1	10	02/24/22 08:38	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		02/24/22 08:38	1	10	02/24/22 08:38	ADM/JAA	SM 2320B 1997
Solids - total dissolved solids (TDS)	630	mg/L		02/25/22 08:58	1	26	02/25/22 11:09	JLC1/ADM	SM 2540C
Total Metals - PIA									
Boron	110	ug/L		02/24/22 09:18	5	10	03/02/22 13:39	JMW	EPA 6020A
Calcium	140	mg/L		02/24/22 09:18	5	0.20	03/02/22 13:39	JMW	EPA 6020A
Magnesium	57	mg/L		02/24/22 09:18	5	0.10	03/02/22 13:39	JMW	EPA 6020A
Potassium	4.3	mg/L		02/24/22 09:18	5	0.10	03/02/22 13:39	JMW	EPA 6020A
Sodium	78	mg/L		02/24/22 09:18	5	0.10	03/03/22 17:13	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04360-01

Name: G203

Alias: NEW_257_502

Sampled: 02/24/22 10:39

Received: 02/24/22 22:45

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	53	mg/L		02/25/22 22:04	25	25	02/25/22 22:04	CRD	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		02/25/22 21:45	1	0.250	02/25/22 21:45	CRD	EPA 300.0 REV 2.1
Sulfate	160	mg/L		02/25/22 22:04	25	25	02/25/22 22:04	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	40.95	Feet		02/24/22 10:39	1		02/24/22 10:39	FIELD	Field
Dissolved oxygen, Field	0.40	mg/L		02/24/22 10:39	1		02/24/22 10:39	FIELD	Field
Oxidation Reduction Potential	-31.5	mV		02/24/22 10:39	1	-500	02/24/22 10:39	FIELD	Field
pH, Field Measured	7.24	pH Units		02/24/22 10:39	1		02/24/22 10:39	FIELD	Field
Specific Conductance, Field Measured	1260	umhos/cm		02/24/22 10:39	1		02/24/22 10:39	FIELD	Field
Temperature, Field Measured	10.2	°C		02/24/22 10:39	1		02/24/22 10:39	FIELD	Field
Turbidity, Field Measured	29.9	NTU		02/24/22 10:39	1	0.00	02/24/22 10:39	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	410	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	650	mg/L		03/02/22 12:44	1	26	03/02/22 14:37	JLC1	SM 2540C
Total Metals - PIA									
Boron	110	ug/L		02/28/22 09:05	5	10	03/01/22 13:21	JMW	EPA 6020A
Calcium	120	mg/L		02/28/22 09:05	5	0.20	03/01/22 13:21	JMW	EPA 6020A
Magnesium	45	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:21	JMW	EPA 6020A
Potassium	1.7	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:21	JMW	EPA 6020A
Sodium	78	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:21	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04360-02

Name: G208

Alias: NEW_257_502

Sampled: 02/24/22 12:30

Received: 02/24/22 22:45

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	58	mg/L		03/01/22 22:49	25	25	03/01/22 22:49	CRD	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		02/28/22 12:04	1	1.0	02/28/22 12:04	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	24.65	Feet		02/24/22 12:30	1		02/24/22 12:30	FIELD	Field
Dissolved oxygen, Field	0.14	mg/L		02/24/22 12:30	1		02/24/22 12:30	FIELD	Field
Oxidation Reduction Potential	-99.9	mV		02/24/22 12:30	1	-500	02/24/22 12:30	FIELD	Field
pH, Field Measured	7.06	pH Units		02/24/22 12:30	1		02/24/22 12:30	FIELD	Field
Specific Conductance, Field Measured	1472	umhos/cm		02/24/22 12:30	1		02/24/22 12:30	FIELD	Field
Temperature, Field Measured	9.1	°C		02/24/22 12:30	1		02/24/22 12:30	FIELD	Field
Turbidity, Field Measured	< 0.00	NTU		02/24/22 12:30	1	0.00	02/24/22 12:30	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	690	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Fluoride	1.46	mg/L		03/07/22 12:51	1	0.250	03/07/22 12:51	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	760	mg/L		03/02/22 12:44	1	26	03/02/22 14:37	JLC1/ADM	SM 2540C
Total Metals - PIA									
Boron	210	ug/L		02/28/22 09:05	5	10	03/01/22 13:25	JMW	EPA 6020A
Calcium	95	mg/L		02/28/22 09:05	5	0.20	03/01/22 13:25	JMW	EPA 6020A
Magnesium	38	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:25	JMW	EPA 6020A
Potassium	2.1	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:25	JMW	EPA 6020A
Sodium	160	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:25	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04360-03

Name: G220

Alias: NEW_257_502

Sampled: 02/24/22 11:41

Received: 02/24/22 22:45

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	83	mg/L		02/28/22 13:52	10	10	02/28/22 13:52	CRD	EPA 300.0 REV 2.1
Sulfate	1.8	mg/L		02/28/22 13:34	1	1.0	02/28/22 13:34	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	17.98	Feet		02/24/22 11:41	1		02/24/22 11:41	FIELD	Field
Dissolved oxygen, Field	1.3	mg/L		02/24/22 11:41	1		02/24/22 11:41	FIELD	Field
Oxidation Reduction Potential	-49.0	mV		02/24/22 11:41	1	-500	02/24/22 11:41	FIELD	Field
pH, Field Measured	7.05	pH Units		02/24/22 11:41	1		02/24/22 11:41	FIELD	Field
Specific Conductance, Field Measured	1524	umhos/cm		02/24/22 11:41	1		02/24/22 11:41	FIELD	Field
Temperature, Field Measured	8.5	°C		02/24/22 11:41	1		02/24/22 11:41	FIELD	Field
Turbidity, Field Measured	< 0.00	NTU		02/24/22 11:41	1	0.00	02/24/22 11:41	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	620	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Fluoride	1.25	mg/L		03/15/22 11:01	1	0.250	03/15/22 11:01	TTH	SM 4500F C 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	810	mg/L		03/02/22 12:44	1	26	03/02/22 14:37	JLC1/AD M	SM 2540C
Total Metals - PIA									
Boron	200	ug/L		02/28/22 09:05	5	10	03/02/22 09:10	JMW	EPA 6020A
Calcium	96	mg/L		02/28/22 09:05	5	0.20	03/01/22 13:48	JMW	EPA 6020A
Magnesium	40	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:48	JMW	EPA 6020A
Potassium	3.1	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:48	JMW	EPA 6020A
Sodium	180	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:48	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04360-04

Name: G48MG

Alias: NEW_257_502

Sampled: 02/23/22 14:35

Received: 02/24/22 22:45

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	24	mg/L		02/28/22 14:28	10	10	02/28/22 14:28	CRD	EPA 300.0 REV 2.1
Sulfate	11	mg/L		02/28/22 14:28	10	10	02/28/22 14:28	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	19.49	Feet		02/23/22 14:35	1		02/23/22 14:35	FIELD	Field
Dissolved oxygen, Field	5.8	mg/L		02/23/22 14:35	1		02/23/22 14:35	FIELD	Field
Oxidation Reduction Potential	-39.9	mV		02/23/22 14:35	1	-500	02/23/22 14:35	FIELD	Field
pH, Field Measured	7.49	pH Units		02/23/22 14:35	1		02/23/22 14:35	FIELD	Field
Specific Conductance, Field Measured	911.1	umhos/cm		02/23/22 14:35	1		02/23/22 14:35	FIELD	Field
Temperature, Field Measured	9.7	°C		02/23/22 14:35	1		02/23/22 14:35	FIELD	Field
Turbidity, Field Measured	748	NTU		02/23/22 14:35	1	0.00	02/23/22 14:35	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	390	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Fluoride	0.573	mg/L		03/15/22 11:03	1	0.250	03/15/22 11:03	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	460	mg/L		03/01/22 13:04	1	26	03/01/22 15:04	JLC1/ADM	SM 2540C
Total Metals - PIA									
Boron	120	ug/L		02/28/22 09:05	5	10	03/02/22 09:14	JMW	EPA 6020A
Calcium	81	mg/L		02/28/22 09:05	5	0.20	03/01/22 13:52	JMW	EPA 6020A
Magnesium	32	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:52	JMW	EPA 6020A
Potassium	4.0	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:52	JMW	EPA 6020A
Sodium	110	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:52	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04360-05

Name: G201

Alias: NEW_257_502

Sampled: 02/23/22 11:40

Received: 02/24/22 22:45

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	4.5	mg/L		02/28/22 14:47	1	1.0	02/28/22 14:47	CRD	EPA 300.0 REV 2.1
Sulfate	530	mg/L		03/03/22 19:29	100	100	03/03/22 19:29	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	18.42	Feet		02/23/22 11:40	1		02/23/22 11:40	FIELD	Field
Dissolved oxygen, Field	0.55	mg/L		02/23/22 11:40	1		02/23/22 11:40	FIELD	Field
Oxidation Reduction Potential	-56.0	mV		02/23/22 11:40	1	-500	02/23/22 11:40	FIELD	Field
pH, Field Measured	7.40	pH Units		02/23/22 11:40	1		02/23/22 11:40	FIELD	Field
Specific Conductance, Field Measured	1288	umhos/cm		02/23/22 11:40	1		02/23/22 11:40	FIELD	Field
Temperature, Field Measured	10.4	°C		02/23/22 11:40	1		02/23/22 11:40	FIELD	Field
Turbidity, Field Measured	6.62	NTU		02/23/22 11:40	1	0.00	02/23/22 11:40	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	180	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Fluoride	0.875	mg/L		03/07/22 12:47	1	0.250	03/07/22 12:47	TTH	SM 4500F C 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	900	mg/L		03/01/22 13:04	1	26	03/01/22 15:04	JLC1	SM 2540C
Total Metals - PIA									
Boron	130	ug/L		02/28/22 09:05	5	10	03/02/22 09:18	JMW	EPA 6020A
Calcium	150	mg/L		02/28/22 09:05	5	0.20	03/01/22 13:56	JMW	EPA 6020A
Magnesium	20	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:56	JMW	EPA 6020A
Potassium	1.9	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:56	JMW	EPA 6020A
Sodium	87	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:56	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04360-06

Name: R201

Alias: NEW_257_502

Sampled: 02/23/22 11:50

Received: 02/24/22 22:45

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	28	mg/L		02/28/22 23:44	10	10	02/28/22 23:44	CRD	EPA 300.0 REV 2.1
Fluoride	1.18	mg/L		02/28/22 23:24	1	0.250	02/28/22 23:24	CRD	EPA 300.0 REV 2.1
Sulfate	140	mg/L		03/01/22 00:04	100	100	03/01/22 00:04	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	18.21	Feet		02/23/22 11:50	1		02/23/22 11:50	FIELD	Field
Dissolved oxygen, Field	3.1	mg/L		02/23/22 11:50	1		02/23/22 11:50	FIELD	Field
Oxidation Reduction Potential	-59.5	mV		02/23/22 11:50	1	-500	02/23/22 11:50	FIELD	Field
pH, Field Measured	7.53	pH Units		02/23/22 11:50	1		02/23/22 11:50	FIELD	Field
Specific Conductance, Field Measured	1330	umhos/cm		02/23/22 11:50	1		02/23/22 11:50	FIELD	Field
Temperature, Field Measured	6.3	°C		02/23/22 11:50	1		02/23/22 11:50	FIELD	Field
Turbidity, Field Measured	442	NTU		02/23/22 11:50	1	0.00	02/23/22 11:50	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	490	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	710	mg/L		03/02/22 12:44	1	26	03/02/22 14:37	JLC1/AD M	SM 2540C
Total Metals - PIA									
Boron	240	ug/L		02/28/22 09:05	5	10	03/02/22 09:35	JMW	EPA 6020A
Calcium	200	mg/L		02/28/22 09:05	5	0.20	03/01/22 13:59	JMW	EPA 6020A
Magnesium	88	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:59	JMW	EPA 6020A
Potassium	3.6	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:59	JMW	EPA 6020A
Sodium	130	mg/L		02/28/22 09:05	5	0.10	03/01/22 13:59	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04360-07

Name: G202

Alias: NEW_257_502

Sampled: 02/23/22 16:23

Received: 02/24/22 22:45

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	58	mg/L	Q4	03/01/22 01:25	25	25	03/01/22 01:25	CRD	EPA 300.0 REV 2.1
Fluoride	0.476	mg/L		03/01/22 00:24	1	0.250	03/01/22 00:24	CRD	EPA 300.0 REV 2.1
Sulfate	190	mg/L	Q4	03/01/22 01:25	25	25	03/01/22 01:25	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	47.74	Feet		02/23/22 16:23	1		02/23/22 16:23	FIELD	Field
Dissolved oxygen, Field	0.51	mg/L		02/23/22 16:23	1		02/23/22 16:23	FIELD	Field
Oxidation Reduction Potential	-65.0	mV		02/23/22 16:23	1	-500	02/23/22 16:23	FIELD	Field
pH, Field Measured	7.50	pH Units		02/23/22 16:23	1		02/23/22 16:23	FIELD	Field
Specific Conductance, Field Measured	1353	umhos/cm		02/23/22 16:23	1		02/23/22 16:23	FIELD	Field
Temperature, Field Measured	9.6	°C		02/23/22 16:23	1		02/23/22 16:23	FIELD	Field
Turbidity, Field Measured	< 0.00	NTU		02/23/22 16:23	1	0.00	02/23/22 16:23	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	400	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	680	mg/L		03/02/22 12:44	1	26	03/02/22 14:37	JLC1	SM 2540C
Total Metals - PIA									
Boron	120	ug/L		02/28/22 09:05	5	10	03/02/22 09:39	JMW	EPA 6020A
Calcium	120	mg/L		02/28/22 09:05	5	0.20	03/01/22 14:03	JMW	EPA 6020A
Magnesium	45	mg/L		02/28/22 09:05	5	0.10	03/01/22 14:03	JMW	EPA 6020A
Potassium	1.7	mg/L		02/28/22 09:05	5	0.10	03/01/22 14:03	JMW	EPA 6020A
Sodium	92	mg/L		02/28/22 09:05	5	0.10	03/01/22 14:03	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04360-08

Name: R202

Alias: NEW_257_502

Sampled: 02/23/22 11:50

Received: 02/24/22 22:45

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	67	mg/L	Q4	03/01/22 03:26	10	10	03/01/22 03:26	CRD	EPA 300.0 REV 2.1
Fluoride	0.485	mg/L		03/01/22 01:45	1	0.250	03/01/22 01:45	CRD	EPA 300.0 REV 2.1
Sulfate	46	mg/L	Q4	03/01/22 03:26	10	10	03/01/22 03:26	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	47.44	Feet		02/23/22 11:50	1		02/23/22 11:50	FIELD	Field
Dissolved oxygen, Field	0.63	mg/L		02/23/22 11:50	1		02/23/22 11:50	FIELD	Field
Oxidation Reduction Potential	-88.0	mV		02/23/22 11:50	1	-500	02/23/22 11:50	FIELD	Field
pH, Field Measured	7.01	pH Units		02/23/22 11:50	1		02/23/22 11:50	FIELD	Field
Specific Conductance, Field Measured	1211	umhos/cm		02/23/22 11:50	1		02/23/22 11:50	FIELD	Field
Temperature, Field Measured	8.1	°C		02/23/22 11:50	1		02/23/22 11:50	FIELD	Field
Turbidity, Field Measured	2.62	NTU		02/23/22 11:50	1	0.00	02/23/22 11:50	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	460	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	600	mg/L		03/02/22 12:44	1	26	03/02/22 14:37	JLC1	SM 2540C
Total Metals - PIA									
Boron	120	ug/L		02/28/22 09:05	5	10	03/02/22 09:43	JMW	EPA 6020A
Calcium	99	mg/L		02/28/22 09:05	5	0.20	03/01/22 14:07	JMW	EPA 6020A
Magnesium	41	mg/L		02/28/22 09:05	5	0.10	03/01/22 14:07	JMW	EPA 6020A
Potassium	1.7	mg/L		02/28/22 09:05	5	0.10	03/01/22 14:07	JMW	EPA 6020A
Sodium	99	mg/L		02/28/22 09:05	5	0.10	03/01/22 14:07	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04360-09

Name: G230

Alias: NEW_257_502

Sampled: 02/23/22 16:16

Received: 02/24/22 22:45

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	110	mg/L		03/01/22 04:47	50	50	03/01/22 05:07	CRD	EPA 300.0 REV 2.1
Sulfate	260	mg/L		03/01/22 04:47	50	50	03/01/22 05:07	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	47.74	Feet		02/23/22 16:16	1		02/23/22 16:16	FIELD	Field
Dissolved oxygen, Field	0.44	mg/L		02/23/22 16:16	1		02/23/22 16:16	FIELD	Field
Oxidation Reduction Potential	-103	mV		02/23/22 16:16	1	-500	02/23/22 16:16	FIELD	Field
pH, Field Measured	7.55	pH Units		02/23/22 16:16	1		02/23/22 16:16	FIELD	Field
Specific Conductance, Field Measured	1849	umhos/cm		02/23/22 16:16	1		02/23/22 16:16	FIELD	Field
Temperature, Field Measured	11.1	°C		02/23/22 16:16	1		02/23/22 16:16	FIELD	Field
Turbidity, Field Measured	49.2	NTU		02/23/22 16:16	1	0.00	02/23/22 16:16	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	450	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Fluoride	0.612	mg/L		03/15/22 11:04	1	0.250	03/15/22 11:04	TTH	SM 4500F C 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	900	mg/L		03/02/22 12:44	1	26	03/02/22 14:37	JLC1	SM 2540C
Total Metals - PIA									
Boron	150	ug/L		02/28/22 09:05	5	10	03/02/22 09:47	JMW	EPA 6020A
Calcium	130	mg/L		02/28/22 09:05	5	0.20	03/01/22 14:10	JMW	EPA 6020A
Magnesium	53	mg/L		02/28/22 09:05	5	0.10	03/01/22 14:10	JMW	EPA 6020A
Potassium	4.6	mg/L		02/28/22 09:05	5	0.10	03/01/22 14:10	JMW	EPA 6020A
Sodium	170	mg/L		02/28/22 09:05	5	0.10	03/01/22 14:10	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04360-10

Name: G231

Alias: NEW_257_502

Sampled: 02/23/22 14:54

Received: 02/24/22 22:45

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	100	mg/L		03/03/22 04:02	50	50	03/03/22 04:02	CRD	EPA 300.0 REV 2.1
Fluoride	0.570	mg/L		03/03/22 03:01	1	0.250	03/03/22 03:01	CRD	EPA 300.0 REV 2.1
Sulfate	180	mg/L		03/03/22 04:02	50	50	03/03/22 04:02	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	47.23	Feet		02/23/22 14:54	1		02/23/22 14:54	FIELD	Field
Dissolved oxygen, Field	0.18	mg/L		02/23/22 14:54	1		02/23/22 14:54	FIELD	Field
Oxidation Reduction Potential	-84.5	mV		02/23/22 14:54	1	-500	02/23/22 14:54	FIELD	Field
pH, Field Measured	7.94	pH Units		02/23/22 14:54	1		02/23/22 14:54	FIELD	Field
Specific Conductance, Field Measured	1261	umhos/cm		02/23/22 14:54	1		02/23/22 14:54	FIELD	Field
Temperature, Field Measured	9.1	°C		02/23/22 14:54	1		02/23/22 14:54	FIELD	Field
Turbidity, Field Measured	56.6	NTU		02/23/22 14:54	1	0.00	02/23/22 14:54	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	340	mg/L		03/07/22 14:02	1	10	03/07/22 14:02	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	600	mg/L		03/02/22 12:44	1	26	03/02/22 14:37	JLC1	SM 2540C
Total Metals - PIA									
Boron	110	ug/L		02/28/22 09:05	5	10	03/02/22 09:50	JMW	EPA 6020A
Calcium	99	mg/L		02/28/22 09:05	5	0.20	03/01/22 14:14	JMW	EPA 6020A
Magnesium	35	mg/L		02/28/22 09:05	5	0.10	03/01/22 14:14	JMW	EPA 6020A
Potassium	3.6	mg/L		02/28/22 09:05	5	0.10	03/01/22 14:14	JMW	EPA 6020A
Sodium	110	mg/L		02/28/22 09:05	5	0.10	03/01/22 14:14	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04360-11

Name: G232

Alias: NEW_257_502

Sampled: 02/23/22 13:16

Received: 02/24/22 22:45

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	73	mg/L		03/03/22 04:42	25	25	03/03/22 04:42	CRD	EPA 300.0 REV 2.1
Fluoride	0.545	mg/L		03/03/22 04:22	1	0.250	03/03/22 04:22	CRD	EPA 300.0 REV 2.1
Sulfate	150	mg/L		03/03/22 04:42	25	25	03/03/22 04:42	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	45.59	Feet		02/23/22 13:16	1		02/23/22 13:16	FIELD	Field
Dissolved oxygen, Field	0.10	mg/L		02/23/22 13:16	1		02/23/22 13:16	FIELD	Field
Oxidation Reduction Potential	-139	mV		02/23/22 13:16	1	-500	02/23/22 13:16	FIELD	Field
pH, Field Measured	7.68	pH Units		02/23/22 13:16	1		02/23/22 13:16	FIELD	Field
Specific Conductance, Field Measured	1243	umhos/cm		02/23/22 13:16	1		02/23/22 13:16	FIELD	Field
Temperature, Field Measured	8.7	°C		02/23/22 13:16	1		02/23/22 13:16	FIELD	Field
Turbidity, Field Measured	52.4	NTU		02/23/22 13:16	1	0.00	02/23/22 13:16	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	380	mg/L		03/08/22 09:07	1	10	03/08/22 09:07	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	640	mg/L		03/02/22 12:44	1	26	03/02/22 14:37	JLC1	SM 2540C
Total Metals - PIA									
Boron	99	ug/L		02/28/22 09:05	5	10	03/02/22 09:54	JMW	EPA 6020A
Calcium	94	mg/L		02/28/22 09:05	5	0.20	03/01/22 14:18	JMW	EPA 6020A
Magnesium	30	mg/L		02/28/22 09:05	5	0.10	03/01/22 14:18	JMW	EPA 6020A
Potassium	3.4	mg/L		02/28/22 09:05	5	0.10	03/01/22 14:18	JMW	EPA 6020A
Sodium	120	mg/L		02/28/22 09:05	5	0.10	03/01/22 14:18	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04360-12

Name: L301

Alias: NEW_257_502

Sampled: 02/23/22 16:51

Received: 02/24/22 22:45

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	25	mg/L		03/01/22 03:46	10	10	03/01/22 03:46	CRD	EPA 300.0 REV 2.1
Sulfate	2400	mg/L		03/01/22 04:06	500	500	03/01/22 04:06	CRD	EPA 300.0 REV 2.1
Field - PIA									
Dissolved oxygen, Field	0.69	mg/L		02/23/22 16:51	1		02/23/22 16:51	FIELD	Field
Oxidation Reduction Potential	-130	mV		02/23/22 16:51	1	-500	02/23/22 16:51	FIELD	Field
pH, Field Measured	10.4	pH Units		02/23/22 16:51	1		02/23/22 16:51	FIELD	Field
Specific Conductance, Field Measured	5231	umhos/cm		02/23/22 16:51	1		02/23/22 16:51	FIELD	Field
Temperature, Field Measured	9.9	°C		02/23/22 16:51	1		02/23/22 16:51	FIELD	Field
Turbidity, Field Measured	< 0.00	NTU		02/23/22 16:51	1	0.00	02/23/22 16:51	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	< 10	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO3	120	mg/L		03/01/22 08:52	1	10	03/01/22 08:52	ADM/JAA	SM 2320B 1997
Fluoride	0.317	mg/L		03/07/22 12:49	1	0.250	03/07/22 12:49	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	3800	mg/L		03/02/22 12:44	1	26	03/02/22 14:37	JLC1/AD M	SM 2540C
Total Metals - PIA									
Boron	66000	ug/L		02/28/22 09:05	100	200	03/02/22 10:33	JMW	EPA 6020A
Calcium	40	mg/L		02/28/22 09:05	5	0.20	03/01/22 14:21	JMW	EPA 6020A
Magnesium	2.2	mg/L		02/28/22 09:05	5	0.10	03/01/22 14:21	JMW	EPA 6020A
Potassium	78	mg/L		02/28/22 09:05	5	0.10	03/01/22 14:21	JMW	EPA 6020A
Sodium	1200	mg/L		02/28/22 09:05	100	2.0	03/01/22 16:01	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04360-13

Name: FIELD BLANK

Matrix: DI Water - Field Blank

Sampled: 02/23/22 17:30

Received: 02/24/22 22:45

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	< 1.0	mg/L		03/01/22 04:27	1	1.0	03/01/22 04:27	CRD	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		03/02/22 21:39	1	0.250	03/02/22 21:39	CRD	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		03/01/22 04:27	1	1.0	03/01/22 04:27	CRD	EPA 300.0 REV 2.1
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	< 2.0	mg/L		03/02/22 14:36	1	2.0	03/02/22 14:36	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		03/02/22 14:36	1	2.0	03/02/22 14:36	ADM/JAA	SM 2320B 1997
Solids - total dissolved solids (TDS)	< 17	mg/L	H	03/03/22 13:07	1	17	03/03/22 14:08	ADM	SM 2540C
Total Metals - PIA									
Boron	170	ug/L		02/28/22 09:05	5	10	03/02/22 09:58	JMW	EPA 6020A
Calcium	< 0.20	mg/L		02/28/22 09:05	5	0.20	03/01/22 15:43	JMW	EPA 6020A
Magnesium	< 0.10	mg/L		02/28/22 09:05	5	0.10	03/01/22 15:43	JMW	EPA 6020A
Potassium	< 0.10	mg/L		02/28/22 09:05	5	0.10	03/01/22 15:43	JMW	EPA 6020A
Sodium	< 0.10	mg/L		02/28/22 09:05	5	0.10	03/01/22 15:43	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FB04360-14

Name: EQUIPMENT BLANK

Matrix: DI Water - Equipment Blank

Sampled: 02/23/22 17:30

Received: 02/24/22 22:45

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	< 1.0	mg/L		03/01/22 04:47	1	1.0	03/01/22 04:47	CRD	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		03/02/22 21:59	1	0.250	03/02/22 21:59	CRD	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		03/01/22 04:47	1	1.0	03/01/22 04:47	CRD	EPA 300.0 REV 2.1
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	< 2.0	mg/L		03/02/22 14:36	1	2.0	03/02/22 14:36	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		03/02/22 14:36	1	2.0	03/02/22 14:36	ADM/JAA	SM 2320B 1997
Solids - total dissolved solids (TDS)	< 17	mg/L	H	03/03/22 13:07	1	17	03/03/22 14:08	ADM	SM 2540C
Total Metals - PIA									
Boron	160	ug/L		02/28/22 09:05	5	10	03/02/22 10:01	JMW	EPA 6020A
Calcium	< 0.20	mg/L		02/28/22 09:05	5	0.20	03/01/22 15:46	JMW	EPA 6020A
Magnesium	< 0.10	mg/L		02/28/22 09:05	5	0.10	03/01/22 15:46	JMW	EPA 6020A
Potassium	< 0.10	mg/L		02/28/22 09:05	5	0.10	03/01/22 15:46	JMW	EPA 6020A
Sodium	< 0.10	mg/L		02/28/22 09:05	5	0.10	03/01/22 15:46	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FC00024-01

Name: R217D

Alias: NEW_257_502

Sampled: 02/28/22 18:54

Received: 03/01/22 09:00

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	86	mg/L		03/07/22 12:35	25	25	03/07/22 12:35	CRD	EPA 300.0 REV 2.1
Sulfate	2200	mg/L		03/07/22 12:53	250	250	03/07/22 12:53	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	19.52	Feet		02/28/22 18:54	1		02/28/22 18:54	FIELD	Field
Dissolved oxygen, Field	1.1	mg/L		02/28/22 18:54	1		02/28/22 18:54	FIELD	Field
Oxidation Reduction Potential	21.2	mV		02/28/22 18:54	1	-500	02/28/22 18:54	FIELD	Field
pH, Field Measured	6.72	pH Units		02/28/22 18:54	1		02/28/22 18:54	FIELD	Field
Specific Conductance, Field Measured	4074	umhos/cm		02/28/22 18:54	1		02/28/22 18:54	FIELD	Field
Temperature, Field Measured	11.2	°C		02/28/22 18:54	1		02/28/22 18:54	FIELD	Field
Turbidity, Field Measured	111	NTU		02/28/22 18:54	1	0.00	02/28/22 18:54	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	520	mg/L		03/07/22 14:02	1	10	03/07/22 14:02	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		03/07/22 14:02	1	10	03/07/22 14:02	ADM/JAA	SM 2320B 1997
Fluoride	0.321	mg/L		03/07/22 15:34	1	0.250	03/07/22 15:34	TTH	SM 4500F C 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	3500	mg/L		03/03/22 14:47	1	26	03/03/22 16:10	adm	SM 2540C
Total Metals - PIA									
Boron	200	ug/L		03/03/22 10:13	5	10	03/08/22 08:57	JMW	EPA 6020A
Calcium	570	mg/L		03/03/22 10:13	100	4.0	03/08/22 10:19	JMW	EPA 6020A
Magnesium	290	mg/L		03/03/22 10:13	5	0.10	03/07/22 12:23	JMW	EPA 6020A
Potassium	9.9	mg/L		03/03/22 10:13	5	0.10	03/07/22 12:23	JMW	EPA 6020A
Sodium	180	mg/L		03/03/22 10:13	5	0.10	03/07/22 12:23	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FC00024-02

Name: G223

Alias: NEW_257_502

Sampled: 02/28/22 16:24

Received: 03/01/22 09:00

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	300	mg/L	Q4	03/07/22 15:00	100	100	03/07/22 15:00	CRD	EPA 300.0 REV 2.1
Sulfate	820	mg/L	Q4	03/07/22 15:00	100	100	03/07/22 15:00	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	33.08	Feet		02/28/22 16:24	1		02/28/22 16:24	FIELD	Field
Dissolved oxygen, Field	0.21	mg/L		02/28/22 16:24	1		02/28/22 16:24	FIELD	Field
Oxidation Reduction Potential	-83.5	mV		02/28/22 16:24	1	-500	02/28/22 16:24	FIELD	Field
pH, Field Measured	6.82	pH Units		02/28/22 16:24	1		02/28/22 16:24	FIELD	Field
Specific Conductance, Field Measured	3506	umhos/cm		02/28/22 16:24	1		02/28/22 16:24	FIELD	Field
Temperature, Field Measured	14.5	°C		02/28/22 16:24	1		02/28/22 16:24	FIELD	Field
Turbidity, Field Measured	9.72	NTU		02/28/22 16:24	1	0.00	02/28/22 16:24	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	850	mg/L		03/07/22 14:02	1	10	03/07/22 14:02	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		03/07/22 14:02	1	10	03/07/22 14:02	ADM/JAA	SM 2320B 1997
Fluoride	0.872	mg/L		03/07/22 15:35	1	0.250	03/07/22 15:35	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	2400	mg/L		03/03/22 13:07	1	26	03/03/22 14:08	ADM	SM 2540C
Total Metals - PIA									
Boron	250	ug/L		03/03/22 10:13	5	10	03/08/22 09:01	JMW	EPA 6020A
Calcium	360	mg/L	Q4	03/03/22 10:13	5	0.20	03/07/22 12:27	JMW	EPA 6020A
Magnesium	140	mg/L	Q4	03/03/22 10:13	5	0.10	03/07/22 12:27	JMW	EPA 6020A
Potassium	4.0	mg/L		03/03/22 10:13	5	0.10	03/07/22 12:27	JMW	EPA 6020A
Sodium	320	mg/L	Q4	03/03/22 10:13	5	0.10	03/07/22 12:27	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FC00024-03

Name: G223 Duplicate

Alias: NEW_257_502

Sampled: 02/28/22 16:24

Received: 03/01/22 09:00

Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	330	mg/L	Q4	03/07/22 16:30	100	100	03/07/22 16:30	CRD	EPA 300.0 REV 2.1
Sulfate	870	mg/L	Q4	03/07/22 16:30	100	100	03/07/22 16:30	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	33.08	Feet		02/28/22 16:24	1		02/28/22 16:24	FIELD	Field
Dissolved oxygen, Field	0.21	mg/L		02/28/22 16:24	1		02/28/22 16:24	FIELD	Field
Oxidation Reduction Potential	-83.5	mV		02/28/22 16:24	1	-500	02/28/22 16:24	FIELD	Field
pH, Field Measured	6.82	pH Units		02/28/22 16:24	1		02/28/22 16:24	FIELD	Field
Specific Conductance, Field Measured	3506	umhos/cm		02/28/22 16:24	1		02/28/22 16:24	FIELD	Field
Temperature, Field Measured	14.5	°C		02/28/22 16:24	1		02/28/22 16:24	FIELD	Field
Turbidity, Field Measured	9.72	NTU		02/28/22 16:24	1	0.00	02/28/22 16:24	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	820	mg/L		03/07/22 14:02	1	10	03/07/22 14:02	ADM/JAA	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		03/07/22 14:02	1	10	03/07/22 14:02	ADM/JAA	SM 2320B 1997
Fluoride	0.869	mg/L		03/07/22 15:41	1	0.250	03/07/22 15:41	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	2400	mg/L		03/03/22 13:07	1	26	03/03/22 14:08	ADM	SM 2540C
Total Metals - PIA									
Boron	260	ug/L		03/03/22 10:13	5	10	03/08/22 09:05	JMW	EPA 6020A
Calcium	360	mg/L		03/03/22 10:13	5	0.20	03/07/22 12:31	JMW	EPA 6020A
Magnesium	140	mg/L		03/03/22 10:13	5	0.10	03/07/22 12:31	JMW	EPA 6020A
Potassium	4.0	mg/L		03/03/22 10:13	5	0.10	03/07/22 12:31	JMW	EPA 6020A
Sodium	320	mg/L		03/03/22 10:13	5	0.10	03/07/22 12:31	JMW	EPA 6020A



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B224339 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B224339-CCB1)				Prepared & Analyzed: 02/11/22					
Sulfate	0.0445	mg/L							
Calibration Check (B224339-CCV1)				Prepared & Analyzed: 02/11/22					
Sulfate	4.91	mg/L		5.000		98	90-110		
<u>Batch B224516 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B224516-CCB1)				Prepared: 02/14/22 Analyzed: 02/15/22					
Chloride	0.554	mg/L							
Calibration Blank (B224516-CCB2)				Prepared & Analyzed: 02/14/22					
Chloride	0.494	mg/L							
Calibration Check (B224516-CCV1)				Prepared: 02/14/22 Analyzed: 02/15/22					
Chloride	5.12	mg/L		5.000		102	90-110		
Calibration Check (B224516-CCV2)				Prepared & Analyzed: 02/14/22					
Chloride	4.94	mg/L		5.000		99	90-110		
<u>Batch B224606 - No Prep - SM 2320B 1997</u>									
Blank (B224606-BLK1)				Prepared & Analyzed: 02/15/22					
Alkalinity - bicarbonate as CaCO ₃	2.50	mg/L							
Blank (B224606-BLK2)				Prepared & Analyzed: 02/15/22					
Alkalinity - bicarbonate as CaCO ₃	2.50	mg/L							
Blank (B224606-BLK3)				Prepared & Analyzed: 02/15/22					
Alkalinity - bicarbonate as CaCO ₃	2.50	mg/L							
<u>Batch B224607 - No Prep - SM 2320B 1997</u>									
Blank (B224607-BLK1)				Prepared & Analyzed: 02/15/22					
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L							
Blank (B224607-BLK2)				Prepared & Analyzed: 02/15/22					
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L							
<u>Batch B224681 - SW 3015 - EPA 6020A</u>									
Blank (B224681-BLK1)				Prepared: 02/17/22 Analyzed: 02/21/22					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B224681-BS1)				Prepared: 02/17/22 Analyzed: 02/21/22					
Boron	535	ug/L		555.6		96	80-120		
Calcium	6.10	mg/L		5.556		110	80-120		
Magnesium	6.32	mg/L		5.556		114	80-120		
Potassium	6.40	mg/L		5.556		115	80-120		
Sodium	6.49	mg/L		5.556		117	80-120		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B224727 - No Prep - SM 2540C</u>									
Blank (B224727-BLK1)				Prepared & Analyzed: 02/17/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B224727-BS1)				Prepared & Analyzed: 02/17/22					
Solids - total dissolved solids (TDS)	920	mg/L		1000		92	84.9-109		
<u>Batch B224950 - No Prep - SM 4500F C 1997</u>									
Calibration Blank (B224950-CCB1)				Prepared & Analyzed: 02/21/22					
Fluoride	0.0180	mg/L							
Calibration Blank (B224950-CCB2)				Prepared & Analyzed: 02/21/22					
Fluoride	0.0200	mg/L							
Calibration Check (B224950-CCV1)				Prepared & Analyzed: 02/21/22					
Fluoride	0.702	mg/L		0.7000		100	90-110		
Calibration Check (B224950-CCV2)				Prepared & Analyzed: 02/21/22					
Fluoride	0.713	mg/L		0.7000		102	90-110		
<u>Batch B225332 - SW 3015 - EPA 6020A</u>									
Blank (B225332-BLK1)				Prepared: 02/24/22 Analyzed: 03/02/22					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B225332-BS1)				Prepared: 02/24/22 Analyzed: 03/02/22					
Boron	546	ug/L		555.6		98	80-120		
Calcium	6.48	mg/L		5.556		117	80-120		
Magnesium	6.66	mg/L		5.556		120	80-120		
Potassium	6.56	mg/L		5.556		118	80-120		
Sodium	6.41	mg/L		5.556		115	80-120		
<u>Batch B225418 - No Prep - SM 2540C</u>									
Blank (B225418-BLK1)				Prepared & Analyzed: 02/25/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B225418-BS1)				Prepared & Analyzed: 02/25/22					
Solids - total dissolved solids (TDS)	953	mg/L		1000		95	84.9-109		
Solids - total dissolved solids (TDS)	953	mg/L		1000		95	84.9-109		
Duplicate (B225418-DUP1)				Prepared & Analyzed: 02/25/22					
Solids - total dissolved solids (TDS)	1070	mg/L			1110			4	5
Solids - total dissolved solids (TDS)	1070	mg/L			1110			4	5
Duplicate (B225418-DUP2)				Prepared & Analyzed: 02/25/22					
Solids - total dissolved solids (TDS)	780	mg/L			760			3	5
Solids - total dissolved solids (TDS)	780	mg/L			760			3	5
<u>Batch B225464 - No Prep - SM 2320B 1997</u>									
Blank (B225464-BLK1)				Prepared & Analyzed: 02/24/22					



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B225464 - No Prep - SM 2320B 1997</u>									
Blank (B225464-BLK1)				Prepared & Analyzed: 02/24/22					
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L							
Blank (B225464-BLK2)				Prepared & Analyzed: 02/24/22					
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L							
<u>Batch B225465 - No Prep - SM 2320B 1997</u>									
Blank (B225465-BLK1)				Prepared & Analyzed: 02/24/22					
Alkalinity - bicarbonate as CaCO ₃	2.50	mg/L							
Blank (B225465-BLK2)				Prepared & Analyzed: 02/24/22					
Alkalinity - bicarbonate as CaCO ₃	7.50	mg/L							
<u>Batch B225527 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B225527-CCB1)				Prepared & Analyzed: 02/25/22					
Sulfate	0.0436	mg/L							
Chloride	0.251	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B225527-CCV1)				Prepared & Analyzed: 02/25/22					
Fluoride	5.05	mg/L		5.000		101	90-110		
Sulfate	4.92	mg/L		5.000		98	90-110		
Chloride	4.81	mg/L		5.000		96	90-110		
<u>Batch B225555 - SW 3015 - EPA 6020A</u>									
Blank (B225555-BLK1)				Prepared: 02/28/22 Analyzed: 03/01/22					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B225555-BS1)				Prepared: 02/28/22 Analyzed: 03/01/22					
Boron	455	ug/L		555.6		82	80-120		
Calcium	5.80	mg/L		5.556		104	80-120		
Magnesium	6.60	mg/L		5.556		119	80-120		
Potassium	6.60	mg/L		5.556		119	80-120		
Sodium	5.80	mg/L		5.556		104	80-120		
<u>Batch B225679 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B225679-CCB1)				Prepared & Analyzed: 02/28/22					
Sulfate	0.00	mg/L							
Chloride	0.00	mg/L							
Calibration Check (B225679-CCV1)				Prepared & Analyzed: 02/28/22					
Chloride	4.62	mg/L		5.000		92	90-110		
Sulfate	4.82	mg/L		5.000		96	90-110		
Matrix Spike (B225679-MS1)				Prepared & Analyzed: 02/28/22					
Sulfate	1.00E9	mg/L		1.500	ND	NR	80-120		
Chloride	6.3	mg/L		1.500	58	NR	80-120		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B225679 - IC No Prep - EPA 300.0 REV 2.1</u>									
Matrix Spike Dup (B225679-MSD1)		Sample: FB04360-02		Prepared & Analyzed: 02/28/22					
Chloride	6.3	mg/L		1.500	58	NR	80-120		20
Sulfate	1.00E9	mg/L		1.500	ND	NR	80-120	0	20
<u>Batch B225681 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B225681-CCB1)		Prepared & Analyzed: 02/28/22							
Fluoride	0.00	mg/L							
Chloride	0.612	mg/L							
Sulfate	0.0666	mg/L							
Calibration Check (B225681-CCV1)		Prepared & Analyzed: 02/28/22							
Chloride	4.91	mg/L		5.000		98	90-110		
Fluoride	4.73	mg/L		5.000		95	90-110		
Sulfate	4.98	mg/L		5.000		100	90-110		
Matrix Spike (B225681-MS1)		Sample: FB04360-07		Prepared & Analyzed: 03/01/22					
Chloride	1.0E9	mg/L	Q4	1.500	58	NR	80-120		
Fluoride	1.75	mg/L		1.500	0.476	85	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	187	NR	80-120		
Matrix Spike (B225681-MS2)		Sample: FB04360-08		Prepared & Analyzed: 03/01/22					
Chloride	1.0E9	mg/L	Q4	1.500	67	NR	80-120		
Fluoride	1.74	mg/L		1.500	0.485	84	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	46.1	NR	80-120		
Matrix Spike Dup (B225681-MSD1)		Sample: FB04360-07		Prepared & Analyzed: 03/01/22					
Fluoride	1.79	mg/L		1.500	0.476	88	80-120	3	20
Chloride	1.0E9	mg/L	Q4	1.500	58	NR	80-120	0	20
Sulfate	1.00E9	mg/L	Q4	1.500	187	NR	80-120	0	20
Matrix Spike Dup (B225681-MSD2)		Sample: FB04360-08		Prepared & Analyzed: 03/01/22					
Chloride	1.0E9	mg/L	Q4	1.500	67	NR	80-120	0	20
Sulfate	1.00E9	mg/L	Q4	1.500	46.1	NR	80-120	0	20
Fluoride	1.75	mg/L		1.500	0.485	84	80-120	0.3	20
<u>Batch B225705 - No Prep - SM 2540C</u>									
Blank (B225705-BLK1)		Prepared & Analyzed: 03/01/22							
Solids - total dissolved solids (TDS)	< 17	mg/L							
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B225705-BS1)		Prepared & Analyzed: 03/01/22							
Solids - total dissolved solids (TDS)	933	mg/L		1000		93	84.9-109		
Solids - total dissolved solids (TDS)	933	mg/L		1000		93	84.9-109		
<u>Batch B225780 - No Prep - SM 2320B 1997</u>									
Blank (B225780-BLK1)		Prepared & Analyzed: 03/01/22							
Alkalinity - bicarbonate as CaCO3	2.50	mg/L							
Blank (B225780-BLK2)		Prepared & Analyzed: 03/01/22							
Alkalinity - bicarbonate as CaCO3	2.50	mg/L							
Blank (B225780-BLK3)		Prepared & Analyzed: 03/01/22							
Alkalinity - bicarbonate as CaCO3	7.50	mg/L							



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B225780 - No Prep - SM 2320B 1997</u>									
LCS (B225780-BS1)				Prepared & Analyzed: 03/01/22					
Alkalinity - bicarbonate as CaCO ₃	85.0	mg/L					90-110		
LCS (B225780-BS2)				Prepared & Analyzed: 03/01/22					
Alkalinity - bicarbonate as CaCO ₃	85.0	mg/L					90-110		
LCS (B225780-BS3)				Prepared & Analyzed: 03/01/22					
Alkalinity - bicarbonate as CaCO ₃	80.0	mg/L					90-110		
Duplicate (B225780-DUP2)				Sample: FB04360-11 Prepared & Analyzed: 03/01/22					
Alkalinity - bicarbonate as CaCO ₃	375	mg/L			375			0	10
Duplicate (B225780-DUP4)				Sample: FB04360-01 Prepared & Analyzed: 03/01/22					
Alkalinity - bicarbonate as CaCO ₃	400	mg/L			412			3	10
<u>Batch B225782 - No Prep - SM 2320B 1997</u>									
Blank (B225782-BLK1)				Prepared & Analyzed: 03/01/22					
Alkalinity - carbonate as CaCO ₃	2.50	mg/L							
Blank (B225782-BLK2)				Prepared & Analyzed: 03/01/22					
Alkalinity - carbonate as CaCO ₃	2.50	mg/L							
Blank (B225782-BLK3)				Prepared & Analyzed: 03/01/22					
Alkalinity - carbonate as CaCO ₃	2.50	mg/L							
Duplicate (B225782-DUP2)				Sample: FB04360-11 Prepared & Analyzed: 03/01/22					
Alkalinity - carbonate as CaCO ₃	< 10	mg/L			ND				10
Duplicate (B225782-DUP4)				Sample: FB04360-01 Prepared & Analyzed: 03/01/22					
Alkalinity - carbonate as CaCO ₃	< 10	mg/L			ND				10
<u>Batch B225819 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B225819-CCB1)				Prepared & Analyzed: 03/01/22					
Chloride	0.00	mg/L							
Calibration Check (B225819-CCV1)				Prepared & Analyzed: 03/01/22					
Chloride	4.81	mg/L			5.000	96	90-110		
<u>Batch B225826 - No Prep - SM 2540C</u>									
Blank (B225826-BLK1)				Prepared & Analyzed: 03/02/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B225826-BS1)				Prepared & Analyzed: 03/02/22					
Solids - total dissolved solids (TDS)	920	mg/L			1000	92	84.9-109		
Solids - total dissolved solids (TDS)	920	mg/L			1000	92	84.9-109		
Duplicate (B225826-DUP1)				Sample: FB04360-03 Prepared & Analyzed: 03/02/22					
Solids - total dissolved solids (TDS)	790	mg/L			810			2	5
Solids - total dissolved solids (TDS)	790	mg/L			790			0	5
Duplicate (B225826-DUP2)				Sample: FB04360-06 Prepared & Analyzed: 03/02/22					
Solids - total dissolved solids (TDS)	860	mg/L	M		710			19	5
Solids - total dissolved solids (TDS)	860	mg/L	M		750			14	5
<u>Batch B225916 - No Prep - SM 2320B 1997</u>									
Blank (B225916-BLK1)				Prepared & Analyzed: 03/02/22					



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B225916 - No Prep - SM 2320B 1997</u>									
Blank (B225916-BLK1)				Prepared & Analyzed: 03/02/22					
Alkalinity - bicarbonate as CaCO ₃	< 2.0	mg/L							
LCS (B225916-BS1)				Prepared & Analyzed: 03/02/22					
Alkalinity - bicarbonate as CaCO ₃	82.5	mg/L					90-110		
<u>Batch B225917 - No Prep - SM 2320B 1997</u>									
Blank (B225917-BLK1)				Prepared & Analyzed: 03/02/22					
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L							
<u>Batch B225932 - SW 3015 - EPA 6020A</u>									
Blank (B225932-BLK1)				Prepared: 03/03/22 Analyzed: 03/08/22					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B225932-BS1)				Prepared: 03/03/22 Analyzed: 03/08/22					
Boron	610	ug/L		555.6		110	80-120		
Calcium	5.72	mg/L		5.556		103	80-120		
Magnesium	5.86	mg/L		5.556		106	80-120		
Potassium	5.65	mg/L		5.556		102	80-120		
Sodium	5.66	mg/L		5.556		102	80-120		
Matrix Spike (B225932-MS1)				Sample: FC00024-02		Prepared: 03/03/22 Analyzed: 03/08/22			
Boron	838	ug/L		555.6	254	105	75-125		
Calcium	364	mg/L	Q4	5.556	364	NR	75-125		
Magnesium	148	mg/L	Q4	5.556	145	66	75-125		
Potassium	9.56	mg/L		5.556	4.01	100	75-125		
Sodium	321	mg/L	Q4	5.556	325	NR	75-125		
Matrix Spike Dup (B225932-MSD1)				Sample: FC00024-02		Prepared: 03/03/22 Analyzed: 03/08/22			
Boron	852	ug/L		555.6	254	108	75-125	2	20
Calcium	365	mg/L	Q4	5.556	364	11	75-125	0.2	20
Magnesium	147	mg/L	Q4	5.556	145	48	75-125	0.7	20
Potassium	9.57	mg/L		5.556	4.01	100	75-125	0.05	20
Sodium	325	mg/L	Q4	5.556	325	2	75-125	1	20
<u>Batch B225953 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B225953-CCB1)				Prepared & Analyzed: 03/02/22					
Fluoride	0.00	mg/L							
Chloride	0.767	mg/L							
Sulfate	0.0227	mg/L							
Calibration Check (B225953-CCV1)				Prepared & Analyzed: 03/02/22					
Fluoride	5.09	mg/L		5.000		102	90-110		
Chloride	4.89	mg/L		5.000		98	90-110		
Sulfate	4.98	mg/L		5.000		100	90-110		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B225976 - No Prep - SM 2540C</u>									
Blank (B225976-BLK1)				Prepared & Analyzed: 03/03/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B225976-BS1)				Prepared & Analyzed: 03/03/22					
Solids - total dissolved solids (TDS)	947	mg/L		1000		95	84.9-109		
<u>Batch B225993 - No Prep - SM 2540C</u>									
Blank (B225993-BLK1)				Prepared & Analyzed: 03/03/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B225993-BS1)				Prepared & Analyzed: 03/03/22					
Solids - total dissolved solids (TDS)	947	mg/L		1000		95	84.9-109		
<u>Batch B226072 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B226072-CCB1)				Prepared & Analyzed: 03/03/22					
Sulfate	0.0441	mg/L							
Calibration Check (B226072-CCV1)				Prepared & Analyzed: 03/03/22					
Sulfate	5.09	mg/L		5.000		102	90-110		
<u>Batch B226200 - No Prep - SM 4500F C 1997</u>									
Calibration Blank (B226200-CCB1)				Prepared & Analyzed: 03/07/22					
Fluoride	0.00900	mg/L							
Calibration Blank (B226200-CCB2)				Prepared & Analyzed: 03/07/22					
Fluoride	0.0110	mg/L							
Calibration Check (B226200-CCV1)				Prepared & Analyzed: 03/07/22					
Fluoride	0.723	mg/L		0.7000		103	90-110		
Calibration Check (B226200-CCV2)				Prepared & Analyzed: 03/07/22					
Fluoride	0.724	mg/L		0.7000		103	90-110		
Matrix Spike (B226200-MS1)				Prepared & Analyzed: 03/07/22					
Fluoride	1.28	mg/L	Sample: FC00024-04	1.000	0.401	88	80-120		
Matrix Spike (B226200-MS3)				Prepared & Analyzed: 03/07/22					
Fluoride	2.65	mg/L	Sample: FB04360-02	1.000	1.46	118	80-120		
Matrix Spike Dup (B226200-MSD1)				Prepared & Analyzed: 03/07/22					
Fluoride	1.31	mg/L	Sample: FC00024-04	1.000	0.401	91	80-120	2	20
Matrix Spike Dup (B226200-MSD3)				Prepared & Analyzed: 03/07/22					
Fluoride	2.58	mg/L	Sample: FB04360-02	1.000	1.46	112	80-120	3	20
<u>Batch B226312 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B226312-CCB1)				Prepared & Analyzed: 03/07/22					
Sulfate	0.00	mg/L							
Chloride	0.0670	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B226312-CCV1)				Prepared & Analyzed: 03/07/22					
Chloride	4.56	mg/L		5.000		91	90-110		
Sulfate	4.86	mg/L		5.000		97	90-110		
Fluoride	4.84	mg/L		5.000		97	90-110		
Matrix Spike (B226312-MS1)				Prepared & Analyzed: 03/07/22					
			Sample: FB04079-04						



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B226312 - IC No Prep - EPA 300.0 REV 2.1</u>									
Matrix Spike (B226312-MS1)		Sample: FB04079-04		Prepared & Analyzed: 03/07/22					
Chloride	< 1.0	mg/L	Q4	1.500	53	NR	80-120		
Fluoride	2.47	mg/L		1.500	0.943	102	80-120		
Matrix Spike (B226312-MS2)		Sample: FC00024-02		Prepared & Analyzed: 03/07/22					
Chloride	< 1.0	mg/L	Q4	1.500	300	NR	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	818	NR	80-120		
Matrix Spike (B226312-MS3)		Sample: FC00024-03		Prepared & Analyzed: 03/07/22					
Sulfate	1.00E9	mg/L	Q4	1.500	871	NR	80-120		
Chloride	< 1.0	mg/L	Q4	1.500	330	NR	80-120		
Matrix Spike Dup (B226312-MSD1)		Sample: FB04079-04		Prepared & Analyzed: 03/08/22					
Fluoride	2.48	mg/L		1.500	0.943	102	80-120	0.2	20
Chloride	< 1.0	mg/L	Q4	1.500	53	NR	80-120		20
Matrix Spike Dup (B226312-MSD2)		Sample: FC00024-02		Prepared & Analyzed: 03/07/22					
Chloride	< 1.0	mg/L	Q4	1.500	300	NR	80-120		20
Sulfate	1.00E9	mg/L	Q4	1.500	818	NR	80-120	0	20
Matrix Spike Dup (B226312-MSD3)		Sample: FC00024-03		Prepared & Analyzed: 03/07/22					
Chloride	< 1.0	mg/L	Q4	1.500	330	NR	80-120		20
Sulfate	1.00E9	mg/L	Q4	1.500	871	NR	80-120	0	20
<u>Batch B226450 - No Prep - SM 2320B 1997</u>									
Blank (B226450-BLK1)		Prepared & Analyzed: 03/07/22							
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L							
<u>Batch B226451 - No Prep - SM 2320B 1997</u>									
Blank (B226451-BLK1)		Prepared & Analyzed: 03/07/22							
Alkalinity - bicarbonate as CaCO ₃	2.50	mg/L							
<u>Batch B226461 - No Prep - SM 2320B 1997</u>									
Blank (B226461-BLK1)		Prepared & Analyzed: 03/08/22							
Alkalinity - bicarbonate as CaCO ₃	2.50	mg/L							
<u>Batch B226470 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B226470-CCB1)		Prepared & Analyzed: 03/08/22							
Sulfate	0.00	mg/L							
Calibration Check (B226470-CCV1)		Prepared & Analyzed: 03/08/22							
Sulfate	5.33	mg/L		5.000		107	90-110		
<u>Batch B226604 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B226604-CCB1)		Prepared & Analyzed: 03/09/22							
Chloride	0.764	mg/L							
Sulfate	0.00	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B226604-CCV1)		Prepared & Analyzed: 03/09/22							
Fluoride	4.74	mg/L		5.000		95	90-110		
Sulfate	4.83	mg/L		5.000		97	90-110		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B226604 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Check (B226604-CCV1)				Prepared & Analyzed: 03/09/22					
Chloride	4.72	mg/L		5.000		94	90-110		
<u>Batch B226996 - No Prep - SM 4500F C 1997</u>									
Calibration Blank (B226996-CCB1)				Prepared & Analyzed: 03/15/22					
Fluoride	0.0100	mg/L							
Calibration Blank (B226996-CCB2)				Prepared & Analyzed: 03/15/22					
Fluoride	0.0100	mg/L							
Calibration Check (B226996-CCV1)				Prepared & Analyzed: 03/15/22					
Fluoride	0.721	mg/L		0.7000		103	90-110		
Calibration Check (B226996-CCV2)				Prepared & Analyzed: 03/15/22					
Fluoride	0.692	mg/L		0.7000		99	90-110		
Matrix Spike (B226996-MS1)				Prepared & Analyzed: 03/15/22					
Fluoride	2.27	mg/L		1.000	1.25	102	80-120		
Matrix Spike Dup (B226996-MSD1)				Prepared & Analyzed: 03/15/22					
Fluoride	2.29	mg/L		1.000	1.25	104	80-120	1	20



NOTES

Specifications regarding method revisions, method modifications, and calculations used for analysis are available upon request. Please contact your project manager.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050

TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615

TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553

Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)

Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807

USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050

Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Qualifiers

- H Test performed after the expiration of the appropriate regulatory/advisory maximum allowable hold time.
- M Analyte failed to meet the required acceptance criteria for duplicate analysis.
- Q4 The matrix spike recovery result is unusable since the analyte concentration in the sample is greater than four times the spike level. The associated blank spike was acceptable.

