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**2022 ANNUAL GROUNDWATER
MONITORING AND CORRECTIVE
ACTION REPORT**

**GYPSUM MANAGEMENT FACILITY GYPSUM
STACK POND**

COFFEEN POWER PLANT

COFFEEN, ILLINOIS

CCR UNIT 103

**2022 ANNUAL GROUNDWATER MONITORING AND
CORRECTIVE ACTION REPORT
COFFEEN POWER PLANT GYPSUM MANAGEMENT FACILITY
GYPSUM STACK POND**

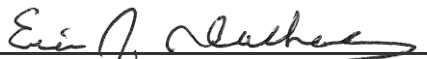
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ACRONYMS AND ABBREVIATIONS

§	Section
35 I.A.C.	Title 35 of the Illinois Administrative Code
40 C.F.R.	Title 40 of the Code of Federal Regulations
ASD	Alternate Source Demonstration
CCR	coal combustion residuals
CMA	Corrective Measures Assessment
CPP	Coffeen Power Plant
GMF GSP	Gypsum Management Facility Gypsum Stack Pond
GWPS	groundwater protection standard
IEPA	Illinois Environmental Protection Agency
NA	not applicable
NRT/OBG	Natural Resource Technology, an OBG Company
Ramboll	Ramboll Americas Engineering Solutions, Inc.
SAP	Sampling and Analysis Plan
SSI	statistically significant increase
SSL	statistically significant level
TBD	to be determined

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 the Gypsum Management Facility Gypsum Stack Pond (GMF GSP) located at the Coffeen Power Plant (CPP) near Coffeen, Illinois.

Groundwater is being monitored at the GMF GSP in accordance with the assessment monitoring program requirements specified in 40 C.F.R. § 257.95. Assessment monitoring was initiated at the GMF GSP on March 26, 2022.

No changes were made to the monitoring system in 2022 (no wells were installed or decommissioned). As discussed in Section 5 of this annual report, the monitoring well network will be updated in 2023 to use the same monitoring well network developed for compliance with Title 35 of the Illinois Administrative Code (35 I.A.C.) § 845, which was submitted to the Illinois Environmental Protection Agency (IEPA) via an operating permit application.

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

- Boron at well G215
- Calcium at wells G209, G215, and G218
- Chloride at well G215
- Sulfate at well G215
- Total Dissolved Solids (TDS) at well G215

Alternate source evaluations were inconclusive for one or more of the SSIs. Consequently and in accordance with 40 C.F.R. § 257.94(e)(2), an assessment monitoring program was established for the GMF GSP by March 26, 2022 and the required notification completed. Statistically Significant Levels (SSLs) of 40 C.F.R. § 257 Appendix IV parameters over groundwater protection standards (GWPSs) have not yet been determined.

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 the GMF GSP located at the CPP near Coffeen, 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 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 the GMF GSP for calendar year 2022.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

Comparison of background groundwater quality with concentrations of parameters in compliance monitoring wells observed during the August 18-20, 2021 detection monitoring program sampling event identified an SSI for one or more 40 C.F.R. § 257 Appendix III parameters at the GMF GSP.

Alternate source evaluations were inconclusive for the SSIs at the GMF GSP. Consequently, and in accordance with 40 C.F.R. § 257.94(e), an assessment monitoring program in accordance with 40 C.F.R. § 257.95 was established for the GMF GSP by March 26, 2022 and the required notification was completed.

3. KEY ACTIONS COMPLETED IN 2022

The 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 1**. No changes were made to the monitoring system in 2022 (no wells were installed or decommissioned). 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 through 3**. Laboratory reports for the third quarter of 2021 and both monitoring events in 2022 are included in **Appendix A**.

Analytical data were evaluated in accordance with the Statistical Analysis Plan (NRT/OBG, 2017b) to determine any SSLs of Appendix IV parameters over GWPSs and SSIs of Appendix III parameters greater than background values. SSIs are highlighted in **Table 2**. Statistical background values are provided in **Table 4** and GWPSs in **Table 5**. A flow chart showing the statistical methodology for determination of background values is included as **Appendix B**. A summary of the determination of SSLs is included in **Table 6**. A flow chart showing the statistical methodology for determination of SSLs is included as **Appendix C**.

¹ Sampling was limited to G206, G209, G215, and G218 during the November 2021 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 Monitoring Program Summary

Sampling Dates	Analytical Data Receipt Date	Parameters Collected	SSI(s)/SSL(s)	SSI(s)/SSL(s) Determination Date	ASD Completion Date
August 18-20, 2021	September 27, 2021	Appendix III	Boron at well G215; Calcium at wells G209, G215, and G218; Chloride at well G215; Sulfate at well G215; TDS at well G215	December 26, 2021	NA
November 29, 2021 ¹	December 13, 2021	Boron at well G215; Fluoride at wells G206, G215, and G218; pH at well G209; TDS at well G218 ²	NA	NA	NA
June 15-16, 2022	October 6, 2022	Appendix III Appendix IV	NA	NA	NA
August 23-24, 2022	November 17, 2022	Appendix III Appendix IV Detected ³	None	January 11, 2023	NA

Notes:

ASD: Alternate Source Demonstration

NA: not applicable

SSI: Statistically Significant Increase

SSL: Statistically Significant Level

¹ Sampling was limited to G206, G209, G215, and G218 during the November 2021 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.

² 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.

³ Groundwater sample analysis was limited to Appendix IV parameters detected during previous events in accordance with 40 C.F.R. § 257.95(d)(1).

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:

- Beginning in 2023, the current monitoring well system will be updated to use the same monitoring well network that was proposed for compliance with 35 I.A.C. § 845 which includes all of the monitoring wells used in the 2022 monitoring system. This is a logical step toward aligning the two regulatory programs. The following documents support the expanded monitoring system for 2023:
 - Hydrogeological Site Characterization Report (Ramboll, 2021), which expands upon the hydrogeologic information provided in the Hydrogeologic Monitoring Plan (NRT/OBG, 2017c)
 - Multi-Site SAP (Ramboll, 2022a)
 - Multi-Site Quality Assurance Project Plan (Ramboll, 2022b)
 - Multi-Site Data Management Plan (Ramboll, 2022c)
 - Multi-Site Statistical Analysis Plan and Certification (Ramboll, 2022d)
 - 40 C.F.R. § 257 Groundwater Monitoring Plan (Ramboll, 2022e), which replaces the monitoring plan provided in the Hydrogeologic Monitoring Plan
 - Monitoring Well Network Certification
- Continuation of the assessment 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.
- Complete evaluation of analytical data from the compliance wells to determine whether an SSL of Appendix IV parameters above GWPSs has occurred.
- If an SSL is identified, potential alternate sources (*i.e.*, a source other than the CCR unit caused the SSL or that the SSL 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 SSL, a written demonstration will be completed within 90 days of SSL 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 SSL, the applicable requirements of 40 C.F.R. §§ 257.94 through 257.98 (*e.g.*, assessment of corrective measures) as may apply in 2023 will be met, including associated recordkeeping/notifications required by 40 C.F.R. §§ 257.105 through 257.108.