Gail J Schindler



Certified by: Gail Schindler, Project Manager

NEWTON CCR LANDFILL

WELL/SAMPLE POINT **G06D**

Purge Method: bladder Pump

Date: 2/22/22 Start Time: 1305

Finish/Sample Time: 1352

Well Depth (Bottom) From MP: _____ ft

Min. Purge Volume: _____ Gal / L

Depth to Water From MP: 28.80 ft

Total Purge Volume: 15 Gal (L)

Water Column Length: _____ ft

Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L

Total Drawdown: 2.17 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1327	30.41	100	7.23	1302.3	13.56	-97.6	1.54	19.56
2	1329	30.45	100	7.23	1320.5	13.53	-98.5	1.58	18.90
3	1331	30.50	100	7.29	1331.4	13.50	-98.9	1.58	19.04
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	
Casing locked/secure	☒	
Well cap fits securely.		☒
Good seal/drainage	☒	
Well has weep holes	☒	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
2	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	General 1000mL P

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 30.97 ft

Comments: Metals Dup.

Filtered Gen. = Resample

Sampler's Signature: Joseph R Reed

NEWTON CCR LANDFILL

WELL/SAMPLE POINT G48MG

Purge Method: Barter

Date: 2/23/22

Start Time: 12:55

Finish/Sample Time: 14:35

Well Depth (Bottom) From MP: 79.90 ft

Min. Purge Volume: 111 Gal/L

Depth to Water From MP: 19.49 ft

Total Purge Volume: 111 Gal/L

Water Column Length: 60.41 ft

Max Drawdown: N/A ft

Well Water Volume: 36.54 Gal/L

Total Drawdown: N/A ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	13:30	N/A	N/A	7.51	933.04	9.82	-41.5	6.00	759.07
2	13:59	N/A	N/A	7.49	928.04	9.79	-40.2	5.85	694.11
3	14:30	N/A	N/A	7.49	911.10	9.70	-39.9	5.76	748.12
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT600 # 449186

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☒ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☐	☒

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250-mL) <u>1000mL</u>

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: N/A ft

Comments

Sampler's Signature: [Signature]

NEWTON CCR LANDFILL

WELL/SAMPLE POINT G201

Purge Method: Bladder pump

Date: 2/23/22

Start Time: 10:56

Finish/Sample Time: 11:40

Well Depth (Bottom) From MP: _____ ft

Min. Purge Volume: _____ Gal / L

Depth to Water From MP: 18.42 ft

Total Purge Volume: 1.5 Gal

Water Column Length: _____ ft

Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L

Total Drawdown: _____ ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	11:06	18.57	100	7.20	1289.6	10.10	-46.4	0.44	13.35
2	11:08	18.60	100	7.24	1249.8	10.14	-50.1	0.65	21.77
3	11:10	18.65	100	7.37	1284.6	10.28	-52.8	0.60	7.71
4	11:12	18.68	100	7.40	1287.8	10.35	-56.0	0.55	6.62
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT602 # 449186

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	X	
Casing locked/secure	X	
Well cap fits securely.		X
Good seal/drainage	X	
Well has weep holes		X

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>1000 mL</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)
1	<u>filter</u>

Final DTW: 18.93 ft

Comments

Sampler's Signature: [Signature]

NEWTON CCR LANDFILL

WELL/SAMPLE POINT **R201**

Purge Method: Bladder Pump

Date: 2/23/22 Start Time: 1056 Finish/Sample Time: 1150

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: _____ Gal / L

Depth to Water From MP: 18.21 ft Total Purge Volume: 2100 ~~Gal~~ mL

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: 1.51 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1114	19.72	100	7.53	1333.4	6.22	-45.2	3.95	225.1
2	1116	19.72	100	7.53	1330.9	6.30	-50.1	3.95	315.8
3	1118	19.72	100	7.53	1330.1	6.31	-59.5	3.09	441.9
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☐ Mod ☒ Strong

Well Integrity	Yes	No
Well has ID sign	☒	
Casing locked/secure	☒	
Well cap fits securely.		☒
Good seal/drainage	☒	
Well has weep holes		☒

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 1000 mL)

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 19.72 ft

Comments

Sampler's Signature: Joseph R Reed

NEWTON CCR LANDFILL

WELL/SAMPLE POINT G202

Purge Method: Low-flow

Date: 2/23/22 Start Time: 1520 Finish/Sample Time: 1623

Well Depth (Bottom) From MP: — ft

Min. Purge Volume: — Gal / L

Depth to Water From MP: 47.74 ft

Total Purge Volume: 3.5 Gal 10

Water Column Length: — ft

Max Drawdown: -0.01 ft 47.73 2/23/22

Well Water Volume: — Gal / L

Total Drawdown: -0.01 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1547	47.73	100	7.58	1314.8	9.97	-43.3	0.78	0.00
2	1549	47.73	100	7.55	1334.0	9.72	-50.8	0.68	1.70
3	1551	47.73	100	7.53	1348.2	9.59	-56.8	0.60	0.00
4	1553	47.73	100	7.51	1355.0	9.49	-61.0	0.55	0.00
5	1555	47.73	100	7.50	1353.4	9.55	-65.0	0.51	0.00
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Aquatroll 600 #846000

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	
Casing locked/secure	☒	
Well cap fits securely.		☒
Good seal/drainage	☒	
Well has weep holes		☒

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) <u>1000.6</u>
	<u>2/23/22</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 47.73 ft

Comments

Sampler's Signature: [Signature]

NEWTON CCR LANDFILL

WELL/SAMPLE POINT R202

Purge Method: bladder

Date: 2/23/2022 Start Time: 1040 Finish/Sample Time: 1150

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: - Gal / L

Depth to Water From MP: 47.44 ft Total Purge Volume: 1200 Gal / L (mL)

Water Column Length: _____ ft Max Drawdown: - ft

Well Water Volume: _____ Gal / L Total Drawdown: 0 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1102	47.44	100	-	-	-	-	-	-
2	1114	47.44	100	6.98	1211.5	8.17	-76.0	0.82	3.87
3	1116	47.44	100	7.00	1211.9	8.21	-85.0	0.67	2.71
4	1118	47.44	100	7.01	1210.6	8.10	-88.0	0.63	2.62
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600 #762215

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☐	☒
Good seal/drainage	☒	☐
Well has weep holes	☐	☒

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) 1000mL

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 47.44 ft

Comments DTW Tape Solinst model 101 # 336216
quarterly killed here

Sampler's Signature: _____

NEWTON CCR LANDFILL

WELL/SAMPLE POINT G203

Purge Method: low flow

Date: 2/24/2022

Start Time: 9:50

Finish/Sample Time: 10:39

Well Depth (Bottom) From MP: _____ ft

Min. Purge Volume: _____ Gal / L

Depth to Water From MP: 40.95 ft

Total Purge Volume: 2.0 Gal

Water Column Length: _____ ft

Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L

Total Drawdown: _____ ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	10:02	40.96	100	7.43	1225.0	10.00	-44.6	3.20	25.65
2	10:04	40.96	100	7.35	1224.6	9.99	-24.8	2.15	22.73
3	10:08	40.98	100	7.24	1246.1	10.11	-34.2	0.60	27.72
4	10:10	40.97	100	7.23	1251.3	10.10	-31.1	0.46	26.37
5	10:12	4.96	100	7.24	1260.1	10.24	-31.5	0.40	29.91
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

AT600 #449186

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	X	
Casing locked/secure	X	
Well cap fits securely.		X
Good seal/drainage	X	
Well has weep holes		X

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P,250 mL) <u>1650</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 40.95 ft

Comments

Sci Inst #269022 DTW type

Sampler's Signature: [Signature]

NEWTON CCR LANDFILL

WELL/SAMPLE POINT **G208**

Purge Method: Low Flow

Date: 2/23/2022 Start Time: 11:34 Finish/Sample Time: 12:30

Well Depth (Bottom) From MP: _____ ft
 Depth to Water From MP: 24.65 ft
 Water Column Length: _____ ft
 Well Water Volume: _____ Gal / L
 Min. Purge Volume: _____ Gal / L
 Total Purge Volume: 2.0 Gal (L)
 Max Drawdown: _____ ft
 Total Drawdown: _____ ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	11:54	28.33	100	7.06	1466.2	9.24	-98.5	0.18	0.00
2	11:56	28.59	100	7.05	1469.9	9.22	-98.6	0.18	0.00
3	11:58	28.81	100	7.06	1472.1	9.11	-99.9	0.14	0.00
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600 # 449186

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	
Casing locked/secure	☒	
Well cap fits securely.		☒
Good seal/drainage	☒	
Well has weep holes	☒	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL)
	1000 # 2/23/22

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 32.26 ft

Comments

Sampler's Signature: [Signature]

SITE

NEWTON PHASE 2 + CCR LANDFILL

WELL/SAMPLE POINT

R217D

Date:

2/28/22

Start Time:

1803

Finish/Sample Time:

1854

Well Depth (Bottom) From MP:

71.70 ft

Depth to Water From MP:

19.52 ft

Well Water Volume:

31.60 L

Water Column Length:

52.18 ft

Total Purge Volume:

2.4 L

Reading	Time	DTW	pH	Spec Con	Temp	DO	Turb	ORP
(Units)		feet	umhos/cm	umhos/cm	deg C	mg/L	NTU	mV
1	1823	19.75	6.64	4040	11.22	0.91	108.15	18.2
2	1825	19.75	6.68	4062.4	11.22	1.01	107.91	17.9
3	1827	19.75	6.72	4074.5	11.22	1.10	111.36	21.2
4								
5								

FINAL DTW 19.75 ft

Sampled with:

Bladder pump

Aquatrail 600 # 444186

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong
 Color: ☐ None ☐ Slight ☒ Mod. ☐ Strong
 Turb: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Well Integrity

Yes

No

Well has ID sign

Casing locked/secure

Well cap fits securely.

Good seal/drainage

Well has weep holes

Weather/Environment

Remarks:

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	Phenols (A,G,250mL, H2SO4)
	O&G (A,G,1000mL, HCL)
1	Cyanide (P, 250mL, NaOH)
	Ammonia (P,250mL, H2SO4)
1	General (P,500mL) 1000 mL
	General (P,250mL) 1000 mL
1	Metals (P, 250mL, HNO3)

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Comments

Sampler's Signature:

NEWTON CCR LANDFILL

WELL/SAMPLE POINT **G220**

Purge Method: Low flow

Date: 2/24/2022 Start Time: 11:09 Finish/Sample Time: 11:41

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: _____ Gal / L
 Depth to Water From MP: 32.30 ft 17.98 Total Purge Volume: _____ Gal / L
 Water Column Length: _____ ft Max Drawdown: _____ ft
 Well Water Volume: _____ Gal / L Total Drawdown: _____ ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		(ft.)	(mL/min)	(s.u.)	(umhos/cm)	(deg C)	(mV)	(mg/L)	(NTU)
1	11:15	43.43	100	7.63	1532.3	8.66	-48.2	1.44	30.00
2	11:17	44.13	100	7.04	1526.1	8.60	-52.4	1.35	28.24
3	11:19	44.38	100	7.65	1524.1	8.54	-49.0	1.29	0.00
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600 # 449186

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	
Casing locked/secure	☒	
Well cap fits securely.		☒
Good seal/drainage	☒	
Well has weep holes	☒	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250-mL) <u>1000 mL</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 48.68 ft

Comments Resample for 1 metals total

Sampler's Signature: [Signature]

Water level tape misread when collecting sample. DTW changed to water level reading during sitewide measurements on 02/21/22. GS

NEWTON CCR LANDFILL

WELL/SAMPLE POINT **G222**

Purge Method: Bladder

Date: 2/22/22 Start Time: 1430 Finish/Sample Time: 1530

Well Depth (Bottom) From MP: 79.31 ft Min. Purge Volume: _____ Gal / L

Depth to Water From MP: 16.19 ft Total Purge Volume: 1.5 Gal (L)

Water Column Length: 63.12 ft Max Drawdown: _____ ft

Well Water Volume: 38.17 Gal (L) Total Drawdown: 3.18 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1450	19.36	100	7.48	1332.9	13.78	103.9	4.36	80.91
2	1452	19.36	100	7.48	1336.4	13.80	103.9	4.20	100.31
3	1454	19.36	100	7.48	1344.1	13.80	103.9	4.16	90.44
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	
Casing locked/secure	☒	
Well cap fits securely.		☒
Good seal/drainage	☒	
Well has weep holes		☒

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) <u>1000mL</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 19.37 ft

Comments

Sampler's Signature: Joseph R Red

SITE

NEWTON PHASE 2

+ CCR LAND FILL

WELL/SAMPLE POINT

G223

Date: 2/28/22 Start Time: 1516 Finish/Sample Time: 1624Well Depth (Bottom) From MP: 91.90 ftDepth to Water From MP: 33.08 ftWell Water Volume: 35.62 LWater Column Length: 58.82 ftTotal Purge Volume: L

Reading	Time	DTW	pH	Spec Con	Temp	DO	Turb	ORP
(Units)		feet	umhos/cm	umhos/cm	deg C	mg/L	NTU	mV
1	1531	34.75	6.82	3496.0	14.54	0.20	8.69	-78.5
2	1533	34.81	6.82	3501.2	14.49	0.20	9.51	-81.8
3	1535	34.84	6.82	3506.2	14.53	0.21	9.72	-83.5
4								
5								

mtc 2/28/22

FINAL DTW 35.98 ft

Sampled with:

Bladder pump

Aquatroll 600 # 449186

Odor:	☐ None	☒ Slight	☐ Mod.	☐ Strong	Well Integrity	Yes	No
Color	☐ None	☒ Slight	☐ Mod.	☐ Strong	Well has ID sign	☒	
Turb	☐ None	☒ Slight	☐ Mod	☐ Strong	Casing locked/secure	☒	
Weather:/Environment					Well cap fits securely.		☒
Remarks:					Good seal/drainage	☒	
					Well has weep holes	☒	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	Phenols (A,G,250mL, H2SO4)
	O&G (A,G,1000mL, HCL)
1	Cyanide (P, 250mL, NaOH)
	Ammonia (P,250mL, H2SO4)
1	General (P,500mL) 1000mL
1	General (P,250mL) 1000mL
1	Metals (P, 250mL, HNO3)

8

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Comments Drawdown did not stabilizeSampler's Signature: [Signature]

NEWTON CCR LANDFILL

WELL/SAMPLE POINT **G224**

Purge Method: low Flow/sub Pump

Date: 2/24/22 Start Time: 15:22 Finish/Sample Time: 16:10

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: _____ Gal / L

Depth to Water From MP: 41.77 ft Total Purge Volume: 2.0 Gal (1)

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: _____ ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	15:40	41.80	100	7.35	1220.8	11.89	-9.4	1.80	583.1
2	15:42	41.80	100	7.36	1210.1	11.86	-28.7	1.35	605.3
3	15:44	41.80	100	7.36	1206.5	11.92	-30.1	1.33	532.8
4	15:46	41.80	100	7.38	1208.8	11.97	-32.8	1.38	536.1
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT600 762098

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☒ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	
Casing locked/secure	☒	
Well cap fits securely.	☒	
Good seal/drainage	☒	
Well has weep holes		☒

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
2	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>500</u>
1	General <u>0, 1000</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 41.80 ft

Comments

Sampler's Signature: [Signature]

NEWTON CCR LANDFILL

WELL/SAMPLE POINT **G230**

Purge Method: Bladder Pump

Date: 2/23/2022 Start Time: 15:20 Finish/Sample Time: 16:16

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: _____ Gal / L

Depth to Water From MP: 47.74 ft Total Purge Volume: 1.5 Gal ①

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: _____ ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	15:38	47.86	100	7.61	1734.6	11.05	-96.4	0.70	79.62
2	15:40	47.86	100	7.58	1837.1	11.03	-99.3	0.57	65.21
3	15:42	47.87	100	7.58	1848.2	11.01	-99.9	0.50	64.54
4	15:44	47.87	100	7.55	1849.0	11.10	-103.2	0.44	49.21
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT600 #449186

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	
Casing locked/secure	☒	
Well cap fits securely.	☒	
Good seal/drainage	☒	
Well has weep holes	☒	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) <u>150mL</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 47.87 ft

Comments

Sampler's Signature: [Signature]

NEWTON CCR LANDFILL

WELL/SAMPLE POINT G231

Purge Method: Low-flow

Date: 2/23/22 Start Time: 1357 Finish/Sample Time: 1454

Well Depth (Bottom) From MP: - ft
 Depth to Water From MP: 47.23 ft
 Water Column Length: - ft
 Well Water Volume: - Gal / L
 Min. Purge Volume: - Gal / L
 Total Purge Volume: 2.6 Gal / L
 Max Drawdown: - ft
 Total Drawdown: 0.04 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1419	47.27	100	8.01	1278.9	9.08	-80.7	0.20	55.11
2	1421	47.27	100	7.97	1269.1	9.15	-83.1	0.18	55.66
3	1423	47.27	100	7.94	1260.8	9.08	-84.5	0.18	56.65
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

Aquatrol 600 #846000

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	
Casing locked/secure	☒	
Well cap fits securely.	☒	
Good seal/drainage	☒	
Well has weep holes	☒	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P,250 mL) <u>1000 mL</u>
	<u>init 2/23/22</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 47.27 ft

Comments

Sampler's Signature: [Signature]

NEWTON CCR LANDFILL

WELL/SAMPLE POINT G232

Purge Method: bt Low-flow

Date: 2/23/22 Start Time: 1216 Finish/Sample Time: 1316

Well Depth (Bottom) From MP: - ft Min. Purge Volume: - Gal / L

Depth to Water From MP: 45.59 ~~45.67~~ ft ^{2/23/22} Total Purge Volume: 2.5 Gal ¹⁰

Water Column Length: - ft Max Drawdown: - ft

Well Water Volume: - Gal / L Total Drawdown: 0.00 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1237	45.59	100	7.70	1262.7	8.76	-136.9	0.11	53.45
2	1239	45.59	100	7.69	1248.6	8.69	-138.2	0.10	56.70
3	1241	45.59	100	7.68	1243.1	8.67	-138.9	0.10	52.44
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

Aquatrak 600 #846000

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
-	VOAs (C,V, 40mL, HCL)
-	VOAS (C,V, 40mL)
-	Organics (A,G,U 1000mL)
-	Organics (A,G,U 500mL)
-	TOC (A,V 40mL, H2SO4)
-	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
-	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) <u>1000mL</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 45.59 ft

Comments

Sampler's Signature: [Signature]

NEWTON CCR LANDFILL

WELL/SAMPLE POINT G233

Purge Method: Low-Flow

Date: 2/22/22 Start Time: 1603 Finish/Sample Time: 1650

Well Depth (Bottom) From MP: 70.82 ft Min. Purge Volume: 1.5 Gal (L)

Depth to Water From MP: 41.30 ft Total Purge Volume: 1.7 Gal (L)

Water Column Length: 29.52 ft Max Drawdown: — ft

Well Water Volume: 17.85 Gal (L) Total Drawdown: 1.56 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1603	41.30	100	—	—	—	—	—	—
2	1618	42.80	100	7.38	2304	12.34	-79.3	0.21	106.45
3	1619	42.80	100	7.38	2315.2	12.37	-88.5	0.20	63.12
4	1620	42.80	100	7.38	2315.1	12.39	-93.0	0.19	65.49
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT-600, 846000

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	General (P, 1000mL)

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 42.86 ft

Comments

Sampler's Signature:

NEWTON CCR LANDFILL

WELL/SAMPLE POINT G234

Purge Method: Low-flow

Date: 2/22/22 Start Time: 1530 Finish/Sample Time: 1600

Well Depth (Bottom) From MP: 70.64 ft Min. Purge Volume: 1.5 Gal (L)

Depth to Water From MP: 42.40 ft Total Purge Volume: 2.8 Gal (L)

Water Column Length: 28.24 ft Max Drawdown: — ft

Well Water Volume: 17.08 Gal (L) Total Drawdown: 0.18 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1530	42.40	150	—	—	—	—	—	—
2	1540	42.58	150	7.70	1431.1	13.00	-82.1	0.22	147.06
3	1541	42.58	150	7.68	1421.3	13.00	-88.7	0.20	128.71
4	1542	42.58	150	7.66	1399.9	13.01	-96.1	0.17	143.34
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT-600, 846000

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

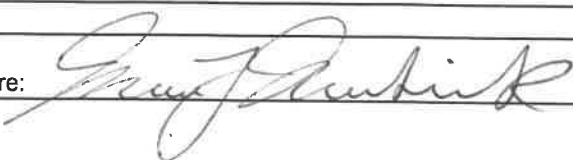
BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	General (P, 1000 mL)

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 42.58 ft

Comments

Sampler's Signature: 

NEWTON CCR LANDFILL

WELL/SAMPLE POINT L301

Purge Method: Hand Pump

Date: 2/23/12 Start Time: 16:22 Finish/Sample Time: 16:51

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: _____ Gal / L
 Depth to Water From MP: N/A ft Total Purge Volume: 1.5 Gal / L
 Water Column Length: _____ ft Max Drawdown: _____ ft
 Well Water Volume: _____ Gal / L Total Drawdown: _____ ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	16:32	N/A	10.1	10.36	5189.6	9.92	115.8	0.29	0.60
2	16:34	N/A	10.2	10.43	5264.1	9.96	-121.4	0.24	0.60
3	16:36	N/A	10.2	10.43	5231.1	9.91	-130.1	0.69	0.6
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: ATC #449186

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign		
Casing locked/secure	☒	
Well cap fits securely.		
Good seal/drainage		
Well has weep holes		

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL) <u>1000</u>

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: N/A ft

Comments

Sampler's Signature: [Signature]

SITE

NEWTON PHASE 1

WELL/SAMPLE POINT

L1R

Date: 2/9/02 Start Time: 1210 Finish/Sample Time: 1226Well Depth (Bottom) From MP: 58.46 ftDepth to Water: 54.64 ft

pH	Spec Con	Temp	DO	Turbidity	ORP
s.u.	umhos/cm	deg C	mg/L	NTU	mV
10.82	>1000	15.72	1.97	>1000	Turb

Sampled with: Bailer

Sample Appearance: Odor: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Color: ☐ None ☐ Slight ☐ Mod. ☒ Strong

Turb: ☐ None ☐ Slight ☒ Mod. ☒ Strong

Weather:/Environment

Remarks:

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
3	TOC (A,V, 40mL, H2SO4)
1	Phenols (A,G,250mL, H2SO4)
1	Ammonia (P, 250mL, H2SO4)
1	Metal (P, 250 mL HNO3)
	General (P, 500 mL)
1	General (P, 1000mL)

Comments: 47.5 * 1000 = 47,500 umhos/cm. Spec con + turb are over 1000.

Sampler's Signature: 

Multiparameter Meter Field Calibration Checklist

Field Personnel: <i>MJN</i>	Date: <i>3/19/22</i>
Weather conditions: <i>30-43°, sunny</i>	Signature: <i>[Signature]</i>
Make/Model: <i>AquaTroll 600</i>	S/N: <i>846000</i>

Instrument unpacked/RDO sensor installed from storage solution and rinsed with pH 4 buffer then triple rinsed with DI water prior. Instrument then subjected to calibration check/calibration regiment (pH 4, then pH 7, then pH 10, followed by Spec Con., ORP, and RDO) instrument and calibration cup rinsed between each buffer.

Sources

pH Buffers					
Primary Source:					
pH: 4a	4.00	pH: 7a	7.00	pH: 10a	10.00
Range:	+/- 0.02	Range:	+/- 0.02	Range:	+/- 0.02
Manufacturer:	MSI	Manufacturer:	MSI	Manufacturer:	MSI
Lot #:	L159-11	Lot #:	L146-06	Lot #:	K344-09
exp:	10-Jun-23	exp:	1-Jun-23	exp:	17-Dec-22

Secondary Source:					
pH: 4b	4.00	pH: 7b	7.00	pH: 10b	10.00
Range:	+/- 0.01	Range:	+/- 0.01	Range:	+/- 0.01
Manufacturer:	Geotech	Manufacturer:	Geotech	Manufacturer:	Geotech
Lot #:	1GD680	Lot #:	0GJ268	Lot #:	0GJ170
exp:	Apr-23	exp:	Oct-22	exp:	Oct-22

Spec Con.					
µS/cm: DI water	0	µS/cm: SC1000	1000	µS/cm: SC2000	2000
Range:	Not Measured	Range:	+/- 1	Range:	+/- 1 %
Manufacturer:	PDC Laboratories, Inc	Manufacturer:	RICCA Chemical	Manufacturer:	Geotech
Received:		Lot #:	4101A25	Lot #:	1GF629
		exp:	Dec-22	exp:	Jun-22

RDO	Sodium Sulfite in DI Water	ORP	Zobell's Standard
Value:	0	Value*:	
Range:	+/- 0.01	Range:	+/- 10 mV
Manufacturer:	Fisher Chemical	Manufacturer:	In-Situ
Lot #:	168261	Lot #:	1GF668
Prepared by:	PDC Tech Services, Inc:	exp:	Mar-22

Turbidity (if required)					
0 NTU	0 (DI Water)	1 NTU	1	10 NTU	10
Range:	Not Measured	Range:		Range:	
Manufacturer:	PDC Laboratories, Inc	Manufacturer:		Manufacturer:	
Lot #:	NA	Lot #:		Lot #:	
exp:	NA	exp:		exp:	

Notes: *See bottle for chart of values based on Temperature

Multiparameter Meter Calibration Checklist (continued)

Values are tested at the beginning of the day, at mid-day, and at the end of the day to document potential drift.
CCV checks are conducted ~ every 4 hours, unless only one well is read then is not required.

Initial Calibration Check/Calibration: 0908

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	4.05	s.u.	±0.1 s.u.	P	N	N/A
7a	7.04	s.u.	±0.1 s.u.	P	N	N/A
10a	10.06	s.u.	±0.1 s.u.	P	N	N/A
SC Zero (DI)	6.87	µS/cm	0<25 µS/cm	P	N	N/A
SC 2000	2031	µS/cm	±5%	P	N	N/A
ORP	236	mV	±15 mV	P	N	N/A
DO (Zero pt)	0.04	mg/L	±0.1	P	N	N/A
DO (Saturated)	97.89	%	97-100%	P	N	N/A
Turbidity (DI)	0.00	NTU	<2 NTU	P	N	N/A

ICV (Initial Calibration Verification)

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.01	s.u.	±0.15 s.u.	P	N/A
7b	6.98	s.u.	±0.15 s.u.	P	N/A
10b	9.98	s.u.	±0.15 s.u.	P	N/A
SC1000	988	µS/cm	±5%	P	N/A

CCV (Continued Calibration Verification):

1110

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.08	s.u.	±0.1 s.u.	P	N	N/A
7	7.09	s.u.	±0.1 s.u.	P	N	N/A
10	10.08	s.u.	±0.1 s.u.	P	N	N/A
SC 1000	1047	µS/cm	±5%	P	N	N/A
DO (Zero pt)	0.09	mg/L	±0.1 mg/L	P	N	N/A
Turbidity (DI)	0.00	NTU	<2 NTU	P	N	N/A

CCV (Continued Calibration Verification):

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4		s.u.	±0.1 s.u.			
7		s.u.	±0.1 s.u.			
10		s.u.	±0.1 s.u.			
SC 1000		µS/cm	±5%			
DO (Zero pt)		mg/L	±0.1 mg/L			
Turbidity (DI)		NTU	<2 NTU			

Comments:

Signature:

Date:

Multiparameter Meter Field Calibration Checklist

Field Personnel	Joe Reed	Date:	2/9/22
Weather conditions:	30°-43°F Sunny	Signature:	Joseph A Reed
Make/Model:	Aqua Troll 600	S/N	NF8A6465

Instrument unpacked/RDO sensor installed from storage solution and rinsed with pH 4 buffer then triple rinsed with DI water prior. Instrument then subjected to calibration check/calibration regiment (pH 4, then pH 7, then pH 10, followed by Spec Con., ORP, and RDO) instrument and calibration cup rinsed between each buffer.

Sources

pH Buffers					
Primary Source:					
pH: 4a	4.00	pH: 7a	7.00	pH: 10a	10.00
Range:	+/- 0.02	Range:	+/- 0.02	Range:	+/- 0.02
Manufacturer:	MSI	Manufacturer:	MSI	Manufacturer:	MSI
Lot #:	L159-11	Lot #:	L146-06	Lot #:	K344-09
exp:	10-Jun-23	exp:	1-Jun-23	exp:	17-Dec-22

Secondary Source:					
pH: 4b	4.00	pH: 7b	7.00	pH: 10b	10.00
Range:	+/- 0.01	Range:	+/- 0.01	Range:	+/- 0.01
Manufacturer:	Geotech	Manufacturer:	Geotech	Manufacturer:	Geotech
Lot #:	1GD680	Lot #:	0GJ268	Lot #:	0GJ170
exp:	Apr-23	exp:	Oct-22	exp:	Oct-22

Spec Con.					
µS/cm: DI water	0	µS/cm: SC1000	1000	µS/cm: SC2000	2000
Range:	Not Measured	Range:	+/- 1	Range:	+/- 1 %
Manufacturer:	PDC Laboratories, Inc	Manufacturer:	RICCA Chemical	Manufacturer:	Geotech
Received:		Lot #:	4101A25	Lot #:	1GF629
		exp:	Dec-22	exp:	Jun-22

RDO	Sodium Sulfite in DI Water	ORP	Zobell's Standard
Value:	0	Value*:	
Range:	+/- 0.01	Range:	+/- 10 mV
Manufacturer:	Fisher Chemical	Manufacturer:	In-Situ
Lot #:	168261	Lot #:	1GF668
Prepared by:	PDC Tech Services, Inc:	exp:	Mar-22

Turbidity (if required)					
0 NTU	0 (DI Water)	1 NTU	1	10 NTU	10
Range:	Not Measured	Range:		Range:	
Manufacturer:	PDC Laboratories, Inc	Manufacturer:		Manufacturer:	
Lot #:	NA	Lot #:		Lot #:	
exp:	NA	exp:		exp:	

Notes: *See bottle for chart of values based on Temperature

Multiparameter Meter Calibration Checklist (continued)

Values are tested at the beginning of the day, at mid-day, and at the end of the day to document potential drift.
CCV checks are conducted ~ every 4 hours, unless only one well is read then is not required.

Initial Calibration Check/Calibration:

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	4	s.u.	±0.1 s.u.	Used	Factory	Liquid
7a		s.u.	±0.1 s.u.			
10a		s.u.	±0.1 s.u.			
SC Zero (DI)		µS/cm	0<25 µS/cm			
SC 2000		µS/cm	±5%			
ORP	238.0	mV	±15 mV			
DO (Zero pt)		mg/L	±0.1	DO = 9.38		
DO (Saturated)		%	97-100%			
Turbidity (DI)	0.0	NTU	<2 NTU			

ICV (Initial Calibration Verification)

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b		s.u.	±0.15 s.u.		
7b		s.u.	±0.15 s.u.		
10b		s.u.	±0.15 s.u.		
SC1000		µS/cm	±5%		

CCV (Continued Calibration Verification):

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4		s.u.	±0.1 s.u.			
7		s.u.	±0.1 s.u.			
10		s.u.	±0.1 s.u.			
SC 1000		µS/cm	±5%			
DO (Zero pt)		mg/L	±0.1 mg/L			
Turbidity (DI)		NTU	<2 NTU			

CCV (Continued Calibration Verification):

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4		s.u.	±0.1 s.u.			
7*		s.u.	±0.1 s.u.			
10		s.u.	±0.1 s.u.			
SC 1000		µS/cm	±5%			
DO (Zero pt)		mg/L	±0.1 mg/L			
Turbidity (DI)		NTU	<2 NTU			

Comments:

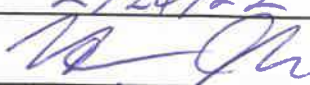
Signature:

Date:

Joseph R. Rad

2/9/22

Multiparameter Meter Field Calibration Checklist

Field Personnel	Matt Julien, Lake George		Date:	2/24/22	
Weather conditions:	27°-32°F cloudy wind NNE 0-4mph		Signature:		
Make/Model	AquaTroll 600		S/N	449186	
Instrument unpacked/RDO sensor installed from storage solution and rinsed with pH 4 buffer then triple rinsed with DI water prior. Instrument then subjected to calibration check/calibration regiment (pH 4, then pH 7, then pH 10, followed by Spec Con., ORP, and RDO) instrument and calibration cup rinsed between each buffer.					
Sources					
pH Buffers					
Primary Source:					
pH: 4a	4.00	pH: 7a	7.00	pH: 10a	10.00
Range:	+/- 0.02	Range:	+/- 0.02	Range:	+/- 0.02
Manufacturer:	MSI	Manufacturer:	MSI	Manufacturer:	MSI
Lot #:	L159-11	Lot #:	L146-06	Lot #:	K344-09
exp:	10-Jun-23	exp:	1-Jun-23	exp:	17-Dec-22
Secondary Source:					
pH: 4b	4.00	pH: 7b	7.00	pH: 10b	10.00
Range:	+/- 0.01	Range:	+/- 0.01	Range:	+/- 0.01
Manufacturer:	Geotech	Manufacturer:	Geotech	Manufacturer:	Geotech
Lot #:	1GD680	Lot #:	0GJ268	Lot #:	0GJ170
exp:	Apr-23	exp:	Oct-22	exp:	Oct-22
Spec Con.					
µS/cm: DI water	0	µS/cm: SC1000	1000	µS/cm: SC2000	2000
Range:	Not Measured	Range:	+/- 1	Range:	+/- 1 %
Manufacturer:	PDC Laboratories, Inc	Manufacturer:	RICCA Chemical	Manufacturer:	Geotech
Received:		Lot #:	4101A25	Lot #:	1GF629
		exp:	Dec-22	exp:	Jun-22
RDO					
Value:	Sodium Sulfite in DI Water		Value*:	Zobell's Standard	
Range:	+/- 0.01		Range:	+/- 10 mV	
Manufacturer:	Fisher Chemical		Manufacturer:	In-Situ	
Lot #:	168261		Lot #:	1GF668	
Prepared by:	PDC Tech Services, Inc:		exp:	Mar-22	
Turbidity (if required)					
0 NTU	0 (DI Water)	1 NTU	1	10 NTU	10
Range:	Not Measured	Range:		Range:	
Manufacturer:	PDC Laboratories, Inc	Manufacturer:		Manufacturer:	
Lot #:	NA	Lot #:		Lot #:	
exp:	NA	exp:		exp:	
Notes:					
*See bottle for chart of values based on Temperature					

Multiparameter Meter Calibration Checklist (continued)

Values are tested at the beginning of the day, at mid-day, and at the end of the day to document potential drift.

CCV checks are conducted ~ every 4 hours, unless only one well is read then is not required.

Initial Calibration Check/Calibration:

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	4.00	s.u.	±0.1 s.u.	Pass	No	N/A
7a	7.06	s.u.	±0.1 s.u.			
10a	10.04	s.u.	±0.1 s.u.			
SC Zero (DI)	23.46	µS/cm	0<25 µS/cm			
SC 2000	2016.3	µS/cm	±5%			
ORP	234.3016	mV	±15 mV			
DO (Zero pt)	0.06	mg/L	±0.1			
DO (Saturated)	99.25	%	97-100%			
Turbidity (DI)	0.00	NTU	<2 NTU			

ICV (Initial Calibration Verification)

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.01	s.u.	±0.15 s.u.	Pass	None
7b	6.88	s.u.	±0.15 s.u.		
10b	10.06	s.u.	±0.15 s.u.		
SC1000	1014.3	µS/cm	±5%		

CCV (Continued Calibration Verification):

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.03	s.u.	±0.1 s.u.	Pass	No	N/A
7	7.08	s.u.	±0.1 s.u.			
10	10.07	s.u.	±0.1 s.u.			
SC 1000	1007.9	µS/cm	±5%			
DO (Zero pt)	0.07	mg/L	±0.1 mg/L			
Turbidity (DI)	0.00	NTU	<2 NTU			

CCV (Continued Calibration Verification):

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4		s.u.	±0.1 s.u.			
7*		s.u.	±0.1 s.u.			
10		s.u.	±0.1 s.u.			
SC 1000		µS/cm	±5%			
DO (Zero pt)		mg/L	±0.1 mg/L			
Turbidity (DI)		NTU	<2 NTU			

Comments:

MK 2/24/22

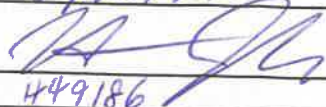
Signature:

[Handwritten Signature]

Date:

2/24/22

Multiparameter Meter Field Calibration Checklist

Field Personnel	MATT JULIEN		Date:	2/28/22	
Weather conditions:	45-55°F sunny wind S 5-15 mph		Signature:		
Make/Model	AquaTroll 600		S/N	449186	
Instrument unpacked/RDO sensor installed from storage solution and rinsed with pH 4 buffer then triple rinsed with DI water prior. Instrument then subjected to calibration check/calibration regiment (pH 4, then pH 7, then pH 10, followed by Spec Con., ORP, and RDO) instrument and calibration cup rinsed between each buffer.					
Sources					
pH Buffers					
Primary Source:					
pH: 4a	4.00	pH: 7a	7.00	pH: 10a	10.00
Range:	+/- 0.02	Range:	+/- 0.02	Range:	+/- 0.02
Manufacturer:	MSI	Manufacturer:	MSI	Manufacturer:	MSI
Lot #:	L159-11	Lot #:	L146-06	Lot #:	K344-09
exp:	10-Jun-23	exp:	1-Jun-23	exp:	17-Dec-22
Secondary Source:					
pH: 4b	4.00	pH: 7b	7.00	pH: 10b	10.00
Range:	+/- 0.01	Range:	+/- 0.01	Range:	+/- 0.01
Manufacturer:	Geotech	Manufacturer:	Geotech	Manufacturer:	Geotech
Lot #:	1GD680	Lot #:	0GJ268	Lot #:	0GJ170
exp:	Apr-23	exp:	Oct-22	exp:	Oct-22
Spec Con.					
µS/cm: DI water	0	µS/cm: SC1000	1000	µS/cm: SC2000	2000
Range:	Not Measured	Range:	+/- 1	Range:	+/- 1 %
Manufacturer:	PDC Laboratories, Inc	Manufacturer:	RICCA Chemical	Manufacturer:	Geotech
Received:		Lot #:	4101A25	Lot #:	1GF629
		exp:	Dec-22	exp:	Jun-22
RDO					
Sodium Sulfite in DI Water		ORP		Zobell's Standard	
Value:	0	Value*:			
Range:	+/- 0.01	Range:		+/- 10 mV	
Manufacturer:	Fisher Chemical	Manufacturer:		In-Situ	
Lot #:	168261	Lot #:		1GF668	
Prepared by:	PDC Tech Services, Inc:	exp:		Mar-22	
Turbidity (if required)					
0 NTU	0 (DI Water)	1 NTU	1	10 NTU	10
Range:	Not Measured	Range:		Range:	
Manufacturer:	PDC Laboratories, Inc	Manufacturer:		Manufacturer:	
Lot #:	NA	Lot #:		Lot #:	
exp:	NA	exp:		exp:	
Notes:					
*See bottle for chart of values based on Temperature					

Multiparameter Meter Calibration Checklist (continued)

Values are tested at the beginning of the day, at mid-day, and at the end of the day to document potential drift. CCV checks are conducted ~ every 4 hours, unless only one well is read then is not required.