6. REFERENCES

Natural Resource Technology, an OBG Company (NRT/OBG), 2017a. Sampling and Analysis Plan, Coffeen GMF Gypsum Stack Pond, Coffeen Power Station, Coffeen, 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, Coffeen Power Station, Coffeen, Illinois. October 17, 2017.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2021. Hydrogeological Site Characterization Report, the Gypsum Management Facility Gypsum Stack Pond, Coffeen Power Plant, Coffeen, Illinois. October 21, 2021.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2022a. Multi-Site Sampling and Analysis Plan. December 28, 2022.

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

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

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

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2022e. 40 C.F.R. § 257 Groundwater Monitoring Plan, the Gypsum Management Facility Gypsum Stack Pond, Coffeen Power Plant, Coffeen, Illinois. December 28, 2022.

TABLES

TABLE 1
GROUNDWATER ELEVATIONS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, 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)
G045D	LCU	31.88 - 41.52	Water Level Only	39.06435	-89.39628	07/26/2021	10.23	613.58
G045D	LCU	31.88 - 41.52	Water Level Only	39.06435	-89.39628	02/07/2022	8.80	615.01
G045D	LCU	31.88 - 41.52	Water Level Only	39.06435	-89.39628	05/09/2022	8.86	614.95
G045D	LCU	31.88 - 41.52	Water Level Only	39.06435	-89.39628	08/23/2022	9.23	614.58
G046D	LCU	41.61 - 51.26	Water Level Only	39.06030	-89.39852	07/26/2021	18.03	607.21
G046D	LCU	41.61 - 51.26	Water Level Only	39.06030	-89.39852	02/07/2022	14.53	610.71
G046D	LCU	41.61 - 51.26	Water Level Only	39.06030	-89.39852	05/09/2022	13.90	611.34
G046D	LCU	41.61 - 51.26	Water Level Only	39.06030	-89.39852	08/23/2022	10.11	615.13
G101	UA	15.68 - 20.32	Water Level Only	39.07139	-89.40011	07/26/2021	7.66	619.94
G101	UA	15.68 - 20.32	Water Level Only	39.07139	-89.40011	02/07/2022	4.90	622.70
G101	UA	15.68 - 20.32	Water Level Only	39.07139	-89.40011	05/09/2022	2.92	624.68
G101	UA	15.68 - 20.32	Water Level Only	39.07139	-89.40011	08/23/2022	7.65	619.95
G102	UA	12.02 - 16.78	Water Level Only	39.07139	-89.39899	07/26/2021	6.07	622.97
G102	UA	12.02 - 16.78	Water Level Only	39.07139	-89.39899	02/07/2022	5.30	623.74
G102	UA	12.02 - 16.78	Water Level Only	39.07139	-89.39899	05/09/2022	3.06	625.98
G102	UA	12.02 - 16.78	Water Level Only	39.07139	-89.39899	08/23/2022	6.79	622.25
G103	UA	15.88 - 20.67	Water Level Only	39.07041	-89.39911	07/26/2021	9.66	624.14
G103	UA	15.88 - 20.67	Water Level Only	39.07041	-89.39911	02/07/2022	10.05	623.75
G103	UA	15.88 - 20.67	Water Level Only	39.07041	-89.39911	05/09/2022	7.68	626.12
G103	UA	15.88 - 20.67	Water Level Only	39.07041	-89.39911	08/23/2022	10.00	623.80
G105	UA	16.11 - 20.90	Water Level Only	39.06849	-89.39910	07/26/2021	8.32	623.76
G105	UA	16.11 - 20.90	Water Level Only	39.06849	-89.39910	02/07/2022	8.95	623.13
G105	UA	16.11 - 20.90	Water Level Only	39.06849	-89.39910	05/09/2022	7.20	624.88
G105	UA	16.11 - 20.90	Water Level Only	39.06849	-89.39910	08/23/2022	8.60	623.48
G106	UA	14.37 - 18.96	Water Level Only	39.06753	-89.39910	07/26/2021	9.27	621.88
G106	UA	14.37 - 18.96	Water Level Only	39.06753	-89.39910	02/07/2022	9.24	621.91
G106	UA	14.37 - 18.96	Water Level Only	39.06753	-89.39910	05/09/2022	7.69	623.46
G106	UA	14.37 - 18.96	Water Level Only	39.06753	-89.39910	08/23/2022	9.65	621.50
G107	UA	13.87 - 18.50	Water Level Only	39.06711	-89.39965	07/26/2021	9.96	620.26
G107	UA	13.87 - 18.50	Water Level Only	39.06711	-89.39965	02/07/2022	8.82	621.40

TABLE 1
GROUNDWATER ELEVATIONS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, 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)
G107	UA	13.87 - 18.50	Water Level Only	39.06711	-89.39965	05/09/2022	8.34	621.88
G107	UA	13.87 - 18.50	Water Level Only	39.06711	-89.39965	08/23/2022	10.53	619.69
G108	UA	16.82 - 21.50	Water Level Only	39.06698	-89.40003	07/26/2021	10.82	619.40
G108	UA	16.82 - 21.50	Water Level Only	39.06698	-89.40003	02/07/2022	10.83	619.39
G108	UA	16.82 - 21.50	Water Level Only	39.06698	-89.40003	05/09/2022	8.41	621.81
G108	UA	16.82 - 21.50	Water Level Only	39.06698	-89.40003	08/23/2022	11.39	618.83
G109	UA	15.39 - 19.93	Water Level Only	39.06705	-89.40042	07/26/2021	11.08	618.68
G109	UA	15.39 - 19.93	Water Level Only	39.06705	-89.40042	02/07/2022	11.10	618.66
G109	UA	15.39 - 19.93	Water Level Only	39.06705	-89.40042	05/09/2022	8.29	621.47
G109	UA	15.39 - 19.93	Water Level Only	39.06705	-89.40042	08/23/2022	11.50	618.26
G110	UA	15.05 - 19.59	Water Level Only	39.06717	-89.40070	07/26/2021	11.89	617.76
G110	UA	15.05 - 19.59	Water Level Only	39.06717	-89.40070	02/07/2022	12.02	617.63
G110	UA	15.05 - 19.59	Water Level Only	39.06717	-89.40070	05/09/2022	9.12	620.53
G110	UA	15.05 - 19.59	Water Level Only	39.06717	-89.40070	08/23/2022	12.18	617.47
G111	UA	14.61 - 19.15	Water Level Only	39.06729	-89.40097	07/26/2021	13.06	616.84
G111	UA	14.61 - 19.15	Water Level Only	39.06729	-89.40097	02/07/2022	13.23	616.67
G111	UA	14.61 - 19.15	Water Level Only	39.06729	-89.40097	05/09/2022	10.76	619.14
G111	UA	14.61 - 19.15	Water Level Only	39.06729	-89.40097	08/23/2022	13.40	616.50
G119	UA	17.29 - 21.83	Water Level Only	39.06899	-89.40121	07/26/2021	14.93	616.62
G119	UA	17.29 - 21.83	Water Level Only	39.06899	-89.40121	02/07/2022	14.34	617.21
G119	UA	17.29 - 21.83	Water Level Only	39.06899	-89.40121	05/09/2022	14.22	617.33
G119	UA	17.29 - 21.83	Water Level Only	39.06899	-89.40121	08/23/2022	15.00	616.55
G120	UA	15.10 - 19.62	Water Level Only	39.06948	-89.40121	07/26/2021	14.92	616.95
G120	UA	15.10 - 19.62	Water Level Only	39.06948	-89.40121	02/07/2022	13.97	617.90
G120	UA	15.10 - 19.62	Water Level Only	39.06948	-89.40121	05/09/2022	13.15	618.72
G120	UA	15.10 - 19.62	Water Level Only	39.06948	-89.40121	08/23/2022	15.07	616.80
G121	UA	16.79 - 21.47	Water Level Only	39.06978	-89.40122	07/26/2021	16.04	616.79
G121	UA	16.79 - 21.47	Water Level Only	39.06978	-89.40122	02/07/2022	13.82	619.01
G121	UA	16.79 - 21.47	Water Level Only	39.06978	-89.40122	05/09/2022	12.08	620.75
G121	UA	16.79 - 21.47	Water Level Only	39.06978	-89.40122	08/23/2022	16.15	616.68