Initial Calibration Check/Calibration: 11/58

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	3.98	s.u.	±0.1 s.u.	Pass	YES	4.00
7a	7.10	s.u.	±0.1 s.u.	Pass	↓	7.00
10a	10.19	s.u.	±0.1 s.u.	Fail	↓	10.00
SC Zero (DI)	15.49	µS/cm	0<25 µS/cm	Pass	No	N/A
SC 2000	1968.7	µS/cm	±5%	↓	↓	↓
ORP	232.1 @ 24°C	mV	±15 mV	↓	↓	↓
DO (Zero pt)	0.03	mg/L	±0.1	↓	↓	↓
DO (Saturated)	99.78	%	97-100%	↓	↓	↓
Turbidity (DI)	0.60	NTU	<2 NTU	↓	↓	↓

ICV (Initial Calibration Verification) 12/12

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.01	s.u.	±0.15 s.u.	Pass	None
7b	6.85	s.u.	±0.15 s.u.	↓	↓
10b	9.88	s.u.	±0.15 s.u.	↓	↓
SC1000	1010.7	µS/cm	±5%	↓	↓

CCV (Continued Calibration Verification): 1900

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.00	s.u.	±0.1 s.u.	Pass	No	N/A
7	7.02	s.u.	±0.1 s.u.	↓	↓	↓
10	10.03	s.u.	±0.1 s.u.	↓	↓	↓
SC 1000	1013.4	µS/cm	±5%	↓	↓	↓
DO (Zero pt)	0.03	mg/L	±0.1 mg/L	↓	↓	↓
Turbidity (DI)	0.78	NTU	<2 NTU	↓	↓	↓

CCV (Continued Calibration Verification):

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4		s.u.	±0.1 s.u.			
7*		s.u.	±0.1 s.u.			
10		s.u.	±0.1 s.u.			
SC 1000		µS/cm	±5%			
DO (Zero pt)		mg/L	±0.1 mg/L			
Turbidity (DI)		NTU	<2 NTU			
Comments:						

Signature:

[Signature]

Date:

2/28/22

2/15
2/28/22



REGULATORY PROGRAM (CIRCLE):

VPDES

IORECA

TACO: RES OR IND/COMM

CHAIN OF CUSTODY RECORD

STATE WHERE SAMPLE COLLECTED IL

[illegible]

CHAIN OF CUSTODY # 1
DATE: 2/28/22
PAGE: 1 OF 1

[illegible]



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

October 07, 2022

Terry Hanratty
Vistra - Newton
Newton Energy Center 6725 N. 500th St
Newton, IL 62448

Dear Terry Hanratty:

Please find enclosed the analytical results for the sample(s) the laboratory received. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of Pace Analytical Services, LLC.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

Pace Analytical Services appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the Director of Client Services, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Sincerely,

Gail Schindler

Gail Schindler
Project Manager
(309) 692-9688 x1716
gail.schindler@pacelabs.com

**SAMPLE RECEIPT CHECK LIST**

Items not applicable will be marked as in compliance

Work Order FE04680

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided



Work Order FE05162

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided



Work Order FE05250

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided



Work Order FF03210

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided



ANALYTICAL RESULTS

Sample: FE04680-02
Name: R217D
Alias: NEW_811_502

Sampled: 05/24/22 11:40
Received: 05/24/22 17:46
Matrix: Ground Water - Grab
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
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Total Metals - PIA

Boron	200	ug/L		06/15/22 09:38	5	10	06/16/22 13:48	JMW	EPA 6020A
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Sample: FE05162-08
Name: G220
Alias: NEW_811_502

Sampled: 05/25/22 15:17
Received: 05/26/22 13:13
Matrix: Ground Water - Grab
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
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Total Metals - PIA

Boron	260	ug/L		06/15/22 09:38	5	10	06/16/22 13:52	JMW	EPA 6020A
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Sample: FE05162-10
Name: G222
Alias: NEW_811_502

Sampled: 05/25/22 12:59
Received: 05/26/22 13:13
Matrix: Ground Water - Grab
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
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General Chemistry - PIA

Fluoride	1.18	mg/L		06/15/22 14:07	1	0.250	06/15/22 14:07	TTH	SM 4500F C 1997
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Sample: FE05250-02
Name: G208
Alias: NEW_811_502

Sampled: 05/26/22 10:42
Received: 05/26/22 16:00
Matrix: Ground Water - Grab
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
-----------	--------	------	-----------	----------	----------	-----	----------	---------	--------

General Chemistry - PIA

Fluoride	1.28	mg/L		06/01/22 14:52	1	0.250	06/01/22 14:52	TTH	SM 4500F C 1997
----------	------	------	--	----------------	---	-------	----------------	-----	-----------------

Total Metals - PIA

Boron	200	ug/L		06/15/22 09:38	5	10	06/16/22 13:56	JMW	EPA 6020A
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ANALYTICAL RESULTS

Sample: FE05250-05

Name: G223

Alias: NEW_811_502

Sampled: 05/26/22 11:22

Received: 05/26/22 16:00

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Sulfate	730	mg/L		06/15/22 14:01	250	250	06/15/22 14:01	CJP	EPA 300.0 REV 2.1

Sample: FF03210-01

Name: G06D

Alias: NEW_811_503

Sampled: 06/15/22 14:40

Received: 06/16/22 09:40

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Total Metals - PIA									
Boron	180	ug/L		06/27/22 08:41	5	15	06/28/22 12:23	JMW	EPA 6020A



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B234154 - No Prep - SM 4500F C 1997</u>									
Calibration Blank (B234154-CCB1)				Prepared & Analyzed: 06/01/22					
Fluoride	0.00700	mg/L							
Calibration Blank (B234154-CCB2)				Prepared & Analyzed: 06/01/22					
Fluoride	0.0200	mg/L							
Calibration Check (B234154-CCV1)				Prepared & Analyzed: 06/01/22					
Fluoride	0.711	mg/L		0.7000		102	90-110		
Calibration Check (B234154-CCV2)				Prepared & Analyzed: 06/01/22					
Fluoride	0.697	mg/L		0.7000		100	90-110		
<u>Batch B235370 - SW 3015 - EPA 6020A</u>									
Blank (B235370-BLK1)				Prepared: 06/15/22 Analyzed: 06/16/22					
Boron	< 10	ug/L							
LCS (B235370-BS1)				Prepared: 06/15/22 Analyzed: 06/16/22					
Boron	558	ug/L		555.6		100	80-120		
<u>Batch B235398 - No Prep - SM 4500F C 1997</u>									
Calibration Blank (B235398-CCB1)				Prepared & Analyzed: 06/15/22					
Fluoride	0.0130	mg/L							
Calibration Blank (B235398-CCB2)				Prepared & Analyzed: 06/15/22					
Fluoride	0.00900	mg/L							
Calibration Check (B235398-CCV1)				Prepared & Analyzed: 06/15/22					
Fluoride	0.663	mg/L		0.7000		95	90-110		
Calibration Check (B235398-CCV2)				Prepared & Analyzed: 06/15/22					
Fluoride	0.693	mg/L		0.7000		99	90-110		
<u>Batch B235539 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B235539-CCB1)				Prepared & Analyzed: 06/15/22					
Sulfate	0.0456	mg/L							
Calibration Check (B235539-CCV1)				Prepared & Analyzed: 06/15/22					
Sulfate	4.89	mg/L		5.000		98	90-110		
<u>Batch B236361 - SW 3015 - EPA 6020A</u>									
Blank (B236361-BLK1)				Prepared: 06/27/22 Analyzed: 06/28/22					
Boron	< 10	ug/L							
LCS (B236361-BS1)				Prepared: 06/27/22 Analyzed: 06/28/22					
Boron	558	ug/L		555.6		100	80-120		



NOTES

Specifications regarding method revisions, method modifications, and calculations used for analysis are available upon request. Please contact your project manager.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050

TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615

TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553

Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)

Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807

USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050

Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050



Certified by: Gail Schindler, Project Manager

Site: Newton Phase 2

WELL/SAMPLE POINT G208

Purge Method: Low-flow/Bladder

Date: 5/26/22 Start Time: 0930 Finish/Sample Time: 1042

Well Depth (Bottom) From MP: 98.30 ft
 Depth to Water From MP: 24.49 ft
 Water Column Length: 73.81 ft
 Well Water Volume: 44.70 Gal 10
 Min. Purge Volume: N/A Gal / L
 Total Purge Volume: 2.4 Gal 10
 Max Drawdown: N/A ft
 Total Drawdown: 36.19 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	0950	28.43	100	7.06	1413.2	15.36	-148.0	0.11	2.14
2	0952	28.72	100	7.05	1409.9	15.31	-149.9	0.10	2.38
3	0954	29.02	100	7.05	1410.4	15.34	-151.9	0.09	2.39
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

NA
5/26/22

Field Meter:

AT 600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☐	☒
Good seal/drainage	☐	☒
Well has weep holes	☐	☒

BOTTLE INFORMATION:

Qty	Bottles
3	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
1	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL)
1	General (P, 500mL)
1	Ammonia
1	Q+O

Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: _____ ft

Comments drawdown did not stabilize. slow recharge

Sampler's Signature: _____

Site: Newton Phase 2

WELL/SAMPLE POINT R217D

Purge Method: BLADDER

Date: 05/24/22 Start Time: 1050 Finish/Sample Time: 1140

Well Depth (Bottom) From MP: 71.70 ft
 Depth to Water From MP: 19.27 ft
 Water Column Length: 52.43 ft
 Well Water Volume: 31.75 Gal / L
 Min. Purge Volume: 1.5 Gal / L
 Total Purge Volume: 1.5 Gal / L
 Max Drawdown: 0.28 ft
 Total Drawdown: 0.28 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1109	19.93	100	6.067	4027.0	16.34	38.10	1.42	356.05
2	1110	19.71	100	6.068	4029.40	16.27	38.70	1.61	402.59
3	1111	19.68	100	6.068	4030.50	16.19	35.90	1.70	508.05
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

AT 600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
3	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
1	Organics (A,G,U 1000mL) <u>HCL</u>
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
1	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL)
1	<u>AMMONIA P 250mL H2SO4</u>
1	<u>GENERAL P 250mL</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 19.55 ft

Comments

Sampler's Signature: [Signature]

Site: Newton Phase 2

WELL/SAMPLE POINT G220

Purge Method: BLADDER

Date: 05/25/20 Start Time: 1420 Finish/Sample Time: 1517

Well Depth (Bottom) From MP: 88.95 ft

Min. Purge Volume: Gal / L

Depth to Water From MP: 17.13 ft

Total Purge Volume: 1.5 Gal

Water Column Length: 71.82 ft

Max Drawdown: ft

Well Water Volume: 43.50 Gal / L

Total Drawdown: 9.92 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1448	80.05	100	7.09	1334.40	20.61	145.20	0.00	26.26
2	1449	80.30	100	7.05	1333.80	19.98	135.40	0.00	29.71
3	1450	80.41	100	7.02	1325.90	19.32	132.70	0.00	28.25
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
3	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
1	Organics (A,G, 1000mL) <u>HCL</u>
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
1	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL)
1	<u>GENERAL P 500mL</u>
1	<u>Ammonia P 250mL H2SO4</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 27.05 ft

Comments

Sampler's Signature: [Signature]

Site: Newton Phase 2

WELL/SAMPLE POINT G222

Purge Method: BLANDER

Date: 05/25/02 Start Time: 1145 Finish/Sample Time: 1259

Well Depth (Bottom) From MP: 82.00 ft
 Depth to Water From MP: 14.81 ft
 Water Column Length: 67.19 ft
 Well Water Volume: 40.70 Gal 10
 Min. Purge Volume: — Gal / L
 Total Purge Volume: 1.5 Gal 10
 Max Drawdown: — ft
 Total Drawdown: 8.58 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1219	17.90	100	7.44	188.30	17.11	145.40	0.11	23.77
2	1220	18.03	100	7.42	184.60	17.88	144.00	0.13	21.80
3	1221	18.10	100	7.42	184.50	18.52	142.80	0.15	13.88
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

AT 600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
3	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
1	Organics (A,G, 1000mL) <u>HCL</u>
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
1	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL)
1	<u>GENERAL P 500mL</u>
1	<u>AMMONIA P 250mL H2SO4</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 23.39 ft

Comments

Sampler's Signature: [Signature]

Site: Newton Phase 2

WELL/SAMPLE POINT G223

Purge Method: bladder

Date: 5/26/2022 Start Time: 1013 Finish/Sample Time: 1122

Well Depth (Bottom) From MP: 91.90 ft
 Depth to Water From MP: 32.59 ft
 Water Column Length: 59.31 ft
 Well Water Volume: 35.87 Gal (L)
 Min. Purge Volume: — Gal / L
 Total Purge Volume: 1000 Gal / L (mL)
 Max Drawdown: — ft
 Total Drawdown: 3.08 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1034	34.56	100	7.12	3272	16.2	-146.7	0.39	3.5
2	1036	34.56	100	7.14	3284	16.3	-148.7	0.245	2.5
3	1038	34.56	100	7.01	3284	16.5	-182.5	0.75	2.4
4	1040	34.58	100	7.00	3283	16.4	-189.8	0.69	1.9
5	1042	34.58	100	7.00	3287	16.4	-193.0	0.61	1.6
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: A7600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☐	☒
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
3	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
1	Organics (A,G,U 1000mL) <u>0.6 (1)</u>
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
1	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL)
1	Ammonia (P, 250mL, H2SO4)
1	General (P, 500mL)

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 35.67 ft

Comments Amb in air line

Sampler's Signature: [Signature]

Site: Newton Phase 1

WELL/SAMPLE POINT G06D

Purge Method: Low-flow / Bladder

Date: 6/15/22 Start Time: 1408 Finish/Sample Time: 1440

Well Depth (Bottom) From MP: NA ft Min. Purge Volume: NA Gal / L

Depth to Water From MP: 28.64 ft Total Purge Volume: 1.9 Gal Ⓛ

Water Column Length: NA ft Max Drawdown: NA ft

Well Water Volume: NA Gal / L Total Drawdown: 3.15 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1429	31.59	100	7.06	1478.7	17.72	-147.7	0.00	55.06
2	1431	30.68	100	7.03	1485.6	17.69	-147.5	0.00	51.47
3	1433	30.78	100	7.01	1500.9	17.73	-147.5	0.00	50.34
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

AT 600 # 606127

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	/	
Casing locked/secure	/	
Well cap fits securely.	/	
Good seal/drainage	/	
Well has weep holes	/	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 31.79 ft

Comments

Drawdown did not stabilize, slow recovery

Sampler's Signature:

[Signature]

Multiparameter Meter Field Calibration Checklist

Field Personnel: JR, AP, AM				Location: Newton			
Weather: Sunny 73°F wind E 12 mph				Environment: grass, mud			
Multiparameter Water Meter		Make: AquaTroll	Model: 600	Serial Number: 846000			
Water Level Meter		Make:	Model:	Serial Number:			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.09	s.u.	±0.1 s.u.	Pass	NA	NA	MSI	L315-04	11/22/2023
pH 7.00a	7.01	s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
pH 10.00a	10.00	s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC Zero (DI)	20.08	µS/cm	0<25 µS/cm				Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2002.2	µS/cm	±5%				Geotech	1GK328	Nov-22
ORP	228.9	mV	±15 mV				InSitu	1GL481	Sep-22
DO (Zero pt)	0.0	mg/L	±0.1				Macron	#000228049	8/26/2025
DO (Saturated)	98.62	%	97-100%				Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.05	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: 900		
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.06	s.u.	±0.15 s.u.		NA	Geotech	1GF009	Jun-23
pH 7.00b	7.02	s.u.	±0.15 s.u.			Geotech	0GJ268	Oct-22
pH 10.00b	10.02	s.u.	±0.15 s.u.			Geotech	1GF458	Jun-23
SC 1000	1032.1	µS/cm	±5%			Ricca	2108D48	Jul-23

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
pH 7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
pH 10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments: **only one well sampled**

Signature:	Date: 5/24/22
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Multiparameter Meter Field Calibration Checklist

Field Personnel: KALEB DESKE			Location: DYWEGY		
Weather: 63° Partly Cloudy WIND 10 mph W			Environment: GRASSY		
Multiparameter Water Meter		Make: AT	Model: 600	Serial Number: 762 098	
Water Level Meter		Make: WATER TAPE	Model: HERRON	Serial Number: 19FF220115243	

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.06	s.u.	±0.1 s.u.	PASS	NO	N/A	MSI	L315-04	11/22/2023
pH 7.00a	7.08	s.u.	±0.1 s.u.	PASS	NO	N/A	MSI	L172-33	6/23/2023
pH 10.00a	10.02	s.u.	±0.1 s.u.	PASS	NO	N/A	MSI	L354-22	1/5/2024
SC Zero (DI)	0.46	µS/cm	0<25 µS/cm	PASS	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	8083.04	µS/cm	±5%	PASS	NO	N/A	Geotech	1GK328	Nov-22
ORP	286.40	mV	±15 mV	PASS	NO	N/A	InSitu	1GL481	Sep-22
DO (Zero pt)	0.08	mg/L	±0.1	PASS	NO	N/A	Macron	#000228049	8/26/2025
DO (Saturated)	98.0	%	97-100%	PASS	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.25	NTU	<2 NTU	PASS	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time:		
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.12	s.u.	±0.15 s.u.	PASS	NO	Geotech	1GF009	Jun-23
pH 7.00b	6.91	s.u.	±0.15 s.u.	PASS	NO	Geotech	0GJ268	Oct-22
pH 10.00b	10.00	s.u.	±0.15 s.u.	PASS	NO	Geotech	1GF458	Jun-23
SC 1000	984.70	µS/cm	±5%	PASS	NO	Ricca	2108D48	Jul-23

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.08	s.u.	±0.1 s.u.	PASS	NO	N/A	MSI	L315-04	11/22/2023
pH 7.00a	7.09	s.u.	±0.1 s.u.	PASS	NO	N/A	MSI	L172-33	6/23/2023
pH 10.00a	10.07	s.u.	±0.1 s.u.	PASS	NO	N/A	MSI	L354-22	1/5/2024
SC 1000	1029.60	µS/cm	±5%	PASS	NO	N/A	Ricca	2108D48	Jul-23
DO (Zero pt)	0.04	mg/L	±0.1 mg/L	PASS	NO	N/A	Macron	#000228049	8/26/2025
Turbidity (DI)	0.30	NTU	<2 NTU	PASS	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: 	Date: 05/24/22
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Kyle Lane</u>				Location: <u>Vistra Newton</u>			
Weather: <u>Sunny 68°</u>				Environment: <u>Dry-Dusty</u>			
Multiparameter Water Meter		Make: <u>In-Situ</u>	Model: <u>Aqua Troll 600</u>	Serial Number: <u>762193 ML 606127</u>			
Water Level Meter		Make:	Model:	Serial Number:			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.05</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>7.07</u>	s.u.	±0.1 s.u.	<u>↓</u>	<u>↓</u>	<u>↓</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>10.02</u>	s.u.	±0.1 s.u.	<u>↓</u>	<u>↓</u>	<u>↓</u>	MSI	L354-22	1/5/2024
SC Zero (DI)	<u>174.05</u>	µS/cm	0<25 µS/cm	<u>↓</u>	<u>↓</u>	<u>↓</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>1935.8</u>	µS/cm	±5%	<u>↓</u>	<u>↓</u>	<u>↓</u>	Geotech	1GK328	Nov-22
ORP	<u>236.4/20.8mV</u>		±15 mV	<u>↓</u>	<u>↓</u>	<u>↓</u>	InSitu	1GL481	Sep-22
DO (Zero pt)	<u>0.06</u>	mg/L	±0.1	<u>↓</u>	<u>↓</u>	<u>↓</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>98.73</u>	%	97-100%	<u>↓</u>	<u>↓</u>	<u>↓</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>1.14</u>	NTU	<2 NTU	<u>↓</u>	<u>↓</u>	<u>↓</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: <u>8:40 AM</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>4.06</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	1GF009	Jun-23	
pH 7.00b	<u>7.93</u>	s.u.	±0.15 s.u.	<u>↓</u>	<u>↓</u>	Geotech	0GJ268	Oct-22	
pH 10.00b	<u>9.99</u>	s.u.	±0.15 s.u.	<u>↓</u>	<u>↓</u>	Geotech	1GF458	Jun-23	
SC 1000	<u>989.54</u>	µS/cm	±5%	<u>↓</u>	<u>↓</u>	Ricca	2108D48	Jul-23	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: <u>5:23 PM</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.08</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>7.07</u>	s.u.	±0.1 s.u.	<u>↓</u>	<u>↓</u>	<u>↓</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>10.02</u>	s.u.	±0.1 s.u.	<u>↓</u>	<u>↓</u>	<u>↓</u>	MSI	L354-22	1/5/2024
SC 1000	<u>1240.6</u>	µS/cm	±5%	<u>↓</u>	<u>↓</u>	<u>↓</u>	Ricca	2108D48	Jul-23
DO (Zero pt)	<u>0.04</u>	mg/L	±0.1 mg/L	<u>↓</u>	<u>↓</u>	<u>↓</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>1.89</u>	NTU	<2 NTU	<u>↓</u>	<u>↓</u>	<u>↓</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: <u>[Signature]</u>	Date: <u>5/24, 22</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Kyle Lane</u>				Location: <u>Newton</u>			
Weather: <u>69°C Windy light rain</u>				Environment: <u>wet</u>			
Multiparameter Water Meter		Make: <u>In-Situ</u>	Model: <u>AOVA Troll 600</u>	Serial Number: <u>846000</u>			
Water Level Meter		Make:	Model:	Serial Number:			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>3.99</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>4.23</u>	<u>3.99</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>6.99</u>	s.u.	±0.1 s.u.	<u>F</u>	<u>6.73</u>	<u>6.99</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>10.00</u>	s.u.	±0.1 s.u.	<u>F</u>	<u>9.68</u>	<u>10.00</u>	MSI	L354-22	1/5/2024
SC Zero (DI)	<u>1155.8 µS/cm</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>NA</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2001.8</u>	µS/cm	±5%	<u>P</u>	<u>NA</u>	<u>NA</u>	Geotech	1GK328	Nov-22
ORP	<u>229.20 / 227.7</u>	mV	±15 mV	<u>P</u>	<u>NA</u>	<u>NA</u>	InSitu	1GL481	Sep-22
DO (Zero pt)	<u>0.00</u>	mg/L	±0.1	<u>P</u>	<u>NA</u>	<u>NA</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>88.35</u>	%	97-100%	<u>P</u>	<u>NA</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.00</u>	NTU	<2 NTU	<u>P</u>	<u>NA</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: <u>8:49 AM</u>				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>3.88</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	1GF009	Jun-23	
pH 7.00b	<u>6.86</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	0GJ268	Oct-22	
pH 10.00b	<u>9.93</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	1GF458	Jun-23	
SC 1000	<u>981.79</u>	µS/cm	±5%	<u>P</u>	<u>NA</u>	Ricca	2108D48	Jul-23	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: <u>1740</u>				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.09</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>7.01</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>9.95</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	L354-22	1/5/2024
SC 1000	<u>1046.9</u>	µS/cm	±5%	<u>P</u>	<u>NA</u>	<u>NA</u>	Ricca	2108D48	Jul-23
DO (Zero pt)	<u>0.01</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>NA</u>	<u>NA</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>1.58</u>	NTU	<2 NTU	<u>P</u>	<u>NA</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: <u>Kyle Lane</u>	Date: <u>8-25-22</u>
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Multiparameter Meter Field Calibration Checklist

Location: Newton - Vista

Environment: 64°-77°F cloudy wind 5-10 mph

Parameter Water Meter	Make: <u>AT</u>	Model: <u>600</u>	Serial Number: <u>762215</u>
Water Level Meter	Make: <u>Heron</u>	Model: <u>disper-T2</u>	Serial Number: <u>19FF211015HB</u>

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.02</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>No</u>	<u>N/A</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>6.98</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>No</u>	<u>N/A</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>9.96</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>No</u>	<u>N/A</u>	MSI	L354-22	1/5/2024
SC Zero (DI)	<u>22.50</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>No</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2054.2</u>	µS/cm	±5%	<u>P</u>	<u>No</u>	<u>N/A</u>	Geotech	1GK328	Nov-22
ORP	<u>128.0 @ 22.0</u>	mV	±15 mV	<u>P</u>	<u>No</u>	<u>N/A</u>	InSitu	1GL481	Sep-22
DO (Zero pt)	<u>0.09</u>	mg/L	±0.1	<u>P</u>	<u>No</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>97.30</u>	%	97-100%	<u>P</u>	<u>No</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>1.63</u>	NTU	<2 NTU	<u>P</u>	<u>No</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification) Time: 0947

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	<u>4.01</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>None</u>	Geotech	1GF009	Jun-23
pH 7.00b	<u>6.85</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>None</u>	Geotech	0GJ268	Oct-22
pH 10.00b	<u>9.91</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>None</u>	Geotech	1GF458	Jun-23
SC 1000	<u>1014.6</u>	µS/cm	±5%	<u>P</u>	<u>None</u>	Ricca	2108D48	Jul-23

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification) Time: 1638

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.02</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>No</u>	<u>N/A</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>7.00</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>No</u>	<u>N/A</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>9.95</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>No</u>	<u>N/A</u>	MSI	L354-22	1/5/2024
SC 1000	<u>1024.9</u>	µS/cm	±5%	<u>P</u>	<u>No</u>	<u>N/A</u>	Ricca	2108D48	Jul-23
DO (Zero pt)	<u>0.07</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>No</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>1.85</u>	NTU	<2 NTU	<u>P</u>	<u>No</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification) Time:

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: [Signature] Date: 5/25/22

Multiparameter Meter Field Calibration Checklist

Field Personnel: AP		Location: Newton Power Station	
Weather: 68-75° cloudy wind SE 11 mph		Environment: grass mts, gravel	
Multiparameter Water Meter	Make: AT	Model: 600	Serial Number: 606127
Water Level Meter	Make:	Model:	Serial Number:

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.02	s.u.	±0.1 s.u.	P	NO	N/A	MSI	L315-04	11/22/2023
pH 7.00a	7.01	s.u.	±0.1 s.u.	P			MSI	L172-33	6/23/2023
pH 10.00a	9.93	s.u.	±0.1 s.u.	I			MSI	L354-22	1/5/2024
SC Zero (DI)	6.84	µS/cm	0<25 µS/cm	I			Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1051	µS/cm	±5%	I			Geotech	1GK328	Nov-22
ORP	236	mV	±15 mV	I			InSitu	1GL481	Sep-22
DO (Zero pt)	0.08	mg/L	±0.1	I			Macron	#000228049	8/26/2025
DO (Saturated)	98.99	%	97-100%	I			Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	1.10	NTU	<2 NTU	I			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 0834		233 @ 22°C		
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.00	s.u.	±0.15 s.u.	P	N/A	Geotech	1GF009	Jun-23	
pH 7.00b	6.95	s.u.	±0.15 s.u.	I		Geotech	0GJ268	Oct-22	
pH 10.00b	9.10	s.u.	±0.15 s.u.	I		Geotech	1GF458	Jun-23	
SC 1000	984.77	µS/cm	±5%	I		Ricca	2108D48	Jul-23	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 1658				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.01	s.u.	±0.1 s.u.	P	NO	N/A	MSI	L315-04	11/22/2023
pH 7.00a	7.03	s.u.	±0.1 s.u.	P			MSI	L172-33	6/23/2023
pH 10.00a	9.99	s.u.	±0.1 s.u.	I			MSI	L354-22	1/5/2024
SC 1000	987.0	µS/cm	±5%	I			Ricca	2108D48	Jul-23
DO (Zero pt)	0.09	mg/L	±0.1 mg/L	I			Macron	#000228049	8/26/2025
Turbidity (DI)	1.34	NTU	<2 NTU	I			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: 	Date: 5/25/2022
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Austin Moore</u>				Location: <u>Dynegy</u>			
Weather: <u>69° Cloudy Wind 12 MW</u>				Environment: <u>Grassy</u>			
Multiparameter Water Meter		Make: <u>AT</u>	Model: <u>600</u>	Serial Number: <u>762098</u>			
Water Level Meter		Make: <u>WT</u>	Model: <u>Heron</u>	Serial Number: <u>19FF-211192 HB</u>			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.08</u>	s.u.	±0.1 s.u.	<u>Pass</u>	<u>NO</u>	<u>N/A</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>7.04</u>	s.u.	±0.1 s.u.	<u>Pass</u>	<u>NO</u>	<u>N/A</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>10.05</u>	s.u.	±0.1 s.u.	<u>Pass</u>	<u>NO</u>	<u>N/A</u>	MSI	L354-22	1/5/2024
SC Zero (DI)	<u>1.08</u>	µS/cm	0<25 µS/cm	<u>Pass</u>	<u>NO</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2000.90</u>	µS/cm	±5%	<u>Pass</u>	<u>NO</u>	<u>N/A</u>	Geotech	1GK328	Nov-22
ORP	<u>223.80</u>	mV	±15 mV	<u>Pass</u>	<u>NO</u>	<u>N/A</u>	InSitu	1GL481	Sep-22
DO (Zero pt)	<u>0.02</u>	mg/L	±0.1	<u>Pass</u>	<u>NO</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>98.02</u>	%	97-100%	<u>Pass</u>	<u>NO</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.39</u>	NTU	<2 NTU	<u>Pass</u>	<u>NO</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time:		
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	<u>4.01</u>	s.u.	±0.15 s.u.	<u>Pass</u>	<u>NO</u>	Geotech	1GF009	Jun-23
pH 7.00b	<u>6.91</u>	s.u.	±0.15 s.u.	<u>Pass</u>	<u>NO</u>	Geotech	0GJ268	Oct-22
pH 10.00b	<u>9.91</u>	s.u.	±0.15 s.u.	<u>Pass</u>	<u>NO</u>	Geotech	1GF458	Jun-23
SC 1000	<u>1018.40</u>	µS/cm	±5%	<u>Pass</u>	<u>NO</u>	Ricca	2108D48	Jul-23

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.03</u>	s.u.	±0.1 s.u.	<u>Pass</u>	<u>NO</u>	<u>N/A</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>7.08</u>	s.u.	±0.1 s.u.	<u>Pass</u>	<u>NO</u>	<u>N/A</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>10.00</u>	s.u.	±0.1 s.u.	<u>Pass</u>	<u>NO</u>	<u>N/A</u>	MSI	L354-22	1/5/2024
SC 1000	<u>1016.23</u>	µS/cm	±5%	<u>Pass</u>	<u>NO</u>	<u>N/A</u>	Ricca	2108D48	Jul-23
DO (Zero pt)	<u>0.06</u>	mg/L	±0.1 mg/L	<u>Pass</u>	<u>NO</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.24</u>	NTU	<2 NTU	<u>Pass</u>	<u>NO</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: <u></u>	Date: <u>05/25/22</u>
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Austin Moore

Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Austin Moore</u>				Location: <u>Dynegy</u>			
Weather: <u>Cloudy 67° Wind 10 mph NW</u>				Environment: <u>Grass</u>			
Multiparameter Water Meter		Make: <u>AT</u>	Model: <u>600</u>	Serial Number: <u>762098</u>			
Water Level Meter		Make: <u>WT</u>	Model: <u>Heron</u>	Serial Number: <u>19FF2202131 ML</u>			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.11</u>	s.u.	±0.1 s.u.	<u>Fail</u>	<u>yes</u>	<u>4.00</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>7.06</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>No</u>	<u>NA</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>10.00</u>	s.u.	±0.1 s.u.	<u>L</u>			MSI	L354-22	1/5/2024
SC Zero (DI)	<u>15.65</u>	µS/cm	0<25 µS/cm	<u>L</u>			Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>1998.5</u>	µS/cm	±5%	<u>L</u>			Geotech	1GK328	Nov-22
ORP	<u>221.3</u>	mV	±15 mV	<u>L</u>			InSitu	1GL481	Sep-22
DO (Zero pt)	<u>.07</u>	mg/L	±0.1	<u>L</u>			Macron	#000228049	8/26/2025
DO (Saturated)	<u>99.7</u>	%	97-100%	<u>L</u>			Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>.22</u>	NTU	<2 NTU	<u>L</u>			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: <u>08:32</u>		
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	<u>4.13</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NO</u>	Geotech	1GF009	Jun-23
pH 7.00b	<u>7.06</u>	s.u.	±0.15 s.u.	<u>L</u>		Geotech	0GJ268	Oct-22
pH 10.00b	<u>10.00</u>	s.u.	±0.15 s.u.	<u>L</u>		Geotech	1GF458	Jun-23
SC 1000	<u>1000.00</u>	µS/cm	±5%	<u>L</u>		Ricca	2108D48	Jul-23

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.08</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>NA</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>7.04</u>	s.u.	±0.1 s.u.	<u>L</u>			MSI	L172-33	6/23/2023
pH 10.00a	<u>10.00</u>	s.u.	±0.1 s.u.	<u>L</u>			MSI	L354-22	1/5/2024
SC 1000	<u>1000.00</u>	µS/cm	±5%	<u>L</u>			Ricca	2108D48	Jul-23
DO (Zero pt)	<u>0.08</u>	mg/L	±0.1 mg/L	<u>L</u>			Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.53</u>	NTU	<2 NTU	<u>L</u>			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: 	Date: <u>6-26-22</u>
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Austin Moore

Multiparameter Meter Field Calibration Checklist

Field Personnel: AP			Location: Newton		
Weather: 66-72°F cloudy Wind SE 10 mph			Environment: grass, gravel mud		
Multiparameter Water Meter	Make: AT	Model: 600	Serial Number: 606127		
Water Level Meter	Make:	Model:	Serial Number:		

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.03	s.u.	±0.1 s.u.	P	NO	N/A	MSI	L315-04	11/22/2023
pH 7.00a	7.06	s.u.	±0.1 s.u.	I	I	I	MSI	L172-33	6/23/2023
pH 10.00a	9.96	s.u.	±0.1 s.u.	I	I	I	MSI	L354-22	1/5/2024
SC Zero (DI)	8.38	µS/cm	0<25 µS/cm	I	I	I	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1976.4	µS/cm	±5%	I	I	I	Geotech	1GK328	Nov-22
ORP	230.9	mV	±15 mV	I	I	I	InSitu	1GL481	Sep-22
DO (Zero pt)	0.09	mg/L	±0.1	I	I	I	Macron	#000228049	8/26/2025
DO (Saturated)	9.42	%	97-100%	I	I	I	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	1.14	NTU	<2 NTU	I	I	I	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 0837	
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Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.02	s.u.	±0.15 s.u.	I	N/A	Geotech	1GF009	Jun-23
pH 7.00b	6.78	s.u.	±0.15 s.u.	I	I	Geotech	0GJ268	Oct-22
pH 10.00b	10.02	s.u.	±0.15 s.u.	I	I	Geotech	1GF458	Jun-23
SC 1000	964.8	µS/cm	±5%	I	I	Ricca	2108D48	Jul-23

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 1156	
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Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.03	s.u.	±0.1 s.u.	P	NO	N/A	MSI	L315-04	11/22/2023
pH 7.00a	7.06	s.u.	±0.1 s.u.	I	I	I	MSI	L172-33	6/23/2023
pH 10.00a	10.03	s.u.	±0.1 s.u.	I	I	I	MSI	L354-22	1/5/2024
SC 1000	968.92	µS/cm	±5%	I	I	I	Ricca	2108D48	Jul-23
DO (Zero pt)	0.08	mg/L	±0.1 mg/L	I	I	I	Macron	#000228049	8/26/2025
Turbidity (DI)	1.15	NTU	<2 NTU	I	I	I	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:	
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Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: 	Date: 5/26/2022
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Multiparameter Meter Field Calibration Checklist

Field Personnel: Kyle Lee				Location: Newton			
Weather: 68° Cloudy				Environment: Wet Muddy			
Multiparameter Water Meter		Make: In-Situ	Model: Aqua TROLL PRO	Serial Number: 846000			
Water Level Meter		Make:	Model:	Serial Number:			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.06	s.u.	±0.1 s.u.	P	NA	NA	MSI	L315-04	11/22/2023
pH 7.00a	7.03	s.u.	±0.1 s.u.	P	NA	NA	MSI	L172-33	6/23/2023
pH 10.00a	9.91	s.u.	±0.1 s.u.	P	NA	NA	MSI	L354-22	1/5/2024
SC Zero (DI)	79.13	µS/cm	0<25 µS/cm	P	NA	NA	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2.00	µS/cm	±5%	P	NA	NA	Geotech	1GK328	Nov-22
ORP 23.15	230.5	mV	±15 mV	P	NA	NA	InSitu	1GL481	Sep-22
DO (Zero pt)	0.00	mg/L	±0.1	P	NA	NA	Macron	#000228049	8/26/2025
DO (Saturated)	97.05	%	97-100%	P	NA	NA	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	1.17	NTU	<2 NTU	P	NA	NA	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 8:50				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.04	s.u.	±0.15 s.u.	P	NA	Geotech	1GF009	Jun-23	
pH 7.00b	6.99	s.u.	±0.15 s.u.	P	NA	Geotech	0GJ268	Oct-22	
pH 10.00b	9.99	s.u.	±0.15 s.u.	P	NA	Geotech	1GF458	Jun-23	
SC 1000	936.72	µS/cm	±5%	P	NA	Ricca	2108D48	Jul-23	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 12:12				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.05	s.u.	±0.1 s.u.	P	NA	NA	MSI	L315-04	11/22/2023
pH 7.00a	7.07	s.u.	±0.1 s.u.	P	NA	NA	MSI	L172-33	6/23/2023
pH 10.00a	9.92	s.u.	±0.1 s.u.	P	NA	NA	MSI	L354-22	1/5/2024
SC 1000	625.9	µS/cm	±5%	P	NA	NA	Ricca	2108D48	Jul-23
DO (Zero pt)	0.01	mg/L	±0.1 mg/L	P	NA	NA	Macron	#000228049	8/26/2025
Turbidity (DI)	0.64	NTU	<2 NTU	P	NA	NA	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: Kyle Lee	Date: 5-26-22
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Multiparameter Meter Field Calibration Checklist

Field Personnel: Matt Julien				Location: Newton Vista					
Weather: 65°-75°F cloudy wind S-S-10mph				Environment: muddy, grass					
Multiparameter Water Meter		Make: InSitu	Model: AT600	Serial Number: 762215					
Water Level Meter		Make: Heron	Model: dipper 2	Serial Number: 19FF2111015HB					

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.04	s.u.	±0.1 s.u.	P	No	PA	MSI	L315-04	11/22/2023
pH 7.00a	7.00	s.u.	±0.1 s.u.	P	No	PA	MSI	L172-33	6/23/2023
pH 10.00a	7.97	s.u.	±0.1 s.u.	P	No	PA	MSI	L354-22	1/5/2024
SC Zero (DI)	2.13	µS/cm	0<25 µS/cm	P	No	PA	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1983.0	µS/cm	±5%	P	No	PA	Geotech	1GK328	Nov-22
ORP	223.40/23%	mV	±15 mV	P	No	PA	InSitu	1GL481	Sep-22
DO (Zero pt)	0.08	mg/L	±0.1	P	No	PA	Macron	#000228049	8/26/2025
DO (Saturated)	98.32	%	97-100%	P	No	PA	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	1.70	NTU	<2 NTU	P	No	PA	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 0856				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.08	s.u.	±0.15 s.u.	P	None	Geotech	1GF009	Jun-23	
pH 7.00b	6.86	s.u.	±0.15 s.u.	P	None	Geotech	0G1268	Oct-22	
pH 10.00b	9.88	s.u.	±0.15 s.u.	P	None	Geotech	1GF458	Jun-23	
SC 1000	1004.6	µS/cm	±5%	P	None	Ricca	2108D48	Jul-23	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 1610				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.06	s.u.	±0.1 s.u.	P	No	N/A	MSI	L315-04	11/22/2023
pH 7.00a	7.01	s.u.	±0.1 s.u.	P	No	N/A	MSI	L172-33	6/23/2023
pH 10.00a	9.97	s.u.	±0.1 s.u.	P	No	N/A	MSI	L354-22	1/5/2024
SC 1000	992.89	µS/cm	±5%	P	No	N/A	Ricca	2108D48	Jul-23
DO (Zero pt)	0.08	mg/L	±0.1 mg/L	P	No	N/A	Macron	#000228049	8/26/2025
Turbidity (DI)	1.64	NTU	<2 NTU	P	No	N/A	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: 	Date: 5/26/22
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MS
5/26/22

Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Aidan Jones</u>				Location: <u>Newton Power Station</u>					
Weather: <u>sunny, clear</u>				Environment: <u>grassy</u>					
Multiparameter Water Meter		Make: <u>AT</u>	Model: <u>600</u>	Serial Number: <u>762215</u>					
Water Level Meter		Make: <u>Heron</u>	Model: <u>1900</u>	Serial Number: <u>19FP211192 HB</u>					

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.07</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N/A</u>	<u>N/A</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>7.04</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>7.92</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	L354-22	1/5/2024
SC Zero (DI)	<u>2.65</u>	µS/cm	0<25 µS/cm	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>1991.4</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Geotech	1GK328	Nov-22
ORP	<u>214.4</u>	mV	±15 mV	<u>I</u>	<u>I</u>	<u>I</u>	InSitu	1GL481	Sep-22
DO (Zero pt)	<u>0.09</u>	mg/L	±0.1	<u>I</u>	<u>I</u>	<u>I</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>11.85</u>	%	97-100%	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0</u>	NTU	<2 NTU	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: <u>9:00 AM</u>				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>4.05</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N/A</u>	Geotech	1GF009	Jun-23	
pH 7.00b	<u>6.98</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>I</u>	Geotech	0GJ268	Oct-22	
pH 10.00b	<u>9.92</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>	Geotech	1GF458	Jun-23	
SC 1000	<u>1016.2</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	Ricca	2108D48	Jul-23	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
pH 7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
pH 10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: <u>Aidan Jones</u>		Date: <u>6-19-22</u>	
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Multiparameter Meter Field Calibration Checklist

Field Personnel: Kyle Larn		Location: Newton	
Weather: 96°F Sunny Wind E 5-10 mph		Environment: Dry, grass	
Multiparameter Water Meter	Make: in-situ	Model: Oqua Troll 600	Serial Number: 606127
Water Level Meter	Make:	Model:	Serial Number:

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.01	s.u.	±0.1 s.u.	P	Na	Na	MSI	L315-04	11/22/2023
pH 7.00a	6.93	s.u.	±0.1 s.u.	P	Na	Na	MSI	L172-33	6/23/2023
pH 10.00a	9.98	s.u.	±0.1 s.u.	P	Na	Na	MSI	L354-22	1/5/2024
SC Zero (DI)	17.88	µS/cm	0<25 µS/cm	P	Na	Na	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	168.3	µS/cm	±5%	P	Na	Na	Geotech	1GK328	Nov-22
ORP	215.47	mV	±15 mV	P	Na	Na	InSitu	1GL481	Sep-22
DO (Zero pt)	0.04	mg/L	±0.1	P	Na	Na	Macron	#000228049	8/26/2025
DO (Saturated)	99.76	%	97-100%	P	Na	Na	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	1.35	NTU	<2 NTU	P	Na	Na	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 12.02
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Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.02	s.u.	±0.15 s.u.	P	Na	Geotech	1GF009	Jun-23
pH 7.00b	6.94	s.u.	±0.15 s.u.	P	Na	Geotech	0GJ268	Oct-22
pH 10.00b	9.96	s.u.	±0.15 s.u.	P	Na	Geotech	1GF458	Jun-23
SC 1000	987.00	µS/cm	±5%	P	Na	Ricca	2108D48	Jul-23

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 14.50
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Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.04	s.u.	±0.1 s.u.	P	Na	Na	MSI	L315-04	11/22/2023
pH 7.00a	6.94	s.u.	±0.1 s.u.	P	Na	Na	MSI	L172-33	6/23/2023
pH 10.00a	9.96	s.u.	±0.1 s.u.	P	Na	Na	MSI	L354-22	1/5/2024
SC 1000	993.37	µS/cm	±5%	P	Na	Na	Ricca	2108D48	Jul-23
DO (Zero pt)	0.07	mg/L	±0.1 mg/L	P	Na	Na	Macron	#000228049	8/26/2025
Turbidity (DI)	1.25	NTU	<2 NTU	P	Na	Na	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 14.50
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Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: [Signature]	Date: 6-15-22
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REGULATORY PROGRAM (CIRCLE):	NPDES
MORBCA	RCRA
CCDD	TACO: RES OR IND/COMM

CHAIN OF CUSTODY RECORD

STATE WHERE SAMPLE COLLECTED IL

[illegible]



PACE ANALYTICAL SERVICES
WWW.PACELABS.COM

REGULATORY PROGRAM (CIRCLE):	NPDES
MORBCA	RCRA
CCDD	TACO: RES OR IND/COMM

CHAIN OF CUSTODY RECORD
STATE WHERE SAMPLE COLLECTED IL

1 CLIENT VISTRA-NEWTON		PROJECT NUMBER PHASE II		PROJECT LOCATION		PURCHASE ORDER #		3 ANALYSIS REQUESTED		4 (FOR LAB USE ONLY)					
ADDRESS 6725 N. 500TH STREET		PHONE NUMBER		E-MAIL		DATE SHIPPED		NH₃*SB*AS*B*CD* CL*CR*CN*PB*MG* HG*NO₃*K*SE*NA* SO₄*TDS*V*ZN* HCO₃*VOC*P*G&O* PHENOL*¹TSS*CA*		LOGIN # FC05162-16 LOGGED BY: CLIENT: VISTRA-NEWTON PROJECT: NEWTON_PHASE II_G2 PROJ. MGR.: GAIL SCHINDLER					
CITY STATE NEWTON, IL 62448		SAMPLER (PLEASE PRINT) Joe Reed		SAMPLER'S SIGNATURE 		MATRIX TYPES: WW- WASTEWATER DW- DRINKING WATER GW- GROUND WATER WWSL- SLUDGE NAS- NON AQUEOUS SOLID LCHT- LEACHATE OIL- OIL SO- SOIL SOL- SOLID									
CONTACT PERSON MR. TERRY HANRATTY		DATE COLLECTED		TIME COLLECTED		SAMPLE TYPE GRAB COMP		MATRIX TYPE		BOTTLE COUNT		PRES CODE CLIENT PROVIDED		REMARKS	
2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)															
R201		5/25/22		1419		X		GW		12				*DISSOLVED	
G201				1427		X				12					
R202				1253		X				12					
G202				1145		X				12					
G203 not required				1545		X				12					
G2175				1709		X				12					
G218 not required				1732		X				12					
G220				1517		X				12					
G221				1410		X				12					
CHEMICAL PRESERVATION CODES:		1 - HCL		2 - H2SO4		3 - HNO3		4 - NAOH		5 - NA2S2O3		6 - UNPRESERVED		7 - OTHER	
5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH (RUSH TAT IS SUBJECT TO PACE LABS APPROVAL AND SURCHARGE)		DATE RESULTS NEEDED		6 I understand that by initialing this box I give the lab permission to proceed with analysis, even though it may not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may <u>NOT</u> be acceptable to report to all regulatory authorities.		PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS)									
RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL PHONE EMAIL IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:															
7 RELINQUISHED BY: (SIGNATURE) 		DATE 5/26/22		RECEIVED BY: (SIGNATURE) 		DATE 5/26/22		8 COMMENTS: (FOR LAB USE ONLY)							
RELINQUISHED BY: (SIGNATURE) 		TIME 1100		RECEIVED BY: (SIGNATURE) 		TIME 1100		SAMPLE TEMPERATURE UPON RECEIPT 3.6 °C							
RELINQUISHED BY: (SIGNATURE) 		DATE 5/26/22		RECEIVED BY: (SIGNATURE) 		DATE 5/26/22		CHILL PROCESS STARTED PRIOR TO RECEIPT SAMPLE(S) RECEIVED ON ICE SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED Y OR N Y							
		TIME 1427				TIME 1427		DATE AND TIME TAKEN FROM SAMPLE BOTTLE							



REGULATORY PROGRAM (CIRCLE):	NPDES
MORBCA	RCRA
CCDD	TACO: RES OR IND/COMM

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1 CLIENT VISTRA-NEWTON		PROJECT NUMBER PHASE II		PROJECT LOCATION		PURCHASE ORDER #		3 ANALYSIS REQUESTED		4 (FOR LAB USE ONLY)	
ADDRESS 6725 N. 500TH STREET		PHONE NUMBER		E-MAIL		DATE SHIPPED		NH₃*, SB*, AS*, B*, CD*, CL*, CR*, CN, PB*, MG*, HG*, NO₃*, K*, SE*, NA*, SO₄*, TDS*, V*, ZN*, HCO₃*, VOC, P*, G&O, PHENOL, TSS, CA*		LOGIN # FG05162-16	
CITY STATE NEWTON, IL 62448		SAMPLER (PLEASE PRINT) Joe Reed		MATRIX TYPES: WW- WASTEWATER DW- DRINKING WATER GW- GROUND WATER WWSL- SLUDGE NAS- NON AQUEOUS SOLID LCHT- LEACHATE OIL- OIL SO- SOIL SOL- SOLID		CLIENT: VISTRA-NEWTON					
CONTACT PERSON MR. TERRY HANRATTY		SAMPLER'S SIGNATURE <i>Joseph R Reed</i>		PROJECT: NEWTON_PHASE II_G2							
2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)		DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB COMP	MATRIX TYPE	BOTTLE COUNT	PRES CODE CLIENT PROVIDED			REMARKS	
G222		5/25/22	1259	X	GW	12				*DISSOLVED	
G225			1250	X		12					
G230			1113	X		12					
G231			1236	X		12					
G232			1348	X		12					
G233			1518	X		12					
G234			1638	X		12					
CHEMICAL PRESERVATION CODES: 1 - HCL 2 - H2SO4 3 - HNO3 4 - NAOH 5 - NA2S2O3 6 - UNPRESERVED 7 - OTHER											
5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH (RUSH TAT IS SUBJECT TO PACE LABS APPROVAL AND SURCHARGE) RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL PHONE EMAIL IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:				DATE RESULTS NEEDED		6 I understand that by initialing this box I give the lab permission to proceed with analysis, even though it may not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may NOT be acceptable to report to all regulatory authorities.					
7 RELINQUISHED BY: (SIGNATURE) <i>Joseph R Reed</i>		DATE 5/26/22	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>		DATE 5/26/22	8 COMMENTS: (FOR LAB USE ONLY)					
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>		TIME 1100	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>		TIME 1100	SAMPLE TEMPERATURE UPON RECEIPT 3.6 °C					
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>		DATE 5/26/22	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>		DATE 5/26/22	CHILL PROCESS STARTED PRIOR TO RECEIPT SAMPLE(S) RECEIVED ON ICE SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED					
		TIME 1427			TIME 1427	DATE AND TIME TAKEN FROM SAMPLE BOTTLE					

REGULATORY PROGRAM (CIRCLE):	NPDES
MORBCA	RCRA
CCDD	TACO: RES OR IND/COMM

CHAIN OF CUSTODY RECORD

STATE WHERE SAMPLE COLLECTED IL

1 CLIENT VISTRA-NEWTON		PROJECT NUMBER PHASE II		PROJECT LOCATION		PURCHASE ORDER #		3 ANALYSIS REQUESTED		4 (FOR LAB USE ONLY)		
ADDRESS 6725 N. 500TH STREET		PHONE NUMBER		E-MAIL		DATE SHIPPED				LOGIN # FE05250		
CITY STATE NEWTON, IL 62448		SAMPLER (PLEASE PRINT) Joe Reed		MATRIX TYPES: WW- WASTEWATER DW- DRINKING WATER GW- GROUND WATER WWSL- SLUDGE NAS- NON AQUEOUS SOLID LCHT- LEACHATE OIL- OIL SO- SOIL SOL- SOLID						LOGGED BY: [Signature]		
CONTACT PERSON MR. TERRY HANRATTY		SAMPLER'S SIGNATURE [Signature]								CLIENT: VISTRA-NEWTON PROJECT: NEWTON_PHASE II_G2 PROJ. MGR.: GAIL SCHINDLER		
2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)		DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB COMP		MATRIX TYPE	BOTTLE COUNT	PRES CODE CLIENT PROVIDED	NH3*,SB*,AS*,B*,CD*, CL*,CR*,CN,PB*,MG*, HG*,NO3*,K*,SE*,NA*, SO4*,TDS*,V*,ZN*, HCO3*,VOC,P*,G&O, PHENOL,TSS,CA*, B,F,COT	REMARKS		
8/5-27-22 A 207 not required		5/6/22	1006	X		G.W	12			*DISSOLVED		
G 208			1042	X			12					
A 214			1058	X			12		X	X	X	8/5-27-22
JR R 215			1205	X			12		X	X	X	
R 219			1208	X			12		X	X	X	
G 223			1122	X			12					
8/5-27-22 R 216 not required			1203	X			12					
CHEMICAL PRESERVATION CODES: 1 - HCL 2 - H2SO4 3 - HNO3 4 - NAOH 5 - NA2S2O3 6 - UNPRESERVED 7 - OTHER												
5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL PHONE EMAIL IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:		DATE RESULTS NEEDED		6 I understand that by initialing this box I give the lab permission to proceed with analysis, even though it may not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may NOT be acceptable to report to all regulatory authorities.								
7 RELINQUISHED BY: (SIGNATURE) [Signature]		DATE 5/6/22		RECEIVED BY: (SIGNATURE)		DATE		8 COMMENTS: (FOR LAB USE ONLY)				
RELINQUISHED BY: (SIGNATURE)		DATE		RECEIVED BY: (SIGNATURE)		DATE		SAMPLE TEMPERATURE UPON RECEIPT 5.8 °C				
RELINQUISHED BY: (SIGNATURE)		DATE		RECEIVED BY: (SIGNATURE)		DATE		CHILL PROCESS STARTED PRIOR TO RECEIPT				
		TIME				TIME		SAMPLE(S) RECEIVED ON ICE				
		DATE				DATE		SAMPLE ACCEPTANCE NONCONFORMANT				
		TIME				TIME		REPORT IS NEEDED				
						1600		DATE AND TIME TAKEN FROM SAMPLE BOTTLE				

STATE WHERE SAMPLE COLLECTED IL

[illegible]



Pace Analytical Services, LLC

2231 W. Altorfer Drive

Peoria, IL 61615

(800)752-6651

November 15, 2022

Terry Hanratty
Vistra - Newton
Newton Energy Center 6725 N. 500th St
Newton, IL 62448

Dear Terry Hanratty:

Please find enclosed the **revised** analytical results for the sample(s) the laboratory received. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of Pace Analytical Services, LLC.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

Pace Analytical Services appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the Director of Client Services, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Gail Schindler

Gail Schindler
Project Manager
(309) 692-9688 x1716
gail.schindler@pacelabs.com

**SAMPLE RECEIPT CHECK LIST**

Items not applicable will be marked as in compliance

Work Order FH03254

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided



Work Order FH03349

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
NO	Current PDC COC submitted
NO	Case narrative provided



Work Order FH03664

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided



Work Order FH04035

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided



Work Order FH04037

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided



Work Order FI04057

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
NO	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
YES	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
YES	Case narrative provided



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

Case Narrative

Revised Report - removed fluoride dissolved from 5 wells and added cadmium dissolved for 1 well



ANALYTICAL RESULTS

Sample: FH03254-01

Name: G208

Alias: NEW_811_502

Sampled: 08/15/22 17:08

Received: 08/16/22 15:28

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	55	mg/L		08/24/22 15:25	25	25	08/24/22 15:25	CRD	EPA 300.0 REV 2.1
Fluoride	1.03	mg/L		08/24/22 15:07	1	0.250	08/24/22 15:07	CRD	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		08/24/22 15:07	1	1.0	08/24/22 15:07	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	25.13	Feet		08/15/22 17:08	1		08/15/22 17:08	FIELD	Field*
Dissolved oxygen, Field	0.10	mg/L		08/15/22 17:08	1		08/15/22 17:08	FIELD	Field*
Oxidation Reduction Potential	-134	mV		08/15/22 17:08	1	-500	08/15/22 17:08	FIELD	Field*
pH, Field Measured	6.76	pH Units		08/15/22 17:08	1		08/15/22 17:08	FIELD	Field*
Specific Conductance, Field Measured	1434	umhos/cm		08/15/22 17:08	1		08/15/22 17:08	FIELD	Field*
Temperature, Field Measured	20.5	°C		08/15/22 17:08	1		08/15/22 17:08	FIELD	Field*
Turbidity, Field Measured	1.94	NTU		08/15/22 17:08	1	0.00	08/15/22 17:08	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	690	mg/L		08/19/22 10:51	1	2.0	08/19/22 10:51	KAM	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		08/19/22 10:51	1	2.0	08/19/22 10:51	KAM	SM 2320B 1997*
Solids - total dissolved solids (TDS)	820	mg/L		08/19/22 11:42	1	26	08/19/22 14:19	CGL	SM 2540C
Total Metals - PIA									
Boron	180	ug/L		08/18/22 08:15	5	10	08/25/22 12:51	JMW	EPA 6020A
Calcium	95	mg/L		08/18/22 08:15	5	0.20	08/25/22 12:51	JMW	EPA 6020A
Magnesium	39	mg/L		08/18/22 08:15	5	0.10	08/25/22 12:51	JMW	EPA 6020A
Potassium	2.2	mg/L		08/18/22 08:15	5	0.20	08/25/22 12:51	JMW	EPA 6020A
Sodium	160	mg/L		08/18/22 08:15	5	0.10	08/25/22 12:51	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH03254-05

Name: R217D

Alias: NEW_811_502

Sampled: 08/15/22 16:47

Received: 08/16/22 15:28

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	100	mg/L		09/01/22 23:30	25	25	09/01/22 23:30	CRD	EPA 300.0 REV 2.1
Sulfate	2100	mg/L		08/30/22 02:23	500	500	08/30/22 02:23	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	19.42	Feet		08/15/22 16:47	1		08/15/22 16:47	FIELD	Field*
Dissolved oxygen, Field	1.1	mg/L		08/15/22 16:47	1		08/15/22 16:47	FIELD	Field*
Oxidation Reduction Potential	2.50	mV		08/15/22 16:47	1	-500	08/15/22 16:47	FIELD	Field*
pH, Field Measured	6.77	pH Units		08/15/22 16:47	1		08/15/22 16:47	FIELD	Field*
Specific Conductance, Field Measured	3819	umhos/cm		08/15/22 16:47	1		08/15/22 16:47	FIELD	Field*
Temperature, Field Measured	20.4	°C		08/15/22 16:47	1		08/15/22 16:47	FIELD	Field*
Turbidity, Field Measured	125	NTU		08/15/22 16:47	1	0.00	08/15/22 16:47	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	210	mg/L		08/19/22 10:51	1	2.0	08/19/22 10:51	KAM	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 2.0	mg/L		08/19/22 10:51	1	2.0	08/19/22 10:51	KAM	SM 2320B 1997*
Fluoride	< 0.250	mg/L		09/01/22 11:49	1	0.250	09/01/22 11:49	TTH	SM 4500F C 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	4100	mg/L		08/19/22 11:42	1	26	08/19/22 14:19	CGL	SM 2540C
Total Metals - PIA									
Boron	200	ug/L		08/18/22 08:15	5	10	08/25/22 12:54	JMW	EPA 6020A
Calcium	570	mg/L		08/18/22 08:15	100	4.0	08/26/22 15:18	JMW	EPA 6020A
Magnesium	270	mg/L		08/18/22 08:15	5	0.10	08/25/22 12:54	JMW	EPA 6020A
Potassium	7.1	mg/L		08/18/22 08:15	5	0.20	08/25/22 12:54	JMW	EPA 6020A
Sodium	170	mg/L		08/18/22 08:15	5	0.10	08/25/22 12:54	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH03254-06

Name: G220

Alias: NEW_811_502

Sampled: 08/15/22 17:48

Received: 08/16/22 15:28

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	41	mg/L		08/24/22 17:13	10	10	08/24/22 17:13	CRD	EPA 300.0 REV 2.1
Fluoride	1.26	mg/L		08/24/22 16:55	1	0.250	08/24/22 16:55	CRD	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		08/24/22 16:55	1	1.0	08/24/22 16:55	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	17.34	Feet		08/15/22 17:48	1		08/15/22 17:48	FIELD	Field*
Dissolved oxygen, Field	2.1	mg/L		08/15/22 17:48	1		08/15/22 17:48	FIELD	Field*
Oxidation Reduction Potential	-120	mV		08/15/22 17:48	1	-500	08/15/22 17:48	FIELD	Field*
pH, Field Measured	6.90	pH Units		08/15/22 17:48	1		08/15/22 17:48	FIELD	Field*
Specific Conductance, Field Measured	1283	umhos/cm		08/15/22 17:48	1		08/15/22 17:48	FIELD	Field*
Temperature, Field Measured	19.5	°C		08/15/22 17:48	1		08/15/22 17:48	FIELD	Field*
Turbidity, Field Measured	16.2	NTU		08/15/22 17:48	1	0.00	08/15/22 17:48	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	660	mg/L		08/19/22 10:51	1	2.0	08/19/22 10:51	KAM	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		08/19/22 10:51	1	2.0	08/19/22 10:51	KAM	SM 2320B 1997*
Solids - total dissolved solids (TDS)	730	mg/L		08/19/22 11:42	1	26	08/19/22 14:19	CGL	SM 2540C
Total Metals - PIA									
Boron	290	ug/L		08/18/22 08:15	5	10	08/25/22 12:58	JMW	EPA 6020A
Calcium	120	mg/L		08/18/22 08:15	5	0.20	08/25/22 12:58	JMW	EPA 6020A
Magnesium	50	mg/L		08/18/22 08:15	5	0.10	08/25/22 12:58	JMW	EPA 6020A
Potassium	3.3	mg/L		08/18/22 08:15	5	0.20	08/25/22 12:58	JMW	EPA 6020A
Sodium	160	mg/L		08/18/22 08:15	5	0.10	08/25/22 12:58	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH03254-07

Name: G223

Alias: NEW_811_502

Sampled: 08/15/22 14:57

Received: 08/16/22 15:28

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	310	mg/L		09/09/22 11:45	50	50	09/09/22 11:45	CJP	EPA 300.0 REV 2.1
Sulfate	710	mg/L		08/30/22 02:41	250	250	08/30/22 02:41	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	32.76	Feet		08/15/22 14:57	1		08/15/22 14:57	FIELD	Field*
Dissolved oxygen, Field	0.83	mg/L		08/15/22 14:57	1		08/15/22 14:57	FIELD	Field*
Oxidation Reduction Potential	-174	mV		08/15/22 14:57	1	-500	08/15/22 14:57	FIELD	Field*
pH, Field Measured	6.81	pH Units		08/15/22 14:57	1		08/15/22 14:57	FIELD	Field*
Specific Conductance, Field Measured	3482	umhos/cm		08/15/22 14:57	1		08/15/22 14:57	FIELD	Field*
Temperature, Field Measured	18.5	°C		08/15/22 14:57	1		08/15/22 14:57	FIELD	Field*
Turbidity, Field Measured	4.66	NTU		08/15/22 14:57	1	0.00	08/15/22 14:57	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	880	mg/L		08/19/22 10:51	1	2.0	08/19/22 10:51	KAM	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 2.0	mg/L		08/19/22 10:51	1	2.0	08/19/22 10:51	KAM	SM 2320B 1997*
Fluoride	0.884	mg/L		09/08/22 15:18	1	0.250	09/08/22 15:18	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	2500	mg/L		08/19/22 11:42	1	26	08/19/22 14:19	CGL	SM 2540C
Total Metals - PIA									
Boron	250	ug/L		08/18/22 08:15	5	10	08/25/22 13:01	JMW	EPA 6020A
Calcium	320	mg/L		08/18/22 08:15	5	0.20	08/25/22 13:01	JMW	EPA 6020A
Magnesium	130	mg/L		08/18/22 08:15	5	0.10	08/25/22 13:01	JMW	EPA 6020A
Potassium	4.3	mg/L		08/18/22 08:15	5	0.20	08/25/22 13:01	JMW	EPA 6020A
Sodium	290	mg/L		08/18/22 08:15	5	0.10	08/25/22 13:01	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH03254-08

Name: G224

Alias: NEW_811_502

Sampled: 08/15/22 13:56

Received: 08/16/22 15:28

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	55	mg/L		08/24/22 18:26	25	25	08/24/22 18:26	CRD	EPA 300.0 REV 2.1
Fluoride	0.327	mg/L		08/24/22 18:08	1	0.250	08/24/22 18:08	CRD	EPA 300.0 REV 2.1
Sulfate	120	mg/L		08/24/22 18:26	25	25	08/24/22 18:26	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	42.11	Feet		08/15/22 13:56	1		08/15/22 13:56	FIELD	Field*
Dissolved oxygen, Field	1.5	mg/L		08/15/22 13:56	1		08/15/22 13:56	FIELD	Field*
Oxidation Reduction Potential	50.7	mV		08/15/22 13:56	1	-500	08/15/22 13:56	FIELD	Field*
pH, Field Measured	6.96	pH Units		08/15/22 13:56	1		08/15/22 13:56	FIELD	Field*
Specific Conductance, Field Measured	1190	umhos/cm		08/15/22 13:56	1		08/15/22 13:56	FIELD	Field*
Temperature, Field Measured	18.5	°C		08/15/22 13:56	1		08/15/22 13:56	FIELD	Field*
Turbidity, Field Measured	271	NTU		08/15/22 13:56	1	0.00	08/15/22 13:56	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	500	mg/L		08/19/22 10:51	1	2.0	08/19/22 10:51	KAM	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		08/19/22 10:51	1	2.0	08/19/22 10:51	KAM	SM 2320B 1997*
Solids - total dissolved solids (TDS)	670	mg/L		08/19/22 11:42	1	34	08/19/22 14:19	CGL	SM 2540C
Total Metals - PIA									
Boron	140	ug/L		08/18/22 08:15	5	10	08/25/22 13:05	JMW	EPA 6020A
Calcium	140	mg/L		08/18/22 08:15	5	0.20	08/25/22 13:05	JMW	EPA 6020A
Magnesium	61	mg/L		08/18/22 08:15	5	0.10	08/25/22 13:05	JMW	EPA 6020A
Potassium	2.9	mg/L		08/18/22 08:15	5	0.20	08/25/22 13:05	JMW	EPA 6020A
Sodium	89	mg/L		08/18/22 08:15	5	0.10	08/25/22 13:05	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH03254-09

Name: G06D

Alias: NEW_811_502

Sampled: 08/16/22 10:30

Received: 08/16/22 15:28

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	56	mg/L		08/24/22 19:02	10	10	08/24/22 19:02	CRD	EPA 300.0 REV 2.1
Fluoride	0.722	mg/L		08/24/22 18:44	1	0.250	08/24/22 18:44	CRD	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		08/24/22 18:44	1	1.0	08/24/22 18:44	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	28.96	Feet		08/16/22 10:30	1		08/16/22 10:30	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		08/16/22 10:30	1		08/16/22 10:30	FIELD	Field*
Oxidation Reduction Potential	-153	mV		08/16/22 10:30	1	-500	08/16/22 10:30	FIELD	Field*
pH, Field Measured	7.34	pH Units		08/16/22 10:30	1		08/16/22 10:30	FIELD	Field*
Specific Conductance, Field Measured	1500	umhos/cm		08/16/22 10:30	1		08/16/22 10:30	FIELD	Field*
Temperature, Field Measured	16.2	°C		08/16/22 10:30	1		08/16/22 10:30	FIELD	Field*
Turbidity, Field Measured	100	NTU		08/16/22 10:30	1	0.00	08/16/22 10:30	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	750	mg/L		08/19/22 10:51	1	2.0	08/19/22 10:51	KAM	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		08/19/22 10:51	1	2.0	08/19/22 10:51	KAM	SM 2320B 1997*
Solids - total dissolved solids (TDS)	870	mg/L		08/19/22 11:42	1	26	08/19/22 14:19	CGL	SM 2540C
Total Metals - PIA									
Boron	240	ug/L		08/18/22 08:15	5	10	08/25/22 13:09	JMW	EPA 6020A
Calcium	110	mg/L		08/18/22 08:15	5	0.20	08/25/22 13:09	JMW	EPA 6020A
Magnesium	53	mg/L		08/18/22 08:15	5	0.10	08/25/22 13:09	JMW	EPA 6020A
Potassium	3.1	mg/L		08/18/22 08:15	5	0.20	08/25/22 13:09	JMW	EPA 6020A
Sodium	160	mg/L		08/18/22 08:15	5	0.10	08/25/22 13:09	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH03349-01

Name: L1R

Alias: NEW_811_503

Sampled: 08/16/22 11:44

Received: 08/16/22 15:28

Matrix: Leachate - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	8200	mg/L		08/17/22 14:46	5000	5000	08/17/22 14:46	CJP	EPA 300.0 REV 2.1
Sulfate	21000	mg/L		08/17/22 14:46	5000	5000	08/17/22 14:46	CJP	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	54.78	Feet		08/16/22 11:44	1		08/16/22 11:44	FIELD	Field*
Dissolved oxygen, Field	1.7	mg/L		08/16/22 11:44	1		08/16/22 11:44	FIELD	Field*
Oxidation Reduction Potential	-336	mV		08/16/22 11:44	1	-500	08/16/22 11:44	FIELD	Field*
pH, Field Measured	10.4	pH Units		08/16/22 11:44	1		08/16/22 11:44	FIELD	Field*
Specific Conductance, Field Measured	34600	umhos/cm		08/16/22 11:44	1		08/16/22 11:44	FIELD	Field*
Temperature, Field Measured	22.7	°C		08/16/22 11:44	1		08/16/22 11:44	FIELD	Field*
Turbidity, Field Measured	>1000	NTU		08/16/22 11:44	1	0.00	08/16/22 11:44	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	790	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	650	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Fluoride	0.286	mg/L		08/22/22 13:52	1	0.250	08/22/22 13:52	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	41000	mg/L	H	08/25/22 16:20	1	170	08/25/22 17:36	CGL	SM 2540C
Total Metals - PIA									
Boron	6900	ug/L		08/22/22 12:15	5	10	08/26/22 14:01	JMW	EPA 6020A
Calcium	480	mg/L		08/22/22 12:15	5	0.20	08/26/22 14:01	JMW	EPA 6020A
Magnesium	0.45	mg/L		08/22/22 12:15	5	0.10	08/26/22 14:01	JMW	EPA 6020A
Potassium	1900	mg/L		08/22/22 12:15	100	2.0	08/26/22 17:51	JMW	EPA 6020A
Sodium	17000	mg/L		08/22/22 12:15	1000	20	08/29/22 09:54	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH03664-01

Name: G48MG

Alias: NEW_811_502

Sampled: 08/16/22 13:22

Received: 08/17/22 12:38

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	27	mg/L		08/24/22 20:14	10	10	08/24/22 20:14	CRD	EPA 300.0 REV 2.1
Fluoride	0.411	mg/L		08/24/22 19:56	1	0.250	08/24/22 19:56	CRD	EPA 300.0 REV 2.1
Sulfate	5.6	mg/L		08/24/22 19:56	1	1.0	08/24/22 19:56	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	19.04	Feet		08/16/22 13:22	1		08/16/22 13:22	FIELD	Field*
Dissolved oxygen, Field	1.8	mg/L		08/16/22 13:22	1		08/16/22 13:22	FIELD	Field*
Oxidation Reduction Potential	-97.0	mV		08/16/22 13:22	1	-500	08/16/22 13:22	FIELD	Field*
pH, Field Measured	7.56	pH Units		08/16/22 13:22	1		08/16/22 13:22	FIELD	Field*
Specific Conductance, Field Measured	632.0	umhos/cm		08/16/22 13:22	1		08/16/22 13:22	FIELD	Field*
Temperature, Field Measured	26.0	°C		08/16/22 13:22	1		08/16/22 13:22	FIELD	Field*
Turbidity, Field Measured	997	NTU		08/16/22 13:22	1	0.00	08/16/22 13:22	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	420	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Solids - total dissolved solids (TDS)	550	mg/L		08/19/22 15:23	1	26	08/22/22 12:11	ZEJ	SM 2540C
Total Metals - PIA									
Boron	180	ug/L		08/22/22 12:15	5	10	08/29/22 08:23	JMW	EPA 6020A
Calcium	150	mg/L		08/22/22 12:15	5	0.20	08/26/22 16:30	JMW	EPA 6020A
Magnesium	53	mg/L		08/22/22 12:15	5	0.10	08/26/22 16:30	JMW	EPA 6020A
Potassium	7.7	mg/L		08/22/22 12:15	5	0.10	08/26/22 16:30	JMW	EPA 6020A
Sodium	120	mg/L		08/22/22 12:15	5	0.10	08/26/22 16:30	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH03664-04

Name: G222

Alias: NEW_811_502

Sampled: 08/16/22 13:47

Received: 08/17/22 12:38

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	69	mg/L		08/24/22 21:09	10	10	08/24/22 21:09	CRD	EPA 300.0 REV 2.1
Fluoride	1.03	mg/L		08/31/22 23:38	1	0.250	08/31/22 23:38	CRD	EPA 300.0 REV 2.1
Sulfate	120	mg/L		08/24/22 21:27	25	25	08/24/22 21:27	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	15.09	Feet		08/16/22 13:47	1		08/16/22 13:47	FIELD	Field*
Dissolved oxygen, Field	0.15	mg/L		08/16/22 13:47	1		08/16/22 13:47	FIELD	Field*
Oxidation Reduction Potential	-156	mV		08/16/22 13:47	1	-500	08/16/22 13:47	FIELD	Field*
pH, Field Measured	7.83	pH Units		08/16/22 13:47	1		08/16/22 13:47	FIELD	Field*
Specific Conductance, Field Measured	1857	umhos/cm		08/16/22 13:47	1		08/16/22 13:47	FIELD	Field*
Temperature, Field Measured	19.8	°C		08/16/22 13:47	1		08/16/22 13:47	FIELD	Field*
Turbidity, Field Measured	4.60	NTU		08/16/22 13:47	1	0.00	08/16/22 13:47	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	740	mg/L		08/26/22 09:03	1	2.0	08/26/22 09:03	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 2.0	mg/L		08/26/22 09:03	1	2.0	08/26/22 09:03	CGL	SM 2320B 1997*
Solids - total dissolved solids (TDS)	1100	mg/L		08/19/22 15:23	1	26	08/22/22 12:11	ZEJ	SM 2540C
Total Metals - PIA									
Boron	280	ug/L		08/22/22 12:15	5	10	08/29/22 08:27	JMW	EPA 6020A
Calcium	140	mg/L		08/22/22 12:15	5	0.20	08/26/22 16:34	JMW	EPA 6020A
Magnesium	61	mg/L		08/22/22 12:15	5	0.10	08/26/22 16:34	JMW	EPA 6020A
Potassium	3.0	mg/L		08/22/22 12:15	5	0.10	08/26/22 16:34	JMW	EPA 6020A
Sodium	210	mg/L		08/22/22 12:15	5	0.10	08/26/22 16:34	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH03664-06

Name: G202

Alias: NEW_811_502

Sampled: 08/17/22 10:15

Received: 08/17/22 12:38

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	57	mg/L		08/24/22 22:03	25	25	08/24/22 22:03	CRD	EPA 300.0 REV 2.1
Fluoride	0.367	mg/L		08/24/22 21:45	1	0.250	08/24/22 21:45	CRD	EPA 300.0 REV 2.1
Sulfate	85	mg/L		08/24/22 22:03	25	25	08/24/22 22:03	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	47.5	Feet		08/17/22 10:15	1		08/17/22 10:15	FIELD	Field*
Dissolved oxygen, Field	8.8	mg/L		08/17/22 10:15	1		08/17/22 10:15	FIELD	Field*
Oxidation Reduction Potential	111	mV		08/17/22 10:15	1	-500	08/17/22 10:15	FIELD	Field*
pH, Field Measured	8.12	pH Units		08/17/22 10:15	1		08/17/22 10:15	FIELD	Field*
Specific Conductance, Field Measured	1200	umhos/cm		08/17/22 10:15	1		08/17/22 10:15	FIELD	Field*
Temperature, Field Measured	17.8	°C		08/17/22 10:15	1		08/17/22 10:15	FIELD	Field*
Turbidity, Field Measured	2.05	NTU		08/17/22 10:15	1	0.00	08/17/22 10:15	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	440	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	770	mg/L		08/23/22 13:57	1	26	08/23/22 16:18	ZEJ	SM 2540C
Total Metals - PIA									
Boron	150	ug/L		08/22/22 12:15	5	10	08/29/22 09:36	JMW	EPA 6020A
Calcium	100	mg/L		08/22/22 12:15	5	0.20	08/26/22 16:49	JMW	EPA 6020A
Magnesium	44	mg/L		08/22/22 12:15	5	0.10	08/29/22 09:36	JMW	EPA 6020A
Potassium	1.8	mg/L		08/22/22 12:15	5	0.10	08/26/22 16:49	JMW	EPA 6020A
Sodium	100	mg/L		08/22/22 12:15	5	0.10	08/29/22 09:36	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH03664-07

Name: R202

Alias: NEW_811_502

Sampled: 08/17/22 11:12

Received: 08/17/22 12:38

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	57	mg/L		08/24/22 22:39	25	25	08/24/22 22:39	CRD	EPA 300.0 REV 2.1
Fluoride	0.364	mg/L		08/24/22 22:21	1	0.250	08/24/22 22:21	CRD	EPA 300.0 REV 2.1
Sulfate	37	mg/L		08/24/22 22:39	25	25	08/24/22 22:39	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	47.3	Feet		08/17/22 11:12	1		08/17/22 11:12	FIELD	Field*
Dissolved oxygen, Field	0.44	mg/L		08/17/22 11:12	1		08/17/22 11:12	FIELD	Field*
Oxidation Reduction Potential	-139	mV		08/17/22 11:12	1	-500	08/17/22 11:12	FIELD	Field*
pH, Field Measured	7.71	pH Units		08/17/22 11:12	1		08/17/22 11:12	FIELD	Field*
Specific Conductance, Field Measured	1242	umhos/cm		08/17/22 11:12	1		08/17/22 11:12	FIELD	Field*
Temperature, Field Measured	17.6	°C		08/17/22 11:12	1		08/17/22 11:12	FIELD	Field*
Turbidity, Field Measured	2.01	NTU		08/17/22 11:12	1	0.00	08/17/22 11:12	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	490	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	560	mg/L		08/23/22 13:57	1	26	08/23/22 16:18	ZEJ	SM 2540C
Total Metals - PIA									
Boron	150	ug/L		08/22/22 12:15	5	10	08/29/22 09:39	JMW	EPA 6020A
Calcium	100	mg/L		08/22/22 12:15	5	0.20	08/26/22 16:52	JMW	EPA 6020A
Magnesium	47	mg/L		08/22/22 12:15	5	0.10	08/29/22 09:39	JMW	EPA 6020A
Potassium	1.8	mg/L		08/22/22 12:15	5	0.10	08/26/22 16:52	JMW	EPA 6020A
Sodium	110	mg/L		08/22/22 12:15	5	0.10	08/29/22 09:39	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH03664-08

Name: G203

Alias: NEW_811_502

Sampled: 08/17/22 11:51

Received: 08/17/22 12:38

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	54	mg/L		08/24/22 23:15	25	25	08/24/22 23:15	CRD	EPA 300.0 REV 2.1
Fluoride	0.263	mg/L		08/24/22 22:57	1	0.250	08/24/22 22:57	CRD	EPA 300.0 REV 2.1
Sulfate	120	mg/L		08/24/22 23:15	25	25	08/24/22 23:15	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	40.98	Feet		08/17/22 11:51	1		08/17/22 11:51	FIELD	Field*
Dissolved oxygen, Field	6.0	mg/L		08/17/22 11:51	1		08/17/22 11:51	FIELD	Field*
Oxidation Reduction Potential	18.2	mV		08/17/22 11:51	1	-500	08/17/22 11:51	FIELD	Field*
pH, Field Measured	8.02	pH Units		08/17/22 11:51	1		08/17/22 11:51	FIELD	Field*
Specific Conductance, Field Measured	1208	umhos/cm		08/17/22 11:51	1		08/17/22 11:51	FIELD	Field*
Temperature, Field Measured	18.5	°C		08/17/22 11:51	1		08/17/22 11:51	FIELD	Field*
Turbidity, Field Measured	0.460	NTU		08/17/22 11:51	1	0.00	08/17/22 11:51	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	450	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Solids - total dissolved solids (TDS)	660	mg/L		08/23/22 13:57	1	26	08/23/22 16:18	ZEJ	SM 2540C
Total Metals - PIA									
Boron	100	ug/L		08/22/22 12:15	5	10	08/29/22 09:43	JMW	EPA 6020A
Calcium	120	mg/L		08/22/22 12:15	5	0.20	08/26/22 16:56	JMW	EPA 6020A
Magnesium	47	mg/L		08/22/22 12:15	5	0.10	08/29/22 09:43	JMW	EPA 6020A
Potassium	1.8	mg/L		08/22/22 12:15	5	0.10	08/26/22 16:56	JMW	EPA 6020A
Sodium	88	mg/L		08/22/22 12:15	5	0.10	08/29/22 09:43	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH04035-01

Name: G201

Alias: NEW_811_502

Sampled: 08/17/22 14:05

Received: 08/18/22 14:22

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	4.4	mg/L		08/30/22 12:14	1	1.0	08/30/22 12:14	CRD	EPA 300.0 REV 2.1
Fluoride	0.715	mg/L		08/30/22 12:14	1	0.250	08/30/22 12:14	CRD	EPA 300.0 REV 2.1
Sulfate	520	mg/L		08/30/22 12:32	100	100	08/30/22 12:32	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	17.49	Feet		08/17/22 14:05	1		08/17/22 14:05	FIELD	Field*
Dissolved oxygen, Field	1.1	mg/L		08/17/22 14:05	1		08/17/22 14:05	FIELD	Field*
Oxidation Reduction Potential	-152	mV		08/17/22 14:05	1	-500	08/17/22 14:05	FIELD	Field*
pH, Field Measured	7.33	pH Units		08/17/22 14:05	1		08/17/22 14:05	FIELD	Field*
Specific Conductance, Field Measured	909.0	umhos/cm		08/17/22 14:05	1		08/17/22 14:05	FIELD	Field*
Temperature, Field Measured	20.0	°C		08/17/22 14:05	1		08/17/22 14:05	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		08/17/22 14:05	1	0.00	08/17/22 14:05	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	190	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	900	mg/L		08/24/22 10:13	1	26	08/24/22 12:08	CGL	SM 2540C
Total Metals - PIA									
Boron	140	ug/L		08/23/22 09:03	5	10	08/29/22 15:01	JMW	EPA 6020A
Calcium	160	mg/L		08/23/22 09:03	5	0.20	08/29/22 15:01	JMW	EPA 6020A
Magnesium	21	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:01	JMW	EPA 6020A
Potassium	1.9	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:01	JMW	EPA 6020A
Sodium	94	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:01	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH04035-02

Name: R201

Alias: NEW_811_502

Sampled: 08/17/22 14:50

Received: 08/18/22 14:22

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	34	mg/L		08/30/22 13:08	25	25	08/30/22 13:08	CRD	EPA 300.0 REV 2.1
Fluoride	1.20	mg/L		08/30/22 12:50	1	0.250	08/30/22 12:50	CRD	EPA 300.0 REV 2.1
Sulfate	100	mg/L		08/30/22 13:08	25	25	08/30/22 13:08	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	17.56	Feet		08/17/22 14:50	1		08/17/22 14:50	FIELD	Field*
Dissolved oxygen, Field	0.82	mg/L		08/17/22 14:50	1		08/17/22 14:50	FIELD	Field*
Oxidation Reduction Potential	-181	mV		08/17/22 14:50	1	-500	08/17/22 14:50	FIELD	Field*
pH, Field Measured	7.31	pH Units		08/17/22 14:50	1		08/17/22 14:50	FIELD	Field*
Specific Conductance, Field Measured	904.0	umhos/cm		08/17/22 14:50	1		08/17/22 14:50	FIELD	Field*
Temperature, Field Measured	21.5	°C		08/17/22 14:50	1		08/17/22 14:50	FIELD	Field*
Turbidity, Field Measured	42.5	NTU		08/17/22 14:50	1	0.00	08/17/22 14:50	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	520	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	730	mg/L		08/24/22 10:13	1	26	08/24/22 12:08	CGL	SM 2540C
Total Metals - PIA									
Boron	210	ug/L		08/23/22 09:03	5	10	08/30/22 08:10	JMW	EPA 6020A
Calcium	97	mg/L		08/23/22 09:03	5	0.20	08/29/22 15:23	JMW	EPA 6020A
Magnesium	40	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:23	JMW	EPA 6020A
Potassium	1.9	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:23	JMW	EPA 6020A
Sodium	150	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:23	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH04035-04

Name: G230

Alias: NEW_811_502

Sampled: 08/17/22 14:49

Received: 08/18/22 14:22

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	100	mg/L		08/30/22 13:26	50	50	08/30/22 13:26	CRD	EPA 300.0 REV 2.1
Sulfate	320	mg/L		08/30/22 13:26	50	50	08/30/22 13:26	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	47.64	Feet		08/17/22 14:49	1		08/17/22 14:49	FIELD	Field*
Dissolved oxygen, Field	0.25	mg/L		08/17/22 14:49	1		08/17/22 14:49	FIELD	Field*
Oxidation Reduction Potential	-152	mV		08/17/22 14:49	1	-500	08/17/22 14:49	FIELD	Field*
pH, Field Measured	7.69	pH Units		08/17/22 14:49	1		08/17/22 14:49	FIELD	Field*
Specific Conductance, Field Measured	1826	umhos/cm		08/17/22 14:49	1		08/17/22 14:49	FIELD	Field*
Temperature, Field Measured	18.9	°C		08/17/22 14:49	1		08/17/22 14:49	FIELD	Field*
Turbidity, Field Measured	68.7	NTU		08/17/22 14:49	1	0.00	08/17/22 14:49	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	440	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Fluoride	0.579	mg/L		09/01/22 12:27	1	0.250	09/01/22 12:27	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	1100	mg/L		08/24/22 10:13	1	26	08/24/22 12:08	CGL	SM 2540C
Total Metals - PIA									
Boron	130	ug/L		08/23/22 09:03	5	10	08/30/22 08:14	JMW	EPA 6020A
Calcium	150	mg/L		08/23/22 09:03	5	0.20	08/29/22 15:27	JMW	EPA 6020A
Magnesium	57	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:27	JMW	EPA 6020A
Potassium	5.1	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:27	JMW	EPA 6020A
Sodium	170	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:27	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH04035-05

Name: G231

Alias: NEW_811_502

Sampled: 08/17/22 15:55

Received: 08/18/22 14:22

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	81	mg/L		08/30/22 14:02	50	50	08/30/22 14:02	CRD	EPA 300.0 REV 2.1
Fluoride	0.430	mg/L		08/30/22 13:44	1	0.250	08/30/22 13:44	CRD	EPA 300.0 REV 2.1
Sulfate	220	mg/L		08/30/22 14:02	50	50	08/30/22 14:02	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	47.12	Feet		08/17/22 15:55	1		08/17/22 15:55	FIELD	Field*
Dissolved oxygen, Field	0.29	mg/L		08/17/22 15:55	1		08/17/22 15:55	FIELD	Field*
Oxidation Reduction Potential	-132	mV		08/17/22 15:55	1	-500	08/17/22 15:55	FIELD	Field*
pH, Field Measured	7.75	pH Units		08/17/22 15:55	1		08/17/22 15:55	FIELD	Field*
Specific Conductance, Field Measured	1306	umhos/cm		08/17/22 15:55	1		08/17/22 15:55	FIELD	Field*
Temperature, Field Measured	18.1	°C		08/17/22 15:55	1		08/17/22 15:55	FIELD	Field*
Turbidity, Field Measured	32.3	NTU		08/17/22 15:55	1	0.00	08/17/22 15:55	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	350	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Solids - total dissolved solids (TDS)	810	mg/L		08/24/22 10:13	1	26	08/24/22 12:08	CGL	SM 2540C
Total Metals - PIA									
Boron	110	ug/L		08/23/22 09:03	5	10	08/30/22 08:18	JMW	EPA 6020A
Calcium	110	mg/L		08/23/22 09:03	5	0.20	08/29/22 15:31	JMW	EPA 6020A
Magnesium	46	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:31	JMW	EPA 6020A
Potassium	3.2	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:31	JMW	EPA 6020A
Sodium	120	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:31	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH04035-06

Name: G232

Alias: NEW_811_502

Sampled: 08/17/22 16:30

Received: 08/18/22 14:22

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	85	mg/L		08/30/22 14:38	25	25	08/30/22 14:38	CRD	EPA 300.0 REV 2.1
Fluoride	0.651	mg/L		08/30/22 14:20	1	0.250	08/30/22 14:20	CRD	EPA 300.0 REV 2.1
Sulfate	330	mg/L		08/31/22 18:43	50	50	08/31/22 18:43	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	45.49	Feet		08/17/22 16:30	1		08/17/22 16:30	FIELD	Field*
Dissolved oxygen, Field	0.19	mg/L		08/17/22 16:30	1		08/17/22 16:30	FIELD	Field*
Oxidation Reduction Potential	-222	mV		08/17/22 16:30	1	-500	08/17/22 16:30	FIELD	Field*
pH, Field Measured	7.95	pH Units		08/17/22 16:30	1		08/17/22 16:30	FIELD	Field*
Specific Conductance, Field Measured	1490	umhos/cm		08/17/22 16:30	1		08/17/22 16:30	FIELD	Field*
Temperature, Field Measured	17.7	°C		08/17/22 16:30	1		08/17/22 16:30	FIELD	Field*
Turbidity, Field Measured	21.3	NTU		08/17/22 16:30	1	0.00	08/17/22 16:30	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	310	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Solids - total dissolved solids (TDS)	950	mg/L		08/24/22 10:13	1	26	08/24/22 12:08	CGL	SM 2540C
Total Metals - PIA									
Boron	130	ug/L		08/23/22 09:03	5	10	08/30/22 08:21	JMW	EPA 6020A
Calcium	100	mg/L		08/23/22 09:03	5	0.20	08/29/22 15:35	JMW	EPA 6020A
Magnesium	35	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:35	JMW	EPA 6020A
Potassium	2.9	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:35	JMW	EPA 6020A
Sodium	160	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:35	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH04035-07

Name: G234

Alias: NEW_811_502

Sampled: 08/17/22 16:11

Received: 08/18/22 14:22

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	60	mg/L		08/30/22 15:50	25	25	08/30/22 15:50	CRD	EPA 300.0 REV 2.1
Fluoride	0.365	mg/L		08/30/22 14:56	1	0.250	08/30/22 14:56	CRD	EPA 300.0 REV 2.1
Sulfate	140	mg/L		08/30/22 15:50	25	25	08/30/22 15:50	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	42.82	Feet		08/17/22 16:11	1		08/17/22 16:11	FIELD	Field*
Dissolved oxygen, Field	0.87	mg/L		08/17/22 16:11	1		08/17/22 16:11	FIELD	Field*
Oxidation Reduction Potential	-164	mV		08/17/22 16:11	1	-500	08/17/22 16:11	FIELD	Field*
pH, Field Measured	7.40	pH Units		08/17/22 16:11	1		08/17/22 16:11	FIELD	Field*
Specific Conductance, Field Measured	989.0	umhos/cm		08/17/22 16:11	1		08/17/22 16:11	FIELD	Field*
Temperature, Field Measured	21.0	°C		08/17/22 16:11	1		08/17/22 16:11	FIELD	Field*
Turbidity, Field Measured	82.6	NTU		08/17/22 16:11	1	0.00	08/17/22 16:11	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	450	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Solids - total dissolved solids (TDS)	760	mg/L		08/24/22 10:13	1	26	08/24/22 12:08	CGL	SM 2540C
Total Metals - PIA									
Boron	97	ug/L		08/23/22 09:03	5	10	08/30/22 08:25	JMW	EPA 6020A
Calcium	120	mg/L		08/23/22 09:03	5	0.20	08/29/22 15:38	JMW	EPA 6020A
Magnesium	49	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:38	JMW	EPA 6020A
Potassium	2.4	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:38	JMW	EPA 6020A
Sodium	120	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:38	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH04035-08

Name: G233

Alias: NEW_811_502

Sampled: 08/18/22 09:08

Received: 08/18/22 14:22

Matrix: Ground Water - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	54	mg/L		08/30/22 16:27	50	50	08/30/22 16:27	CRD	EPA 300.0 REV 2.1
Sulfate	620	mg/L		08/31/22 19:37	100	100	08/31/22 19:37	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	41.48	Feet		08/18/22 09:08	1		08/18/22 09:08	FIELD	Field*
Dissolved oxygen, Field	0.81	mg/L		08/18/22 09:08	1		08/18/22 09:08	FIELD	Field*
Oxidation Reduction Potential	-119	mV		08/18/22 09:08	1	-500	08/18/22 09:08	FIELD	Field*
pH, Field Measured	7.16	pH Units		08/18/22 09:08	1		08/18/22 09:08	FIELD	Field*
Specific Conductance, Field Measured	2102	umhos/cm		08/18/22 09:08	1		08/18/22 09:08	FIELD	Field*
Temperature, Field Measured	15.9	°C		08/18/22 09:08	1		08/18/22 09:08	FIELD	Field*
Turbidity, Field Measured	9.86	NTU		08/18/22 09:08	1	0.00	08/18/22 09:08	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	540	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		08/26/22 09:03	1	10	08/26/22 09:03	CGL	SM 2320B 1997*
Fluoride	0.494	mg/L		09/01/22 12:36	1	0.250	09/01/22 12:36	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	1500	mg/L		08/24/22 10:20	1	26	08/24/22 14:12	CGL	SM 2540C
Total Metals - PIA									
Boron	150	ug/L		08/23/22 09:03	5	10	08/30/22 08:29	JMW	EPA 6020A
Calcium	190	mg/L		08/23/22 09:03	5	0.20	08/29/22 15:42	JMW	EPA 6020A
Magnesium	76	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:42	JMW	EPA 6020A
Potassium	4.2	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:42	JMW	EPA 6020A
Sodium	220	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:42	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FH04037-01

Name: L301

Alias: NEW_811_502

Sampled: 08/18/22 09:02

Received: 08/18/22 14:22

Matrix: Leachate - Grab

PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	25	mg/L		09/02/22 15:13	10	10	09/02/22 15:13	CRD	EPA 300.0 REV 2.1
Sulfate	2100	mg/L		09/02/22 15:31	500	500	09/02/22 15:31	CRD	EPA 300.0 REV 2.1
Field - PIA									
Dissolved oxygen, Field	2.9	mg/L		08/18/22 09:02	1		08/18/22 09:02	FIELD	Field*
Oxidation Reduction Potential	-156	mV		08/18/22 09:02	1	-500	08/18/22 09:02	FIELD	Field*
pH, Field Measured	9.64	pH Units		08/18/22 09:02	1		08/18/22 09:02	FIELD	Field*
Specific Conductance, Field Measured	3990	umhos/cm		08/18/22 09:02	1		08/18/22 09:02	FIELD	Field*
Temperature, Field Measured	18.7	°C		08/18/22 09:02	1		08/18/22 09:02	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		08/18/22 09:02	1	0.00	08/18/22 09:02	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	< 2.0	mg/L		08/30/22 12:45	1	2.0	08/30/22 12:45	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	180	mg/L		08/30/22 12:45	1	2.0	08/30/22 12:45	CGL	SM 2320B 1997*
Fluoride	0.314	mg/L		09/08/22 15:23	1	0.250	09/08/22 15:23	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	7300	mg/L		08/24/22 10:13	1	34	08/24/22 12:08	CGL	SM 2540C
Total Metals - PIA									
Boron	60000	ug/L		08/23/22 09:03	200	400	08/30/22 09:33	JMW	EPA 6020A
Calcium	36	mg/L		08/23/22 09:03	5	0.20	08/29/22 15:46	JMW	EPA 6020A
Magnesium	1.8	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:46	JMW	EPA 6020A
Potassium	74	mg/L		08/23/22 09:03	5	0.10	08/29/22 15:46	JMW	EPA 6020A
Sodium	1100	mg/L		08/23/22 09:03	200	4.0	08/29/22 17:17	JMW	EPA 6020A



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B241136 - SW 3015 - EPA 6020A</u>									
Blank (B241136-BLK1)				Prepared: 08/18/22 Analyzed: 08/24/22					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B241136-BS1)				Prepared: 08/18/22 Analyzed: 08/24/22					
Boron	493	ug/L		555.6		89	80-120		
Calcium	5.44	mg/L		5.556		98	80-120		
Magnesium	5.69	mg/L		5.556		102	80-120		
Potassium	5.50	mg/L		5.556		99	80-120		
Sodium	5.53	mg/L		5.556		100	80-120		
<u>Batch B241176 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B241176-CCB1)				Prepared & Analyzed: 08/17/22					
Chloride	0.132	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B241176-CCV1)				Prepared & Analyzed: 08/17/22					
Chloride	5.04	mg/L		5.000		101	90-110		
Sulfate	5.03	mg/L		5.000		101	90-110		
<u>Batch B241298 - No Prep - SM 2540C</u>									
Blank (B241298-BLK1)				Prepared & Analyzed: 08/19/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B241298-BS1)				Prepared & Analyzed: 08/19/22					
Solids - total dissolved solids (TDS)	950	mg/L		1000		95	84.9-109		
Solids - total dissolved solids (TDS)	950	mg/L		1000		95	84.9-109		
Duplicate (B241298-DUP1)				Sample: FH03254-08 Prepared & Analyzed: 08/19/22					
Solids - total dissolved solids (TDS)	640	mg/L			667			4	5
Solids - total dissolved solids (TDS)	640	mg/L			667			4	5
Duplicate (B241298-DUP2)				Sample: FH03254-09 Prepared & Analyzed: 08/19/22					
Solids - total dissolved solids (TDS)	875	mg/L			870			0.6	5
Solids - total dissolved solids (TDS)	875	mg/L			870			0.6	5
<u>Batch B241342 - No Prep - SM 2540C</u>									
Blank (B241342-BLK1)				Prepared: 08/19/22 Analyzed: 08/22/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B241342-BS1)				Prepared: 08/19/22 Analyzed: 08/22/22					
Solids - total dissolved solids (TDS)	977	mg/L		1000		98	84.9-109		
<u>Batch B241379 - No Prep - SM 4500F C 1997</u>									



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B241379 - No Prep - SM 4500F C 1997</u>									
Calibration Blank (B241379-CCB1)				Prepared & Analyzed: 08/22/22					
Fluoride	0.00800	mg/L							
Calibration Blank (B241379-CCB2)				Prepared & Analyzed: 08/22/22					
Fluoride	0.0100	mg/L							
Calibration Check (B241379-CCV1)				Prepared & Analyzed: 08/22/22					
Fluoride	0.652	mg/L		0.7000		93	90-110		
Calibration Check (B241379-CCV2)				Prepared & Analyzed: 08/22/22					
Fluoride	0.694	mg/L		0.7000		99	90-110		
<u>Batch B241419 - SW 3015 - EPA 6020A</u>									
Blank (B241419-BLK1)				Prepared: 08/22/22 Analyzed: 08/26/22					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B241419-BS1)				Prepared: 08/22/22 Analyzed: 08/26/22					
Boron	553	ug/L		555.6		99	80-120		
Calcium	5.46	mg/L		5.556		98	80-120		
Magnesium	5.20	mg/L		5.556		94	80-120		
Potassium	5.86	mg/L		5.556		105	80-120		
Sodium	6.12	mg/L		5.556		110	80-120		
<u>Batch B241512 - SW 3015 - EPA 6020A</u>									
Blank (B241512-BLK1)				Prepared: 08/23/22 Analyzed: 08/26/22					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B241512-BS1)				Prepared: 08/23/22 Analyzed: 08/26/22					
Boron	662	ug/L		555.6		119	80-120		
Calcium	5.53	mg/L		5.556		100	80-120		
Magnesium	5.21	mg/L		5.556		94	80-120		
Potassium	5.81	mg/L		5.556		105	80-120		
Sodium	6.24	mg/L		5.556		112	80-120		
<u>Batch B241555 - No Prep - SM 2320B 1997</u>									
Blank (B241555-BLK1)				Prepared & Analyzed: 08/19/22					
Alkalinity - bicarbonate as CaCO ₃	2.50	mg/L							
LCS (B241555-BS1)				Prepared & Analyzed: 08/19/22					
Alkalinity - bicarbonate as CaCO ₃	65.0	mg/L					90-110		
<u>Batch B241556 - No Prep - SM 2320B 1997</u>									
Blank (B241556-BLK1)				Prepared & Analyzed: 08/19/22					



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B241556 - No Prep - SM 2320B 1997</u>									
Blank (B241556-BLK1)				Prepared & Analyzed: 08/19/22					
Alkalinity - carbonate as CaCO ₃	2.50	mg/L							
<u>Batch B241570 - No Prep - SM 2540C</u>									
Blank (B241570-BLK1)				Prepared & Analyzed: 08/23/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B241570-BS1)				Prepared & Analyzed: 08/23/22					
Solids - total dissolved solids (TDS)	987	mg/L		1000		99	84.9-109		
Solids - total dissolved solids (TDS)	987	mg/L		1000		99	84.9-109		
<u>Batch B241686 - No Prep - SM 2540C</u>									
Blank (B241686-BLK1)				Prepared & Analyzed: 08/24/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B241686-BS1)				Prepared & Analyzed: 08/24/22					
Solids - total dissolved solids (TDS)	977	mg/L		1000		98	84.9-109		
Solids - total dissolved solids (TDS)	977	mg/L		1000		98	84.9-109		
<u>Batch B241688 - No Prep - SM 2540C</u>									
Blank (B241688-BLK1)				Prepared & Analyzed: 08/24/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B241688-BS1)				Prepared & Analyzed: 08/24/22					
Solids - total dissolved solids (TDS)	1010	mg/L		1000		101	84.9-109		
<u>Batch B241829 - No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B241829-CCB1)				Prepared & Analyzed: 08/24/22					
Chloride	0.511	mg/L							
Fluoride	0.00	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B241829-CCV1)				Prepared & Analyzed: 08/24/22					
Sulfate	4.95	mg/L		5.000		99	90-110		
Fluoride	5.08	mg/L		5.000		102	90-110		
Chloride	4.76	mg/L		5.000		95	90-110		
<u>Batch B241831 - No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B241831-CCB1)				Prepared & Analyzed: 08/24/22					
Sulfate	0.00	mg/L							
Chloride	0.0687	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B241831-CCV1)				Prepared & Analyzed: 08/24/22					
Sulfate	4.94	mg/L		5.000		99	90-110		
Chloride	4.59	mg/L		5.000		92	90-110		
Fluoride	5.02	mg/L		5.000		100	90-110		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B241894 - No Prep - SM 2540C</u>									
Blank (B241894-BLK1)				Prepared & Analyzed: 08/25/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B241894-BS1)				Prepared & Analyzed: 08/25/22					
Solids - total dissolved solids (TDS)	967	mg/L		1000		97	84.9-109		
<u>Batch B242066 - No Prep - SM 2320B 1997</u>									
Duplicate (B242066-DUP5)				Sample: FH04035-01	Prepared & Analyzed: 08/26/22				
Alkalinity - bicarbonate as CaCO3	188	mg/L			188			0	10
<u>Batch B242068 - No Prep - SM 2320B 1997</u>									
Duplicate (B242068-DUP5)				Sample: FH04035-01	Prepared & Analyzed: 08/26/22				
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
<u>Batch B242277 - No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B242277-CCB1)				Prepared & Analyzed: 08/29/22					
Sulfate	0.00	mg/L							
Calibration Check (B242277-CCV1)				Prepared & Analyzed: 08/29/22					
Sulfate	4.83	mg/L		5.000		97	90-110		
<u>Batch B242417 - No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B242417-CCB1)				Prepared & Analyzed: 08/30/22					
Sulfate	0.00	mg/L							
Fluoride	0.00	mg/L							
Chloride	0.149	mg/L							
Calibration Blank (B242417-CCB2)				Prepared & Analyzed: 08/30/22					
Fluoride	0.00	mg/L							
Chloride	0.210	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B242417-CCV1)				Prepared & Analyzed: 08/30/22					
Sulfate	5.19	mg/L		5.000		104	90-110		
Fluoride	5.24	mg/L		5.000		105	90-110		
Chloride	5.10	mg/L		5.000		102	90-110		
Calibration Check (B242417-CCV2)				Prepared & Analyzed: 08/30/22					
Fluoride	4.99	mg/L		5.000		100	90-110		
Chloride	4.81	mg/L		5.000		96	90-110		
Sulfate	4.89	mg/L		5.000		98	90-110		
<u>Batch B242487 - No Prep - SM 4500F C 1997</u>									
Calibration Blank (B242487-CCB1)				Prepared & Analyzed: 09/01/22					
Fluoride	0.00900	mg/L							
Calibration Blank (B242487-CCB2)				Prepared & Analyzed: 09/01/22					
Fluoride	0.00900	mg/L							
Calibration Check (B242487-CCV1)				Prepared & Analyzed: 09/01/22					
Fluoride	0.665	mg/L		0.7000		95	90-110		
Calibration Check (B242487-CCV2)				Prepared & Analyzed: 09/01/22					



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B242487 - No Prep - SM 4500F C 1997</u>									
Calibration Check (B242487-CCV2)				Prepared & Analyzed: 09/01/22					
Fluoride	0.689	mg/L		0.7000		98	90-110		
<u>Batch B242494 - No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B242494-CCB1)				Prepared & Analyzed: 08/31/22					
Sulfate	0.00	mg/L							
Calibration Check (B242494-CCV1)				Prepared & Analyzed: 08/31/22					
Sulfate	5.08	mg/L		5.000		102	90-110		
<u>Batch B242498 - No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B242498-CCB1)				Prepared & Analyzed: 08/31/22					
Fluoride	0.00	mg/L							
Calibration Check (B242498-CCV1)				Prepared & Analyzed: 08/31/22					
Fluoride	5.14	mg/L		5.000		103	90-110		
<u>Batch B242685 - No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B242685-CCB1)				Prepared & Analyzed: 09/01/22					
Chloride	0.657	mg/L							
Calibration Check (B242685-CCV1)				Prepared & Analyzed: 09/01/22					
Chloride	4.92	mg/L		5.000		98	90-110		
<u>Batch B242703 - No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B242703-CCB1)				Prepared & Analyzed: 09/02/22					
Chloride	0.655	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B242703-CCV1)				Prepared & Analyzed: 09/02/22					
Sulfate	4.86	mg/L		5.000		97	90-110		
Chloride	4.86	mg/L		5.000		97	90-110		
<u>Batch B243079 - No Prep - SM 4500F C 1997</u>									
Calibration Blank (B243079-CCB1)				Prepared & Analyzed: 09/08/22					
Fluoride	0.00800	mg/L							
Calibration Blank (B243079-CCB2)				Prepared & Analyzed: 09/08/22					
Fluoride	0.0110	mg/L							
Calibration Check (B243079-CCV1)				Prepared & Analyzed: 09/08/22					
Fluoride	0.689	mg/L		0.7000		98	90-110		
Calibration Check (B243079-CCV2)				Prepared & Analyzed: 09/08/22					
Fluoride	0.696	mg/L		0.7000		99	90-110		
Matrix Spike (B243079-MS1)				Prepared & Analyzed: 09/08/22					
Fluoride	1.92	mg/L		1.000	0.884	103	80-120		
Matrix Spike Dup (B243079-MSD1)				Prepared & Analyzed: 09/08/22					
Fluoride	1.98	mg/L		1.000	0.884	109	80-120	3	20
<u>Batch B243383 - No Prep - EPA 300.0 REV 2.1</u>									



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B243383 - No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B243383-CCB1)				Prepared & Analyzed: 09/09/22					
Chloride	0.0718	mg/L							
Calibration Check (B243383-CCV1)				Prepared & Analyzed: 09/09/22					
Chloride	4.79	mg/L		5.000		96	90-110		



NOTES

Specifications regarding method revisions, method modifications, and calculations used for analysis are available upon request. Please contact your project manager.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050

TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615

TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553

Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)

Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807

USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050

Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Qualifiers

H Test performed after the expiration of the appropriate regulatory/advisory maximum allowable hold time.