TABLE 1
GROUNDWATER ELEVATIONS
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 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, 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)
G122	UA	16.51 - 21.05	Water Level Only	39.07010	-89.40122	07/26/2021	15.77	616.92
G122	UA	16.51 - 21.05	Water Level Only	39.07010	-89.40122	02/07/2022	11.53	621.16
G122	UA	16.51 - 21.05	Water Level Only	39.07010	-89.40122	05/09/2022	9.66	623.03
G122	UA	16.51 - 21.05	Water Level Only	39.07010	-89.40122	08/23/2022	15.66	617.03
G123	UA	20.94 - 25.46	Water Level Only	39.07040	-89.40122	07/26/2021	13.61	619.35
G123	UA	20.94 - 25.46	Water Level Only	39.07040	-89.40122	02/07/2022	11.45	621.51
G123	UA	20.94 - 25.46	Water Level Only	39.07040	-89.40122	05/09/2022	8.40	624.56
G123	UA	20.94 - 25.46	Water Level Only	39.07040	-89.40122	08/23/2022	13.46	619.50
G124	UA	15.98 - 20.51	Water Level Only	39.07072	-89.40122	07/26/2021	14.34	619.05
G124	UA	15.98 - 20.51	Water Level Only	39.07072	-89.40122	02/07/2022	10.97	622.42
G124	UA	15.98 - 20.51	Water Level Only	39.07072	-89.40122	05/09/2022	9.34	624.05
G124	UA	15.98 - 20.51	Water Level Only	39.07072	-89.40122	08/23/2022	14.22	619.17
G125	UA	17.03 - 21.56	Water Level Only	39.07100	-89.40122	07/26/2021	14.40	619.11
G125	UA	17.03 - 21.56	Water Level Only	39.07100	-89.40122	02/07/2022	11.07	622.44
G125	UA	17.03 - 21.56	Water Level Only	39.07100	-89.40122	05/09/2022	9.48	624.03
G125	UA	17.03 - 21.56	Water Level Only	39.07100	-89.40122	08/23/2022	14.37	619.14
G126	UA	12.89 - 17.43	Water Level Only	39.06730	-89.40127	07/26/2021	9.54	615.85
G126	UA	12.89 - 17.43	Water Level Only	39.06730	-89.40127	02/07/2022	9.65	615.74
G126	UA	12.89 - 17.43	Water Level Only	39.06730	-89.40127	05/09/2022	7.86	617.53
G126	UA	12.89 - 17.43	Water Level Only	39.06730	-89.40127	08/23/2022	9.69	615.70
G151	UA	15.34 - 19.84	Water Level Only	39.06720	-89.40159	07/26/2021	11.10	614.83
G151	UA	15.34 - 19.84	Water Level Only	39.06720	-89.40159	02/07/2022	11.46	614.47
G151	UA	15.34 - 19.84	Water Level Only	39.06720	-89.40159	05/09/2022	10.15	615.78
G151	UA	15.34 - 19.84	Water Level Only	39.06720	-89.40159	08/23/2022	11.31	614.62
G152	UA	13.59 - 18.09	Water Level Only	39.06628	-89.40129	07/26/2021	9.76	616.76
G152	UA	13.59 - 18.09	Water Level Only	39.06628	-89.40129	02/07/2022	10.76	615.76
G152	UA	13.59 - 18.09	Water Level Only	39.06628	-89.40129	05/09/2022	8.91	617.61
G152	UA	13.59 - 18.09	Water Level Only	39.06628	-89.40129	08/23/2022	11.45	615.07
G153	UA	15.90 - 20.34	Water Level Only	39.06586	-89.40257	07/26/2021	12.43	613.97
G153	UA	15.90 - 20.34	Water Level Only	39.06586	-89.40257	02/07/2022	11.15	615.25