Certified by: Gail Schindler, Project Manager



The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information: Company: Visira Corp Address: 13498 E. 900th St		Section B Required Project Information: Report To: Brian Voelker Copy To: Jason Stuckey		Section C Invoice Information: Attention: Jason Stuckey Company Name: Visira Corp Address: see Section A Quote Reference: Project Manager: Profile #: 		Section D Required Material Information: Material: DRINKING WATER Material Specification: see Section A Material Quantity: see Section A Material Unit of Measure: see Section A Material Location: see Section A Material Status: see Section A Material Notes: see Section A	
Email To: Brian.Voelker@VisiraCorp.com Phone: (217) 753-8911 Fax: 		Purchase Order No.: Project Name: Newton Project Number: 2285		Regulatory Agency: NPDES: UST: RCRA: OTHER: 		Site Location: IL STATE: 	
Requested Due Date/RAT: standard							

Section D Required Client Information	Valid Matrix Codes		COLLECTED		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS			
	MATRIX	CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME											Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)	
SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	DRINKING WATER	DW																		
	WASTE WATER	WW																		
	WASTE WATER PRODUCT	WP																		
	SOIL/SOLID	SL																		
	OIL	OL																		
	WIFE	WP																		
	AIR	AR																		
	OTHER	OT																		
	TISSUE	TS																		
	1	S101	WTG	8/13/22	1749															
	2	G105	WTG	8/13/22	1443															
	3	G208			1708															
	4	A214			1800															
	5	A215			1559															
	6	G217S			1352															
	7	R217D			1647															
8	G220			1748																
9	G223			1457																
10	G224			1356																
11	XPW01			1648																
12	XPW02			1730																
13																				
14																				
15																				
16																				

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS		
NEW-Q3-2022		Joe R. Reed		8/16/22		1528		Joe R. Reed		8/16/22		1528		Received on Ice (Y/N) ☒ Custody Sealed Cooler (Y/N) ☒ Samples Intact (Y/N) ☒		

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 5

Section A Required Client Information: Company: Visira Corp Address: 13498 E. 900th St Email To: Brian.Voelker@VisiraCorp.com Phone: (217) 753-8911 Fax: Requested Due Date/TAT: standard		Section B Required Project Information: Report To: Brian Voelker Copy To: Jason Stuckey Purchase Order No.: Project Name: Newton Project Number: 2285		Section C Invoice Information: Attention: Jason Stuckey Company Name: Visira Corp Address: see Section A Quote Reference: Project Manager: Profile #:	
REGULATORY AGENCY NPDES GROUND WATER DRINKING WATER UST RCRA OTHER		Site Location STATE: IL			

Section D Required Client Information		Valid Matrix Codes		COLLECTED		SAMPLE TEMP AT COLLECTION		Preservatives		Requested Analysis Filtered (Y/N)		Project No./ Lab I.D.											
ITEM #	Matrix Code	Matrix Code	Matrix Code	DATE	TIME	SAMPLE TYPE (G=GRAB C=COMP)	MATRIX CODE (see valid codes to left)	UNPRESERVED	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	Analysis Test	NEW-257-501	NEW-257-502	NEW-811-502	NEW-811-503	NEW-22Q3-NEW-NPDES-501	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	LIR			8/16/22	1144		WTG																
2	T101				1017																		
3	S102				1122																		
4	T102				1057																		
5	G106				1130																		
6	G06D				1030																		
7	G104				1033																		
8	XPW03				1104																		
9	XPW04				1030																		
10																							
11																							
12																							
13																							
14																							
15																							
16																							

ADDITIONAL COMMENTS NEW-Q3-2022		RELINQUISHED BY / AFFILIATION Joseph R. Rude	DATE 8/16/22	TIME 1528	ACCEPTED BY / AFFILIATION Joseph R. Rude	DATE 8/16/22	TIME 1528	SAMPLE CONDITIONS Received on Ice (Y/N) ☒ Custody Sealed Cooler (Y/N) ☒ Samples Intact (Y/N) ☒
SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: Joseph R. Rude		DATE Signed (MM/DD/YYYY): 8/16/22		Temp in °C 24		Project No./ Lab I.D.		

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Required Client Information:

Section B

Required Project Information:

Company:	Vistra Corp	Report To:	Brian Voelker	Attention:	Jason Stuckey	REGULATORY AGENCY		
Address:	13498 E. 900th St	Copy To:	Jason Stuckey	Company Name:	Vistra Corp			
				Address:	see Section A			
				Quote Reference:				
Email To:	Brian.Voelker@VistraCorp.com	Purchase Order No.:		Project Manager:		NPDES	GROUND WATER	DRINKING WATER
Phone:	(217) 753-8911	Fax:		Project #:		UST	RCRA	OTHER
Requested Due Date/TAT:			standard			Site Location		IL
						STATE:		

[illegible][illegible]

FH03664

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company: **Visira Corp**
 Address: **13498 E. 900th St**
 Email To: **Brian.Voelker@VisiraCorp.com**
 Phone: **(217) 753-8911** Fax:
 Requested Due Date/TAT: **standard**

Section B Required Project Information:

Report To: **Brian Voelker**
 Copy To: **Jason Stuckey**
 Purchase Order No.:
 Project Name: **Newton**
 Project Number: **22165**

Section C Invoice Information:

Attention: **Jason Stuckey**
 Company Name: **Visira Corp**
 Address: **see Section A**
 Quote Reference:
 Project Manager:
 Profile #:

REGULATORY AGENCY

NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐
 UST ☐ RCRA ☐ OTHER ☐
 Site Location: **IL**
 STATE:

Section D Required Client Information	Valid Matrix Codes MATRIX CODE		MATRIX CODE (see valid codes to left)	COLLECTED		SAMPLE TYPE (G=GRAB C=COMP)	# OF CONTAINERS	Preservatives							Analysis Test ↑	Requested Analysis Filtered (Y/N)					Project No./ Lab I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	DW WATER WASTE WATER PRODUCT SOIL/SOLID OIL WIPE AIR FIBER TISSUE	DW WT WW P SL CL WP AR OT IS		DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol		Other	NEW-257-501	NEW-257-502	NEW-811-502	NEW-811-503		NEW-22Q3-NEW-NPDES-501	Residual Chlorine (Y/N)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	ITEM #																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														

ADDITIONAL COMMENTS: **NEW-Q3-2022**

RELINQUISHED BY / AFFILIATION: **Joseph R. Reed** DATE: **8/17/22** TIME: **1537**

ACCEPTED BY / AFFILIATION: **Joseph R. Reed** DATE: **8/17/22** TIME: **1537**

SAMPLER NAME AND SIGNATURE: **Joseph R. Reed**

PRINT Name of SAMPLER: **AP, LC, AM, SC, D, E**

SIGNATURE of SAMPLER: **8/16/2022**

DATE Signed (MM/DD/YYYY): **8/16/2022**

Temp in °C: **13**

Received on: **8/17/22**

Sealed Cooler (Y/N): **N**

Custody (Y/N): **N**

Samples Intact (Y/N): **X**

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company: **Vistra Corp**
Address: **13498 E. 900th St**

Section B Required Project Information:

Report To: **Brian Voelker**
Copy To: **Jason Stuckey**

Purchase Order No.:
Project Name: **Newton**
Project Number: **2285**

Section C Invoice Information:

Attention: **Jason Stuckey**
Company Name: **Vistra Corp**
Address: **see Section A**
Quote Reference:
Project Manager:
Profile #:

REGULATORY AGENCY

NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐
UST ☐ RCRA ☐ OTHER ☐

Site Location
STATE: **IL**

ITEM #	Valid Matrix Codes MATRIX CODE DW WW P SL OL WP AR OT TS	Valid Matrix Codes MATRIX CODE DW WW P SL OL WP AR OT TS	COLLECTED DATE TIME	SAMPLE TYPE (G=GRAB C=COMP) MATRIX CODE (see valid codes to left)	# OF CONTAINERS	Preservatives Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	Analysis Test Y/N	Requested Analysis Filtered (Y/N)	Project No./ Lab I.D.
1	G202		8/17/22	1015	6	X	X		
2	R202		8/17/22	1112	6	X	X		
3	G203		8/17/22	1151	2	X	X		
4	A213A		8/16/22	1701	4	X	X		
5			8/18/22						
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
NEW-Q3-2022	<i>Jason Stuckey</i>	8/17/22	1537	<i>Jason Stuckey</i>	8/17/22	1537	Temp in °C Received on Ice (Y/N) Custody Sealed Cooler (Y/N) Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: **AP AM KL SC DC**
SIGNATURE of SAMPLER: *Jason Stuckey*
DATE signed (MM/DD/YYYY): **8/17/22**

Not on calcu

FH04035

Page: 1 of 5

Invoice Information: **Attention: Jason Stuckey**

Quote	
Reference:	
Project	
Manager:	
Profile #	
Address:	see Section A

REGULATORY AGENCY		IL
NPDES	GROUND WATER	STATE:
UST	RCRA	
Site Location		

(A-Z, 0-9 / :-)
Sample IDs MUST BE UNIQUE

[illegible]

NEW-Q3-2022

7/26

DATE	

ACCEPTED BY / AFFILIATION

DATE	TIME
------	------

SAMPLE E CONDITIONS

PRINT Name of SAMPLER:

SIGNATURE OF SAMPLER:

DATE Signed _____

DATE Signed _____

DATE Signed _____

DATE Signed _____

Temp in °C	Received on	Ice (Y/N)	Custody	Sealed Cooler	(Y/N)	Samples intact	(Y/N)
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FH04037

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
Required Client Information:

Company: **Vistra Corp**
Address: **13498 E. 900th St**
Email To: **Brian.Voelker@VistraCorp.com**
Phone: **(217) 753-8911** Fax:
Requested Due Date/TAT: **standard**

Section B
Required Project Information:

Report To: **Brian Voelker**
Copy To: **Jason Stuckey**
Purchase Order No.:
Project Name:
Project Number: **2285**

Section C
Invoice Information:

Attention: **Jason Stuckey**
Company Name: **Vistra Corp**
Address: **see Section A**
Quote:
Reference:
Project:
Manager:
Profile #:

REGULATORY AGENCY

NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐
UST ☐ RCRA ☐ OTHER ☐
Site Location: **IL**
STATE: **IL**

ITEM #	Valid Matrix Codes		COLLECTED		Requested Analysis Filtered (Y/N)		Project No./ Lab I.D.	
	MATRIX	CODE	DATE	TIME	Y/N	Y/N	Y/N	Y/N
1	DRINKING WATER	DW	8/17/22	12:56				
2	WATER	WT	8/17/22	15:05				
3	WASTE WATER	WW	8/17/22	12:13				
4	PRODUCT	P	8/17/22	13:45				
5	SOLID	S	8/17/22	12:16				
6	WASTE	W	8/17/22	14:05				
7	WASTE	W	8/17/22	14:50				
8	WASTE	W	8/17/22	13:15				
9	WASTE	W	8/17/22	14:49				
10	WASTE	W	8/17/22	15:55				
11	WASTE	W	8/17/22	16:11				
12	WASTE	W	8/15/22	10:10				
13	WASTE	W	8/18/22	09:08				
14	WASTE	W	8/18/22	09:08				
15	WASTE	W	8/18/22	09:02				
16	WASTE	W	8/18/22	09:02				

ADDITIONAL COMMENTS
NEW-Q3-2022

RELINQUISHED BY / AFFILIATION: *[Signature]* DATE: **8/18/22** TIME: **1330**

ACCEPTED BY / AFFILIATION: *[Signature]* DATE: **8/18/22** TIME: **1422**

Temp in °C: **15**

SAMPLE CONDITIONS: Received on: **8/18/22** Sealed Cooler: **Y** Custody: **Y** Samples Intact: **Y**

SAMPLER NAME AND SIGNATURE: *[Signature]* PRINT Name of SAMPLER: **AP: n. l. m. 156 DE** SIGNATURE of SAMPLER: *[Signature]* DATE SIGNED: **8/17/2022** (MM/DD/YY):

F-10 46577

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information: Company: Visira Corp Address: 13498 E. 900th St Email To: Brian.Voelker@VisiraCorp.com Phone: (217) 753-8911 Fax: Requested Due Date/TAT: standard		Section B Required Project Information: Report To: Brian Voelker Copy To: Jason Stuckey Purchase Order No.: Project Name: Project Number: 2285		Section C Invoice Information: Attention: Jason Stuckey Company Name: Visira Corp Address: see Section A Quote Reference: Project Manager: Profile #:	
Regulatory Agency NPDES UST Site Location STATE: IL		Ground Water RCRA OTHER			

# ITEM	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WWT WASTEWATER WW PRODUCT P SOIL/SOLID SL OIL OL VAPE WP AIR AR OTHER OT TISSE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	Analysis Test ↑	Requested Analysis Filtered (Y/N)										Project No./ Lab I.D.
									Y	N									
1				9/15/22															
2				1334															
3	G230			1335															
4	G231			1421															
5	G232			1455															
6	G233			1349															
7	G234			1432															
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			

ADDITIONAL COMMENTS NEW-Q3-2022		RELINQUISHED BY / AFFILIATION DATE TIME	ACCEPTED BY / AFFILIATION DATE TIME	SAMPLE CONDITIONS Received on Custody Sealed Cooler Samples Initialed
NEW-Q3-2022		9/15/22 14:21	9/15/22 14:21	9/15/22 14:21

Newton

WELL/SAMPLE POINT **G06D**

Purge Method: Dedicated bladder pump

Date: 8/16/22 Start Time: 0955 Finish/Sample Time: 1030

Well Depth (Bottom) From MP: Pump ft Min. Purge Volume: 1.5 Gal ☒

Depth to Water From MP: 28.96 ft Total Purge Volume: 1.6 Gal ☒

Water Column Length: — ft Max Drawdown: — ft

Well Water Volume: — Gal / L Total Drawdown: 3.71 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1017	30.31 31.26	100	7.35	1570.3	16.10	-153.1	0.01	159.00
2	1018	31.26	100	7.34	1519.9	16.17	-153.0	0.00	110.00
3	1019	31.34	100	7.34	1499.9	16.22	-153.2	0.00	100.27
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: ATC600 739449

Sample Appearance:

Odor: ☐ None ☐ Slight ☐ Mod. ☒ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☒ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	
Casing locked/secure	☒	
Well cap fits securely.		☒
Good seal/drainage	☒	
Well has weep holes	☒	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 32.67 ft

Comments

Sampler's Signature: [Signature]

NEWTON

WELL/SAMPLE POINT **G48MG**

Purge Method: portable pump

Date: 8/16/2022 Start Time: 1245 Finish/Sample Time: 1322

Well Depth (Bottom) From MP: 80.04 ft Min. Purge Volume: - Gal / L

Depth to Water From MP: 19.04 ft Total Purge Volume: 1000 Gal / L (mL)

Water Column Length: 61 ft Max Drawdown: - ft

Well Water Volume: 36.94 Gal 0.37 Total Drawdown: 0.03 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1305	19.07	100	7.58	631	25.7	-156	3.04	1000
2	1307	19.07	100	7.57	638	25.8	-132	2.21	998
3	1309	19.07	100	7.56	637	25.9	-110	1.94	1000
4	1311	19.07	100	7.55	637	25.9	-102	1.90	982
5	1313	19.07	100	7.56	632	26.0	-97	1.82	997
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☐ Mod ☒ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☐	☒

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) <u>500mL</u>

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 19.07 ft

Comments

Sampler's Signature: [Signature]

Newton

WELL/SAMPLE POINT **G201**

Purge Method: bladder

Date: 8/17/2022 Start Time: 1307

Finish/Sample Time: 1405

Well Depth (Bottom) From MP: _____ ft

Min. Purge Volume: _____ Gal / L

Depth to Water From MP: 17.49 ft

Total Purge Volume: 1000 Gal / L (ML)

Water Column Length: _____ ft

Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L

Total Drawdown: 0.30 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1326	17.66	100	7.37	9.44	20.2	-140	1.25	0.0
2	1328	17.66	100	7.36	9.07	20.1	-147	1.14	0.0
3	1330	17.66	100	7.33	9.09	20.0	-152	1.07	0.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☐	☒
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>500mV</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 17.74 ft

Comments

Sampler's Signature: [Signature]

Newton

WELL/SAMPLE POINT R201

Purge Method: 6/after

Date: 8/17/2022 Start Time: 1407 Finish/Sample Time: 1450

Well Depth (Bottom) From MP: 80.42 ft Min. Purge Volume: ✓ Gal / L

Depth to Water From MP: 17.56 ft Total Purge Volume: 1000 Gal / L (ML)

Water Column Length: 62.86 ft Max Drawdown: — ft

Well Water Volume: 38.02 Gal / L Total Drawdown: 6.61 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1422	20.10	100	7.33	910	21.7	-174	0.74	29.2
2	1424	20.25	100	7.32	907	21.6	-178	0.73	38.8
3	1426	20.40	100	7.31	904	21.5	-181	0.82	42.5
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign		☒
Casing locked/secure	☒	
Well cap fits securely.	☒	
Good seal/drainage	☒	
Well has weep holes	☒	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) <u>500mL</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 24.17 ft

Comments

Sampler's Signature: [Signature]

Newton

WELL/SAMPLE POINT **G202**

Purge Method: Dedicated bladder

Date: 8-17-22 Start Time: 9:10 Finish/Sample Time: 10:15

Well Depth (Bottom) From MP: 70.00 ft
 Depth to Water From MP: 47.50 ft
 Water Column Length: 22.5 ft
 Well Water Volume: 13.61 Gal (L)
 Min. Purge Volume: 1.0 Gal (L)
 Total Purge Volume: 1.5 Gal (L)
 Max Drawdown: — ft
 Total Drawdown: 0.00 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	9:38	47.50	100	7.86	1040.4	17.98	107.8	8.99	0.05
2	9:40	47.50	100	7.99	1202.2	18.01	109.8	8.84	4.96
3	9:42	47.50	100	8.05	1197.8	17.92	111.0	8.81	4.31
4	9:44	47.50	100	8.12	1200.3	17.76	111.2	8.76	2.05
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

AT600 739449

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☐	☒
Good seal/drainage	☒	☐
Well has weep holes	☐	☒

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL)

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 47.50 ft

Comments

Sampler's Signature: 

Newton

WELL/SAMPLE POINT R202

Purge Method: Bladder pump

Date: 8-17-22 Start Time: 10:22 Finish/Sample Time: 11:12

Well Depth (Bottom) From MP: 77.55 ft Min. Purge Volume: 1.0 Gal (L)

Depth to Water From MP: 47.30 ft Total Purge Volume: 2.0 Gal (L)

Water Column Length: 30.25 ft Max Drawdown: — ft

Well Water Volume: 18.30 Gal (L) Total Drawdown: .01 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	10:39	47.30	100	7.67	1235.4	18.26	-119.7	1.37	0.29
2	10:43	47.31	100	7.69	1241.1	17.60	-136.3	0.55	1.11
3	10:45	47.31	100	7.70	1242.3	17.55	-138.3	0.47	2.55
4	10:46	47.31	100	7.71	1241.5	17.55	-139.3	0.44	2.01
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

AT600 739449

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign		☒
Casing locked/secure	☒	
Well cap fits securely.	☒	
Good seal/drainage	☒	
Well has weep holes		☒

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL)

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 47.31 ft

Comments Standing water in well casing

Sampler's Signature: [Signature]

Newton

WELL/SAMPLE POINT **G203**

Purge Method: Bladder Pump

Date: 8-17-22 Start Time: 11:26 Finish/Sample Time: 1151

Well Depth (Bottom) From MP: 71.80 ft
 Depth to Water From MP: 40.98 ft
 Water Column Length: 30.82 ft
 Well Water Volume: 18.64 Gal (L)

Min. Purge Volume: 1.0 Gal (L)
 Total Purge Volume: 1.6 Gal (L)
 Max Drawdown: — ft
 Total Drawdown: 0.00 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	11:36	40.98	100	8.11	1188.2	18.42	17.8	6.04	0.36
2	11:38	40.98	100	8.07	1202.4	18.58	25.3	6.15	0.46
3	11:40	40.98	100	8.02	1207.5	18.50	18.2	6.04	0.46
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

AT600 739449

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☒
Good seal/drainage	☒	☐
Well has weep holes	☐	☒

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 40.98 ft

Comments

Sampler's Signature: [Signature]

Newton

WELL/SAMPLE POINT **G208**

Purge Method: Compressor Bladder

Date: 16-27

Start Time: 15-Aug-22

Finish/Sample Time: 1708

Well Depth (Bottom) From MP: 98.30 ft

Depth to Water From MP: 25.13 ft

Water Column Length: 73.17 ft

Well Water Volume: 44.3 Gal

Min. Purge Volume: 1 Gal

Total Purge Volume: 1.4 Gal

Max Drawdown: — ft

Total Drawdown: 6.2 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	16.46	29.43	100	6.74	1431.6	20.14	-134.5	0.12	2.76
2	16.48	29.70	1	6.75	1431.1	19.94	-133.9	0.10	2.33
3	16.50	29.94	1	6.76	1433.7	20.48	-134.4	0.10	1.94
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☐	☒
Good seal/drainage	☒	☐
Well has weep holes	☐	☒

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>500</u>

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 31.33 ft

Comments

Sampler's Signature: [Signature]

Newton

WELL/SAMPLE POINT **G217D**

Purge Method: _____

Date: _____ Start Time: _____ Finish/Sample Time: _____

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: _____ Gal / L

Depth to Water From MP: _____ ft Total Purge Volume: _____ Gal / L

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: _____ ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1									
2									
3									
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: _____

Sample Appearance:

Odor: ☐ None ☐ Slight ☐ Mod. ☐ Strong

Color ☐ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign		
Casing locked/secure		
Well cap fits securely		
Good seal/drainage		
Well has weep holes		

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: _____ ft

Comments

does not exist

Sampler's Signature: _____

[Signature]

SBG

Newton

WELL/SAMPLE POINT **R217D**

Purge Method: Dedicated bladder

Date: 8-15-22

Start Time: 15:22

Finish/Sample Time: 16:47

Well Depth (Bottom) From MP: 71.70 ft

Min. Purge Volume: 1.0 Gal (L)

Depth to Water From MP: 19.42 ft

Total Purge Volume: 1.2 Gal (L)

Water Column Length: 52.28 ft

Max Drawdown: - ft

Well Water Volume: 31.62 Gal (L)

Total Drawdown: 0.18 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	15:44	19.60	100	6.77	3832.9	20.56	36.9	1.36	91.03
2	15:46	19.60	100	6.77	3838.0	20.56	16.9	1.19	60.02
3	15:48	19.60	100	6.77	3818.6	20.44	2.5	1.09	124.63
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT600 739449

Sample Appearance:

Odor: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Color: ☒ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☐	☒
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL)

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 19.60 ft

Comments

Sampler's Signature: [Signature]

Newton

WELL/SAMPLE POINT G220

Purge Method: Compressor, bladder

Date: 15-Aug-22 Start Time: 1715 Finish/Sample Time: 1748

Well Depth (Bottom) From MP: 88.95 ft
 Depth to Water From MP: 17.34 ft
 Water Column Length: 71.61 ft
 Well Water Volume: 43.37 Gal (L)
 Min. Purge Volume: 1 Gal (L)
 Total Purge Volume: 6.6 Gal (L)
 Max Drawdown: — ft
 Total Drawdown: 4.68 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1734	20.55	100	6.93	1296.3	8.61	-134.7	0.17	21.66
2	1736	20.65	↓	7.16	1284.2	19.61	-12.3	2.28	17.55
3	1738	20.79	↓	6.90	1283.1	19.48	-19.6	2.07	16.25
4								2.07	
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	1	
Casing locked/secure	1	
Well cap fits securely.		1
Good seal/drainage	1	
Well has weep holes		1

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 22.02 ft

Comments

Sampler's Signature: Austin Moore

Newton

WELL/SAMPLE POINT **G222**

Purge Method: Dedicated bladder pump

Date: 8-16-22 Start Time: 13:17 Finish/Sample Time: 1347

Well Depth (Bottom) From MP: 82.00 ft
 Depth to Water From MP: 15.09 ft
 Water Column Length: 66.91 ft
 Well Water Volume: 40.47 Gal (L)
 Min. Purge Volume: 1.0 Gal (L)
 Total Purge Volume: 2.0 Gal (L)
 Max Drawdown: — ft
 Total Drawdown: 4.29 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	13:32	17.34	100	8.14	1845.4	19.57	-175.2	0.19	5.82
2	13:34	17.70	100	8.00	1858.5	19.77	-166.3	0.17	4.39
3	13:36	17.97	100	7.83	1857.0	19.84	-156.5	0.15	4.60
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

AT600 739449

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	✓	
Casing locked/secure	✓	
Well cap fits securely.		✓
Good seal/drainage	✓	
Well has weep holes	✓	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>500 mL</u>

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 19.38 ft

Comments

Sampler's Signature:

[Handwritten Signature]

Newton

WELL/SAMPLE POINT G223

Purge Method: Compressor/Bladder

Date: 19-Aug-22 Start Time: 14:21 Finish/Sample Time: 14:57

Well Depth (Bottom) From MP: 91.90 ft Min. Purge Volume: 1 Gal / 0

Depth to Water From MP: 32.76 ft Total Purge Volume: 134 Gal / 0

Water Column Length: 59.14 ft Max Drawdown: — ft

Well Water Volume: 35.82 Gal / 0 Total Drawdown: 1.59 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	14.42	34.20 34.20	100	7.01	3,444.2	18.58	-102.9	2.55	17.0
2	14.44	33.34 34.30	1	6.89	3,471.0	18.12	-148.1	1.09	3.04
3	14.46	34.40	1	6.81	3,481.6	18.48	-173.6	2.83 0.83	4.66
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☐	☒
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>300</u>

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 34.4 ~~35~~ ft

Comments

Sampler's Signature: Justin Moore KXG

Newton

WELL/SAMPLE POINT **G224**

Purge Method: Compressor/Bladder

Date: 15 Aug-22

Start Time: 1326

Finish/Sample Time: 13:56

Well Depth (Bottom) From MP: 76.08 ft

Min. Purge Volume: 20.5 Gal / 0

Depth to Water From MP: 42.11 ft

Total Purge Volume: 1.5 Gal / 0

Water Column Length: 33.97 ft

Max Drawdown: ft

Well Water Volume: 20.57 Gal / L

Total Drawdown: 1.04 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	13:51	42.15	100	6.95	1,187.6	18.69	58.8	2.49	220.95
2	13:53	42.15	↓	6.96	1,186.2	18.55	58.9	1.50	215.64
3	13:55	42.15	↓	6.96	1,189.9	18.53	50.7	1.48	271.23
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

Odor: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Color: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☒ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	✓	
Casing locked/secure	✓	
Well cap fits securely.		✓
Good seal/drainage	✓	✗
Well has weep holes		✓

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
10	General (P, 250 mL)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 42.15 ft

Comments

Sampler's Signature: Dustin Moore

Newton

WELL/SAMPLE POINT **G230**

Purge Method: Bladder pump

Date: 8-17-22 Start Time: 14:18 Finish/Sample Time: 14:49

Well Depth (Bottom) From MP: 76.45 ft
 Depth to Water From MP: 47.64 ft
 Water Column Length: 28.81 ft
 Well Water Volume: 17.42 Gal (L)
 Min. Purge Volume: 1.8 Gal (L)
 Total Purge Volume: 1.9 Gal (L)
 Max Drawdown: - ft
 Total Drawdown: 0.07 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	14:31	47.70	100	7.80	1841.7	18.86	-147.9	0.44	86.74
2	14:31	47.70	100	7.74	1861.2	18.81	-150.7	0.32	86.14
3	14:36	47.70	100	7.69	1825.7	18.87	-152.1	0.25	68.74
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

AT600 739449

Sample Appearance:

Odor: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Color: ☒ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☐	☒

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>500mL</u>

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 47.71 ft

Comments

Sampler's Signature: [Signature]

Newton

WELL/SAMPLE POINT **G231**

Purge Method: Compressor bladder

Date: 17-Aug-22 Start Time: 1931

Finish/Sample Time: 1955

Well Depth (Bottom) From MP: 76.19 ft

Min. Purge Volume: 1 Gal (L)

Depth to Water From MP: 47.12 ft

Total Purge Volume: 6.3 Gal (L)

Water Column Length: 29.07 ft

Max Drawdown: ft

Well Water Volume: 17.60 Gal (L)

Total Drawdown: 0.02 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1943	47.21	100	7.78	1286.2	18.36	-92.6	0.67	32.34
2	1944	47.24	1	7.76	1304.5	18.37	-119.1	0.37	33.65
3	1945	47.21	1	7.79	1309.6	18.09	-131.6	0.29	32.33
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	/	
Casing locked/secure	/	
Well cap fits securely.	/	
Good seal/drainage	/	
Well has weep holes		/

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250-mL) <u>sample</u>

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 47.21 ft

Comments

Sampler's Signature: Austin Moor

Newton

WELL/SAMPLE POINT **G232**

Purge Method: Compressor bladder

Date: 12-Aug-22

Start Time: 1601

Finish/Sample Time: 1630

Well Depth (Bottom) From MP: 72.87 ft

Min. Purge Volume: 1 Gal / L

Depth to Water From MP: 49.49 ft

Total Purge Volume: 1.3 Gal / L

Water Column Length: 27.38 ft

Max Drawdown: ✓ ft

Well Water Volume: 16.58 Gal / L

Total Drawdown: 0.24 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1613	49.61	100	7.62	123.0	17.87	-232.1	0.28	26.26
2	1614	49.60	✓	7.80	149.1	17.99	-226.2	0.21	25.03
3	1615	49.69	✓	7.95	148.9	17.71	-22.3	0.12	24.21
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	✓	
Casing locked/secure	✓	
Well cap fits securely.	✓	
Good seal/drainage	✓	
Well has weep holes		✓

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250-mL) <u>500mL</u>

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 49.73 ft

Comments

Sampler's Signature: Austin Moon

Newton

WELL/SAMPLE POINT **G233**

Purge Method: Compressor bladder

Date: 18-Aug-22 Start Time: 0839

Finish/Sample Time: 9:08

Well Depth (Bottom) From MP: 70.87 ft

Min. Purge Volume: 1 Gal ☒

Depth to Water From MP: 41.48 ft

Total Purge Volume: 1.23 Gal ☒

Water Column Length: 29.39 ft

Max Drawdown: — ft

Well Water Volume: 17.8 Gal ☒

Total Drawdown: 1.77 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	8:56	43.10	100	7.16	2,086.3	15.57	-120	0.72	20.95
2	8:57	43.15	1	7.16	2,108.5	15.58	-119	0.75	14.25
3	8:58	43.20	1	7.16	2,102.4	15.90	-119	0.81	9.86
4							-119.0		
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☐	☒

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>Sample</u>

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 43.75 ft

Comments

Sampler's Signature: [Signature]

Newton

WELL/SAMPLE POINT **G234**

Purge Method: blow

Date: 8/17/2022

Start Time: 1534

Finish/Sample Time: 1611

Well Depth (Bottom) From MP: 70.61 ft

Min. Purge Volume: — Gal / L

Depth to Water From MP: 42.82 ft

Total Purge Volume: 1000 Gal / L (mL)

Water Column Length: 27.79 ft

Max Drawdown: — ft

Well Water Volume: 16.81 Gal (L)

Total Drawdown: 0.07 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1551	42.89	100	7.46	979	21.7	-152	1.91	93.9
2	1553	42.89	100	7.45	1000	21.6	-156	1.39	84.0
3	1555	42.89	100	7.42	1010	21.2	-160	1.05	75.5
4	1557	42.89	100	7.41	999	21.1	-162	0.93	76.6
5	1559	42.89	100	7.40	989	21.0	-164	0.87	82.6
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☐	☒

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) 500mL

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 42.84 ft

Comments

Sampler's Signature: [Signature]

Newton

WELL/SAMPLE POINT L1R

Purge Method: bailer

Date: 8/16/2022 Start Time: 1130 Finish/Sample Time: 1144

Well Depth (Bottom) From MP: 58.46 ft Min. Purge Volume: — Gal / L

Depth to Water From MP: 54.78 ft Total Purge Volume: 0.5 Gal / L

Water Column Length: 3.68 ft Max Drawdown: — ft

Well Water Volume: 2.23 Gal / L Total Drawdown: 0.29 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1133	58.46	—	10.44	34,600	22.7	-336	1.74	> 1000
2									
3									
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☐ None ☐ Slight ☐ Mod. ☒ Strong

Color: ☐ None ☐ Slight ☐ Mod. ☒ Strong

Turb: ☐ None ☐ Slight ☐ Mod ☒ Strong

Well Integrity	Yes	No
Well has ID sign	✓	
Casing locked/secure		✓
Well cap fits securely.	✓	
Good seal/drainage	✓	
Well has weep holes		✓

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
3	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) 500mL
1	Ammonia (P, 250mL, H2SO4)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 55.07 ft

Comments: Under 5 ft of water, only 1/2 bail purge
turbidity greater than 1000 NTU

Sampler's Signature: [Signature]

Newton

WELL/SAMPLE POINT L301

Purge Method: bladder

Date: 8/18/2022 Start Time: 0840 Finish/Sample Time: 0902

Depth to Water From MP: 1 ft

pH	Spec Cond	Temp	ORP	DO	Turb
(s.u.)	(umhos/cm)	(deg C)	(mV)	(mg/L)	(NTU)
7.64	3990	18.7	-156	2.86	0.0

Field Meter: Horiba

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign		X
Casing locked/secure	✓	
Well cap fits securely.		X
Good seal/drainage	✓	
Well has weep holes		✓

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) <u>500mL</u>

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Comments Asks

Sampler's Signature: [Signature]

Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Sam Grant, David Escanilla</u>				Location: <u>Newton</u>			
Weather: <u>75°, Partly Cloudy, 11 km/h S.</u>				Environment: <u>Grassy, Gravel Road</u>			
Multiparameter Water Meter		Make:	InSitu	Model:	Aquatroll 600	Serial Number:	<u>739449</u>
Water Level Meter		Make:	Heron	Model:	Dipper-T	Serial Number:	<u>19FF2201152HB</u>

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>3.94</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>NA</u>	MSI	L153-17	6/8/2023
pH 7.00a	<u>7.04</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	L172-33	8/23/2023
pH 10.00a	<u>9.97</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	L118-08	5/12/2023
SC Zero (DI)	<u>14.97</u>	µS/cm	0<25 µS/cm	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>1941.3</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Geotech	1GJ517	Oct-22
ORP	<u>226.20</u>	mV	±15 mV	<u>I</u>	<u>I</u>	<u>I</u>	InSitu	1Gk507	Aug-22
DO (Zero pt)	<u>0.06</u>	mg/L	±0.1	<u>I</u>	<u>I</u>	<u>I</u>	Fischer Chemical	168261	8/26/2025
DO (Saturated)	<u>98.5</u>	%	97-100%	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.00</u>	NTU	<2 NTU	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: <u>1235</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>3.98</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>None</u>	Geotech	1GH562	Aug-22	
pH 7.00b	<u>6.88</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>	Geotech	1GD360	Apr-22	
pH 10.00b	<u>9.87</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>	Geotech	1GE278	Mar-22	
SC 1000	<u>1003.0</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	Ricca	2107D48	Jul-23	

Approx. every 4 hrs, unless only one well

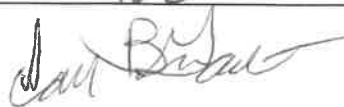
CCV (Continued Calibration Verification):						Time: <u>17:48</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.10</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>NA</u>	MSI	L153-17	6/8/2023
pH 7.00a	<u>7.10</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	L172-33	8/23/2023
pH 10.00a	<u>9.99</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	L118-08	5/12/2023
SC 1000	<u>993.52</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Ricca	2108D48	Jul-23
DO (Zero pt)	<u>0.08</u>	mg/L	±0.1 mg/L	<u>I</u>	<u>I</u>	<u>I</u>	Fischer Chemical	168261	8/26/2025
Turbidity (DI)	<u>0.37</u>	NTU	<2 NTU	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L153-17	6/8/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	8/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L118-08	5/12/2023
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Fischer Chemical	168261	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: 	Date: <u>8-5-22</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: AP JL				Location: Newton					
Weather: 64°-74°F cloudy				Environment: Grass, gravel, woods					
Multiparameter Water Meter		Make: Horiba	Model: V-5000	Serial Number: PV2645A3					
Water Level Meter		Make: Heron	Model: Dip-72	Serial Number: 108P211192H3					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.01	s.u.	±0.1 s.u.	P	NO	NA	MSI	L344-09	12/14/2023
pH 7.00a	—	s.u.	±0.1 s.u.	P	—	—	MSI	L343-07	12/9/2023
pH 10.00a	—	s.u.	±0.1 s.u.	—	—	—	MSI	M082-04	3/25/2024
SC Zero (DI)	—	µS/cm	0<25 µS/cm	—	—	—	Pace Labs	N/A (DI)	N/A (DI)
SC 1000	4500	µS/cm	±5%	P	NO	—	Geotech	1GK328	Nov-22
ORP	—	mV	±15 mV	—	—	—	InSitu	1GL481	Sep-22
DO (Zero pt)	9.03	mg/L	±0.1	P	NO	—	Macron	#000228049	8/26/2025
DO (Saturated)	—	%	97-100%	—	—	—	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	P	NO	—	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 0910				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b		s.u.	±0.15 s.u.			Geotech	1GF009	Jun-23	
pH 7.00b		s.u.	±0.15 s.u.			Geotech	0GJ268	Oct-22	
pH 10.00b		s.u.	±0.15 s.u.			Geotech	1GF458	Jun-23	
SC 1000		µS/cm	±5%			Ricca	1111A87	Nov-22	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 1625				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.02	s.u.	±0.1 s.u.	P	NO	—	MSI	L315-04	11/22/2023
pH 7.00a	—	s.u.	±0.1 s.u.	—	—	—	MSI	L172-33	6/23/2023
pH 10.00a	—	s.u.	±0.1 s.u.	—	—	—	MSI	L354-22	1/5/2024
SC 1000	4460	µS/cm	±5%	P	NO	—	Ricca	2108D48	Jul-23
DO (Zero pt)	9.10	mg/L	±0.1 mg/L	—	—	—	Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	—	—	—	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Horiba solution used

Signature: 	Date: 8/16/2022
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>David Escamilla</u>	Location: <u>Newton</u>
Weather: <u>65-79°F, Sunny, wind w/ mph</u>	Environment: <u>gravel road, tall grass</u>

Multiparameter Water Meter	Make:	In Situ	Model:	Aquatroll 600	Serial Number:	739449
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Water Level Meter	Make:	Heron	Model:	Dipper-T	Serial Number:	19FFZZ01152H8
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Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.94	s.u.	±0.1 s.u.	P	N	NA	MSI	L153-17	6/8/2023
pH 7.00a	7.62	s.u.	±0.1 s.u.	I	I	I	MSI	L172-33	8/23/2023
pH 10.00a	9.95	s.u.	±0.1 s.u.	I	I	I	MSI	L118-08	5/12/2023
SC Zero (DI)	38.74	µS/cm	0<25 µS/cm	F	Y	0.06	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	0.06	µS/cm	±5%	F	Y	1999.3	Geotech	1GJ517	Oct-22
ORP	199.221	mV	±15 mV	P	N	NA	In Situ	1Gk507	Aug-22
DO (Zero pt)	0.09	mg/L	±0.1				Fischer Chemical	168261	8/26/2025
DO (Saturated)	98.57	%	97-100%				Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.00	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.02	s.u.	±0.15 s.u.	P	None	Geotech	1GH562	Aug-22
pH 7.00b	6.99	s.u.	±0.15 s.u.	I	I	Geotech	1GD360	Apr-22
pH 10.00b	9.87	s.u.	±0.15 s.u.	I	I	Geotech	1GE278	Mar-22
SC 1000	1034.2	µS/cm	±5%	I	I	Ricca	2107D48	Jul-23

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.10	s.u.	±0.1 s.u.	P	N	NA	MSI	L153-17	6/8/2023
pH 7.00a	7.02	s.u.	±0.1 s.u.	I	I	I	MSI	L172-33	8/23/2023
pH 10.00a	9.91	s.u.	±0.1 s.u.	I	I	I	MSI	L118-08	5/12/2023
SC 1000	989.35	µS/cm	±5%	I	I	I	Ricca	2108D48	Jul-23
DO (Zero pt)	0.09	mg/L	±0.1 mg/L	I	I	I	Fischer Chemical	168261	8/26/2025
Turbidity (DI)	2.00	NTU	<2 NTU	I	I	I	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L153-17	6/8/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	8/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L118-08	5/12/2023
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Fischer Chemical	168261	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: <u>[Signature]</u>	Date: <u>8/16/2024</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Austen Moore</u>				Location: <u>Newton</u>			
Weather: <u>79-63°</u> <u>wind NNE 4mph</u>				Environment: <u>Grassy, partly cloudy</u>			
Multiparameter Water Meter		Make: <u>AT</u>	Model: <u>600</u>	Serial Number: <u>8460070^{AM} 762098</u>			
Water Level Meter		Make: <u>Herron</u>	Model: <u>WT</u>	Serial Number: <u>19FF21111924B</u>			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>5.75</u>	s.u.	±0.1 s.u.	<u>F</u>	<u>Y</u>	<u>7.00</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>6.81</u>	s.u.	±0.1 s.u.	<u>F</u>	<u>Y</u>	<u>7.00</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>9.92</u>	s.u.	±0.1 s.u.	<u>F</u>	<u>Y</u>	<u>10.00</u>	MSI	L354-22	1/5/2024
SC Zero (DI)	<u>17.35</u>	µS/cm	0<25 µS/cm	<u>I</u>			Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>1923.8</u>	µS/cm	±5%	<u>I</u>			Geotech	1GK328	Nov-22
ORP	<u>215.4</u>	mV	±15 mV	<u>I</u>			InSitu	1GL481	Sep-22
DO (Zero pt)	<u>0.05</u>	mg/L	±0.1	<u>I</u>			Macron	#000228049	8/26/2025
DO (Saturated)	<u>92.34</u>	%	97-100%	<u>I</u>			Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.92</u>	NTU	<2 NTU	<u>I</u>			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: <u>0906</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>4.02</u>	s.u.	±0.15 s.u.	<u>I</u>		Geotech	1GF009	Jun-23	
pH 7.00b	<u>6.88</u>	s.u.	±0.15 s.u.	<u>I</u>		Geotech	0GJ268	Oct-22	
pH 10.00b	<u>9.87</u>	s.u.	±0.15 s.u.	<u>I</u>		Geotech	1GF458	Jun-23	
SC 1000	<u>495.58</u>	µS/cm	±5%	<u>I</u>		Ricca	2108D48	Jul-23	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: <u>1714</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>5.73</u>	s.u.	±0.1 s.u.	<u>F</u>	<u>Y</u>	<u>4.00</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>7.16</u>	s.u.	±0.1 s.u.	<u>F</u>	<u>Y</u>	<u>7.00</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>9.94</u>	s.u.	±0.1 s.u.	<u>F</u>	<u>Y</u>	<u>10.00</u>	MSI	L354-22	1/5/2024
SC 1000	<u>1011.0</u>	µS/cm	±5%	<u>F</u>			Ricca	2108D48	Jul-23
DO (Zero pt)	<u>0.02</u>	mg/L	±0.1 mg/L	<u>F</u>			Macron	#000228049	8/26/2025
Turbidity (DI)	<u>1.54</u>	NTU	<2 NTU	<u>F</u>			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: <u>Austen Moore</u>	Date: <u>16-Aug-22</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: Kyle Lane				Location: Newton Power					
Weather: 84° Sunny light cloud				Environment: Dry					
Multiparameter Water Meter		Make: in-situ	Model: A+ 600	Serial Number: 762098					
Water Level Meter		Make:	Model:	Serial Number:					

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.03	s.u.	±0.1 s.u.	P	Na	Na	MSI	L344-09	12/14/2023
pH 7.00a	6.98	s.u.	±0.1 s.u.	P	Na	Na	MSI	L343-07	12/9/2023
pH 10.00a	10.01	s.u.	±0.1 s.u.	P	Na	Na	MSI	M082-04	3/25/2024
SC Zero (DI)	17.53	µS/cm	0<25 µS/cm	P	Na	Na	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1964.20	µS/cm	±5%	P	Na	Na	Geotech	1GK328	Nov-22
ORP	23.44	mV	±15 mV	P	Na	Na	InSitu	1GL481	Sep-22
DO (Zero pt)	0.05	mg/L	±0.1	P	Na	Na	Macron	#000228049	8/26/2025
DO (Saturated)	99.70	%	97-100%	P	Na	Na	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.75	NTU	<2 NTU	P	Na	Na	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 8:57				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.02	s.u.	±0.15 s.u.	P	Na	Geotech	1GF009	Jun-23	
pH 7.00b	6.95	s.u.	±0.15 s.u.	P	Na	Geotech	0GJ268	Oct-22	
pH 10.00b	10.04	s.u.	±0.15 s.u.	P	Na	Geotech	1GF458	Jun-23	
SC 1000	1013.0	µS/cm	±5%	P	Na	Ricca	1111A87	Nov-22	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 16:39				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.08	s.u.	±0.1 s.u.	P	Na	Na	MSI	L315-04	11/22/2023
pH 7.00a	7.04	s.u.	±0.1 s.u.	P	Na	Na	MSI	L172-33	6/23/2023
pH 10.00a	10.05	s.u.	±0.1 s.u.	P	Na	Na	MSI	L354-22	1/5/2024
SC 1000	1040.5	µS/cm	±5%	P	Na	Na	Ricca	2108D48	Jul-23
DO (Zero pt)	0.05	mg/L	±0.1 mg/L	P	Na	Na	Macron	#000228049	8/26/2025
Turbidity (DI)	1.89	NTU	<2 NTU	P	Na	Na	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: Kyle Lane	Date: 8-17-22
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Multiparameter Meter Field Calibration Checklist