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GROUNDWATER ELEVATIONS
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 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, 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)
G153	UA	15.90 - 20.34	Water Level Only	39.06586	-89.40257	05/09/2022	8.99	617.41
G153	UA	15.90 - 20.34	Water Level Only	39.06586	-89.40257	08/23/2022	11.77	614.63
G154	UA	14.26 - 18.76	Water Level Only	39.06709	-89.40357	07/26/2021	11.14	615.21
G154	UA	14.26 - 18.76	Water Level Only	39.06709	-89.40357	02/07/2022	11.45	614.90
G154	UA	14.26 - 18.76	Water Level Only	39.06709	-89.40357	05/09/2022	8.00	618.35
G154	UA	14.26 - 18.76	Water Level Only	39.06709	-89.40357	08/23/2022	13.00	613.35
G155	UA	15.09 - 19.58	Water Level Only	39.06749	-89.40266	07/26/2021	12.05	613.81
G155	UA	15.09 - 19.58	Water Level Only	39.06749	-89.40266	02/07/2022	11.67	614.19
G155	UA	15.09 - 19.58	Water Level Only	39.06749	-89.40266	05/09/2022	9.44	616.42
G155	UA	15.09 - 19.58	Water Level Only	39.06749	-89.40266	08/23/2022	12.56	613.30
G200	UA	12.19 - 16.98	Background	39.07514	-89.39501	07/26/2021	6.20	619.74
G200	UA	12.19 - 16.98	Background	39.07514	-89.39501	02/07/2022	3.55	622.39
G200	UA	12.19 - 16.98	Background	39.07514	-89.39501	05/09/2022	2.89	623.05
G200	UA	12.19 - 16.98	Background	39.07514	-89.39501	08/23/2022	6.21	619.73
G206	UA	17.51 - 21.92	Compliance	39.06740	-89.39855	07/26/2021	10.82	622.00
G206	UA	17.51 - 21.92	Compliance	39.06740	-89.39855	02/07/2022	10.45	622.37
G206	UA	17.51 - 21.92	Compliance	39.06740	-89.39855	05/09/2022	9.12	623.70
G206	UA	17.51 - 21.92	Compliance	39.06740	-89.39855	08/23/2022	11.21	621.61
G206D	DA	49.20 - 59.00	Water Level Only	39.06743	-89.39849	07/26/2021	43.00	591.14
G206D	DA	49.20 - 59.00	Water Level Only	39.06743	-89.39849	02/07/2022	35.92	598.22
G206D	DA	49.20 - 59.00	Water Level Only	39.06743	-89.39849	05/09/2022	32.84	601.30
G206D	DA	49.20 - 59.00	Water Level Only	39.06743	-89.39849	08/23/2022	31.28	602.86
G207	UA	18.24 - 22.77	Water Level Only	39.06757	-89.39795	07/26/2021	10.96	622.25
G207	UA	18.24 - 22.77	Water Level Only	39.06757	-89.39795	02/07/2022	10.64	622.57
G207	UA	18.24 - 22.77	Water Level Only	39.06757	-89.39795	05/09/2022	9.60	623.61
G207	UA	18.24 - 22.77	Water Level Only	39.06757	-89.39795	08/23/2022	11.33	621.88
G208	UA	17.53 - 22.06	Water Level Only	39.06774	-89.39740	07/26/2021	10.79	622.37
G208	UA	17.53 - 22.06	Water Level Only	39.06774	-89.39740	02/07/2022	10.80	622.36
G208	UA	17.53 - 22.06	Water Level Only	39.06774	-89.39740	05/09/2022	9.78	623.38
G208	UA	17.53 - 22.06	Water Level Only	39.06774	-89.39740	08/23/2022	11.04	622.12
G209	UA	17.74 - 22.28	Compliance	39.06792	-89.39685	07/26/2021	10.50	622.41
G209	UA	17.74 - 22.28	Compliance	39.06792	-89.39685	02/07/2022	10.56	622.35
G209	UA	17.74 - 22.28	Compliance	39.06792	-89.39685	05/09/2022	9.52	623.39
G209	UA	17.74 - 22.28	Compliance	39.06792	-89.39685	08/23/2022	10.72	622.19

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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)
G210	UA	19.39 - 23.93	Water Level Only	39.06809	-89.39632	07/26/2021	10.81	622.18
G210	UA	19.39 - 23.93	Water Level Only	39.06809	-89.39632	02/07/2022	11.05	621.94
G210	UA	19.39 - 23.93	Water Level Only	39.06809	-89.39632	05/09/2022	9.46	623.53
G210	UA	19.39 - 23.93	Water Level Only	39.06809	-89.39632	08/23/2022	11.03	621.96
G211	UA	17.34 - 21.88	Water Level Only	39.06826	-89.39579	07/26/2021	10.82	621.82
G211	UA	17.34 - 21.88	Water Level Only	39.06826	-89.39579	02/07/2022	10.76	621.88
G211	UA	17.34 - 21.88	Water Level Only	39.06826	-89.39579	05/09/2022	8.97	623.67
G211	UA	17.34 - 21.88	Water Level Only	39.06826	-89.39579	08/23/2022	10.87	621.77
G212	UA	16.74 - 21.29	Compliance	39.06843	-89.39532	07/26/2021	11.76	621.13
G212	UA	16.74 - 21.29	Compliance	39.06843	-89.39532	02/07/2022	11.10	621.79
G212	UA	16.74 - 21.29	Compliance	39.06843	-89.39532	05/09/2022	9.66	623.23
G212	UA	16.74 - 21.29	Compliance	39.06843	-89.39532	08/23/2022	12.08	620.81
G213	UA	16.75 - 21.29	Water Level Only	39.06859	-89.39482	07/26/2021	11.85	620.96
G213	UA	16.75 - 21.29	Water Level Only	39.06859	-89.39482	02/07/2022	11.23	621.58
G213	UA	16.75 - 21.29	Water Level Only	39.06859	-89.39482	05/09/2022	9.96	622.85
G213	UA	16.75 - 21.29	Water Level Only	39.06859	-89.39482	08/23/2022	12.18	620.63
G214	UA	17.75 - 22.14	Water Level Only	39.06892	-89.39398	07/26/2021	14.46	618.39
G214	UA	17.75 - 22.14	Water Level Only	39.06892	-89.39398	02/07/2022	14.52	618.33
G214	UA	17.75 - 22.14	Water Level Only	39.06892	-89.39398	05/09/2022	12.13	620.72
G214	UA	17.75 - 22.14	Water Level Only	39.06892	-89.39398	08/23/2022	14.85	618.00
G215	UA	19.41 - 23.80	Compliance	39.06931	-89.39394	07/26/2021	14.27	618.79
G215	UA	19.41 - 23.80	Compliance	39.06931	-89.39394	02/07/2022	14.45	618.61
G215	UA	19.41 - 23.80	Compliance	39.06931	-89.39394	05/09/2022	12.42	620.64
G215	UA	19.41 - 23.80	Compliance	39.06931	-89.39394	08/23/2022	14.61	618.45
G216	UA	20.04 - 24.42	Water Level Only	39.06976	-89.39395	07/26/2021	13.56	619.20
G216	UA	20.04 - 24.42	Water Level Only	39.06976	-89.39395	02/07/2022	13.68	619.08
G216	UA	20.04 - 24.42	Water Level Only	39.06976	-89.39395	05/09/2022	11.85	620.91
G216	UA	20.04 - 24.42	Water Level Only	39.06976	-89.39395	08/23/2022	13.92	618.84
G217	UA	20.49 - 24.88	Water Level Only	39.07034	-89.39396	07/26/2021	15.17	617.93
G217	UA	20.49 - 24.88	Water Level Only	39.07034	-89.39396	02/07/2022	14.76	618.34
G217	UA	20.49 - 24.88	Water Level Only	39.07034	-89.39396	05/09/2022	13.16	619.94
G217	UA	20.49 - 24.88	Water Level Only	39.07034	-89.39396	08/23/2022	15.60	617.50
G218	UA	20.33 - 24.77	Compliance	39.07088	-89.39396	07/26/2021	14.00	619.11

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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)
G218	UA	20.33 - 24.77	Compliance	39.07088	-89.39396	02/07/2022	13.78	619.33
G218	UA	20.33 - 24.77	Compliance	39.07088	-89.39396	05/09/2022	12.06	621.05
G218	UA	20.33 - 24.77	Compliance	39.07088	-89.39396	08/23/2022	14.23	618.88
G270	UA	13.13 - 17.92	Water Level Only	39.06656	-89.39740	07/26/2021	3.47	622.39
G270	UA	13.13 - 17.92	Water Level Only	39.06656	-89.39740	02/07/2022	2.59	623.27
G270	UA	13.13 - 17.92	Water Level Only	39.06656	-89.39740	05/09/2022	2.47	623.39
G270	UA	13.13 - 17.92	Water Level Only	39.06656	-89.39740	08/23/2022	4.03	621.83
G271	UA	9.96 - 14.31	Water Level Only	39.06501	-89.39559	07/26/2021	9.90	615.67
G271	UA	9.96 - 14.31	Water Level Only	39.06501	-89.39559	02/07/2022	9.06	616.51
G271	UA	9.96 - 14.31	Water Level Only	39.06501	-89.39559	05/09/2022	5.14	620.43
G271	UA	9.96 - 14.31	Water Level Only	39.06501	-89.39559	08/23/2022	10.68	614.89
G272	UA	9.11 - 13.98	Water Level Only	39.06499	-89.39479	07/26/2021	9.37	614.44
G272	UA	9.11 - 13.98	Water Level Only	39.06499	-89.39479	02/07/2022	8.92	614.89
G272	UA	9.11 - 13.98	Water Level Only	39.06499	-89.39479	05/09/2022	5.42	618.39
G272	UA	9.11 - 13.98	Water Level Only	39.06499	-89.39479	08/23/2022	10.19	613.62
G273	UA	9.08 - 14.56	Water Level Only	39.06499	-89.39397	07/26/2021	10.67	612.35
G273	UA	9.08 - 14.56	Water Level Only	39.06499	-89.39397	02/07/2022	10.32	612.70
G273	UA	9.08 - 14.56	Water Level Only	39.06499	-89.39397	05/09/2022	7.68	615.34
G273	UA	9.08 - 14.56	Water Level Only	39.06499	-89.39397	08/23/2022	11.23	611.79
G274	UA	12.90 - 17.67	Water Level Only	39.06499	-89.39320	07/26/2021	14.22	609.82
G274	UA	12.90 - 17.67	Water Level Only	39.06499	-89.39320	02/07/2022	13.90	610.14
G274	UA	12.90 - 17.67	Water Level Only	39.06499	-89.39320	05/09/2022	11.83	612.21
G274	UA	12.90 - 17.67	Water Level Only	39.06499	-89.39320	08/23/2022	14.70	609.34
G275	UA	8.22 - 12.62	Water Level Only	39.06515	-89.39256	07/26/2021	13.21	605.05
G275	UA	8.22 - 12.62	Water Level Only	39.06515	-89.39256	02/07/2022	13.16	605.10
G275	UA	8.22 - 12.62	Water Level Only	39.06515	-89.39256	05/09/2022	12.59	605.67
G275	UA	8.22 - 12.62	Water Level Only	39.06515	-89.39256	08/23/2022	Dry	
G275D	DA	49.76 - 59.55	Water Level Only	39.06512	-89.39260	07/26/2021	49.96	570.35
G275D	DA	49.76 - 59.55	Water Level Only	39.06512	-89.39260	02/07/2022	39.85	580.46
G275D	DA	49.76 - 59.55	Water Level Only	39.06512	-89.39260	05/09/2022	39.20	581.11
G275D	DA	49.76 - 59.55	Water Level Only	39.06512	-89.39260	08/23/2022	39.49	580.82

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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)
G276	UA	22.41 - 27.22	Water Level Only	39.06553	-89.39262	07/26/2021	27.32	604.68
G276	UA	22.41 - 27.22	Water Level Only	39.06553	-89.39262	02/07/2022	27.54	604.46
G276	UA	22.41 - 27.22	Water Level Only	39.06553	-89.39262	05/09/2022	25.05	606.95
G276	UA	22.41 - 27.22	Water Level Only	39.06553	-89.39262	08/23/2022	27.34	604.66
G277	UA	14.29 - 18.77	Water Level Only	39.06593	-89.39257	07/26/2021	19.75	603.33
G277	UA	14.29 - 18.77	Water Level Only	39.06593	-89.39257	02/07/2022	19.37	603.71
G277	UA	14.29 - 18.77	Water Level Only	39.06593	-89.39257	05/09/2022	17.21	605.87
G277	UA	14.29 - 18.77	Water Level Only	39.06593	-89.39257	08/23/2022	19.62	603.46
G278	UA	18.93 - 23.70	Water Level Only	39.06674	-89.39316	07/26/2021	23.68	607.49
G278	UA	18.93 - 23.70	Water Level Only	39.06674	-89.39316	02/07/2022	24.23	606.94
G278	UA	18.93 - 23.70	Water Level Only	39.06674	-89.39316	05/09/2022	21.93	609.24
G278	UA	18.93 - 23.70	Water Level Only	39.06674	-89.39316	08/23/2022	22.66	608.51
G279	UA	22.40 - 26.79	Water Level Only	39.06716	-89.39300	07/26/2021	23.47	608.57
G279	UA	22.40 - 26.79	Water Level Only	39.06716	-89.39300	02/07/2022	22.93	609.11
G279	UA	22.40 - 26.79	Water Level Only	39.06716	-89.39300	05/09/2022	20.60	611.44
G279	UA	22.40 - 26.79	Water Level Only	39.06716	-89.39300	08/23/2022	23.00	609.04
G280	UA	12.79 - 17.63	Water Level Only	39.06722	-89.39499	07/26/2021	5.60	619.75
G280	UA	12.79 - 17.63	Water Level Only	39.06722	-89.39499	02/07/2022	4.90	620.45
G280	UA	12.79 - 17.63	Water Level Only	39.06722	-89.39499	05/09/2022	2.71	622.64
G280	UA	12.79 - 17.63	Water Level Only	39.06722	-89.39499	08/23/2022	4.10	621.25
G281	UA	15.51 - 20.16	Water Level Only	39.06541	-89.39932	07/26/2021	6.34	620.02
G281	UA	15.51 - 20.16	Water Level Only	39.06541	-89.39932	02/07/2022	6.25	620.11
G281	UA	15.51 - 20.16	Water Level Only	39.06541	-89.39932	05/09/2022	4.21	622.15
G281	UA	15.51 - 20.16	Water Level Only	39.06541	-89.39932	08/23/2022	6.85	619.51
G283	LCU	8.39 - 18.17	Water Level Only	39.06464	-89.39212	07/26/2021	5.57	605.18
G283	LCU	8.39 - 18.17	Water Level Only	39.06464	-89.39212	02/07/2022	4.79	605.96
G283	LCU	8.39 - 18.17	Water Level Only	39.06464	-89.39212	05/09/2022	3.46	607.29
G283	LCU	8.39 - 18.17	Water Level Only	39.06464	-89.39212	08/23/2022	8.06	602.69
G284	UA	8.08 - 12.85	Water Level Only	39.06549	-89.39063	07/26/2021	11.31	607.11
G284	UA	8.08 - 12.85	Water Level Only	39.06549	-89.39063	02/07/2022	10.96	607.46