Field Personnel:	Sam Grant, David Escamilla	Location:	Newton
Weather:	75-81°, Sunny, 3km/h NE	Environment:	gravel road, Tall grass

Multiparameter Water Meter	Make:	InSitu	Model:	Aquatroll 600	Serial Number:	739449
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Water Level Meter	Make:	Heron	Model:	Dipper-T	Serial Number:	19FF2201152HB
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Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.99	s.u.	±0.1 s.u.	P	N	NA	MSI	L153-17	6/8/2023
pH 7.00a	7.07	s.u.	±0.1 s.u.				MSI	L172-33	8/23/2023
pH 10.00a	9.99	s.u.	±0.1 s.u.				MSI	L118-08	5/12/2023
SC Zero (DI)	12.21	µS/cm	0<25 µS/cm				Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1991.3	µS/cm	±5%				Geotech	1GJ517	Oct-22
ORP	227.80 @ 21.51	mV	±15 mV				InSitu	1Gk507	Aug-22
DO (Zero pt)	0.09	mg/L	±0.1				Fischer Chemical	168261	8/26/2025
DO (Saturated)	97.45	%	97-100%				Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.00	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.07	s.u.	±0.15 s.u.	P	None	Geotech	1GH562	Aug-22
pH 7.00b	6.89	s.u.	±0.15 s.u.			Geotech	1GD360	Apr-22
pH 10.00b	9.90	s.u.	±0.15 s.u.			Geotech	1GE278	Mar-22
SC 1000	982.24	µS/cm	±5%			Ricca	2107D48	Jul-23

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.10	s.u.	±0.1 s.u.	P	N	NA	MSI	L153-17	6/8/2023
pH 7.00a	7.03	s.u.	±0.1 s.u.				MSI	L172-33	8/23/2023
pH 10.00a	9.90	s.u.	±0.1 s.u.				MSI	L118-08	5/12/2023
SC 1000	1052.4	µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)	0.09	mg/L	±0.1 mg/L				Fischer Chemical	168261	8/26/2025
Turbidity (DI)	0.93	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L153-17	6/8/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	8/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L118-08	5/12/2023
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Fischer Chemical	168261	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature:		Date:	8-17-22
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Multiparameter Meter Field Calibration Checklist

Field Personnel: AP				Location: Newton					
Weather: 73°-74° Sunny wind NE 4 mph				Environment: grass, gravel, dirt					
Multiparameter Water Meter		Make: Hanna	Model: J-5000	Serial Number: PW2675D3					
Water Level Meter		Make: Heron	Model: Digbert	Serial Number: 198C 2202/31m					

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.00	s.u.	±0.1 s.u.	P	NO	—	MSI	L344-09	12/14/2023
pH 7.00a	—	s.u.	±0.1 s.u.	—	—	—	MSI	L343-07	12/9/2023
pH 10.00a	—	s.u.	±0.1 s.u.	—	—	—	MSI	M082-04	3/25/2024
SC Zero (DI)	—	µS/cm	0<25 µS/cm	—	—	—	Pace Labs	N/A (DI)	N/A (DI)
SC 1000	4500	µS/cm	±5%	P	NO	—	Geotech	1GK328	Nov-22
ORP	—	mV	±15 mV	—	—	—	InSitu	1GL481	Sep-22
DO (Zero pt)	0.07	mg/L	±0.1	P	NO	—	Macron	#000228049	8/26/2025
DO (Saturated)	—	%	97-100%	—	—	—	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	P	NO	—	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 0906				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	—	s.u.	±0.15 s.u.	—	—	Geotech	1GF009	Jun-23	
pH 7.00b	—	s.u.	±0.15 s.u.	—	—	Geotech	0GJ268	Oct-22	
pH 10.00b	—	s.u.	±0.15 s.u.	—	—	Geotech	1GF458	Jun-23	
SC 1000	—	µS/cm	±5%	—	—	Ricca	1111A87	Nov-22	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 1632				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.00	s.u.	±0.1 s.u.	P	NO	—	MSI	L315-04	11/22/2023
pH 7.00a	—	s.u.	±0.1 s.u.	—	—	—	MSI	L172-33	6/23/2023
pH 10.00a	—	s.u.	±0.1 s.u.	—	—	—	MSI	L354-22	1/5/2024
SC 1000	4500	µS/cm	±5%	P	NO	—	Ricca	2108D48	Jul-23
DO (Zero pt)	0.10	mg/L	±0.1 mg/L	P	NO	—	Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	P	NO	—	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: 	Date: 8/17/2022
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <i>AD</i>				Location: <i>Newton</i>			
Weather: <i>73°-79° Sunny Wind</i>				Environment: <i>grass, gravel, soil</i>			
Multiparameter Water Meter		Make: <i>Holiba</i>	Model: <i>U-5000</i>	Serial Number: <i>PW264503</i>			
Water Level Meter		Make: <i>Heron</i>	Model: <i>0.0012</i>	Serial Number: <i>19LR2202131ML</i>			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<i>4.01</i>	s.u.	±0.1 s.u.	<i>P</i>	<i>N</i>	<i>-</i>	MSI	L344-09	12/14/2023
pH 7.00a	<i>-</i>	s.u.	±0.1 s.u.	<i>P</i>	<i>-</i>	<i>-</i>	MSI	L343-07	12/9/2023
pH 10.00a	<i>-</i>	s.u.	±0.1 s.u.	<i>-</i>	<i>-</i>	<i>-</i>	MSI	M082-04	3/25/2024
SC Zero (DI)	<i>-</i>	µS/cm	0<25 µS/cm	<i>-</i>	<i>-</i>	<i>-</i>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<i>4990</i>	µS/cm	±5%	<i>P</i>	<i>N</i>	<i>-</i>	Geotech	1GK328	Nov-22
ORP	<i>-</i>	mV	±15 mV	<i>-</i>	<i>-</i>	<i>-</i>	InSitu	1GL481	Sep-22
DO (Zero pt)	<i>9.09</i>	mg/L	±0.1	<i>P</i>	<i>N</i>	<i>-</i>	Macron	#000228049	8/26/2025
DO (Saturated)	<i>-</i>	%	97-100%	<i>-</i>	<i>-</i>	<i>-</i>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<i>0.0</i>	NTU	<2 NTU	<i>P</i>	<i>N</i>	<i>-</i>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: <i>0835</i>				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<i>-</i>	s.u.	±0.15 s.u.	<i>-</i>	<i>-</i>	Geotech	1GF009	Jun-23	
pH 7.00b	<i>-</i>	s.u.	±0.15 s.u.	<i>-</i>	<i>-</i>	Geotech	0GJ268	Oct-22	
pH 10.00b	<i>-</i>	s.u.	±0.15 s.u.	<i>-</i>	<i>-</i>	Geotech	1GF458	Jun-23	
SC 1000	<i>-</i>	µS/cm	±5%	<i>-</i>	<i>-</i>	Ricca	1111A87	Nov-22	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: <i>0916</i>				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<i>4.03</i>	s.u.	±0.1 s.u.	<i>P</i>	<i>N</i>	<i>-</i>	MSI	L315-04	11/22/2023
pH 7.00a	<i>-</i>	s.u.	±0.1 s.u.	<i>-</i>	<i>-</i>	<i>-</i>	MSI	L172-33	6/23/2023
pH 10.00a	<i>-</i>	s.u.	±0.1 s.u.	<i>-</i>	<i>-</i>	<i>-</i>	MSI	L354-22	1/5/2024
SC 1000	<i>4870</i>	µS/cm	±5%	<i>P</i>	<i>N</i>	<i>-</i>	Ricca	2108D48	Jul-23
DO (Zero pt)	<i>9.06</i>	mg/L	±0.1 mg/L	<i>P</i>	<i>N</i>	<i>-</i>	Macron	#000228049	8/26/2025
Turbidity (DI)	<i>0.0</i>	NTU	<2 NTU	<i>P</i>	<i>N</i>	<i>-</i>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments: *Holiba calibration solution used*

Signature: <i>[Signature]</i>	Date: <i>8/18/2022</i>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: Kyle Wynn Location: Newton Power

Weather: 81° Sunny Environment: Dry

Multiparameter Water Meter Make: in-situ Model: AT 600 Serial Number: 762098

Water Level Meter Make: Solinst Model: WT Serial Number: 336216

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.00</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	L344-09	12/14/2023
pH 7.00a	<u>6.98</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	L343-07	12/9/2023
pH 10.00a	<u>9.98</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NA</u>	<u>NA</u>	MSI	M082-04	3/25/2024
SC Zero (DI)	<u>22.54</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>NA</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>1963.9</u>	µS/cm	±5%	<u>P</u>	<u>NA</u>	<u>NA</u>	Geotech	1GK328	Nov-22
ORP	<u>243.8</u>	mV	±15 mV	<u>P</u>	<u>NA</u>	<u>NA</u>	InSitu	1GL481	Sep-22
DO (Zero pt)	<u>0.0</u>	mg/L	±0.1	<u>P</u>	<u>NA</u>	<u>NA</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>98.84</u>	%	97-100%	<u>P</u>	<u>NA</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.8</u>	NTU	<2 NTU	<u>P</u>	<u>NA</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>4.00</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	1GF009	Jun-23	
pH 7.00b	<u>6.87</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	0GJ268	Oct-22	
pH 10.00b	<u>9.84</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>NA</u>	Geotech	1GF458	Jun-23	
SC 1000	<u>1008.2</u>	µS/cm	±5%	<u>P</u>	<u>NA</u>	Ricca	1111A87	Nov-22	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
pH 7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
pH 10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

only one well sampled

Signature: [Signature] Date: 8-18-22



Pace Analytical Services, LLC

2231 W. Altorfer Drive

Peoria, IL 61615

(800)752-6651

January 10, 2023

Terry Hanratty
Vistra - Newton
Newton Energy Center 6725 N. 500th St
Newton, IL 62448

Dear Terry Hanratty:

Please find enclosed the **revised** analytical results for the sample(s) the laboratory received. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of Pace Analytical Services, LLC.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

Pace Analytical Services appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the Director of Client Services, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Gail Schindler

Gail Schindler
Project Manager
(309) 692-9688 x1716
gail.schindler@pacelabs.com

**SAMPLE RECEIPT CHECK LIST**

Items not applicable will be marked as in compliance

Work Order FK00540

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided



Work Order FK00555

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
YES	Case narrative provided



Work Order FK00958

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
YES	Case narrative provided



Work Order FK00963

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided



ANALYTICAL RESULTS

Sample: FK00540-02
Name: R201
Matrix: Ground Water - Grab

Sampled: 11/01/22 16:08
Received: 11/02/22 15:11
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	4.2	mg/L		11/13/22 21:32	1	1.0	11/13/22 21:32	LAM	EPA 300.0 REV 2.1
Sulfate	480	mg/L		11/12/22 16:13	100	100	11/12/22 16:13	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	18.09	Feet		11/01/22 16:08	1		11/01/22 16:08	FIELD	Field*
Dissolved oxygen, Field	0.62	mg/L		11/01/22 16:08	1		11/01/22 16:08	FIELD	Field*
Oxidation Reduction Potential	-123	mV		11/01/22 16:08	1	-500	11/01/22 16:08	FIELD	Field*
pH, Field Measured	7.90	pH Units		11/01/22 16:08	1		11/01/22 16:08	FIELD	Field*
Specific Conductance, Field Measured	1265	umhos/cm		11/01/22 16:08	1		11/01/22 16:08	FIELD	Field*
Temperature, Field Measured	18.6	°C		11/01/22 16:08	1		11/01/22 16:08	FIELD	Field*
Turbidity, Field Measured	2.67	NTU		11/01/22 16:08	1	0.00	11/01/22 16:08	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	190	mg/L		11/04/22 09:30	1	10	11/04/22 09:30	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		11/04/22 09:30	1	10	11/04/22 09:30	HRF	SM 2320B 1997*
Fluoride	0.825	mg/L		11/16/22 14:53	1	0.250	11/16/22 14:53	TTH	SM 4500F C 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	840	mg/L		11/07/22 09:30	1	26	11/07/22 10:54	HRF	SM 2540C
Total Metals - PIA									
Boron	120	ug/L		11/14/22 08:38	5	10	11/15/22 07:59	JMW	EPA 6020A
Calcium	150	mg/L		11/14/22 08:38	5	0.20	11/15/22 07:59	JMW	EPA 6020A
Magnesium	19	mg/L		11/14/22 08:38	5	0.10	11/15/22 07:59	JMW	EPA 6020A
Potassium	1.6	mg/L		11/14/22 08:38	5	0.10	11/15/22 12:18	JMW	EPA 6020A
Sodium	84	mg/L		11/14/22 08:38	5	0.10	11/15/22 07:59	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FK00540-07
Name: G230
Matrix: Ground Water - Grab

Sampled: 11/01/22 15:33
Received: 11/02/22 15:11
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	96	mg/L		11/12/22 16:49	50	50	11/12/22 16:49	CRD	EPA 300.0 REV 2.1
Sulfate	470	mg/L		11/12/22 16:49	50	50	11/12/22 16:49	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	48.51	Feet		11/01/22 15:33	1		11/01/22 15:33	FIELD	Field*
Dissolved oxygen, Field	4.9	mg/L		11/01/22 15:33	1		11/01/22 15:33	FIELD	Field*
Oxidation Reduction Potential	-167	mV		11/01/22 15:33	1	-500	11/01/22 15:33	FIELD	Field*
pH, Field Measured	7.66	pH Units		11/01/22 15:33	1		11/01/22 15:33	FIELD	Field*
Specific Conductance, Field Measured	1091	umhos/cm		11/01/22 15:33	1		11/01/22 15:33	FIELD	Field*
Temperature, Field Measured	18.0	°C		11/01/22 15:33	1		11/01/22 15:33	FIELD	Field*
Turbidity, Field Measured	79.9	NTU		11/01/22 15:33	1	0.00	11/01/22 15:33	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	480	mg/L		11/04/22 09:30	1	10	11/04/22 09:30	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/04/22 09:30	1	10	11/04/22 09:30	HRF	SM 2320B 1997*
Fluoride	0.590	mg/L		11/16/22 14:55	1	0.250	11/16/22 14:55	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	1300	mg/L		11/03/22 10:00	1	26	11/03/22 11:05	HRF	SM 2540C
Total Metals - PIA									
Boron	150	ug/L		11/14/22 08:38	5	10	11/15/22 08:03	JMW	EPA 6020A
Calcium	150	mg/L		11/14/22 08:38	5	0.20	11/15/22 08:03	JMW	EPA 6020A
Magnesium	59	mg/L		11/14/22 08:38	5	0.10	11/15/22 08:03	JMW	EPA 6020A
Potassium	6.6	mg/L		11/14/22 08:38	5	0.10	11/15/22 12:22	JMW	EPA 6020A
Sodium	180	mg/L		11/14/22 08:38	5	0.10	11/15/22 08:03	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FK00540-08
Name: G231
Matrix: Ground Water - Grab

Sampled: 11/01/22 16:18
Received: 11/02/22 15:11
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	64	mg/L		11/12/22 18:01	25	25	11/12/22 18:01	CRD	EPA 300.0 REV 2.1
Sulfate	180	mg/L		11/12/22 18:01	25	25	11/12/22 18:01	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	47.9	Feet		11/01/22 16:18	1		11/01/22 16:18	FIELD	Field*
Dissolved oxygen, Field	0.93	mg/L		11/01/22 16:18	1		11/01/22 16:18	FIELD	Field*
Oxidation Reduction Potential	-156	mV		11/01/22 16:18	1	-500	11/01/22 16:18	FIELD	Field*
pH, Field Measured	8.06	pH Units		11/01/22 16:18	1		11/01/22 16:18	FIELD	Field*
Specific Conductance, Field Measured	1350	umhos/cm		11/01/22 16:18	1		11/01/22 16:18	FIELD	Field*
Temperature, Field Measured	17.1	°C		11/01/22 16:18	1		11/01/22 16:18	FIELD	Field*
Turbidity, Field Measured	106	NTU		11/01/22 16:18	1	0.00	11/01/22 16:18	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	390	mg/L		11/10/22 09:19	1	10	11/10/22 09:19	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		11/10/22 09:19	1	10	11/10/22 09:19	HRF	SM 2320B 1997*
Fluoride	0.573	mg/L		11/16/22 14:56	1	0.250	11/16/22 14:56	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	700	mg/L		11/07/22 09:30	1	26	11/07/22 10:54	HRF	SM 2540C
Total Metals - PIA									
Boron	110	ug/L		11/14/22 08:38	5	10	11/15/22 08:06	JMW	EPA 6020A
Calcium	120	mg/L		11/14/22 08:38	5	0.20	11/15/22 08:06	JMW	EPA 6020A
Magnesium	48	mg/L		11/14/22 08:38	5	0.10	11/15/22 08:06	JMW	EPA 6020A
Potassium	2.9	mg/L		11/14/22 08:38	5	0.10	11/15/22 12:26	JMW	EPA 6020A
Sodium	110	mg/L		11/14/22 08:38	5	0.10	11/15/22 08:06	JMW	EPA 6020A

Sample: FK00540-10
Name: R217D
Matrix: Ground Water - Grab

Sampled: 11/02/22 13:46
Received: 11/02/22 15:11
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Total Metals - PIA									
Boron	170	ug/L		11/14/22 08:38	5	10	11/15/22 08:10	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FK00540-11
Name: R202
Matrix: Ground Water - Grab

Sampled: 11/02/22 12:02
Received: 11/02/22 15:11
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	57	mg/L		11/12/22 19:14	25	25	11/12/22 19:14	CRD	EPA 300.0 REV 2.1
Sulfate	36	mg/L		11/12/22 19:14	25	25	11/12/22 19:14	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	68.59	Feet		11/02/22 12:02	1		11/02/22 12:02	FIELD	Field*
Dissolved oxygen, Field	1.8	mg/L		11/02/22 12:02	1		11/02/22 12:02	FIELD	Field*
Oxidation Reduction Potential	-32.0	mV		11/02/22 12:02	1	-500	11/02/22 12:02	FIELD	Field*
pH, Field Measured	7.30	pH Units		11/02/22 12:02	1		11/02/22 12:02	FIELD	Field*
Specific Conductance, Field Measured	1161	umhos/cm		11/02/22 12:02	1		11/02/22 12:02	FIELD	Field*
Temperature, Field Measured	15.7	°C		11/02/22 12:02	1		11/02/22 12:02	FIELD	Field*
Turbidity, Field Measured	1.45	NTU		11/02/22 12:02	1	0.00	11/02/22 12:02	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	450	mg/L		11/10/22 09:19	1	10	11/10/22 09:19	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		11/10/22 09:19	1	10	11/10/22 09:19	HRF	SM 2320B 1997*
Fluoride	0.548	mg/L		11/16/22 15:00	1	0.250	11/16/22 15:00	TTH	SM 4500F C 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	660	mg/L		11/07/22 09:30	1	26	11/07/22 10:54	HRF	SM 2540C
Total Metals - PIA									
Boron	100	ug/L		11/14/22 08:38	5	10	11/15/22 08:14	JMW	EPA 6020A
Calcium	96	mg/L		11/14/22 08:38	5	0.20	11/15/22 08:14	JMW	EPA 6020A
Magnesium	41	mg/L		11/14/22 08:38	5	0.10	11/15/22 08:14	JMW	EPA 6020A
Potassium	1.6	mg/L		11/14/22 08:38	5	0.10	11/15/22 12:33	JMW	EPA 6020A
Sodium	100	mg/L		11/14/22 08:38	5	0.10	11/15/22 08:14	JMW	EPA 6020A

Sample: FK00540-12
Name: G202
Matrix: Ground Water - Grab

Sampled: 11/02/22 11:13
Received: 11/02/22 15:11
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - PIA									
pH, Field Measured	8.03	pH Units		11/02/22 11:13	1		11/02/22 11:13	FIELD	Field*



ANALYTICAL RESULTS

Sample: FK00540-14
Name: MW46D
Matrix: Ground Water - Grab

Sampled: 11/02/22 12:13
Received: 11/02/22 15:11
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	20	mg/L		11/15/22 19:52	5	5.0	11/15/22 19:52	CRD	EPA 300.0 REV 2.1
Sulfate	1400	mg/L		11/15/22 20:10	250	250	11/15/22 20:10	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	6.94	Feet		11/02/22 12:13	1		11/02/22 12:13	FIELD	Field*
Dissolved oxygen, Field	6.0	mg/L		11/02/22 12:13	1		11/02/22 12:13	FIELD	Field*
Oxidation Reduction Potential	-77.1	mV		11/02/22 12:13	1	-500	11/02/22 12:13	FIELD	Field*
pH, Field Measured	7.11	pH Units		11/02/22 12:13	1		11/02/22 12:13	FIELD	Field*
Specific Conductance, Field Measured	3079	umhos/cm		11/02/22 12:13	1		11/02/22 12:13	FIELD	Field*
Temperature, Field Measured	15.8	°C		11/02/22 12:13	1		11/02/22 12:13	FIELD	Field*
Turbidity, Field Measured	1000	NTU		11/02/22 12:13	1	0.00	11/02/22 12:13	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	650	mg/L		11/10/22 09:19	1	10	11/10/22 09:19	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		11/10/22 09:19	1	10	11/10/22 09:19	HRF	SM 2320B 1997*
Fluoride	< 0.250	mg/L		11/16/22 15:20	1	0.250	11/16/22 15:20	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	1300	mg/L		11/08/22 12:09	1	26	11/08/22 13:15	HRF	SM 2540C
Total Metals - PIA									
Boron	340	ug/L		11/14/22 08:38	20	40	11/15/22 11:05	JMW	EPA 6020A
Calcium	3500	mg/L		11/14/22 08:38	100	4.0	11/15/22 09:18	JMW	EPA 6020A
Magnesium	1300	mg/L		11/14/22 08:38	100	2.0	11/15/22 09:18	JMW	EPA 6020A
Potassium	67	mg/L		11/14/22 08:38	20	0.40	11/15/22 12:40	JMW	EPA 6020A
Sodium	18	mg/L		11/14/22 08:38	1	0.020	11/15/22 08:21	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FK00555-03
Name: G06D
Matrix: Ground Water - Grab

Sampled: 11/01/22 10:02
Received: 11/02/22 15:20
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	820	mg/L		11/03/22 10:00	1	26	11/03/22 11:05	HRF	SM 2540C
<u>Total Metals - PIA</u>									
Boron	180	ug/L		11/15/22 09:21	5	10	11/16/22 08:57	JMW	EPA 6020A

Sample: FK00555-04
Name: G108 - WELL DRY
Matrix: Ground Water - Grab

Sampled: 11/01/22 13:32
Received: 11/02/22 15:20
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Field - PIA</u>									
Depth, From Measuring Point	15.45	Feet		11/01/22 13:32	1		11/01/22 13:32	FIELD	Field*



ANALYTICAL RESULTS

Sample: FK00555-05
Name: G130
Matrix: Ground Water - Grab

Sampled: 11/01/22 14:19
Received: 11/02/22 15:20
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	1400	mg/L		11/12/22 20:08	500	500	11/12/22 20:08	CRD	EPA 300.0 REV 2.1
Sulfate	3400	mg/L		11/12/22 20:08	500	500	11/12/22 20:08	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	7.58	Feet		11/01/22 14:19	1		11/01/22 14:19	FIELD	Field*
Dissolved oxygen, Field	3.3	mg/L		11/01/22 14:19	1		11/01/22 14:19	FIELD	Field*
Oxidation Reduction Potential	44.1	mV		11/01/22 14:19	1	-500	11/01/22 14:19	FIELD	Field*
pH, Field Measured	6.42	pH Units		11/01/22 14:19	1		11/01/22 14:19	FIELD	Field*
Specific Conductance, Field Measured	9890	umhos/cm		11/01/22 14:19	1		11/01/22 14:19	FIELD	Field*
Temperature, Field Measured	17.7	°C		11/01/22 14:19	1		11/01/22 14:19	FIELD	Field*
Turbidity, Field Measured	200	NTU		11/01/22 14:19	1	0.00	11/01/22 14:19	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	300	mg/L		11/12/22 10:04	1	10	11/12/22 10:04	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		11/12/22 10:04	1	10	11/12/22 10:04	CGL	SM 2320B 1997*
Fluoride	< 0.250	mg/L		11/16/22 15:26	1	0.250	11/16/22 15:26	TTH	SM 4500F C 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	7000	mg/L		11/07/22 09:30	1	26	11/07/22 10:54	HRF	SM 2540C
Total Metals - PIA									
Boron	73	ug/L		11/14/22 08:38	5	10	11/15/22 08:24	JMW	EPA 6020A
Calcium	580	mg/L		11/14/22 08:38	100	4.0	11/15/22 09:22	JMW	EPA 6020A
Magnesium	420	mg/L		11/14/22 08:38	5	0.10	11/15/22 08:24	JMW	EPA 6020A
Potassium	1.5	mg/L		11/14/22 08:38	5	0.10	11/15/22 12:53	JMW	EPA 6020A
Sodium	1300	mg/L		11/14/22 08:38	100	2.0	11/15/22 09:22	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FK00555-06
Name: G133
Matrix: Ground Water - Grab

Sampled: 11/01/22 11:47
Received: 11/02/22 15:20
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	1600	mg/L		11/12/22 21:20	250	250	11/12/22 21:20	CRD	EPA 300.0 REV 2.1
Sulfate	1500	mg/L		11/12/22 21:20	250	250	11/12/22 21:20	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	13.85	Feet		11/01/22 11:47	1		11/01/22 11:47	FIELD	Field*
Dissolved oxygen, Field	5.6	mg/L		11/01/22 11:47	1		11/01/22 11:47	FIELD	Field*
Oxidation Reduction Potential	187	mV		11/01/22 11:47	1	-500	11/01/22 11:47	FIELD	Field*
pH, Field Measured	6.94	pH Units		11/01/22 11:47	1		11/01/22 11:47	FIELD	Field*
Specific Conductance, Field Measured	6400	umhos/cm		11/01/22 11:47	1		11/01/22 11:47	FIELD	Field*
Temperature, Field Measured	16.4	°C		11/01/22 11:47	1		11/01/22 11:47	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		11/01/22 11:47	1	0.00	11/01/22 11:47	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	400	mg/L		11/12/22 10:04	1	10	11/12/22 10:04	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/12/22 10:04	1	10	11/12/22 10:04	CGL	SM 2320B 1997*
Fluoride	< 0.250	mg/L		11/16/22 15:29	1	0.250	11/16/22 15:29	TTH	SM 4500F C 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	4300	mg/L		11/08/22 12:09	1	26	11/08/22 13:15	HRF	SM 2540C
Total Metals - PIA									
Boron	200	ug/L		11/14/22 08:38	5	10	11/15/22 08:28	JMW	EPA 6020A
Calcium	670	mg/L		11/14/22 08:38	100	4.0	11/15/22 09:26	JMW	EPA 6020A
Magnesium	400	mg/L		11/14/22 08:38	5	0.10	11/15/22 08:28	JMW	EPA 6020A
Potassium	7.1	mg/L		11/14/22 08:38	5	0.10	11/15/22 12:57	JMW	EPA 6020A
Sodium	380	mg/L		11/14/22 08:38	5	0.10	11/15/22 08:28	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FK00555-09
Name: G128
Matrix: Ground Water - Grab

Sampled: 11/02/22 13:18
Received: 11/02/22 15:20
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	2200	mg/L		11/12/22 21:38	1000	1000	11/12/22 21:38	CRD	EPA 300.0 REV 2.1
Sulfate	6300	mg/L		11/12/22 21:38	1000	1000	11/12/22 21:38	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	3.2	Feet		11/02/22 13:18	1		11/02/22 13:18	FIELD	Field*
Dissolved oxygen, Field	7.4	mg/L		11/02/22 13:18	1		11/02/22 13:18	FIELD	Field*
Oxidation Reduction Potential	-92.0	mV		11/02/22 13:18	1	-500	11/02/22 13:18	FIELD	Field*
pH, Field Measured	7.69	pH Units		11/02/22 13:18	1		11/02/22 13:18	FIELD	Field*
Specific Conductance, Field Measured	1610	umhos/cm		11/02/22 13:18	1		11/02/22 13:18	FIELD	Field*
Temperature, Field Measured	20.1	°C		11/02/22 13:18	1		11/02/22 13:18	FIELD	Field*
Turbidity, Field Measured	20.5	NTU		11/02/22 13:18	1	0.00	11/02/22 13:18	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	880	mg/L		11/12/22 10:04	1	10	11/12/22 10:04	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/12/22 10:04	1	10	11/12/22 10:04	CGL	SM 2320B 1997*
Fluoride	0.361	mg/L		11/16/22 15:39	1	0.250	11/16/22 15:39	TTH	SM 4500F C 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	14000	mg/L	H	11/16/22 11:36	1	51	11/16/22 14:48	HRF	SM 2540C
Total Metals - PIA									
Boron	1100	ug/L		11/14/22 08:38	5	10	11/15/22 08:32	JMW	EPA 6020A
Calcium	460	mg/L		11/14/22 08:38	5	0.20	11/15/22 08:32	JMW	EPA 6020A
Magnesium	550	mg/L		11/14/22 08:38	100	2.0	11/15/22 09:29	JMW	EPA 6020A
Potassium	27	mg/L		11/14/22 08:38	5	0.10	11/15/22 13:01	JMW	EPA 6020A
Sodium	3400	mg/L		11/14/22 08:38	100	2.0	11/15/22 09:29	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FK00555-11
Name: G118
Matrix: Ground Water - Grab

Sampled: 11/02/22 12:56
Received: 11/02/22 15:20
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	< 1.0	mg/L		11/12/22 21:57	1	1.0	11/12/22 21:57	CRD	EPA 300.0 REV 2.1
Sulfate	58	mg/L		11/12/22 22:15	10	10	11/12/22 22:15	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	15.65	Feet		11/02/22 12:56	1		11/02/22 12:56	FIELD	Field*
Dissolved oxygen, Field	7.0	mg/L		11/02/22 12:56	1		11/02/22 12:56	FIELD	Field*
Oxidation Reduction Potential	-3.50	mV		11/02/22 12:56	1	-500	11/02/22 12:56	FIELD	Field*
pH, Field Measured	7.42	pH Units		11/02/22 12:56	1		11/02/22 12:56	FIELD	Field*
Specific Conductance, Field Measured	561.0	umhos/cm		11/02/22 12:56	1		11/02/22 12:56	FIELD	Field*
Temperature, Field Measured	16.6	°C		11/02/22 12:56	1		11/02/22 12:56	FIELD	Field*
Turbidity, Field Measured	1000	NTU		11/02/22 12:56	1	0.00	11/02/22 12:56	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	250	mg/L		11/16/22 16:38	1	10	11/16/22 16:38	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		11/16/22 16:38	1	10	11/16/22 16:38	HRF	SM 2320B 1997*
Fluoride	0.306	mg/L		11/16/22 15:41	1	0.250	11/16/22 15:41	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	620	mg/L		11/09/22 15:28	1	100	11/09/22 16:31	HRF	SM 2540C
Total Metals - PIA									
Boron	110	ug/L		11/15/22 09:21	5	10	11/16/22 09:01	JMW	EPA 6020A
Calcium	440	mg/L		11/15/22 09:21	5	0.20	11/16/22 09:01	JMW	EPA 6020A
Magnesium	250	mg/L		11/15/22 09:21	5	0.10	11/16/22 09:01	JMW	EPA 6020A
Potassium	16	mg/L		11/15/22 09:21	5	0.10	11/16/22 12:37	JMW	EPA 6020A
Sodium	32	mg/L		11/15/22 09:21	5	0.10	11/16/22 09:01	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FK00555-12
Name: G104D
Matrix: Ground Water - Grab

Sampled: 11/02/22 10:54
Received: 11/02/22 15:20
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	22	mg/L		11/12/22 23:09	10	10	11/12/22 23:09	CRD	EPA 300.0 REV 2.1
Sulfate	9.7	mg/L		11/13/22 10:40	5	5.0	11/13/22 10:40	LAM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	49.73	Feet		11/02/22 10:54	1		11/02/22 10:54	FIELD	Field*
Dissolved oxygen, Field	46	mg/L		11/02/22 10:54	1		11/02/22 10:54	FIELD	Field*
Oxidation Reduction Potential	-127	mV		11/02/22 10:54	1	-500	11/02/22 10:54	FIELD	Field*
pH, Field Measured	6.98	pH Units		11/02/22 10:54	1		11/02/22 10:54	FIELD	Field*
Specific Conductance, Field Measured	1607	umhos/cm		11/02/22 10:54	1		11/02/22 10:54	FIELD	Field*
Temperature, Field Measured	16.4	°C		11/02/22 10:54	1		11/02/22 10:54	FIELD	Field*
Turbidity, Field Measured	64.7	NTU		11/02/22 10:54	1	0.00	11/02/22 10:54	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	780	mg/L		11/16/22 16:38	1	10	11/16/22 16:38	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/16/22 16:38	1	10	11/16/22 16:38	HRF	SM 2320B 1997*
Fluoride	1.10	mg/L		11/16/22 15:43	1	0.250	11/16/22 15:43	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	670	mg/L		11/09/22 15:28	1	51	11/09/22 16:31	HRF	SM 2540C
Total Metals - PIA									
Boron	280	ug/L		11/15/22 09:21	5	10	11/16/22 09:05	JMW	EPA 6020A
Calcium	880	mg/L		11/15/22 09:21	100	4.0	11/16/22 11:19	JMW	EPA 6020A
Magnesium	230	mg/L		11/15/22 09:21	5	0.10	11/16/22 09:05	JMW	EPA 6020A
Potassium	30	mg/L		11/15/22 09:21	5	0.10	11/16/22 12:41	JMW	EPA 6020A
Sodium	170	mg/L		11/15/22 09:21	5	0.10	11/16/22 09:05	JMW	EPA 6020A

Sample: FK00555-14
Name: G104S
Matrix: Ground Water - Grab

Sampled: 10/31/22 00:00
Received: 11/02/22 15:20
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - PIA									
Depth, From Measuring Point	9.83	Feet		10/31/22 00:00	1		10/31/22 00:00	FIELD	Field*



ANALYTICAL RESULTS

Sample: FK00958-03
Name: G232
Matrix: Ground Water - Grab

Sampled: 11/02/22 15:55
Received: 11/03/22 16:03
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	70	mg/L		11/16/22 17:43	50	50	11/16/22 17:43	LAM	EPA 300.0 REV 2.1
Sulfate	350	mg/L		11/16/22 17:43	50	50	11/16/22 17:43	LAM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	71.44	Feet		11/02/22 15:55	1		11/02/22 15:55	FIELD	Field*
Dissolved oxygen, Field	2.0	mg/L		11/02/22 15:55	1		11/02/22 15:55	FIELD	Field*
Oxidation Reduction Potential	-195	mV		11/02/22 15:55	1	-500	11/02/22 15:55	FIELD	Field*
pH, Field Measured	7.97	pH Units		11/02/22 15:55	1		11/02/22 15:55	FIELD	Field*
Specific Conductance, Field Measured	1201	umhos/cm		11/02/22 15:55	1		11/02/22 15:55	FIELD	Field*
Temperature, Field Measured	22.5	°C		11/02/22 15:55	1		11/02/22 15:55	FIELD	Field*
Turbidity, Field Measured	3.11	NTU		11/02/22 15:55	1	0.00	11/02/22 15:55	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	350	mg/L		11/04/22 09:30	1	10	11/04/22 09:30	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/04/22 09:30	1	10	11/04/22 09:30	HRF	SM 2320B 1997*
Fluoride	0.763	mg/L		11/22/22 14:30	1	0.250	11/22/22 14:30	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	1000	mg/L		11/08/22 12:09	1	26	11/08/22 13:15	HRF	SM 2540C
Total Metals - PIA									
Boron	150	ug/L		11/07/22 09:08	5	10	11/10/22 14:20	JMW	EPA 6020A
Calcium	130	mg/L		11/07/22 09:08	5	0.20	11/10/22 14:20	JMW	EPA 6020A
Magnesium	44	mg/L		11/07/22 09:08	5	0.10	11/10/22 14:20	JMW	EPA 6020A
Potassium	3.1	mg/L		11/07/22 09:08	5	0.10	11/10/22 14:20	JMW	EPA 6020A
Sodium	240	mg/L		11/07/22 09:08	5	0.10	11/10/22 14:20	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FK00958-04
Name: G233
Matrix: Ground Water - Grab

Sampled: 11/02/22 15:13
Received: 11/03/22 16:03
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	46	mg/L		11/16/22 18:19	10	10	11/16/22 18:19	LAM	EPA 300.0 REV 2.1
Sulfate	510	mg/L		11/16/22 18:37	100	100	11/16/22 18:37	LAM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	42.21	Feet		11/02/22 15:13	1		11/02/22 15:13	FIELD	Field*
Dissolved oxygen, Field	5.8	mg/L		11/02/22 15:13	1		11/02/22 15:13	FIELD	Field*
Oxidation Reduction Potential	-134	mV		11/02/22 15:13	1	-500	11/02/22 15:13	FIELD	Field*
pH, Field Measured	7.49	pH Units		11/02/22 15:13	1		11/02/22 15:13	FIELD	Field*
Specific Conductance, Field Measured	1100	umhos/cm		11/02/22 15:13	1		11/02/22 15:13	FIELD	Field*
Temperature, Field Measured	14.5	°C		11/02/22 15:13	1		11/02/22 15:13	FIELD	Field*
Turbidity, Field Measured	35.9	NTU		11/02/22 15:13	1	0.00	11/02/22 15:13	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	560	mg/L		11/04/22 09:30	1	10	11/04/22 09:30	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/04/22 09:30	1	10	11/04/22 09:30	HRF	SM 2320B 1997*
Fluoride	0.457	mg/L		11/22/22 14:32	1	0.250	11/22/22 14:32	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	1400	mg/L		11/08/22 15:58	1	26	11/08/22 17:06	HRF	SM 2540C
Total Metals - PIA									
Boron	140	ug/L		11/07/22 09:08	5	10	11/10/22 14:23	JMW	EPA 6020A
Calcium	190	mg/L		11/07/22 09:08	5	0.20	11/10/22 14:23	JMW	EPA 6020A
Magnesium	77	mg/L		11/07/22 09:08	5	0.10	11/10/22 14:23	JMW	EPA 6020A
Potassium	4.0	mg/L		11/07/22 09:08	5	0.10	11/10/22 14:23	JMW	EPA 6020A
Sodium	180	mg/L		11/07/22 09:08	5	0.10	11/10/22 14:23	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FK00958-05
Name: G234
Matrix: Ground Water - Grab

Sampled: 11/02/22 15:54
Received: 11/03/22 16:03
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	55	mg/L		11/16/22 19:13	25	25	11/16/22 19:13	LAM	EPA 300.0 REV 2.1
Sulfate	160	mg/L		11/16/22 19:13	25	25	11/16/22 19:13	LAM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	43.76	Feet		11/02/22 15:20	1		11/02/22 15:20	FIELD	Field*
Dissolved oxygen, Field	3.6	mg/L		11/02/22 15:20	1		11/02/22 15:20	FIELD	Field*
Oxidation Reduction Potential	-145	mV		11/02/22 15:20	1	-500	11/02/22 15:20	FIELD	Field*
pH, Field Measured	7.75	pH Units		11/02/22 15:20	1		11/02/22 15:20	FIELD	Field*
Specific Conductance, Field Measured	1404	umhos/cm		11/02/22 15:20	1		11/02/22 15:20	FIELD	Field*
Temperature, Field Measured	15.9	°C		11/02/22 15:20	1		11/02/22 15:20	FIELD	Field*
Turbidity, Field Measured	83.9	NTU		11/02/22 15:20	1	0.00	11/02/22 15:20	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	500	mg/L		11/04/22 09:30	1	10	11/04/22 09:30	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/04/22 09:30	1	10	11/04/22 09:30	HRF	SM 2320B 1997*
Fluoride	0.514	mg/L		11/22/22 14:34	1	0.250	11/22/22 14:34	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	820	mg/L		11/08/22 15:58	1	26	11/08/22 17:06	HRF	SM 2540C
Total Metals - PIA									
Boron	100	ug/L		11/15/22 09:21	5	10	11/16/22 10:57	JMW	EPA 6020A
Calcium	110	mg/L		11/15/22 09:21	5	0.20	11/16/22 10:57	JMW	EPA 6020A
Magnesium	47	mg/L		11/15/22 09:21	5	0.10	11/16/22 10:57	JMW	EPA 6020A
Potassium	2.1	mg/L		11/15/22 09:21	5	0.10	11/16/22 12:45	JMW	EPA 6020A
Sodium	110	mg/L		11/15/22 09:21	5	0.10	11/16/22 10:57	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FK00958-06
Name: MW34D
Matrix: Ground Water - Grab

Sampled: 11/02/22 15:31
Received: 11/03/22 16:03
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	19	mg/L		11/17/22 14:23	5	5.0	11/17/22 14:23	LAM	EPA 300.0 REV 2.1
Sulfate	69	mg/L		11/16/22 19:49	10	10	11/16/22 19:49	LAM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	12.61	Feet		11/02/22 15:31	1		11/02/22 15:31	FIELD	Field*
Dissolved oxygen, Field	3.0	mg/L		11/02/22 15:31	1		11/02/22 15:31	FIELD	Field*
Oxidation Reduction Potential	-20.0	mV		11/02/22 15:31	1	-500	11/02/22 15:31	FIELD	Field*
pH, Field Measured	8.20	pH Units		11/02/22 15:31	1		11/02/22 15:31	FIELD	Field*
Specific Conductance, Field Measured	946.0	umhos/cm		11/02/22 15:31	1		11/02/22 15:31	FIELD	Field*
Temperature, Field Measured	16.7	°C		11/02/22 15:31	1		11/02/22 15:31	FIELD	Field*
Turbidity, Field Measured	20.0	NTU		11/02/22 15:31	1	0.00	11/02/22 15:31	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	350	mg/L		11/04/22 09:30	1	10	11/04/22 09:30	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		11/04/22 09:30	1	10	11/04/22 09:30	HRF	SM 2320B 1997*
Fluoride	0.791	mg/L		11/22/22 14:36	1	0.250	11/22/22 14:36	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	480	mg/L		11/08/22 15:58	1	26	11/08/22 17:06	HRF	SM 2540C
Total Metals - PIA									
Boron	190	ug/L		11/15/22 09:21	5	10	11/16/22 11:00	JMW	EPA 6020A
Calcium	49	mg/L		11/15/22 09:21	5	0.20	11/16/22 11:00	JMW	EPA 6020A
Magnesium	43	mg/L		11/15/22 09:21	5	0.10	11/16/22 11:00	JMW	EPA 6020A
Potassium	2.2	mg/L		11/15/22 09:21	5	0.10	11/16/22 12:49	JMW	EPA 6020A
Sodium	67	mg/L		11/15/22 09:21	5	0.10	11/16/22 11:00	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FK00958-07
Name: MW43D
Matrix: Ground Water - Grab

Sampled: 11/02/22 16:04
Received: 11/03/22 16:03
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	42	mg/L		11/16/22 21:01	10	10	11/16/22 21:01	LAM	EPA 300.0 REV 2.1
Sulfate	1400	mg/L		11/17/22 14:42	250	250	11/17/22 14:42	LAM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	11.93	Feet		11/02/22 16:04	1		11/02/22 16:04	FIELD	Field*
Dissolved oxygen, Field	5.2	mg/L		11/02/22 16:04	1		11/02/22 16:04	FIELD	Field*
Oxidation Reduction Potential	111	mV		11/02/22 16:04	1	-500	11/02/22 16:04	FIELD	Field*
pH, Field Measured	7.71	pH Units		11/02/22 16:04	1		11/02/22 16:04	FIELD	Field*
Specific Conductance, Field Measured	2670	umhos/cm		11/02/22 16:04	1		11/02/22 16:04	FIELD	Field*
Temperature, Field Measured	16.4	°C		11/02/22 16:04	1		11/02/22 16:04	FIELD	Field*
Turbidity, Field Measured	132	NTU		11/02/22 16:04	1	0.00	11/02/22 16:04	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	290	mg/L		11/04/22 09:30	1	10	11/04/22 09:30	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		11/04/22 09:30	1	10	11/04/22 09:30	HRF	SM 2320B 1997*
Fluoride	< 0.250	mg/L		11/22/22 14:47	1	0.250	11/22/22 14:47	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	2500	mg/L		11/08/22 15:58	1	26	11/08/22 17:06	HRF	SM 2540C
Total Metals - PIA									
Boron	120	ug/L		11/15/22 09:21	5	10	11/16/22 11:04	JMW	EPA 6020A
Calcium	340	mg/L		11/15/22 09:21	5	0.20	11/16/22 11:04	JMW	EPA 6020A
Magnesium	200	mg/L		11/15/22 09:21	5	0.10	11/16/22 11:04	JMW	EPA 6020A
Potassium	3.3	mg/L		11/15/22 09:21	5	0.10	11/16/22 12:53	JMW	EPA 6020A
Sodium	100	mg/L		11/15/22 09:21	5	0.10	11/16/22 11:04	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FK00963-06
Name: G114
Matrix: Ground Water - Grab

Sampled: 11/03/22 10:34
Received: 11/03/22 16:03
PO #: 1145007

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	58	mg/L		11/17/22 15:00	10	10	11/17/22 15:00	LAM	EPA 300.0 REV 2.1
Sulfate	2100	mg/L		11/16/22 21:38	1000	1000	11/16/22 21:38	LAM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	18.87	Feet		11/03/22 10:34	1		11/03/22 10:34	FIELD	Field*
Dissolved oxygen, Field	1.8	mg/L		11/03/22 10:34	1		11/03/22 10:34	FIELD	Field*
Oxidation Reduction Potential	-60.4	mV		11/03/22 10:34	1	-500	11/03/22 10:34	FIELD	Field*
pH, Field Measured	7.25	pH Units		11/03/22 10:34	1		11/03/22 10:34	FIELD	Field*
Specific Conductance, Field Measured	3349	umhos/cm		11/03/22 10:34	1		11/03/22 10:34	FIELD	Field*
Temperature, Field Measured	16.2	°C		11/03/22 10:34	1		11/03/22 10:34	FIELD	Field*
Turbidity, Field Measured	32.0	NTU		11/03/22 10:34	1	0.00	11/03/22 10:34	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO ₃	490	mg/L		11/10/22 09:19	1	10	11/10/22 09:19	HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO ₃	< 10	mg/L		11/10/22 09:19	1	10	11/10/22 09:19	HRF	SM 2320B 1997*
Fluoride	0.282	mg/L		11/22/22 14:49	1	0.250	11/22/22 14:49	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	3800	mg/L		11/10/22 03:32	1	26	11/10/22 03:32	HRF	SM 2540C
Total Metals - PIA									
Boron	160	ug/L		11/15/22 09:21	5	10	11/16/22 11:15	JMW	EPA 6020A
Calcium	650	mg/L		11/15/22 09:21	100	4.0	11/17/22 08:30	JMW	EPA 6020A
Magnesium	300	mg/L		11/15/22 09:21	5	0.10	11/16/22 11:15	JMW	EPA 6020A
Potassium	6.6	mg/L		11/15/22 09:21	5	0.10	11/16/22 13:04	JMW	EPA 6020A
Sodium	140	mg/L		11/15/22 09:21	5	0.10	11/16/22 11:15	JMW	EPA 6020A



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B248124 - No Prep - SM 2540C</u>									
Blank (B248124-BLK1)				Prepared & Analyzed: 11/03/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B248124-BS1)				Prepared & Analyzed: 11/03/22					
Solids - total dissolved solids (TDS)	943	mg/L		1000		94	84.9-109		
<u>Batch B248378 - SW 3015 - EPA 6020A</u>									
Blank (B248378-BLK1)				Prepared: 11/07/22 Analyzed: 11/10/22					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B248378-BS1)				Prepared: 11/07/22 Analyzed: 11/10/22					
Boron	565	ug/L		555.6		102	80-120		
Calcium	6.37	mg/L		5.556		115	80-120		
Magnesium	6.38	mg/L		5.556		115	80-120		
Potassium	6.41	mg/L		5.556		115	80-120		
Sodium	6.36	mg/L		5.556		114	80-120		
<u>Batch B248381 - No Prep - SM 2540C</u>									
Blank (B248381-BLK1)				Prepared & Analyzed: 11/07/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B248381-BS1)				Prepared & Analyzed: 11/07/22					
Solids - total dissolved solids (TDS)	963	mg/L		1000		96	84.9-109		
Solids - total dissolved solids (TDS)	963	mg/L		1000		96	84.9-109		
<u>Batch B248533 - No Prep - SM 2540C</u>									
Blank (B248533-BLK1)				Prepared & Analyzed: 11/08/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B248533-BS1)				Prepared & Analyzed: 11/08/22					
Solids - total dissolved solids (TDS)	1060	mg/L		1000		106	84.9-109		
Solids - total dissolved solids (TDS)	1060	mg/L		1000		106	84.9-109		
<u>Batch B248585 - No Prep - SM 2540C</u>									
Blank (B248585-BLK1)				Prepared & Analyzed: 11/08/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B248585-BS1)				Prepared & Analyzed: 11/08/22					
Solids - total dissolved solids (TDS)	993	mg/L		1000		99	84.9-109		
Duplicate (B248585-DUP1)				Prepared & Analyzed: 11/08/22					
Solids - total dissolved solids (TDS)	2440	mg/L			2500			3	5



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B248696 - No Prep - SM 2540C</u>									
Blank (B248696-BLK1)				Prepared & Analyzed: 11/09/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B248696-BS1)				Prepared & Analyzed: 11/09/22					
Solids - total dissolved solids (TDS)	987	mg/L		1000		99	84.9-109		
<u>Batch B248729 - No Prep - SM 2320B 1997</u>									
Duplicate (B248729-DUP4)			Sample: FK00958-07		Prepared & Analyzed: 11/04/22				
Alkalinity - carbonate as CaCO ₃	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO ₃	300	mg/L			288			4	10
<u>Batch B248805 - No Prep - SM 2540C</u>									
Blank (B248805-BLK1)				Prepared & Analyzed: 11/10/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B248805-BS1)				Prepared & Analyzed: 11/10/22					
Solids - total dissolved solids (TDS)	943	mg/L		1000		94	84.9-109		
<u>Batch B248962 - No Prep - SM 2320B 1997</u>									
Duplicate (B248962-DUP2)			Sample: FK00540-11		Prepared & Analyzed: 11/10/22				
Alkalinity - bicarbonate as CaCO ₃	450	mg/L			450			0	10
Alkalinity - carbonate as CaCO ₃	< 10	mg/L			ND				10
<u>Batch B248980 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B248980-CCB1)				Prepared & Analyzed: 11/12/22					
Sulfate	0.00	mg/L							
Chloride	0.00	mg/L							
Calibration Check (B248980-CCV1)				Prepared & Analyzed: 11/12/22					
Sulfate	4.98	mg/L		5.000		100	90-110		
Chloride	4.85	mg/L		5.000		97	90-110		
<u>Batch B248997 - SW 3015 - EPA 6020A</u>									
Blank (B248997-BLK1)				Prepared: 11/14/22 Analyzed: 11/15/22					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B248997-BS1)				Prepared: 11/14/22 Analyzed: 11/15/22					
Boron	534	ug/L		555.6		96	80-120		
Calcium	6.21	mg/L		5.556		112	80-120		
Magnesium	6.00	mg/L		5.556		108	80-120		
Potassium	6.05	mg/L		5.556		109	80-120		
Sodium	5.98	mg/L		5.556		108	80-120		
<u>Batch B249052 - IC No Prep - EPA 300.0 REV 2.1</u>									



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B249052 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B249052-CCB1)				Prepared & Analyzed: 11/13/22					
Sulfate	0.00	mg/L							
Calibration Check (B249052-CCV1)				Prepared & Analyzed: 11/13/22					
Sulfate	5.06	mg/L		5.000		101	90-110		
<u>Batch B249055 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B249055-CCB1)				Prepared & Analyzed: 11/13/22					
Chloride	0.730	mg/L							
Calibration Check (B249055-CCV1)				Prepared & Analyzed: 11/13/22					
Chloride	4.82	mg/L		5.000		96	90-110		
<u>Batch B249122 - SW 3015 - EPA 6020A</u>									
Blank (B249122-BLK1)				Prepared: 11/15/22 Analyzed: 11/16/22					
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Magnesium	< 0.10	mg/L							
Potassium	< 0.10	mg/L							
Sodium	< 0.10	mg/L							
LCS (B249122-BS1)				Prepared: 11/15/22 Analyzed: 11/16/22					
Boron	569	ug/L		555.6		103	80-120		
Calcium	6.00	mg/L		5.556		108	80-120		
Magnesium	6.32	mg/L		5.556		114	80-120		
Potassium	5.95	mg/L		5.556		107	80-120		
Sodium	5.95	mg/L		5.556		107	80-120		
<u>Batch B249266 - No Prep - SM 4500F C 1997</u>									
Matrix Spike (B249266-MS3)		Sample: FK00540-08		Prepared & Analyzed: 11/16/22					
Fluoride	1.69	mg/L		1.000	0.573	112	80-120		
Matrix Spike Dup (B249266-MSD3)		Sample: FK00540-08		Prepared & Analyzed: 11/16/22					
Fluoride	1.66	mg/L		1.000	0.573	108	80-120	2	20
<u>Batch B249272 - No Prep - SM 2540C</u>									
Blank (B249272-BLK1)				Prepared & Analyzed: 11/16/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B249272-BS1)				Prepared & Analyzed: 11/16/22					
Solids - total dissolved solids (TDS)	1030	mg/L		1000		103	84.9-109		
<u>Batch B249298 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B249298-CCB1)				Prepared & Analyzed: 11/15/22					
Chloride	0.930	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B249298-CCV1)				Prepared & Analyzed: 11/15/22					
Chloride	4.88	mg/L		5.000		98	90-110		
Sulfate	4.96	mg/L		5.000		99	90-110		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B249466 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B249466-CCB1)				Prepared & Analyzed: 11/16/22					
Sulfate	0.00	mg/L							
Chloride	0.00	mg/L							
Calibration Check (B249466-CCV1)				Prepared & Analyzed: 11/16/22					
Sulfate	4.98	mg/L		5.000		100	90-110		
Chloride	4.87	mg/L		5.000		97	90-110		
<u>Batch B249578 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B249578-CCB1)				Prepared & Analyzed: 11/17/22					
Chloride	0.00	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B249578-CCV1)				Prepared & Analyzed: 11/17/22					
Sulfate	4.99	mg/L		5.000		100	90-110		
Chloride	4.96	mg/L		5.000		99	90-110		
<u>Batch B249751 - No Prep - SM 4500F C 1997</u>									
Matrix Spike (B249751-MS4)		Sample: FK00958-06		Prepared & Analyzed: 11/22/22					
Fluoride	1.82	mg/L		1.000	0.791	103	80-120		
Matrix Spike Dup (B249751-MSD4)		Sample: FK00958-06		Prepared & Analyzed: 11/22/22					
Fluoride	1.81	mg/L		1.000	0.791	102	80-120	0.5	20
<u>Batch B249766 - No Prep - SM 2320B 1997</u>									
Duplicate (B249766-DUP1)		Sample: FK00555-11		Prepared & Analyzed: 11/16/22					
Alkalinity - bicarbonate as CaCO ₃	238	mg/L			250			5	10
Alkalinity - carbonate as CaCO ₃	< 10	mg/L			ND				10



NOTES

Specifications regarding method revisions, method modifications, and calculations used for analysis are available upon request. Please contact your project manager.

Revised Report - corrected sample time for G234, removed results for A207 and MW48S.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050

TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615

TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553

Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)

Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807

USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050

Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Qualifiers

H Test performed after the expiration of the appropriate regulatory/advisory maximum allowable hold time.

Certified by: Gail Schindler, Project Manager



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NPDES	RCRA	TACO: RES OR IND/COMM
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REGULATORY PROGRAM (CIRCLE):	NPDES
MORBCA	RCRA
CCDD	TACO: RES OR IND/COMM

CLIENT VISTRA-NEWTON 6725 N. 500TH STREET NEWTON, IL 62448 CONTACT PERSON MR. TERRY HANRATTY		PROJECT NUMBER PHASE I PHONE NUMBER E-MAIL		PROJECT LOCATION PURCHASE ORDER # DATE SHIPPED		ANALYSIS REQUESTED 3		(FOR LAB USE ONLY) 4 LOGIN # <u>FK0555</u> LOGGED BY: <u>gb</u> CLIENT: VISTRA-NEWTON PROJECT: NEWTON_PHASE1_G1 PROJ. MGR.: GAIL SCHINDLER			
2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)		DATE COLLECTED TIME COLLECTED		SAMPLE TYPE GRAB		MATRIX TYPE COMP		BOTTLE COUNT PRES CODE CHECK PROVIDED			
G 104 G 106 G 108 G 130 G 133 G 136 G 139 G 128 G 141		11/2/22 1523 1059 1002 1332 1419 1147 1456 1531 1318 1130		X X X X X X X X X X		GW GW GW GW GW GW GW GW GW GW		4 4 2 0 6 6 4 4 4 4 4		*DISSOLVED Dry	
5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) (RUSH TAT IS SUBJECT TO PACE LABS APPROVAL AND SURCHARGE) RUSH RESULTS VIA (PLEASE CIRCLE)		1 - HCL 2 - H2SO4 3 - HNO3 4 - NAOH 5 - NA2S2O3 6 - UNPRESERVED 7 - OTHER		DATE RESULTS NEEDED 6		6 I understand that by initialing this box I give the lab permission to proceed with analysis, even though it may not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may NOT be acceptable to report to all regulatory authorities.		PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS)			
7 RELINQUISHED BY: (SIGNATURE) <u>[Signature]</u>		DATE <u>11/2/22</u> TIME <u>1416</u>		RECEIVED BY: (SIGNATURE) <u>[Signature]</u>		DATE <u>11/2/22</u> TIME <u>1416</u>		COMMENTS: (FOR LAB USE ONLY) 8			
RELINQUISHED BY: (SIGNATURE) <u>[Signature]</u>		DATE <u>11-2-22</u> TIME <u>18:32</u>		RECEIVED BY: (SIGNATURE) <u>[Signature]</u>		DATE <u>11-2-22</u> TIME <u>0800</u>		SAMPLE TEMPERATURE UPON RECEIPT <u>32</u> °C CHILL PROCESS STARTED PRIOR TO RECEIPT SAMPLE(S) RECEIVED ON ICE SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED DATE AND TIME TAKEN FROM SAMPLE BOTTLE			
RELINQUISHED BY: (SIGNATURE) <u>[Signature]</u>		DATE <u>11/2/22</u> TIME <u>1416</u>		RECEIVED BY: (SIGNATURE) <u>[Signature]</u>		DATE <u>11/2/22</u> TIME <u>0800</u>		RELINQUISHED BY: (SIGNATURE) <u>[Signature]</u>			

[illegible]

CHAIN OF CUSTODY RECORD

REGULATORY PROGRAM (CIRCLE):	NPDES
MORBCA	RCRA
CCDD	TACO: RES or IND/COMM

1		CLIENT		VISTRA-NEWTON		PROJECT NUMBER		PROJECT LOCATION		PURCHASE ORDER #		3		ANALYSIS REQUESTED		4		(FOR LAB USE ONLY)	
ADDRESS		6725 N. 500TH STREET		PHONE NUMBER		E-MAIL		DATE SHIPPED				NH3,CA,CL,COD,FE		MG,MN,HG,NO3		NA,SO4,B,K,CR		TDS,TOC	
CITY		NEWTON, IL 62448		SAMPLER (PLEASE PRINT)		SAMPLER'S SIGNATURE		MATRIX TYPES:		BOTTLE COUNT		PRES CODE							
STATE		NEWTON, IL 62448		+M K B G A P		Curtin Moon		WW-WASTEWATER DW-DRINKING WATER GW-GROUND WATER MS-KON AQUEOUS SOLID LCH-LEACHATE OIL-OIL SOL-SOLID		7		2,3,6		X		X			
CONTACT PERSON		MR. TERRY HANRATTY		DATE COLLECTED		TIME COLLECTED		SAMPLE TYPE		MATRIX TYPE		COMP		X		X			
2		SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)		DATE COLLECTED		TIME COLLECTED		SAMPLE TYPE		MATRIX TYPE		COMP		X		X			
S101				11/3/92		1030		X		GW				X		X			
S102				11/3/92		1059		X		GW				X		X			
T101				11/3/92		1129		X		GW				X		X			
T102				11/3/92		1152		X		GW				X		X			
G105				11/3/92		1100		X		GW				X		X			
G114				11/3/92		1034		X		GW									
G116				11/3/92		1146		X		GW									
G125				11/3/92		1030		X		GW									
CHEMICAL PRESERVATION CODES:		1 - HCL		2 - H2SO4		3 - HNO3		4 - NAOH		5 - NA2S2O3		6 - UNPRESERVED		7 - OTHER					
5		TURNAROUND TIME REQUESTED (PLEASE CIRCLE)		NORMAL		RUSH		DATE RESULTS NEEDED		6		I understand that by initialing this box I give the lab permission to proceed with analysis, even though it may not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may <u>NOT</u> be acceptable to report to all regulatory authorities.							
EMAIL IF DIFFERENT FROM ABOVE:		PHONE # IF DIFFERENT FROM ABOVE:		7		RELINQUISHED BY: (SIGNATURE)		DATE		11/3/92		TIME		1603					
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									
RELINQUISHED BY: (SIGNATURE)		Curtin Moon		DATE		11/3/92		TIME		1603									

Newton

WELL/SAMPLE POINT G203 MW340

Purge Method: baile

Date: 11/2/2022 Start Time: 1452 Finish/Sample Time: 1531

Well Depth (Bottom) From MP: 74.80 ft 58.67 Min. Purge Volume: — Gal / L

Depth to Water From MP: 12.61 ft Total Purge Volume: 28 Gal (L)

Water Column Length: 46.06 ft Max Drawdown: — ft

Well Water Volume: 27.86 Gal (L) Total Drawdown: 32.17 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		(ft.)	(mL/min)	(s.u.)	(umhos/cm)	(deg C)	(mV)	(mg/L)	(NTU)
1	1516	42.29	—	8.27	951	16.7	-21	3.07	19.7
2	1518	43.54	—	8.20	946	16.7	-20	3.03	20.0
3									
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	✓	
Casing locked/secure		✗
Well cap fits securely.		✗
Good seal/drainage	✓	
Well has weep holes		✗

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>500mL</u>

(2)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 44.78 ft

Comments unable to close casing 1st due to casing being
swath into ground vesp nest inside

Only two consecutive
reads taken due

Sampler's Signature: [Signature]

to significant drawdown
after 1 well volume on
pore recharge

Newton

WELL/SAMPLE POINT G208 MW350 Purge Method:

Date: 11/1/2022 Start Time: 1550 Finish/Sample Time: 1556

Well Depth (Bottom) From MP: 98.30 ft Min. Purge Volume: Gal / L
 Depth to Water From MP: ft Total Purge Volume: Gal / L
 Water Column Length: ft Max Drawdown: ft
 Well Water Volume: Gal / L Total Drawdown: ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1									
2									
3									
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

Sample Appearance:

Odor: ☐ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	✓	
Casing locked/secure		✗
Well cap fits securely.	✓	
Good seal/drainage	✓	
Well has weep holes	✓	

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
0	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
0	General (P, 250 mL) 500mL

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: ft

Comments well casing sunken enough to prevent opening
unable to sample

Sampler's Signature:

Newton

WELL/SAMPLE POINT

G223 MW 43D

Purge Method:

baile

Date:

11/2/2022

Start Time:

1540

Finish/Sample Time:

1604

Well Depth (Bottom) From MP:

91.90 ft 40.77

Min. Purge Volume:

Gal / L

Depth to Water From MP:

11.93 ft

Total Purge Volume:

18 Gal (L)

Water Column Length:

28.84 ft

Max Drawdown:

ft

Well Water Volume:

17.44 Gal (L)

Total Drawdown:

21.13 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1556	30.64	—	7.72	2670	16.4	111	5.27	137
2	1557	31.80	—	7.71	2670	16.4	111	5.24	132
3									
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

Horibor

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☒ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	✓	
Casing locked/secure	✓	
Well cap fits securely.		
Good seal/drainage	✓	
Well has weep holes		✗

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) 500mL

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW:

33.06 ft

Comments

only two consecutive readings taken due to significant draw down and poor recharge

Sampler's Signature:

[Signature]

Newton

WELL/SAMPLE POINT G224 MW 460

Purge Method: BAICER

Date: 11/02/22

Start Time: 1100

Finish/Sample Time: 1213

Well Depth (Bottom) From MP: ^{KMD}~~76.08~~ ft 32.11

Min. Purge Volume: Gal / L 16.00 x 3 = 48.00

Depth to Water From MP: 6.94 ft

Total Purge Volume: 42.00 ^{KMD x 3 = 126.00} Gal

Water Column Length: 69.14 ^{KMD} ft 25.17

Max Drawdown: ft

Well Water Volume: 41.87 Gal 15.24

Total Drawdown: 22.68 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1125	27.60	—	7.11	3079	15.82	77.10	6.00	1000
2									
3									
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HANNA

Sample Appearance:

Odor: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Color: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) <u>500mL</u>

(2)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 29.62 ft

Comments WELL NOT RECHARGING ONLY 1 WELL VOLUME

Sampler's Signature: 

Newton

WELL/SAMPLE POINT

G104D

G222

Purge Method:

BATLER

Date:

11/01/22
11/02/22

Start Time:

1445 0938

Finish/Sample Time:

1054

Well Depth (Bottom) From MP:

82.00 ft

Min. Purge Volume:

Gal / L

Depth to Water From MP:

49.73 ft

Total Purge Volume:

60.00 Gal

20 x 3

Water Column Length:

32.27 ft

Max Drawdown:

ft

Well Water Volume:

19.54 Gal

Total Drawdown:

21.51 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1005	70.23	—	6.98	1607	16.37	-126.70	45.5	64.70
2									
3									
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

AT 600 HANNA
KMD

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☒ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) 500 mL

②

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW:

71.24 ft

Comments

WELL WONT RECHARGE ONLY ONE VOLUME.

Sampler's Signature:

[Signature]
KMD

Newton

WELL/SAMPLE POINT G06D

Purge Method: Bladder

Date: 11/01/22 Start Time: 0935 Finish/Sample Time: 1002

Well Depth (Bottom) From MP: 129.11 ^{BG} ft 94.40 Min. Purge Volume: 1 Gal (L)

Depth to Water From MP: 29.11 ft Total Purge Volume: 1 Gal (L)

Water Column Length: 65.29 ft Max Drawdown: — ft

Well Water Volume: 39.54 Gal (L) Total Drawdown: 3.39 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		(ft.)	(mL/min)	(s.u.)	(umhos/cm)	(deg C)	(mV)	(mg/L)	(NTU)
1	0951	31.00	100	6.77	1345.6	13.39	-131.9	0.00	1.60
2	0952	31.19	100	6.76	1345.7	13.40	-132.7	0.00	1.73
3	0953	31.35	100	6.80	1340.2	13.41	-133.8	0.00	1.91
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

Odor: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☐	☒
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL, 500)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 32.50 ft

Comments

Sampler's Signature: Brenda H. Hume

Newton

WELL/SAMPLE POINT

6108

6220

Purge Method:

Date:

11/1/2022

Start Time:

13201

Finish/Sample Time:

1332

Well Depth (Bottom) From MP:

66.95 ft

15.47

Min. Purge Volume:

—

Gal / L

Depth to Water From MP:

15.41 ft

Total Purge Volume:

0

Gal / L

Water Column Length:

0.06 ft

Max Drawdown:

—

ft

Well Water Volume:

0.04

Gal

Total Drawdown:

0

ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1									
2									
3									
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

Sample Appearance:

Odor: ☐ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☐ Mod. ☐ Strong

Well Integrity	Yes	No
Well has ID sign	✓	
Casing locked/secure	✓	
Well cap fits securely.	✓	
Good seal/drainage	✓	
Well has weep holes		

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
0	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
0	General (P, 250mL) 500mL

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW:

15.41

ft

Comments

Well Dry, unable to sample

Sampler's Signature:



NEWTON

WELL/SAMPLE POINT G114 G48MG

Purge Method: boiler

Date: 11/3/2022 Start Time: 0943 Finish/Sample Time: 1034

Well Depth (Bottom) From MP: 144.60 ft Min. Purge Volume: — Gal / L

Depth to Water From MP: 18.87 ft Total Purge Volume: 48 Gal (L)

Water Column Length: 25.73 ft Max Drawdown: — ft

Well Water Volume: 15.56 Gal / L Total Drawdown: — ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1002	24.74	—	7.27	3351	16.14	-60.9	1.73	20.6
2	1018	27.50	—	7.26	3349	16.18	-60.5	1.90	20.8
3	1030	32.17	—	7.25	3341	16.17	-60.4	1.81	32.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba AT600
App 11/3/2022

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod. ☒ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>500mL</u>

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 32.17 ft

Comments Paper wasp nest in well

Sampler's Signature: [Signature]

Newton

WELL/SAMPLE POINT

118
A207

Purge Method:

BAILER

Date:

11/02/22

Start Time:

1232

Finish/Sample Time:

1256

Well Depth (Bottom) From MP:

-76.30 ft 22.63

Min. Purge Volume:

5 Gal / L

Depth to Water From MP:

15.65 ft

Total Purge Volume:

5 Gal / L $\times 3 = 15$

Water Column Length:

6.98 ft

Max Drawdown:

3.82 ft

Well Water Volume:

4.22 Gal ①

Total Drawdown:

3.82 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1245	16.37	—	7.53	545	17.29	-19.50	6.25	1000
2	1252	19.93	—	7.42	561	16.64	-3.5	7.05	1000
3									
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

HANNA

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250mL) <u>500 mL</u>

②

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW:

19.47 ft

Comments

WELL NOT RECHARGING ONLY READS

Sampler's Signature:



Newton

WELL/SAMPLE POINT **G128**

Purge Method: per: Suck

Date: 11/2/2022

Start Time: 1740

Finish/Sample Time: 1318

Well Depth (Bottom) From MP: 30.05 ft

Min. Purge Volume: — Gal / L

Depth to Water From MP: 3.20 ft

Total Purge Volume: 1000 Gal / L (mL)

Water Column Length: 26.85 ft

Max Drawdown: — ft

Well Water Volume: 10.24 Gal (L)

Total Drawdown: 3.25 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1221	5.00	100	7.54	1620	19.9	-79	7.30	31.7
2	1223	5.09	100	7.62	1620	20.0	-81	7.31	24.1
3	1225	5.15	100	7.64	1610	20.1	-92	7.35	20.5
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☐	☒
Good seal/drainage	☒	☐
Well has weep holes	☐	☒

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
1	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>500 mL</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 6.45 ft

Comments

Sampler's Signature: [Signature]

Newton

WELL/SAMPLE POINT G130

Purge Method: per: Slow / fir

Date: 11/1/2022 Start Time: 1340

Finish/Sample Time: 1419

Well Depth (Bottom) From MP: 23.20 ft

Min. Purge Volume: — Gal / L

Depth to Water From MP: 7.58 ft

Total Purge Volume: 1000 Gal / L (ML)

Water Column Length: 15.62 ft

Max Drawdown: — ft

Well Water Volume: 0.45 Gal (D)

Total Drawdown: 268 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1354	0.80	100	6.42	9873	17.69	41.1	3.48	244
2	1356	0.04	100	6.43	9884	17.69	42.3	3.40	211
3	1358	0.05	100	6.42	9890	17.72	44.1	3.32	200
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Hanna

Sample Appearance:

Odor: ☐ None ☐ Slight ☐ Mod. ☒ Strong

Color: ☐ None ☐ Slight ☐ Mod. ☒ Strong

Turb: ☐ None ☐ Slight ☐ Mod ☒ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☐	☒
Good seal/drainage	☒	☐
Well has weep holes	☐	☒

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>500 mL</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 10.26 ft

Comments

Ants in well, water cleared up a bit after
Ants purged

Sampler's Signature: [Signature]

Newton

WELL/SAMPLE POINT G133

Purge Method: Water

Date: 11-1-22

Start Time: 10:15

Finish/Sample Time: 11:47

Well Depth (Bottom) From MP: 27.60 ft

Min. Purge Volume: — Gal / L

Depth to Water From MP: 13.85 ft

Total Purge Volume: 6.8 Gal / L

Water Column Length: 13.75 ft

Max Drawdown: — ft

Well Water Volume: 2.2 Gal / L

Total Drawdown: 1.64 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	11:30	19.70	—	6.83	6,530	16.52	211	5.62	0.0
2	11:33	19.75	—	6.87	6,490	16.50	200	5.51	0.0
3	11:36	19.86	—	6.94	6,400	16.44	187	5.55	0.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	
Casing locked/secure	☒	
Well cap fits securely.		☒
Good seal/drainage	☒	☒ KL 11-1-22
Well has weep holes		☒

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL)

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 20.49 ft

Comments: Turbidity higher than sensors can read

Sampler's Signature: [Signature]

Newton

WELL/SAMPLE POINT R201

Purge Method: Bladder

Date: 11/01/22 Start Time: 1525 Finish/Sample Time: 1608

Well Depth (Bottom) From MP: 80.42 ft
 Depth to Water From MP: 18.09 ft
 Water Column Length: 62.33 ft
 Well Water Volume: 37.75 Gal / ()

Min. Purge Volume: 1 Gal / ()
 Total Purge Volume: 1.1 Gal / ()
 Max Drawdown: — ft
 Total Drawdown: 0.16 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1544	18.35	100	7.92	1265.0	18.70	-113.1	0.78	3.10
2	1545	18.35	100	7.91	1257.9	18.65	-117.7	0.64	2.63
3	1546	18.35	100	7.90	1265.4	18.61	-123.4	0.62	2.67
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☐	☒
Good seal/drainage	☐	☒
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>500</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 18.35 ft

Comments

Sampler's Signature: Brendan Lina

Newton

WELL/SAMPLE POINT **G202**

Purge Method: Bladder

Date: 11/02/22 Start Time: 1007 Finish/Sample Time: 1113

Well Depth (Bottom) From MP: 70.00 ft
 Depth to Water From MP: 49.90* ft
 Water Column Length: 20.10 ft
 Well Water Volume: 12.17 Gal / (C)
 Min. Purge Volume: 1 Gal (C)
 Total Purge Volume: 1.2 Gal (C)
 Max Drawdown: — ft
 Total Drawdown: — ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1041	—	100	8.02	1148.2	16.09	100.9	6.51	1.54
2	1042	—	100	8.00	1152.0	16.02	101.7	6.53	1.56
3	1043	—	100	8.03	1148.7	15.97	102.5	6.51	1.48
4	—	—	—	—	—	—	—	—	—
5	—	—	—	—	—	—	—	—	—
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

AT 600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☐	☒
Well cap fits securely.	☐	☒
Good seal/drainage	☐	☒
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
1	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL) <u>500</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: — ft

*
 Comments Depth may not be accurate, hit a soft bottom around 40ft., cannot get water level to consistently go off, first goes off around 49.90, no sand visible in casing, water

Sampler's Signature: _____

level has gritty sediment on it when brought up, consistent resistance to water level after 40 ft.

Lock is bent, cannot be closed

Newton

WELL/SAMPLE POINT R202

Purge Method: Bladder

Date: 11/02/22 Start Time: 1117 Finish/Sample Time: 1202

Well Depth (Bottom) From MP: 77.55 ft Min. Purge Volume: 1 Gal 10

Depth to Water From MP: 68.59 ft Total Purge Volume: 1.1 Gal 0

Water Column Length: 8.96 ft Max Drawdown: — ft

Well Water Volume: 5.43 Gal (L) Total Drawdown: 1.00 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1133	69.59	100	7.32	1147.1	15.77	-21.7	3.05	1.56
2	1134	69.59	100	7.30	1151.3	15.74	-29.5	1.89	1.48
3	1135	69.59	100	7.29	1155.2	15.69	-31.2	1.87	1.44
4	1136	69.59	100	7.30	1160.8	15.67	-32.0	1.82	1.45
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☐	☒
Good seal/drainage	☐	☒
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>500</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 69.59 ft

Comments

Sampler's Signature: Brenda M. Lina

Newton

WELL/SAMPLE POINT R217D

Purge Method: Bladder

Date: 11/02/22 Start Time: 1250 Finish/Sample Time: 1346

Well Depth (Bottom) From MP: 71.70 ft
 Depth to Water From MP: 19.79 ft
 Water Column Length: 51.91 ft
 Well Water Volume: 31.44 Gal (L)
 Min. Purge Volume: 1 Gal (L)
 Total Purge Volume: 1 Gal (L)
 Max Drawdown: — ft
 Total Drawdown: 0.22 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1308	20.01	100	7.11	2909.4	19.61	129.8	2.72	2.87
2	1309	20.01	100	7.04	2919.6	19.63	131.5	2.73	2.84
3	1310	20.01	100	7.00	3926.6	19.61	133.4	2.69	2.79
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign		☒
Casing locked/secure	☒	
Well cap fits securely.		☒
Good seal/drainage		☒
Well has weep holes	☒	

BOTTLE INFORMATION:

Qty	Unfiltered Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL, 500)

Qty	Filtered Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
	General (P,500mL)

Final DTW: 20.01 ft

Comments Well is labeled G217D

ler's Signature: Brendan Allen

Newton

WELL/SAMPLE POINT **G230**

Purge Method: 3 LADDER

Date: 11/01/22 Start Time: 1450 Finish/Sample Time: 1533

Well Depth (Bottom) From MP: 76.45 ft Min. Purge Volume: Gal / L

Depth to Water From MP: 48.51 ft Total Purge Volume: 1.0 Gal ①

Water Column Length: 27.94 ft Max Drawdown: ft

Well Water Volume: 16.92 Gal ① Total Drawdown: 0.14 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	15:07	48.65	100	7.73	1080	19.94	-171	5.11	93.40
2	15:08	48.65	100	7.82	1088	18.27	-168	5.30	87.50
3	15:09	48.65	100	7.66	1091	17.97	-167	4.89	79.90
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>500 mL</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 48.65 ft

Comments

Sampler's Signature: [Signature]

Newton

WELL/SAMPLE POINT G231

Purge Method: BLADDER

Date: 11/01/22 Start Time: 1540 Finish/Sample Time: 1618

Well Depth (Bottom) From MP: 76.19 ft Min. Purge Volume: Gal / L

Depth to Water From MP: 47.90 ft Total Purge Volume: 1.0 Gal (L)

Water Column Length: 28.29 ft Max Drawdown: ft

Well Water Volume: 17.13 Gal (L) Total Drawdown: 0.05 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1536	47.95	100	8.09	1,350	17.39	-135	2.27	110
2	1557	47.95	100	8.07	1,350	17.25	-149	1.40	104
3	1558	47.95	100	8.06	1,350	17.09	-156	0.93	106
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

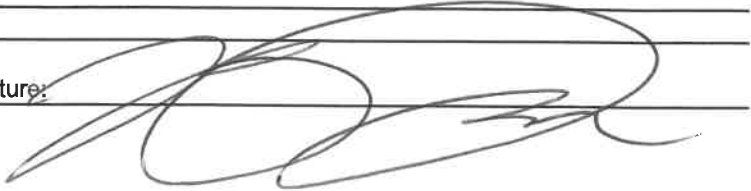
BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>500mL</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 47.95 ft

Comments

Sampler's Signature: 

Newton

WELL/SAMPLE POINT **G232**

Purge Method: Bladder

Date: 11/2/22 Start Time: 1516 Finish/Sample Time: 1555

Well Depth (Bottom) From MP: 72.87 ft
 Depth to Water From MP: 71.44 ft
 Water Column Length: 1.43 ft
 Well Water Volume: 6.87 Gal/L
 Min. Purge Volume: 0 Gal/L
 Total Purge Volume: 0.25 Gal/L
 Max Drawdown: — ft
 Total Drawdown: 0.38 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1027	71.62	100	8.04	1194.1	22.56	563	4.68	3.61
2	1028	71.64	100	8.00	1195.9	22.54	-141.2	3.15	3.47
3	1029	71.67	100	7.99	1192.6	22.54	-178.0	2.17	3.36
4	1030	71.66	100	7.97	1195.2	22.52	-188.1	2.16	3.18
5	1031	71.70	100	7.97	1200.8	22.50	-195.4	2.05	3.11
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 600

Sample Appearance:

Odor: ☐ None ☐ Slight ☐ Mod. ☒ Strong

Color: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☒ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☐	☒
Good seal/drainage	☐	☒
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>500</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 71.82 ft

Comments Water column below well screen

Sampler's Signature: [Signature]

Newton

WELL/SAMPLE POINT G233

Purge Method: BLADDER

Date: 11/02/22 Start Time: 1420 Finish/Sample Time: 1513

Well Depth (Bottom) From MP: 70.87 ft Min. Purge Volume: Gal / L

Depth to Water From MP: 42.21 ft Total Purge Volume: 1.0 Gal (L)

Water Column Length: 28.66 ft Max Drawdown: ft

Well Water Volume: 17.35 Gal (L) Total Drawdown: 3.33 ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1447	45.10	100	7.48	1470	14.48	-133.40	5.72	97.80
2	1448	45.25	100	7.48	1146	14.49	-133.70	5.64	29.90
3	1449	45.40	100	7.49	1100	14.50	-134.00	5.81	35.90
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HANNA

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☐ Slight ☒ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>500 mL</u>

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 45.54 ft

Comments

Sampler's Signature: 

Newton

WELL/SAMPLE POINT **G234**

Purge Method: **BLADDER**

Date: **11/02/22** Start Time: **1520** Finish/Sample Time: **1554**

Well Depth (Bottom) From MP: **70.61** ft
 Depth to Water From MP: **43.76** ft
 Water Column Length: **26.85** ft
 Well Water Volume: **16.26** Gal / **10**
 Min. Purge Volume: **—** Gal / L
 Total Purge Volume: **1.0** Gal / **10**
 Max Drawdown: **—** ft
 Total Drawdown: **0.24** ft

Reading (Units)	Time	Depth (ft.)	Flow Rate (mL/min)	pH (s.u.)	Spec Cond (umhos/cm)	Temp (deg C)	ORP (mV)	DO (mg/L)	Turb (NTU)
1	1534	44.00	100	7.76	1378	16.13	135.50	3.43	85.10
2	1535	44.00	100	7.76	1402	15.94	141.10	3.55	87.80
3	1536	44.00	100	7.75	1404	15.86	145.40	3.60	83.90
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter:

HANNA

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

Well Integrity	Yes	No
Well has ID sign	☒	☐
Casing locked/secure	☒	☐
Well cap fits securely.	☒	☐
Good seal/drainage	☒	☐
Well has weep holes	☒	☐

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAs (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
1	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) 500mL

Filtered	
Qty	Bottles
1	Metals (P,250mL, HNO3)
1	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: **44.00** ft

Comments

Sampler's Signature: 

Multiparameter Meter Field Calibration Checklist

Field Personnel: Kyle Lane				Location: Newton			
Weather: 71° Sunny				Environment: Dry			
Multiparameter Water Meter		Make: Pelgan	Model: Haniba	Serial Number: PW294503			
Water Level Meter		Make:	Model:	Serial Number:			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.06	s.u.	±0.1 s.u.	P	Na	Na	MSI	L344-09	12/14/2023
pH 7.00a	7.00	s.u.	±0.1 s.u.	P	Na	Na	MSI	L343-07	12/9/2023
pH 10.00a	10.05	s.u.	±0.1 s.u.	P	Na	Na	MSI	M082-04	3/25/2024
SC Zero (DI)	22.31	µS/cm	0<25 µS/cm	P	Na	Na	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2036.5	µS/cm	±5%	P	Na	Na	Geotech	1GK328	Nov-22
ORP	234	mV	±15 mV	P	Na	Na	InSitu	2GC827	Dec-22
DO (Zero pt)	0.05	mg/L	±0.1	P	Na	Na	Macron	#000228049	8/26/2025
DO (Saturated)	98.53	%	97-100%	P	Na	Na	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.31	NTU	<2 NTU	P	Na	Na	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 9:47				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.08	s.u.	±0.15 s.u.	P	Na	Geotech	2GC243	Mar-24	
pH 7.00b	7.03	s.u.	±0.15 s.u.	P	Na	Geotech	2GC931	Mar-24	
pH 10.00b	10.12	s.u.	±0.15 s.u.	P	Na	Geotech	2GE820	May-24	
SC 1000	1016.3	µS/cm	±5%	P	Na	Ricca	4205H64	May-24	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 14:38				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.07	s.u.	±0.1 s.u.	P	Na	Na	MSI	L315-04	11/22/2023
pH 7.00a	6.96	s.u.	±0.1 s.u.	P	Na	Na	MSI	L172-33	6/23/2023
pH 10.00a	10.03	s.u.	±0.1 s.u.	P	Na	Na	MSI	L354-22	1/5/2024
SC 1000	1028.0	µS/cm	±5%	P	Na	Na	Ricca	2108D48	Jul-23
DO (Zero pt)	0.03	mg/L	±0.1 mg/L	P	Na	Na	Macron	#000228049	8/26/2025
Turbidity (DI)	0.00	NTU	<2 NTU	P	Na	Na	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: [Signature]	Date: 11-1-22
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Brendan Gibson</u>				Location: <u>Newton</u>			
Weather: <u>46° (63°-36°) Sunny 1 mph NE</u>				Environment: <u>Gravel Road</u>			
Multiparameter Water Meter		Make: <u>Aquatrol</u>	Model: <u>600</u>	Serial Number: <u>846000</u>			
Water Level Meter		Make: <u>WL</u>	Model: <u>Heron</u>	Serial Number: <u>19FF21111924B</u>			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.50</u>	s.u.	±0.1 s.u.	<u>F</u>	<u>Y</u>	<u>4.00</u>	MSI	L344-09	12/14/2023
pH 7.00a	<u>7.65</u>	s.u.	±0.1 s.u.	<u>F</u>	<u>Y</u>	<u>7.06</u>	MSI	L343-07	12/9/2023
pH 10.00a	<u>10.67</u>	s.u.	±0.1 s.u.	<u>F</u>	<u>Y</u>	<u>10.08</u>	MSI	M082-04	3/25/2024
SC Zero (DI)	<u>13.91</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>N</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2028.3</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Geotech	1GK328	Nov-22
ORP	<u>241.5</u>	mV	±15 mV	<u>I</u>	<u>I</u>	<u>I</u>	InSitu	2GC827	Dec-22
DO (Zero pt)	<u>0.00</u>	mg/L	±0.1	<u>I</u>	<u>I</u>	<u>I</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>98.43</u>	%	97-100%	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.81</u>	NTU	<2 NTU	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: <u>0840</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>4.03</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	Geotech	2GC243	Mar-24	
pH 7.00b	<u>6.86</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>	Geotech	2GC931	Mar-24	
pH 10.00b	<u>9.88</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>	Geotech	2GE820	May-24	
SC 1000	<u>982.06</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	Ricca	4205H64	May-24	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: <u>0850</u>			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.07</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>7.08</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>10.10</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	L354-22	1/5/2024
SC 1000	<u>1042.8</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Ricca	2108D48	Jul-23
DO (Zero pt)	<u>0.06</u>	mg/L	±0.1 mg/L	<u>I</u>	<u>I</u>	<u>I</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>1.97</u>	NTU	<2 NTU	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: <u>Brendan Gibson</u>	Date: <u>11/01/22</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Adon Pemberton</u>			Location: <u>New Lon</u>		
Weather: <u>52-68°F cloudy</u> <u>wind SE 1mph</u>			Environment: <u>grass dirt</u>		
Multiparameter Water Meter		Make: <u>Hanna</u>	Model: <u>HI9829</u>	Serial Number: <u>07010006101</u>	
Water Level Meter		Make: <u>Heron</u>	Model: <u>Dipper 12</u>	Serial Number: <u>198F-2202131ML</u>	

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.01</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>	MSI	L344-09	12/14/2023
pH 7.00a	<u>7.03</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>I</u>	<u>I</u>	MSI	L343-07	12/9/2023
pH 10.00a	<u>10.05</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>	MSI	M082-04	3/25/2024
SC Zero (DI)	<u>22.2</u>	µS/cm	0<25 µS/cm	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>1992</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Geotech	1GK328	Nov-22
ORP	<u>230.8</u>	mV	±15 mV	<u>I</u>	<u>I</u>	<u>I</u>	InSitu	2GC827	Dec-22
DO (Zero pt)	<u>0.04</u>	mg/L	±0.1	<u>I</u>	<u>I</u>	<u>I</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>98.88</u>	%	97-100%	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.0</u>	NTU	<2 NTU	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

242 @ 15°C

ICV (Initial Calibration Verification)					Time: <u>1007</u>
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
pH 4.00b	<u>4.02</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>-</u>
pH 7.00b	<u>7.04</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>-</u>
pH 10.00b	<u>10.03</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>-</u>
SC 1000	<u>1023</u>	µS/cm	±5%	<u>I</u>	<u>-</u>

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: <u>1633</u>	
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
pH 4.00a	<u>4.18</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>NO</u>	<u>N/A</u>
pH 7.00a	<u>7.03</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>I</u>	<u>I</u>
pH 10.00a	<u>10.07</u>	s.u.	±0.1 s.u.	<u>I</u>	<u>I</u>	<u>I</u>
SC 1000	<u>1034</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>
DO (Zero pt)	<u>0.08</u>	mg/L	±0.1 mg/L	<u>I</u>	<u>I</u>	<u>I</u>
Turbidity (DI)	<u>0.00</u>	NTU	<2 NTU	<u>I</u>	<u>I</u>	<u>I</u>

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:	
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4.00a		s.u.	±0.1 s.u.			
7.00a		s.u.	±0.1 s.u.			
10.00a		s.u.	±0.1 s.u.			
SC 1000		µS/cm	±5%			
DO (Zero pt)		mg/L	±0.1 mg/L			
Turbidity (DI)		NTU	<2 NTU			

Comments:

Signature: <u>[Signature]</u>	Date: <u>10/11/1/2023</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Brendan Gilenon</u>			Location: <u>Newton</u>		
Weather: <u>52°(72°-49°) Cloudy 5mph NW</u>			Environment: <u>Gravel Road</u>		
Multiparameter Water Meter	Make: <u>AT</u>	Model: <u>600</u>	Serial Number: <u>846000</u>		
Water Level Meter	Make: <u>WL</u>	Model: <u>Heron</u>	Serial Number:		

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>3.99</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	L344-09	12/14/2023
pH 7.00a	<u>6.99</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	L343-07	12/9/2023
pH 10.00a	<u>10.05</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	M082-04	3/25/2024
SC Zero (DI)	<u>20.88</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>N</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000@14.55°	<u>2139.5</u>	µS/cm	±5%	<u>F</u>	<u>Y</u>	<u>2000.0</u>	Geotech	1GK328	Nov-22
ORP	<u>241.9</u>	mV	±15 mV	<u>P</u>	<u>N</u>	<u>N/A</u>	InSitu	2GC827	Dec-22
DO (Zero pt)	<u>0.01</u>	mg/L	±0.1	<u>P</u>	<u>N</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>48.36</u>	%	97-100%	<u>P</u>	<u>N</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.00</u>	NTU	<2 NTU	<u>P</u>	<u>N</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: <u>0830</u>
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
pH 4.00b	<u>3.93</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>
pH 7.00b	<u>6.85</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>
pH 10.00b	<u>9.89</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>
SC 1000	<u>1019.2</u>	µS/cm	±5%	<u>P</u>	<u>N</u>

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: <u>1601</u>
Buffer	Check Value	Units	Range	Pass/Fail	Adjusted Reading
pH 4.00a	<u>4.06</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N/A</u>
pH 7.00a	<u>7.02</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N/A</u>
pH 10.00a	<u>10.06</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N/A</u>
SC 1000	<u>1012.8</u>	µS/cm	±5%	<u>P</u>	<u>N/A</u>
DO (Zero pt)	<u>0.04</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>N/A</u>
Turbidity (DI)	<u>0.35</u>	NTU	<2 NTU	<u>P</u>	<u>N/A</u>

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:
Buffer	Check Value	Units	Range	Pass/Fail	Adjusted Reading
4.00a		s.u.	±0.1 s.u.		
7.00a		s.u.	±0.1 s.u.		
10.00a		s.u.	±0.1 s.u.		
SC 1000		µS/cm	±5%		
DO (Zero pt)		mg/L	±0.1 mg/L		
Turbidity (DI)		NTU	<2 NTU		

Comments:

Signature: <u>Brendan Gilenon</u>	Date: <u>11/02/22</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: KALEB DESICE				Location: NEWTON			
Weather: 55° SUNNY				Environment: GRASSY			
Multiparameter Water Meter		Make: HANNA	Model:	Serial Number: HI 7629829			
Water Level Meter		Make:	Model:	Serial Number:			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.03	s.u.	±0.1 s.u.	PASS	NO	NA	MSI	L315-04	11/22/2023
pH 7.00a	7.06	s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
pH 10.00a	10.01	s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC Zero (DI)	13.20	µS/cm	0<25 µS/cm				Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2003.00	µS/cm	±5%				Geotech	1GK328	Nov-22
ORP	241	mV	±15 mV				InSitu	1GL481	Sep-22
DO (Zero pt)	0.00	mg/L	±0.1				Macron	#000228049	8/26/2025
DO (Saturated)	98	%	97-100%				Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	1.23	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: 0925			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.06	s.u.	±0.15 s.u.	PASS	NO	Geotech	1GF009	Jun-23	
pH 7.00b	6.98	s.u.	±0.15 s.u.			Geotech	0GJ268	Oct-22	
pH 10.00b	10.00	s.u.	±0.15 s.u.			Geotech	1GF458	Jun-23	
SC 1000	1001.00	µS/cm	±5%			Ricca	2108D48	Jul-23	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: 1555			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.98	s.u.	±0.1 s.u.	PASS	NO	NA	MSI	L315-04	11/22/2023
pH 7.00a	6.99	s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
pH 10.00a	10.03	s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000	993.00	µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)	0.02	mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)	1.41	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:			
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: 	Date: 11/02/22
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Multiparameter Meter Field Calibration Checklist

Field Personnel: KYLE LANE, AP		Location: Newton	
Weather: 49° to 72° sunny		Environment: Dry	
Multiparameter Water Meter	Make: Pelgon	Model: Horiba	Serial Number: PW29YJ03
Water Level Meter	Make:	Model:	Serial Number:

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.07	s.u.	±0.1 s.u.	P	NA	NA	MSI	L344-09	12/14/2023
pH 7.00a	7.04	s.u.	±0.1 s.u.	P	NA	NA	MSI	L343-07	12/9/2023
pH 10.00a	10.08	s.u.	±0.1 s.u.	P	NA	NA	MSI	M082-04	3/25/2024
SC Zero (DI)	20.05	µS/cm	0<25 µS/cm	P	NA	NA	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2036	µS/cm	±5%	P	NA	NA	Geotech	1GK328	Nov-22
ORP	-132	mV	±15 mV	P	NA	NA	InSitu	2GC827	Dec-22
DO (Zero pt)	0.01	mg/L	±0.1	P	NA	NA	Macron	#000228049	8/26/2025
DO (Saturated)	98.46	%	97-100%	P	NA	NA	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	1.34	NTU	<2 NTU	P	NA	NA	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 09:04
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
pH 4.00b	4.03	s.u.	±0.15 s.u.	P	NA
pH 7.00b	7.00	s.u.	±0.15 s.u.	P	NA
pH 10.00b	10.11	s.u.	±0.15 s.u.	P	NA
SC 1000	1956	µS/cm	±5%	P	NA

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 16:30	
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
pH 4.00a	4.02	s.u.	±0.1 s.u.	P	NO	NA
pH 7.00a	7.06	s.u.	±0.1 s.u.	P	NO	NA
pH 10.00a	10.08	s.u.	±0.1 s.u.	P	NO	NA
SC 1000	1027	µS/cm	±5%	P	NO	NA
DO (Zero pt)	0.0A	mg/L	±0.1 mg/L	P	NO	NA
Turbidity (DI)	0.0	NTU	<2 NTU	P	NO	NA

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: 	Date: 11/3/2022
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Brendan Glencon</u>				Location: <u>Newton</u>					
Weather: <u>50° (73-47) partly cloudy, temp NW</u>				Environment: <u>Gravel Road</u>					
Multiparameter Water Meter		Make: <u>AT</u>	Model: <u>600</u>	Serial Number: <u>846000</u>					
Water Level Meter		Make: <u>WL</u>	Model: <u>Heron</u>	Serial Number: <u>19FF211192HB</u>					

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>3.91</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	L344-09	12/14/2023
pH 7.00a	<u>7.01</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	L343-07	12/9/2023
pH 10.00a	<u>10.09</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	M082-04	3/25/2024
SC Zero (DI)	<u>22.03</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>N</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2207.1</u>	µS/cm	±5%	<u>F</u>	<u>Y</u>	<u>2000.0</u>	Geotech	1GK328	Nov-22
ORP	<u>241.1</u>	mV	±15 mV	<u>P</u>	<u>N</u>	<u>N/A</u>	InSitu	2GC827	Dec-22
DO (Zero pt)	<u>0.00</u>	mg/L	±0.1	<u>P</u>	<u>N</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>97.42</u>	%	97-100%	<u>P</u>	<u>N</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.00</u>	NTU	<2 NTU	<u>P</u>	<u>N</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: <u>0900</u>				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	<u>4.08</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	Geotech	2GC243	Mar-24	
pH 7.00b	<u>6.89</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	Geotech	2GC931	Mar-24	
pH 10.00b	<u>9.91</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N</u>	Geotech	2GE820	May-24	
SC 1000	<u>984.12</u>	µS/cm	±5%	<u>P</u>	<u>N</u>	Ricca	4205H64	May-24	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: <u></u>				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.10</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>6.85</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>10.10</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>N/A</u>	MSI	L354-22	1/5/2024
SC 1000	<u>1004.21</u>	µS/cm	±5%	<u>P</u>	<u>N</u>	<u>N/A</u>	Ricca	2108D48	Jul-23
DO (Zero pt)	<u>0.00</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>N</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.00</u>	NTU	<2 NTU	<u>P</u>	<u>N</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: <u></u>				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: <u>Brendan Glencon</u>	Date: <u>11/03/22</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: KALEB DESKE				Location: NEWTON			
Weather: 67° PARTLY CLOUDY				Environment: GRASSY			
Multiparameter Water Meter		Make: HANNA	Model:	Serial Number: HI 7629829			
Water Level Meter		Make:	Model:	Serial Number:			

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.03	s.u.	±0.1 s.u.	Pass	NO	NA	MSI	L315-04	11/22/2023
pH 7.00a	7.01	s.u.	±0.1 s.u.	Pass	NO	NA	MSI	L172-33	6/23/2023
pH 10.00a	10.00	s.u.	±0.1 s.u.	Pass	NO	NA	MSI	L354-22	1/5/2024
SC Zero (DI)	15	µS/cm	0<25 µS/cm	Pass	NO	NA	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1994	µS/cm	±5%	Pass	NO	NA	Geotech	1GK328	Nov-22
ORP	243.60	mV	±15 mV	Pass	NO	NA	InSitu	1GL481	Sep-22
DO (Zero pt)	0.01	mg/L	±0.1	Pass	NO	NA	Macron	#000228049	8/26/2025
DO (Saturated)	98.00	%	97-100%	Pass	NO	NA	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	1.01	NTU	<2 NTU	Pass	NO	NA	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 0920				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.04	s.u.	±0.15 s.u.	Pass	NO	Geotech	1GF009	Jun-23	
pH 7.00b	7.08	s.u.	±0.15 s.u.	Pass	NO	Geotech	0GJ268	Oct-22	
pH 10.00b	10.00	s.u.	±0.15 s.u.	Pass	NO	Geotech	1GF458	Jun-23	
SC 1000	1004	µS/cm	±5%	Pass	NO	Ricca	2108D48	Jul-23	

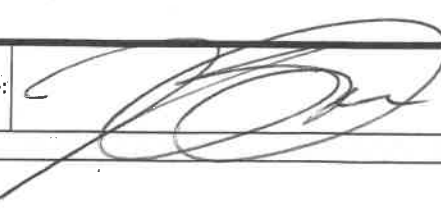
Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 1143				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.02	s.u.	±0.1 s.u.	Pass	NO	NA	MSI	L315-04	11/22/2023
pH 7.00a	7.06	s.u.	±0.1 s.u.	Pass	NO	NA	MSI	L172-33	6/23/2023
pH 10.00a	9.97	s.u.	±0.1 s.u.	Pass	NO	NA	MSI	L354-22	1/5/2024
SC 1000	993.00	µS/cm	±5%	Pass	NO	NA	Ricca	2108D48	Jul-23
DO (Zero pt)	0.02	mg/L	±0.1 mg/L	Pass	NO	NA	Macron	#000228049	8/26/2025
Turbidity (DI)	1.32	NTU	<2 NTU	Pass	NO	NA	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

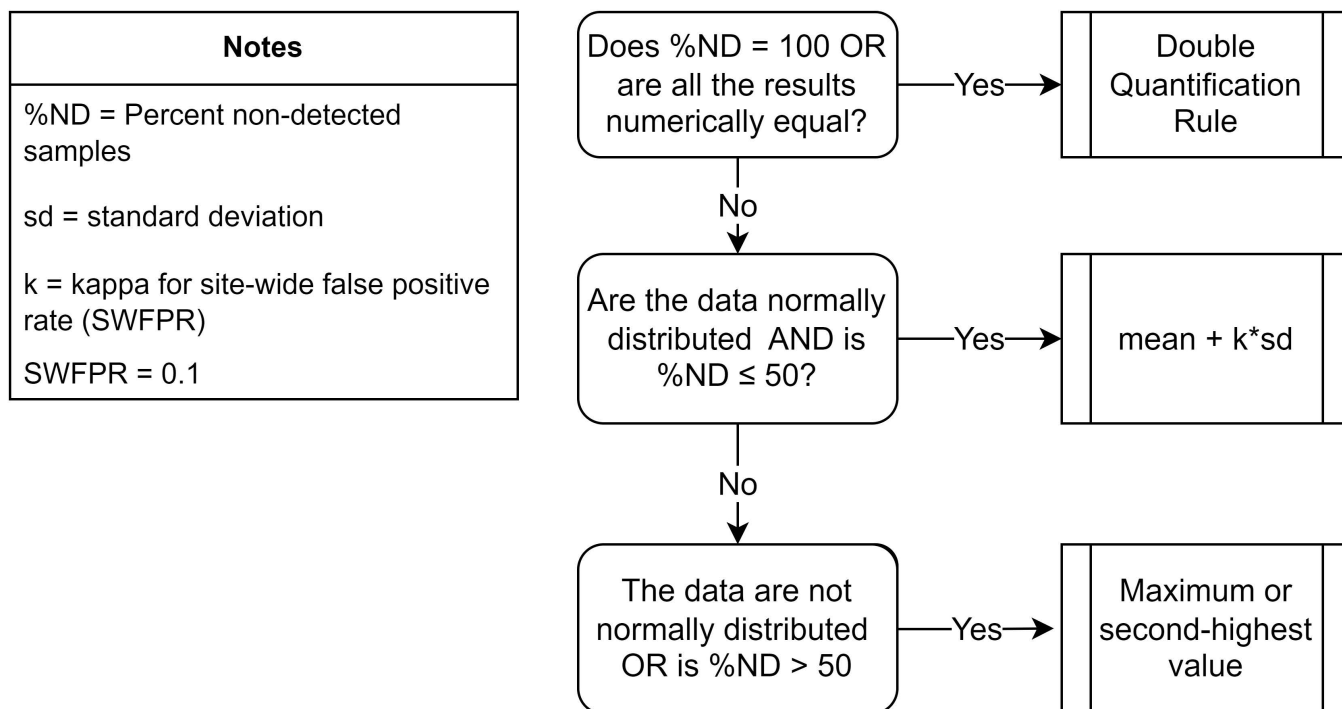
CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	L315-04	11/22/2023
7.00a		s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
10.00a		s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024
SC 1000		µS/cm	±5%				Ricca	2108D48	Jul-23
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Comments:

Signature: 	Date: 11/03/22
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APPENDIX B

STATISTICAL METHODOLOGY FOR DETERMINATION OF BACKGROUND VALUES



When data are not normally distributed or %ND > 50, the maximum value is used if the background sample size is < 60. Where the background sample size is ≥ 60, the achievable per-constituent false positive rates for the maximum and second-highest background values will be compared, and the background value with the achievable per-constituent false positive rate that is closest to, but does not exceed, the target per-constituent false positive rate of 0.015% is used.