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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)
G284	UA	8.08 - 12.85	Water Level Only	39.06549	-89.39063	05/09/2022	7.58	610.84
G284	UA	8.08 - 12.85	Water Level Only	39.06549	-89.39063	08/23/2022	12.00	606.42
G285	LCU	13.68 - 23.45	Water Level Only	39.06651	-89.39147	07/26/2021	8.25	605.27
G285	LCU	13.68 - 23.45	Water Level Only	39.06651	-89.39147	02/07/2022	7.21	606.31
G285	LCU	13.68 - 23.45	Water Level Only	39.06651	-89.39147	05/09/2022	4.46	609.06
G285	LCU	13.68 - 23.45	Water Level Only	39.06651	-89.39147	08/23/2022	6.44	607.08
G286	UA	3.37 - 8.16	Water Level Only	39.06728	-89.39188	02/07/2022	7.03	606.10
G286	UA	3.37 - 8.16	Water Level Only	39.06728	-89.39188	05/09/2022	5.11	608.02
G286	UA	3.37 - 8.16	Water Level Only	39.06728	-89.39188	08/23/2022	Dry	
G287	UA	5.43 - 10.25	Water Level Only	39.06830	-89.39239	02/07/2022	9.10	608.35
G287	UA	5.43 - 10.25	Water Level Only	39.06830	-89.39239	05/09/2022	7.01	610.44
G287	UA	5.43 - 10.25	Water Level Only	39.06830	-89.39239	08/23/2022	Dry	
G288	UA	7.59 - 12.26	Water Level Only	39.06783	-89.39008	07/26/2021	7.22	612.85
G288	UA	7.59 - 12.26	Water Level Only	39.06783	-89.39008	02/07/2022	6.14	613.93
G288	UA	7.59 - 12.26	Water Level Only	39.06783	-89.39008	05/09/2022	4.81	615.26
G288	UA	7.59 - 12.26	Water Level Only	39.06783	-89.39008	08/23/2022	7.68	612.39
G301	UA	11.31 - 15.96	Water Level Only	39.05951	-89.39541	07/26/2021	7.34	615.31
G301	UA	11.31 - 15.96	Water Level Only	39.05951	-89.39541	02/07/2022	6.14	616.51
G301	UA	11.31 - 15.96	Water Level Only	39.05951	-89.39541	05/09/2022	5.78	616.87
G301	UA	11.31 - 15.96	Water Level Only	39.05951	-89.39541	08/23/2022	7.07	615.58
G302	UA	13.21 - 17.86	Water Level Only	39.05954	-89.39319	07/26/2021	9.06	610.98
G302	UA	13.21 - 17.86	Water Level Only	39.05954	-89.39319	02/07/2022	8.04	612.00
G302	UA	13.21 - 17.86	Water Level Only	39.05954	-89.39319	05/09/2022	4.37	615.67
G302	UA	13.21 - 17.86	Water Level Only	39.05954	-89.39319	08/23/2022	9.15	610.89
G303	UA	10 - 20	Water Level Only	39.05714	-89.39172	07/26/2021	5.58	616.44
G303	UA	10 - 20	Water Level Only	39.05714	-89.39172	02/07/2022	4.12	617.90
G303	UA	10 - 20	Water Level Only	39.05714	-89.39172	05/09/2022	3.58	618.44
G303	UA	10 - 20	Water Level Only	39.05714	-89.39172	08/23/2022	6.06	615.96
G305	UA	13.44 - 18.27	Water Level Only	39.05656	-89.39680	07/26/2021	7.49	618.18
G305	UA	13.44 - 18.27	Water Level Only	39.05656	-89.39680	02/07/2022	6.27	619.40

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GROUNDWATER ELEVATIONS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, 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)
G305	UA	13.44 - 18.27	Water Level Only	39.05656	-89.39680	05/09/2022	6.00	619.67
G305	UA	13.44 - 18.27	Water Level Only	39.05656	-89.39680	08/23/2022	7.61	618.06
G306	UA	13.07 - 17.68	Water Level Only	39.05649	-89.39356	07/26/2021	7.07	618.84
G306	UA	13.07 - 17.68	Water Level Only	39.05649	-89.39356	02/07/2022	6.09	619.82
G306	UA	13.07 - 17.68	Water Level Only	39.05649	-89.39356	05/09/2022	5.33	620.58
G306	UA	13.07 - 17.68	Water Level Only	39.05649	-89.39356	08/23/2022	8.12	617.79
G307	UA	12.96 - 17.80	Water Level Only	39.05721	-89.39554	07/26/2021	Above Top of Casing	
G307	UA	12.96 - 17.80	Water Level Only	39.05721	-89.39554	02/07/2022	Above Top of Casing	
G307	UA	12.96 - 17.80	Water Level Only	39.05721	-89.39554	05/09/2022	Above Top of Casing	
G307	UA	12.96 - 17.80	Water Level Only	39.05721	-89.39554	08/23/2022	Above Top of Casing	
G307D	LCU	48.98 - 58.75	Water Level Only	39.05721	-89.39552	07/26/2021	2.62	622.26
G307D	LCU	48.98 - 58.75	Water Level Only	39.05721	-89.39552	02/07/2022	2.56	622.32
G307D	LCU	48.98 - 58.75	Water Level Only	39.05721	-89.39552	05/09/2022	8.57	616.31
G307D	LCU	48.98 - 58.75	Water Level Only	39.05721	-89.39552	08/23/2022	9.79	615.09
G308	UA	10.10 - 14.89	Water Level Only	39.05738	-89.39713	07/26/2021	4.91	619.68
G308	UA	10.10 - 14.89	Water Level Only	39.05738	-89.39713	02/07/2022	3.84	620.75
G308	UA	10.10 - 14.89	Water Level Only	39.05738	-89.39713	05/09/2022	4.04	620.55
G308	UA	10.10 - 14.89	Water Level Only	39.05738	-89.39713	08/23/2022	7.24	617.35
G309	UA	12.97 - 17.75	Water Level Only	39.05851	-89.39724	07/26/2021	7.00	618.88
G309	UA	12.97 - 17.75	Water Level Only	39.05851	-89.39724	02/07/2022	6.79	619.09
G309	UA	12.97 - 17.75	Water Level Only	39.05851	-89.39724	05/09/2022	5.86	620.02
G309	UA	12.97 - 17.75	Water Level Only	39.05851	-89.39724	08/23/2022	7.24	618.64
G310	UA	10.24 - 15.03	Water Level Only	39.05953	-89.39691	07/26/2021	8.74	614.13
G310	UA	10.24 - 15.03	Water Level Only	39.05953	-89.39691	02/07/2022	7.86	615.01
G310	UA	10.24 - 15.03	Water Level Only	39.05953	-89.39691	05/09/2022	6.90	615.97
G310	UA	10.24 - 15.03	Water Level Only	39.05953	-89.39691	08/23/2022	8.89	613.98
G311	UA	9.27 - 14.04	Water Level Only	39.05951	-89.39436	07/26/2021	7.99	613.05
G311	UA	9.27 - 14.04	Water Level Only	39.05951	-89.39436	02/07/2022	6.76	614.28
G311	UA	9.27 - 14.04	Water Level Only	39.05951	-89.39436	05/09/2022	5.30	615.74
G311	UA	9.27 - 14.04	Water Level Only	39.05951	-89.39436	08/23/2022	7.85	613.19