APPENDIX C

ALTERNATE SOURCE DEMONSTRATIONS

Intended for

Illinois Power Generating Company

Date

June 06, 2022

Project No.

1940102203-015

**40 C.F.R. § 257.94(e)(2): ALTERNATE
SOURCE DEMONSTRATION
PHASE II LANDFILL (LF2)
NEWTON POWER PLANT
NEWTON, ILLINOIS**



Bright ideas. Sustainable change.

CERTIFICATIONS

I, Chase J. Christenson, a professional geologist in good standing in the State of Illinois, certify that the information in this report is accurate as of the date of my signature below. The content of this report is not to be used other than for its intended purpose and meaning, or for extrapolations beyond the interpretations contained herein.



Chase J. Christenson
Professional Geologist
196-001467
Illinois
Ramboll Americas Engineering Solutions, Inc.
Date: June 06, 2022



I, Anne Frances Ackerman, a qualified professional engineer in good standing in the State of Illinois, certify that the information in this report is accurate as of the date of my signature below. The content of this report is not to be used other than for its intended purpose and meaning, or for extrapolations beyond the interpretations contained herein.



Anne Frances Ackerman
Qualified Professional Engineer
062-060586
Illinois
Ramboll Americas Engineering Solutions, Inc.
Date: June 06, 2022



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FIGURES (IN TEXT)

- Figure A Piper Diagram Showing Ionic Composition of LF2 Groundwater and Leachate During the D9 Sampling Event
- Figure B Boron Box Plot Including LF2 Cells 1 and 2 Downgradient Monitoring Wells and LF2 Cell 3 Downgradient Monitoring Wells

FIGURES (ATTACHED)

- Figure 1 Sampling Location and Potentiometric Surface Map – November 08, 2021

ACRONYMS AND ABBREVIATIONS

40 C.F.R.	Title 40 of the Code of Federal Regulations
ASD	Alternate Source Demonstration
bgs	below ground surface
CCR	coal combustion residuals
CCR Rule	40 C.F.R. § 257 Subpart D
cm/s	centimeters per second
D9	Detection Monitoring Round 9
IQR	interquartile range
LCU	lower confining unit
LF1	Phase I Landfill
LF2	Phase II Landfill
LOE	line(s) of evidence
mg/L	milligrams per liter
NAVD88	North American Vertical Datum of 1988
NPP	Newton Power Plant
NRT/OBG	Natural Resource Technology, an OBG Company
Ramboll	Ramboll Americas Engineering Solutions, Inc.
Rapps	Rapps Engineering and Applied Science
Site	Newton Power Plant
SSI	Statistically Significant Increase
TDS	total dissolved solids
UA	uppermost aquifer
UCU	upper confining unit

1. INTRODUCTION

Title 40 of the Code of Federal Regulations (40 C.F.R.) § 257.94(e)(2) allows the owner or operator of a coal combustion residuals (CCR) unit 90 days from the date of determination of a Statistically Significant Increase (SSI) over background for groundwater constituents listed in Appendix III of 40 C.F.R. § 257 to complete a written demonstration that a source other than the CCR unit being monitored caused the SSI(s), or that the SSI(s) resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality (Alternate Source Demonstration [ASD]).

This ASD has been prepared on behalf of Illinois Power Generating Company, by Ramboll Americas Engineering Solutions, Inc. (Ramboll), to provide pertinent information pursuant to 40 C.F.R. § 257.95(g)(3)(ii) for the Newton Power Plant (NPP; Site) Phase II Landfill (LF2), located near Newton, Illinois.

The most recent Detection Monitoring sampling event (Detection Monitoring Round 9 [D9]) was completed on November 12, 2021 and analytical data were received on December 08, 2021. In accordance with 40 C.F.R. § 257.93(h)(2), statistical analysis of the data to identify SSIs of 40 C.F.R. § 257 Subpart D (CCR Rule) Appendix III parameters over background concentrations was completed by March 08, 2022, within 90 days of receipt of the analytical data. The statistical determination identified the following SSIs at compliance monitoring wells:

- Boron at wells G220, G222, and G223
- Calcium at wells G220, G223, and R217D
- Chloride at wells G06D, G202, G203, G208, G220, G222, G223, G224, and R217D
- Fluoride at well G208 and G220
- pH at well R217D
- Sulfate at well R217D
- Total dissolved solids (TDS) at wells G06D, G222, G223, and R217D

Because the next Detection Monitoring sampling event (Round 10 [D10]) was completed on February 28, 2022, within 90 days of receipt of analytical data for the D9 sampling event, results from the D10 sampling event were used to confirm the D9 SSIs in accordance with the Statistical Analysis Plan (Natural Resource Technology, an OBG Company [NRT/OBG] 2017a). Following evaluation of analytical data from the D10 sampling event, the following SSIs remained for D9:

- Boron at wells G220, G222, and G223
- Calcium at wells G223 and R217D
- Chloride at wells G06D, G202, G203, G208, G220, G222, G223, G224, and R217D
- Fluoride at wells G208 and G220
- Sulfate at well R217D
- TDS at wells G222, G223, and R217D

Pursuant to 40 C.F.R. § 257.94(e)(2), the lines of evidence (LOE) presented in **Section 3** demonstrate that sources other than LF2 were the cause of the boron, calcium, chloride, fluoride, sulfate, and TDS SSIs listed above. This ASD was completed by June 06, 2022, within 90 days of determination of the SSIs (March 08, 2022), as required by 40 C.F.R. § 257.94(e)(2).

2. BACKGROUND

2.1 Site Location and Description

The NPP is located in Jasper County in the southeastern part of central Illinois, approximately seven miles southwest of the town of Newton. LF2 is located in the northwest quarter of Section 26 and the northeast quarter of Section 27, Township 6 North, Range 8 East in Jasper County, Illinois. The NPP is bounded by Newton Lake and agricultural land to the west, south, and east, and agricultural land to the north. Beyond the lake is additional agricultural land.

2.2 Description of Phase II Landfill CCR Unit

LF2 includes three lined disposal cells (**Figure 1**). LF2 Cells 1 and 2, encompassing approximately 12 acres, are adjacent to each other and located south and east of the Phase I Landfill (LF1). LF2 Cell 3 encompasses approximately 7 acres and is located approximately 1,100 feet west of Cells 1 and 2. All three cells of LF2 are constructed with composite liners and leachate collection systems that exceed the landfill liner design criteria of 40 C.F.R. § 257.70. Cell 3 is inactive and has not received CCR since it was constructed in 2011.

2.3 Geology and Hydrogeology

The information used to describe the hydrogeology is based on the local geology obtained from published sources, hydrogeologic investigation data, and boring data collected during site investigations conducted from 1997 to 2021.

Quaternary deposits in the Newton area consist mainly of diamictons and outwash deposits that were deposited during Illinoian and Pre-Illinoian glaciations (Lineback, 1979; Willman et al., 1975). The unconsolidated deposits include the following units (beginning at the ground surface):

- **Upper Drift:** The upper drift is composed of the low permeability silts and clays of the Peoria Silt and Sangamon Soil and the sandier soils of the Hagarstown Member. The hydraulic conductivity of this unit, calculated using field hydraulic test data from monitoring wells screened between 8 and 36 feet below ground surface (bgs), ranged from 2.4×10^{-6} to 6.1×10^{-5} centimeters per second (cm/s) with a geometric mean of 1.7×10^{-5} cm/s (Rapps Engineering and Applied Science [Rapps], 1997).
- **Upper Confining Unit (UCU):** The UCU consists of a thick package of the low permeability clay and silt of the Vandalia Till Member. This unit is a laterally continuous layer between the base of the upper drift and the top of the uppermost aquifer (UA). The calculated hydraulic conductivity of this unit ranged from 6.3×10^{-9} to 2.1×10^{-8} cm/s with a geometric mean of 1.1×10^{-8} cm/s (Rapps, 1997).
- **Uppermost Aquifer (UA):** The UA is composed of the Mulberry Grove Member, which has been classified as poorly graded sand, silty sand, clayey sand, and gravel. The hydraulic conductivity of the UA, calculated using results of field hydraulic tests in monitoring wells screened in the UA, ranged from 1.32×10^{-8} to 1.15×10^{-1} cm/s with a geometric mean hydraulic conductivity of 8.4×10^{-5} cm/s (NRT/OBG, 2017b; Ramboll, 2021).

- **Lower Confining Unit (LCU):** The LCU is comprised of low permeability silt and clay of the Smithboro Till Member and the Banner Formation. The vertical hydraulic conductivity of this unit based upon laboratory testing ranged from 4.1×10^{-8} to 4.3×10^{-6} cm/s with a geometric mean vertical hydraulic conductivity of 3.3×10^{-7} (Ramboll, 2021). The horizontal hydraulic conductivity based upon one field test was calculated to be 1.4×10^{-7} cm/s (Rapps, 1997).

The bedrock beneath the unconsolidated deposits consists of Pennsylvanian-age Mattoon Formation (Willman et al., 1967) that is mostly shale near the bedrock surface but is characterized at depth by a complex sequence of shales, thin limestones, coals, underclays, and several sandstones (Willman et al., 1975). The erosional surface of the Pennsylvanian-age Mattoon Formation bedrock ranges widely in depth in the vicinity of the Site, but is typically encountered at 90 to 120 feet bgs.

Groundwater elevations (referenced to North American Vertical Datum of 1988 [NAVD88]) across LF2 ranged from approximately 491 to 519 feet during D9 (**Figure 1**). Depth to groundwater measurements used to generate the groundwater elevation contours shown on **Figure 1** were collected on November 08, 2021. Overall groundwater flow within the UA at the NPP is southward toward Newton Lake, but with flow converging along the major axis of LF2 Cells 1 and 2, and a predominantly eastward flow near LF2 Cell 3. Based on groundwater flow directions near LF2, groundwater beneath LF2 Cells 1 and 2 does not influence groundwater beneath LF2 Cell 3.

2.4 Groundwater and Landfill Monitoring

The UA monitoring system for LF2 Cells 1, 2, and 3 is shown on **Figure 1**.

Monitoring wells G201 and G48MG are used to monitor background groundwater quality for LF2 (all cells). Groundwater quality at LF2 Cells 1 and 2 is monitored using wells G202, G203, G223, G224, and R217D (which replaced well G217D in October 2017). Groundwater quality at LF2 Cell 3 is monitored using wells G06D, G208, G220, and G222. Leachate from LF2 is monitored using leachate sample location L301 (**Figure 1**).

3. ALTERNATE SOURCE DEMONSTRATION: LINES OF EVIDENCE

As allowed by 40 C.F.R. § 257.94(e)(2), this ASD demonstrates that sources other than LF2 caused the SSI(s), or that the SSI(s) was a result of natural variation in groundwater quality. This ASD is based on the following LOEs:

1. LF2 composite liner design.
2. No CCR material has been placed in LF2 Cell 3.
3. The ionic composition of groundwater is different than the ionic composition of leachate.
4. Boron concentrations in wells monitoring LF2 Cells 1 and 2 are statistically similar to concentrations in wells monitoring LF2 Cell 3 (where no CCR material has been placed).

These LOEs are described and supported in greater detail below.

3.1 LOE #1: LF2 Composite Liner Design

The constructed liner and leachate collection system for LF2 Cells 1, 2, and 3 include the following design components from top to bottom:

- Soil cover for liner frost protection
- 10-ounce per square yard geotextile separation layer between the leachate management system and the frost protection soil cover
- 1-foot-thick sand drainage layer
- 60-mil high-density polyethylene geomembrane
- Three-feet-thick compacted, low-permeability soil having a maximum hydraulic conductivity of 1.0×10^{-7} cm/s

These components exceed the landfill liner design criteria of 40 C.F.R. § 257. The landfill design criteria were intended to provide protection to the UA. Therefore, the presence of the composite liner suggests that LF2 is not contributing CCR constituents to the groundwater in the vicinity of LF2.

3.2 LOE #2: No CCR Material Has Been Placed in LF2 Cell 3

LF2 Cells 1 and 2 were constructed and began receiving CCR in 1997. Currently, a portion of LF2 Cell 2 is in operation. No CCR has been placed in LF2 Cell 3.

LF2 Cell 3 has never contained CCR; therefore, it cannot be the source of the CCR constituents boron, chloride, fluoride, or TDS detected in Cell 3 groundwater monitoring wells (G06D, G208, G220, and G222).

3.3 LOE #3: The Ionic Composition of Groundwater is Different Than the Ionic Composition of Leachate

Piper diagrams graphically represent ionic composition of aqueous solutions. A Piper diagram displays the position of water samples with respect to their major cation and anion content on the two lower triangular portions of the diagram, providing the information which, when

combined on the central, diamond-shaped portion of the diagram, identify composition categories or groupings (hydrochemical facies). **Figure A** below is a Piper diagram that displays the ionic composition of samples collected from the background and compliance monitoring wells associated with LF2 (D9 sampling event), and leachate sampling location L301 associated with LF2.

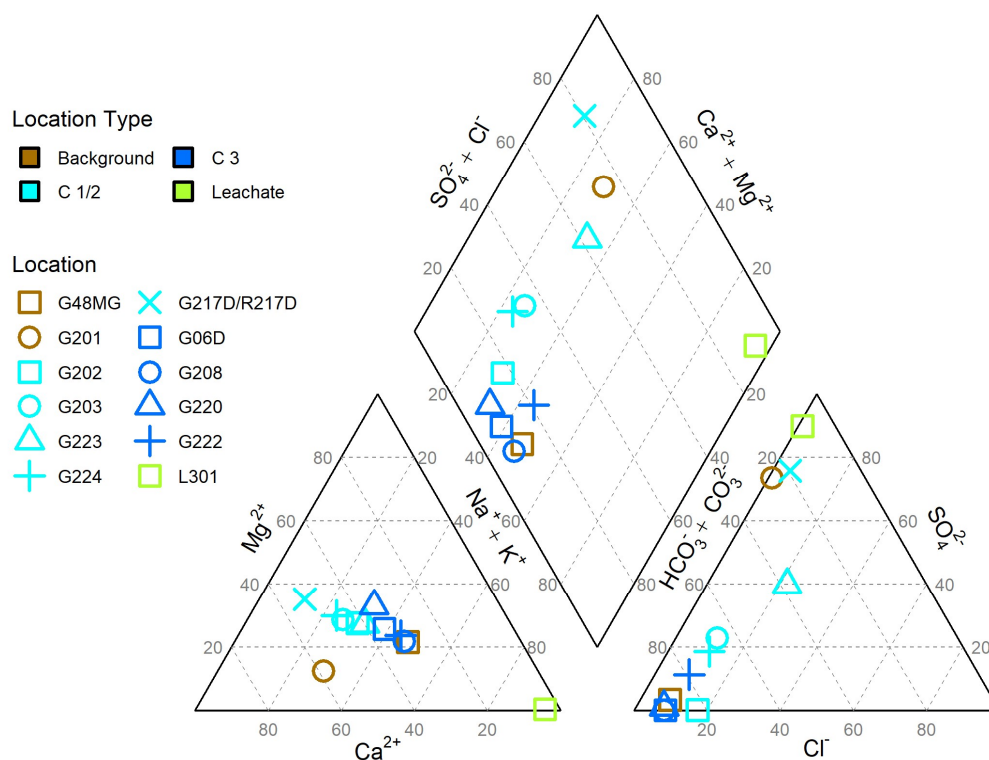


Figure A. Piper Diagram Showing Ionic Composition of LF2 Groundwater and Leachate During the D9 Sampling Event.

It is evident from the Piper diagram (**Figure A**) that leachate from LF2 (L301; green symbol) is in the sodium-chloride hydrochemical facies, while the LF2 groundwater samples (blue and cyan symbols) and background samples (brown symbols) are in the calcium-bicarbonate and calcium-sulfate hydrochemical facies. Therefore, groundwater samples from LF2 compliance wells have a different ionic composition than leachate, indicating that leachate is not the source of CCR constituents detected in any LF2 groundwater monitoring wells.

3.4 LOE #4: Boron Concentrations in Wells Monitoring LF2 Cells 1 and 2 are Statistically Similar to Concentrations in Wells Monitoring LF2 Cell 3 (Where No CCR material Has Been Placed)

Box plots graphically represent the range of values of a given dataset using lines to construct a box where the lower line, midline, and upper lines of the box represent the values of the first quartile, median, and third quartile values, respectively. The minimum and maximum values of the dataset (excluding outliers) are illustrated by whisker lines extending beyond the first and third quartiles (*i.e.*, below and above) of the box. The interquartile range (IQR) is the distance

between the first and third quartiles. Outliers (values that are at least 1.5 times the IQR away from the edges of the box) are represented by single points plotted outside of the range of the whiskers.

Boron SSIs were identified at LF2 Cells 1, 2, and 3 during the D9 sampling event. Cell 3 has never contained CCR and, as noted above, the groundwater flow direction indicates that groundwater beneath Cell 3 is not influenced by groundwater beneath Cells 1 and 2. Box plots of the boron concentrations observed in LF2 Cells 1 and 2 compliance wells (cyan), and LF2 Cell 3 compliance wells (blue), are shown in **Figure B** below.

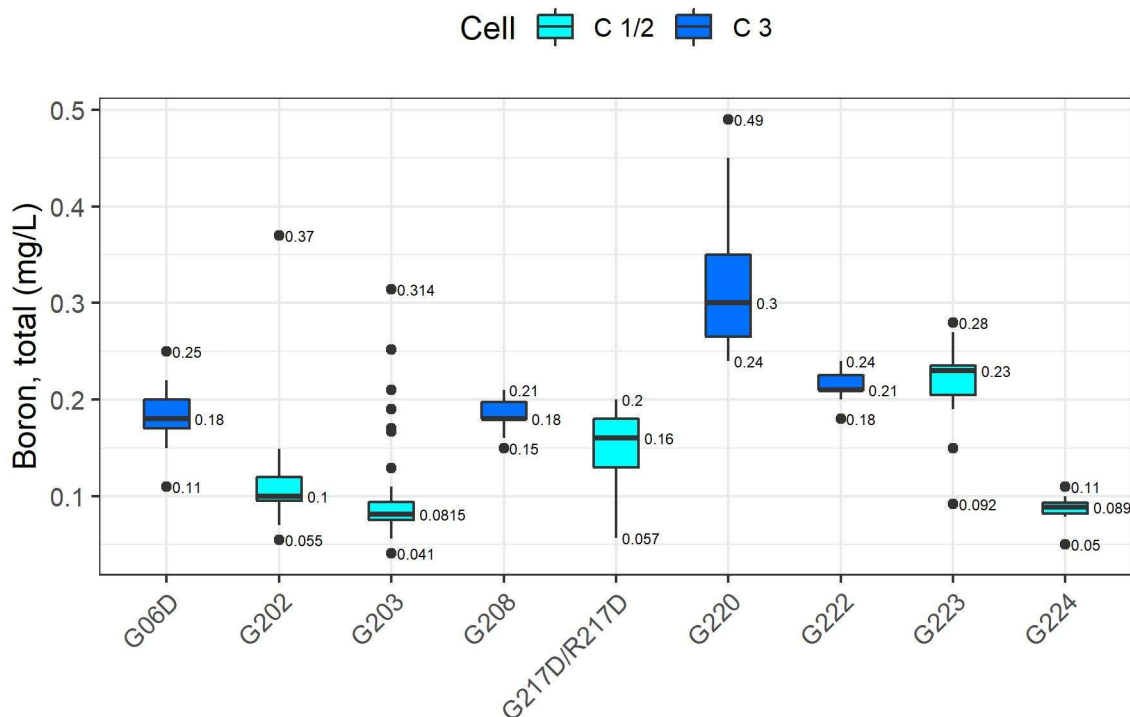


Figure B. Boron Box Plot Including LF2 Cells 1 and 2 Downgradient Monitoring Wells (cyan) and LF2 Cell 3 Downgradient Monitoring Wells (blue).

The minimum and maximum boron concentrations in compliance wells monitoring LF2 Cell 3 ranged from 0.11 to 0.49 milligrams per liter (mg/L). The minimum and maximum boron concentrations in compliance wells monitoring LF2 Cells 1 and 2 ranged from 0.041 to 0.37 mg/L. Boron concentrations in compliance wells monitoring LF2 Cells 1 and 2 were within or below the range of concentrations observed at compliance wells monitoring LF2 Cell 3.

The similarity of boron concentrations in wells monitoring LF2 Cell 3, which has never contained CCR, and in LF2 Cells 1 and 2 compliance wells, suggests that LF2 Cells 1 and 2 are not the source of boron in the LF2 groundwater monitoring well G223.

4. CONCLUSIONS

Based on the four LOEs below, it has been demonstrated that the SSIs at G06D, G202, G203, G208, G220, G222, G223, G224, and R217D are not due to LF2 but are from a source other than the CCR unit being monitored:

1. LF2 composite liner design.
2. No CCR material has been placed in LF2 Cell 3.
3. The ionic composition of groundwater is different than the ionic composition of leachate.
4. Boron concentrations in wells monitoring LF2 Cells 1 and 2 are statistically similar to concentrations in wells monitoring LF2 Cell 3 (where no CCR material has been placed).

This information serves as the written ASD prepared in accordance with 40 C.F.R. § 257.94(e)(2) that the SSIs observed during D9 were not due to LF2. Therefore, an assessment monitoring program is not required, and the NPP LF2 will remain in detection monitoring.

5. REFERENCES

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FIGURES



- BACKGROUND WELL
- COMPLIANCE WELL
- MONITORING WELL
- LEACHATE WELL
- STAFF GAGE, RIVER
- GROUNDWATER ELEVATION CONTOUR (5-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- PART 257 REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE

NOTES:
1. ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
2. NM = NOT MEASURED
3. ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)



**SAMPLING LOCATION AND
POTENTIOMETRIC SURFACE MAP
NOVEMBER 8, 2021**

**ALTERNATE SOURCE DEMONSTRATION
LANDFILL PHASE II (LF2)
NEWTON POWER PLANT
NEWTON, ILLINOIS**

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



Intended for

Illinois Power Generating Company

Date

October 2, 2022

Project No.

1940102203-015

**40 C.F.R. § 257.94(e)(2): ALTERNATE
SOURCE DEMONSTRATION
PHASE II LANDFILL (LF2)
NEWTON POWER PLANT
NEWTON, ILLINOIS**



Bright ideas. Sustainable change.

CERTIFICATIONS

I, Chase J. Christenson, a professional geologist in good standing in the State of Illinois, certify that the information in this report is accurate as of the date of my signature below. The content of this report is not to be used other than for its intended purpose and meaning, or for extrapolations beyond the interpretations contained herein.



Chase J. Christenson
Professional Geologist
196-001467
Illinois
Ramboll Americas Engineering Solutions, Inc.
Date: October 2, 2022



I, Anne Frances Ackerman, a qualified professional engineer in good standing in the State of Illinois, certify that the information in this report is accurate as of the date of my signature below. The content of this report is not to be used other than for its intended purpose and meaning, or for extrapolations beyond the interpretations contained herein.



Anne Frances Ackerman
Qualified Professional Engineer
062-060586
Illinois
Ramboll Americas Engineering Solutions, Inc.
Date: October 2, 2022



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FIGURES (IN TEXT)

Figure A	Piper Diagram Showing Ionic Composition of LF2 Background and Compliance Groundwater and Leachate During the D10 Sampling Event
Figure B	Boron Box Plot Including LF2 Cells 1 and 2 Compliance Monitoring Wells and LF2 Cell 3 Compliance Monitoring Wells

FIGURES (ATTACHED)

Figure 1	Sampling Locations and Potentiometric Surface Map – February 21, 2022
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ACRONYMS AND ABBREVIATIONS

40 C.F.R.	Title 40 of the Code of Federal Regulations
ASD	Alternate Source Demonstration
bgs	below ground surface
CCR	coal combustion residuals
CCR Rule	40 C.F.R. § 257 Subpart D
cm/s	centimeters per second
D10	Detection Monitoring Round 10
IQR	interquartile range
LCU	lower confining unit
LF1	Phase I Landfill
LF2	Phase II Landfill
LOE	line(s) of evidence
mg/L	milligrams per liter
NAVD88	North American Vertical Datum of 1988
NPP	Newton Power Plant
NRT/OBG	Natural Resource Technology, an OBG Company
Ramboll	Ramboll Americas Engineering Solutions, Inc.
Rapps	Rapps Engineering and Applied Science
Site	Newton Power Plant
SSI	Statistically Significant Increase
TDS	total dissolved solids
UA	uppermost aquifer
UCU	upper confining unit

1. INTRODUCTION

Title 40 of the Code of Federal Regulations (40 C.F.R.) § 257.94(e)(2) allows the owner or operator of a coal combustion residuals (CCR) unit 90 days from the date of determination of a Statistically Significant Increase (SSI) over background for groundwater constituents listed in Appendix III of 40 C.F.R. § 257 to complete a written demonstration that a source other than the CCR unit being monitored caused the SSI(s), or that the SSI(s) resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality (Alternate Source Demonstration [ASD]).

This ASD has been prepared on behalf of Illinois Power Generating Company, by Ramboll Americas Engineering Solutions, Inc. (Ramboll), to provide pertinent information pursuant to 40 C.F.R. § 257.94(e)(2) for the Newton Power Plant (NPP; Site) Phase II Landfill (LF2), located near Newton, Illinois.

The most recent Detection Monitoring sampling event (Detection Monitoring Round 10 [D10]) samples were collected from February 22 to 28, 2022, and analytical data were received on April 5, 2022. In accordance with 40 C.F.R. § 257.94(e)(2), statistical analysis of the data to identify SSIs of 40 C.F.R. § 257 Subpart D (CCR Rule) Appendix III parameters over background concentrations was completed by July 4, 2022, within 90 days of receipt of the analytical data. The statistical determination identified the following SSIs at compliance monitoring wells:

- Boron at wells G06D, G208, G220, G222, G223, and R217D
- Calcium at wells G223, and R217D
- Chloride at wells G06D, G202, G203, G208, G220, G222, G223, G224, and R217D
- Fluoride at wells G208, G220 and G222
- Sulfate at wells G223 and R217D
- Total dissolved solids (TDS) at wells G222, G223, and R217D

In accordance with the Statistical Analysis Plan (Natural Resource Technology, an OBG Company [NRT/OBG] 2017a), wells G06D, G208, G220, G222, G223, and R217D were resampled from May 25 to June 15, 2022, and analyzed only for boron (at G06D, G208, G220, and R217D), fluoride (at G208 and G222), and sulfate (at G223) to confirm the SSIs. Following evaluation of analytical data from the resample event, the following SSIs remained:

- Boron at wells G208, G220, G222, G223, and R217D
- Calcium at wells G223, and R217D
- Chloride at wells G06D, G202, G203, G208, G220, G222, G223, G224, and R217D
- Fluoride at wells G208, G220 and G222
- Sulfate at well R217D
- Total dissolved solids (TDS) at wells G222, G223, and R217D

Pursuant to 40 C.F.R. § 257.94(e)(2), the lines of evidence (LOE) presented in **Section 3** demonstrate that sources other than LF2 were the cause of the boron, calcium, chloride, fluoride, sulfate, and TDS SSIs listed above. This ASD was completed by October 2, 2022, within 90 days of determination of the SSIs (July 4, 2022), as required by 40 C.F.R. § 257.94(e)(2).

2. BACKGROUND

2.1 Site location and Description

The NPP is located in Jasper County in the southeastern part of central Illinois, approximately seven miles southwest of the town of Newton. LF2 is located in the northwest quarter of Section 26 and the northeast quarter of Section 27, Township 6 North, Range 8 East in Jasper County, Illinois. The NPP is bounded by Newton Lake and agricultural land to the west, south, and east, and agricultural land to the north. Beyond the lake is additional agricultural land.

2.2 Description of Phase II Landfill CCR Unit

LF2 includes three lined disposal cells (**Figure 1**). LF2 Cells 1 and 2, encompassing approximately 12 acres, are adjacent to each other and located south and east of the Phase I Landfill (LF1). LF2 Cell 3 encompasses approximately 7 acres and is located approximately 1,100 feet west of Cells 1 and 2. All three cells of LF2 are constructed with composite liners and leachate collection systems that exceed the landfill liner design criteria of 40 C.F.R. § 257.70. Cell 3 is inactive and has not received CCR since it was constructed in 2011.

2.3 Geology and Hydrogeology

The information used to describe the hydrogeology is based on the local geology obtained from published sources, hydrogeologic investigation data, and boring data collected during site investigations conducted from 1997 to 2021.

Quaternary deposits in the Newton area consist mainly of diamictons and outwash deposits that were deposited during Illinoian and Pre-Illinoian glaciations (Lineback, 1979; Willman et al., 1975). The unconsolidated deposits include the following units (beginning at the ground surface):

- **Upper Drift:** The upper drift is composed of the low permeability silts and clays of the Peoria Silt and Sangamon Soil and the sandier soils of the Hagarstown Member. The hydraulic conductivity of this unit, calculated using field hydraulic test data from monitoring wells screened between 8 and 36 feet below ground surface (bgs), ranged from 2.4×10^{-6} to 6.1×10^{-5} centimeters per second (cm/s) with a geometric mean of 1.7×10^{-5} cm/s (Rapps Engineering and Applied Science [Rapps], 1997).
- **Upper Confining Unit (UCU):** The UCU consists of a thick package of low permeability clay and silt of the Vandalia Till Member. This unit is a laterally continuous layer between the base of the upper drift and the top of the uppermost aquifer (UA). The calculated hydraulic conductivity of this unit ranged from 6.3×10^{-9} to 2.1×10^{-8} cm/s with a geometric mean of 1.1×10^{-8} cm/s (Rapps, 1997).
- **Uppermost Aquifer (UA):** The UA is composed of the Mulberry Grove Member, which has been classified as poorly-graded sand, silty sand, clayey sand, and gravel. The hydraulic conductivity of the UA, calculated using results of field hydraulic tests in monitoring wells screened in the UA, ranged from 1.32×10^{-8} to 1.15×10^{-1} cm/s with a geometric mean hydraulic conductivity of 8.4×10^{-5} cm/s (NRT/OBG, 2017b; Ramboll, 2021).

- **Lower Confining Unit (LCU):** The LCU is comprised of low permeability silt and clay of the Smithboro Till Member and the Banner Formation. The vertical hydraulic conductivity of this unit based upon laboratory testing ranged from 4.1×10^{-8} to 4.3×10^{-6} cm/s with a geometric mean vertical hydraulic conductivity of 3.3×10^{-7} (Ramboll, 2021). The horizontal hydraulic conductivity based upon one field test was calculated to be 1.4×10^{-7} cm/s (Rapps, 1997).

The bedrock beneath the unconsolidated deposits consists of Pennsylvanian-age Mattoon Formation (Willman et al., 1967) that is mostly shale near the bedrock surface but is characterized at depth by a complex sequence of shales, thin limestones, coals, underclays, and several sandstones (Willman et al., 1975). The erosional surface of the Pennsylvanian-age Mattoon Formation bedrock ranges widely in depth in the vicinity of the Site, but is typically encountered at 90 to 120 feet bgs.

Groundwater elevations (referenced to North American Vertical Datum of 1988 [NAVD88]) across LF2 ranged from approximately 492 to 519 feet during D10 (**Figure 1**). Depth to groundwater measurements used to generate the groundwater elevation contours shown on **Figure 1** were collected on February 21, 2022. Overall groundwater flow within the UA at the NPP is southward toward Newton Lake, but with flow converging along the major axis of LF2 Cells 1 and 2, and a predominantly eastward flow near LF2 Cell 3. Based on groundwater flow directions near LF2, groundwater beneath LF2 Cells 1 and 2 does not influence groundwater beneath LF2 Cell 3.

2.4 Groundwater and Landfill Monitoring

The UA monitoring system for LF2 Cells 1, 2, and 3 is shown on **Figure 1**.

Monitoring wells G201 and G48MG are used to monitor background groundwater quality for LF2 (all cells). Groundwater quality at LF2 Cells 1 and 2 is monitored using wells G202, G203, G223, G224, and R217D (which replaced well G217D in October 2017). Groundwater quality at LF2 Cell 3 is monitored using wells G06D, G208, G220, and G222. Due to the groundwater flow direction, several monitoring wells are located upgradient from LF2 (wells G223, G224, and R217D at Cells 1 and 2 and G220 and G222 at Cell 3). Additional monitoring wells have been installed downgradient of the unit, and preliminary data are currently being collected to prepare for updating the monitoring system. Leachate from LF2 is monitored using leachate sample location L301 (**Figure 1**).

3. ALTERNATE SOURCE DEMONSTRATION: LINES OF EVIDENCE

As allowed by 40 C.F.R. § 257.94(e)(2), this ASD demonstrates that sources other than LF2 caused the SSI(s), or that the SSI(s) was a result of natural variation in groundwater quality. This ASD is based on the following LOEs:

1. LF2 composite liner design.
2. No CCR material has been placed in LF2 Cell 3.
3. The ionic composition of LF2 groundwater is different than the ionic composition of leachate
4. Boron concentrations in wells monitoring LF2 Cells 1 and 2 are statistically similar to concentrations in wells monitoring LF2 Cell 3 (where no CCR material has been placed).

These LOEs are described and supported in greater detail below.

3.1 LOE #1: LF2 Composite Liner Design

The constructed liner and leachate collection system for LF2 Cells 1, 2, and 3 include the following design components from top to bottom:

- Soil cover for liner frost protection
- 10-ounce per square yard geotextile separation layer between the leachate management system and the frost protection soil cover
- 1-foot-thick sand drainage layer
- 60-mil high-density polyethylene geomembrane
- Three-foot-thick compacted, low-permeability soil having a maximum hydraulic conductivity of 1.0×10^{-7} cm/s

These components exceed the landfill liner design criteria of 40 C.F.R. § 257.70. The landfill design criteria were intended to provide protection to the UA. Therefore, the presence of the composite liner suggests that LF2 is not contributing CCR constituents to the groundwater in the vicinity of LF2.

3.2 LOE #2: No CCR Material Has Been Placed in LF2 Cell 3

LF2 Cells 1 and 2 were constructed and began receiving CCR in 1997. Currently, a portion of LF2 Cell 2 is in operation. No CCR has been placed in LF2 Cell 3.

LF2 Cell 3 has never contained CCR; therefore, it cannot be the source of the CCR constituents boron, chloride, fluoride, or TDS detected in Cell 3 groundwater monitoring wells (G06D, G208, G220, and G222).

3.3 LOE #3: The Ionic Composition of LF2 Groundwater is Different Than the Ionic Composition of Leachate

Piper diagrams graphically represent ionic composition of aqueous solutions. A Piper diagram displays the position of water samples relative to their major cation and anion content on the two lower triangular portions of the diagram, providing the information which, when combined

on the central, diamond-shaped portion of the diagram, identifies the compositional categories or groupings (hydrochemical facies). **Figure A** below is a Piper diagram that displays the ionic composition of samples collected from the background and compliance monitoring wells associated with LF2 (D10 sampling event), and leachate sampling location L301 associated with LF2.

NEW LF2 - D10

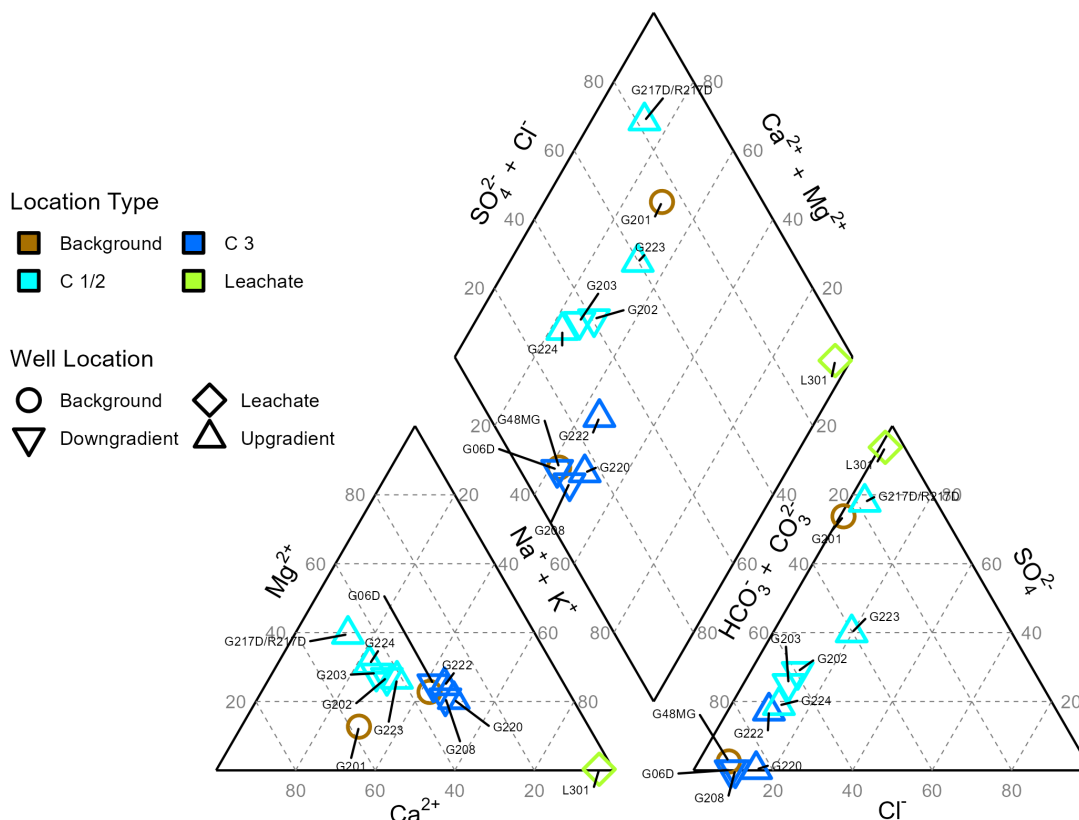


Figure A. Piper Diagram Showing Ionic Composition of LF2 Background and Compliance Groundwater and Leachate During the D10 Sampling Event.

It is evident from the Piper diagram (**Figure A**) that leachate from LF2 (L301; green symbol) is in the sodium-chloride hydrochemical facies, while the LF2 compliance groundwater samples (blue and cyan symbols) and background samples (brown symbols) are in the calcium-bicarbonate and calcium-sulfate hydrochemical facies. Therefore, groundwater samples from LF2 compliance wells have a different ionic composition than leachate, indicating that leachate is not the source of CCR constituents detected in any LF2 compliance groundwater monitoring wells.

3.4 LOE #4: Boron Concentrations in Wells Monitoring LF2 Cells 1 and 2 are Statistically Similar to Concentrations in Wells Monitoring LF2 Cell 3 (Where No CCR Material Has Been Placed)

Box plots graphically represent the range of values of a given dataset using lines to construct a box where the lower line, midline, and upper lines of the box represent the values of the first quartile, median, and third quartile values, respectively. The minimum and maximum values of the dataset (excluding outliers) are illustrated by whisker lines extending beyond the first and third quartiles (*i.e.*, below and above) of the box. The interquartile range (IQR) is the distance between the first and third quartiles. Outliers (values that are at least 1.5 times the IQR away from the edges of the box) are represented by single points plotted outside of the range of the whiskers.

Boron SSIs were identified at LF2 Cells 1, 2, and 3 during the D10 sampling event. Cell 3 has never contained CCR and, as noted above, the groundwater flow direction indicates that groundwater beneath Cell 3 is not influenced by groundwater beneath Cells 1 and 2. Box plots of the boron concentrations observed in LF2 Cells 1 and 2 compliance wells (cyan), and LF2 Cell 3 compliance wells (blue), are shown in **Figure B** below.

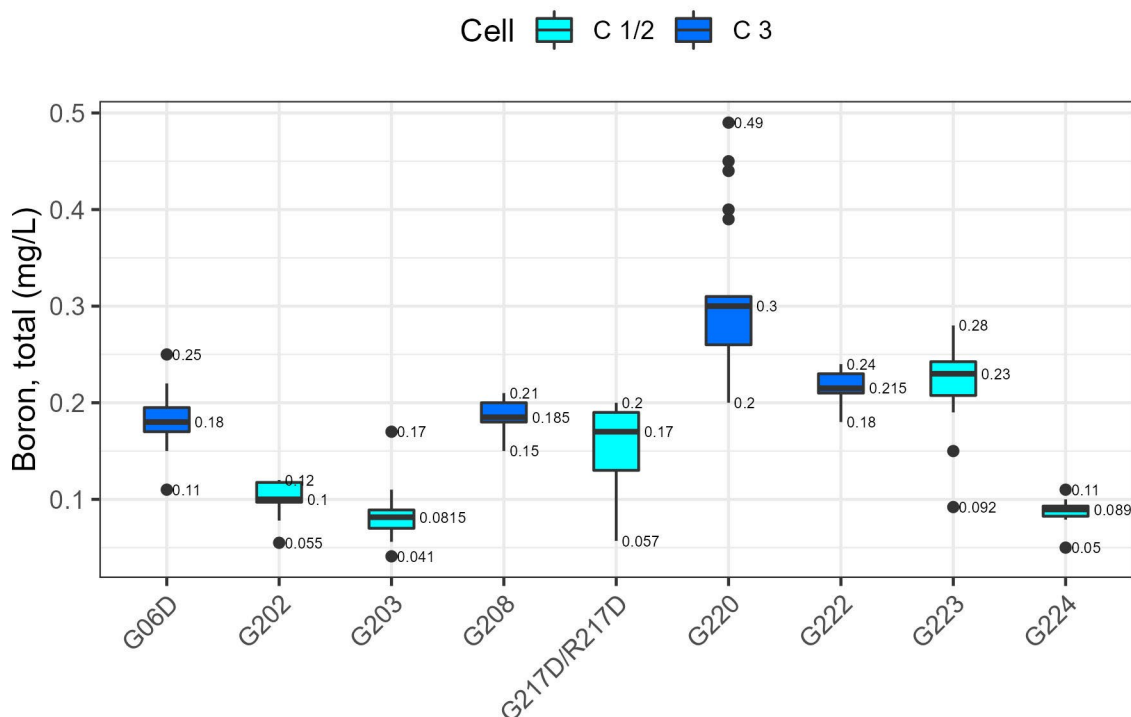


Figure B. Boron Box Plot Including LF2 Cells 1 and 2 Compliance Monitoring Wells (cyan) and LF2 Cell 3 Compliance Monitoring Wells (blue).

The minimum and maximum boron concentrations in compliance wells monitoring LF2 Cell 3 ranged from 0.11 to 0.49 milligrams per liter (mg/L). The minimum and maximum boron concentrations in compliance wells monitoring LF2 Cells 1 and 2 ranged from 0.041 to

0.28 mg/L. Boron concentrations in compliance wells monitoring LF2 Cells 1 and 2 were within or below the range of concentrations observed at compliance wells monitoring LF2 Cell 3.

The similarity of boron concentrations in wells monitoring LF2 Cell 3, which has never contained CCR, and in LF2 Cells 1 and 2 compliance wells, suggests that LF2 Cells 1 and 2 are not the source of boron in the LF2 groundwater monitoring wells G223 and R217D.

4. CONCLUSIONS

Based on the four LOEs below, it has been demonstrated that the SSIs at G06D, G202, G203, G208, G220, G222, G223, G224, and R217D are not due to LF2 but are from a source other than the CCR unit being monitored:

1. LF2 composite liner design.
2. No CCR material has been placed in LF2 Cell 3.
3. The ionic composition of LF2 groundwater is different than the ionic composition of leachate.
4. Boron concentrations in wells monitoring LF2 Cells 1 and 2 are statistically similar to concentrations in wells monitoring LF2 Cell 3 (where no CCR material has been placed).

This information serves as the written ASD prepared in accordance with 40 C.F.R. § 257.94(e)(2) that the SSIs observed during D10 were not due to LF2. Therefore, an assessment monitoring program is not required, and the NPP LF2 will remain in detection monitoring.

5. REFERENCES

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FIGURES



- BACKGROUND WELL
- COMPLIANCE WELL
- MONITORING WELL
- LEACHATE WELL
- GROUNDWATER ELEVATION CONTOUR (5-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- PART 257 REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE

NOTES:
1. ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

0 400 800
Feet

FIGURE 1
SAMPLING LOCATIONS AND
POTENTIOMETRIC SURFACE MAP
FEBRUARY 21, 2022

ALTERNATE SOURCE DEMONSTRATION
PHASE II LANDFILL (LF2)
NEWTON POWER PLANT
NEWTON, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