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 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, 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)
G311D	LCU	50.16 - 60.10	Water Level Only	39.05951	-89.39431	07/26/2021	51.50	569.74
G311D	LCU	50.16 - 60.10	Water Level Only	39.05951	-89.39431	02/07/2022	28.10	593.14
G311D	LCU	50.16 - 60.10	Water Level Only	39.05951	-89.39431	05/09/2022	24.81	596.43
G311D	LCU	50.16 - 60.10	Water Level Only	39.05951	-89.39431	08/23/2022	23.78	597.46
G312	UA	9.79 - 14.58	Water Level Only	39.05956	-89.39198	07/26/2021	11.22	608.56
G312	UA	9.79 - 14.58	Water Level Only	39.05956	-89.39198	02/07/2022	10.77	609.01
G312	UA	9.79 - 14.58	Water Level Only	39.05956	-89.39198	05/09/2022	8.34	611.44
G312	UA	9.79 - 14.58	Water Level Only	39.05956	-89.39198	08/23/2022	11.28	608.50
G313	UA	6.30 - 11.11	Water Level Only	39.05877	-89.39112	07/26/2021	2.59	611.71
G313	UA	6.30 - 11.11	Water Level Only	39.05877	-89.39112	02/07/2022	2.88	611.42
G313	UA	6.30 - 11.11	Water Level Only	39.05877	-89.39112	05/09/2022	2.72	611.58
G313	UA	6.30 - 11.11	Water Level Only	39.05877	-89.39112	08/23/2022	2.38	611.92
G314	LCU	14.56 - 19.58	Water Level Only	39.05782	-89.39096	07/26/2021	7.22	606.66
G314	LCU	14.56 - 19.58	Water Level Only	39.05782	-89.39096	02/07/2022	6.03	607.85
G314	LCU	14.56 - 19.58	Water Level Only	39.05782	-89.39096	05/09/2022	4.77	609.11
G314	LCU	14.56 - 19.58	Water Level Only	39.05782	-89.39096	08/23/2022	3.30	610.58
G314D	DA	39.34 - 49.11	Water Level Only	39.05785	-89.39096	07/26/2021	47.05	566.65
G314D	DA	39.34 - 49.11	Water Level Only	39.05785	-89.39096	02/07/2022	23.24	590.46
G314D	DA	39.34 - 49.11	Water Level Only	39.05785	-89.39096	05/09/2022	18.89	594.81
G314D	DA	39.34 - 49.11	Water Level Only	39.05785	-89.39096	08/23/2022	18.00	595.70
G315	UA	9.69 - 14.48	Water Level Only	39.05716	-89.39367	07/26/2021	3.10	620.42
G315	UA	9.69 - 14.48	Water Level Only	39.05716	-89.39367	02/07/2022	2.11	621.41
G315	UA	9.69 - 14.48	Water Level Only	39.05716	-89.39367	05/09/2022	2.12	621.40
G315	UA	9.69 - 14.48	Water Level Only	39.05716	-89.39367	08/23/2022	3.31	620.21
G316	LCU	10.02 - 14.82	Water Level Only	39.05785	-89.38970	07/26/2021	11.86	590.73
G316	LCU	10.02 - 14.82	Water Level Only	39.05785	-89.38970	02/07/2022	11.48	591.11
G316	LCU	10.02 - 14.82	Water Level Only	39.05785	-89.38970	05/09/2022	11.05	591.54
G316	LCU	10.02 - 14.82	Water Level Only	39.05785	-89.38970	08/23/2022	12.18	590.41
G317	UA	30.14 - 34.93	Water Level Only	39.05673	-89.39015	07/26/2021	33.66	608.27
G317	UA	30.14 - 34.93	Water Level Only	39.05673	-89.39015	02/07/2022	32.04	609.89

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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)
G317	UA	30.14 - 34.93	Water Level Only	39.05673	-89.39015	05/09/2022	28.03	613.90
G317	UA	30.14 - 34.93	Water Level Only	39.05673	-89.39015	08/23/2022	33.97	607.96
G401	UA	14.36 - 18.79	Water Level Only	39.06026	-89.39529	07/26/2021	21.63	603.94
G401	UA	14.36 - 18.79	Water Level Only	39.06026	-89.39529	02/07/2022	21.14	604.43
G401	UA	14.36 - 18.79	Water Level Only	39.06026	-89.39529	05/09/2022	20.95	604.62
G401	UA	14.36 - 18.79	Water Level Only	39.06026	-89.39529	08/23/2022	21.52	604.05
G402	UA	10 - 20	Water Level Only	39.06021	-89.39171	07/26/2021	10.54	602.83
G402	UA	10 - 20	Water Level Only	39.06021	-89.39171	02/07/2022	9.24	604.13
G402	UA	10 - 20	Water Level Only	39.06021	-89.39171	05/09/2022	7.98	605.39
G402	UA	10 - 20	Water Level Only	39.06021	-89.39171	08/23/2022	10.01	603.36
G403	UA	13.11 - 17.78	Water Level Only	39.06317	-89.39878	07/26/2021	6.91	619.56
G403	UA	13.11 - 17.78	Water Level Only	39.06317	-89.39878	02/07/2022	6.39	620.08
G403	UA	13.11 - 17.78	Water Level Only	39.06317	-89.39878	05/09/2022	5.76	620.71
G403	UA	13.11 - 17.78	Water Level Only	39.06317	-89.39878	08/23/2022	8.54	617.93
G404	UA	6.42 - 11.17	Water Level Only	39.06433	-89.39249	07/26/2021	4.38	611.29
G404	UA	6.42 - 11.17	Water Level Only	39.06433	-89.39249	02/07/2022	3.58	612.09
G404	UA	6.42 - 11.17	Water Level Only	39.06433	-89.39249	05/09/2022	3.29	612.38
G404	UA	6.42 - 11.17	Water Level Only	39.06433	-89.39249	08/23/2022	5.41	610.26
G405	UA	9.01 - 13.76	Water Level Only	39.06435	-89.39623	07/26/2021	6.26	617.37
G405	UA	9.01 - 13.76	Water Level Only	39.06435	-89.39623	02/07/2022	6.35	617.28
G405	UA	9.01 - 13.76	Water Level Only	39.06435	-89.39623	05/09/2022	5.72	617.91
G405	UA	9.01 - 13.76	Water Level Only	39.06435	-89.39623	08/23/2022	6.78	616.85
G406	UA	13.56 - 18.37	Water Level Only	39.06031	-89.39851	07/26/2021	11.16	614.20
G406	UA	13.56 - 18.37	Water Level Only	39.06031	-89.39851	02/07/2022	11.81	613.55
G406	UA	13.56 - 18.37	Water Level Only	39.06031	-89.39851	05/09/2022	10.00	615.36
G406	UA	13.56 - 18.37	Water Level Only	39.06031	-89.39851	08/23/2022	11.89	613.47
G407	UA	13.78 - 18.61	Water Level Only	39.06157	-89.40200	07/26/2021	6.94	614.38
G407	UA	13.78 - 18.61	Water Level Only	39.06157	-89.40200	02/07/2022	5.93	615.39
G407	UA	13.78 - 18.61	Water Level Only	39.06157	-89.40200	05/09/2022	5.54	615.78
G407	UA	13.78 - 18.61	Water Level Only	39.06157	-89.40200	08/23/2022	7.27	614.05

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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)
G410	UA	8.89 - 13.68	Water Level Only	39.06157	-89.40376	07/26/2021	8.28	611.51
G410	UA	8.89 - 13.68	Water Level Only	39.06157	-89.40376	02/07/2022	8.12	611.67
G410	UA	8.89 - 13.68	Water Level Only	39.06157	-89.40376	05/09/2022	6.89	612.90
G410	UA	8.89 - 13.68	Water Level Only	39.06157	-89.40376	08/23/2022	8.81	610.98
G411	UA	11.21 - 16.07	Water Level Only	39.06398	-89.40403	07/26/2021	7.05	616.20
G411	UA	11.21 - 16.07	Water Level Only	39.06398	-89.40403	02/07/2022	6.48	616.77
G411	UA	11.21 - 16.07	Water Level Only	39.06398	-89.40403	05/09/2022	5.51	617.74
G411	UA	11.21 - 16.07	Water Level Only	39.06398	-89.40403	08/23/2022	7.78	615.47
MW03D	DA	52.29 - 57.06	Water Level Only	39.07139	-89.39898	07/26/2021	30.92	598.09
MW03D	DA	52.29 - 57.06	Water Level Only	39.07139	-89.39898	02/07/2022	30.55	598.46
MW03D	DA	52.29 - 57.06	Water Level Only	39.07139	-89.39898	05/09/2022	29.65	599.36
MW03D	DA	52.29 - 57.06	Water Level Only	39.07139	-89.39898	08/23/2022	30.26	598.75
MW04S	UA	9.83 - 14.26	Water Level Only	39.07536	-89.39923	07/26/2021	7.34	618.55
MW04S	UA	9.83 - 14.26	Water Level Only	39.07536	-89.39923	02/07/2022	6.33	619.56
MW04S	UA	9.83 - 14.26	Water Level Only	39.07536	-89.39923	05/09/2022	5.29	620.60
MW04S	UA	9.83 - 14.26	Water Level Only	39.07536	-89.39923	08/23/2022	7.19	618.70
MW05S	UA	12.66 - 17.41	Water Level Only	39.07587	-89.40333	07/26/2021	7.81	618.14
MW05S	UA	12.66 - 17.41	Water Level Only	39.07587	-89.40333	02/07/2022	7.29	618.66
MW05S	UA	12.66 - 17.41	Water Level Only	39.07587	-89.40333	05/09/2022	5.03	620.92
MW05S	UA	12.66 - 17.41	Water Level Only	39.07587	-89.40333	08/23/2022	8.08	617.87
MW10S	UA	11.28 - 15.76	Water Level Only	39.07601	-89.39407	07/26/2021	6.71	617.74
MW10S	UA	11.28 - 15.76	Water Level Only	39.07601	-89.39407	02/07/2022	5.54	618.91
MW10S	UA	11.28 - 15.76	Water Level Only	39.07601	-89.39407	05/09/2022	4.36	620.09
MW10S	UA	11.28 - 15.76	Water Level Only	39.07601	-89.39407	08/23/2022	6.08	618.37
MW11S	UA	8.89 - 13.63	Water Level Only	39.07189	-89.39391	07/26/2021	4.30	620.97
MW11S	UA	8.89 - 13.63	Water Level Only	39.07189	-89.39391	02/07/2022	3.28	621.99
MW11S	UA	8.89 - 13.63	Water Level Only	39.07189	-89.39391	05/09/2022	2.78	622.49
MW11S	UA	8.89 - 13.63	Water Level Only	39.07189	-89.39391	08/23/2022	4.41	620.86
MW11D	LCU	28.31 - 33.04	Water Level Only	39.07189	-89.39389	07/26/2021	4.95	620.57
MW11D	LCU	28.31 - 33.04	Water Level Only	39.07189	-89.39389	02/07/2022	4.17	621.35

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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)
MW11D	LCU	28.31 - 33.04	Water Level Only	39.07189	-89.39389	05/09/2022	3.41	622.11
MW11D	LCU	28.31 - 33.04	Water Level Only	39.07189	-89.39389	08/23/2022	5.12	620.40
MW12S	UA	10.61 - 15.18	Water Level Only	39.06851	-89.39420	07/26/2021	6.88	618.43
MW12S	UA	10.61 - 15.18	Water Level Only	39.06851	-89.39420	02/07/2022	5.53	619.78
MW12S	UA	10.61 - 15.18	Water Level Only	39.06851	-89.39420	05/09/2022	4.36	620.95
MW12D	DA	42.46 - 46.99	Water Level Only	39.06850	-89.39420	07/26/2021	13.71	611.50
MW12D	DA	42.46 - 46.99	Water Level Only	39.06850	-89.39420	02/07/2022	12.52	612.69
MW12D	DA	42.46 - 46.99	Water Level Only	39.06850	-89.39420	05/09/2022	11.86	613.35
MW12D	DA	42.46 - 46.99	Water Level Only	39.06850	-89.39420	08/23/2022	12.93	612.28
MW16S	UA	14.59 - 19.41	Water Level Only	39.07357	-89.39701	07/26/2021	8.79	620.68
MW16S	UA	14.59 - 19.41	Water Level Only	39.07357	-89.39701	02/07/2022	5.73	623.74
MW16S	UA	14.59 - 19.41	Water Level Only	39.07357	-89.39701	05/09/2022	3.84	625.63
MW16S	UA	14.59 - 19.41	Water Level Only	39.07357	-89.39701	08/23/2022	9.45	620.02
MW16D	DA	45.90 - 50.34	Water Level Only	39.07357	-89.39704	07/26/2021	12.75	616.63
MW16D	DA	45.90 - 50.34	Water Level Only	39.07357	-89.39704	02/07/2022	12.46	616.92
MW16D	DA	45.90 - 50.34	Water Level Only	39.07357	-89.39704	05/09/2022	10.62	618.76
MW16D	DA	45.90 - 50.34	Water Level Only	39.07357	-89.39704	08/23/2022	11.95	617.43
MW20S	UA	8.41 - 13.22	Water Level Only	39.06497	-89.39432	07/26/2021	9.55	613.35
MW20S	UA	8.41 - 13.22	Water Level Only	39.06497	-89.39432	02/07/2022	8.86	614.04
MW20S	UA	8.41 - 13.22	Water Level Only	39.06497	-89.39432	05/09/2022	6.06	616.84
MW20S	UA	8.41 - 13.22	Water Level Only	39.06497	-89.39432	08/23/2022	10.21	612.69
R104	UA	14.59 - 19.32	Water Level Only	39.06947	-89.39911	07/26/2021	7.43	625.41
R104	UA	14.59 - 19.32	Water Level Only	39.06947	-89.39911	02/07/2022	8.06	624.78
R104	UA	14.59 - 19.32	Water Level Only	39.06947	-89.39911	05/09/2022	6.05	626.79
R104	UA	14.59 - 19.32	Water Level Only	39.06947	-89.39911	08/23/2022	7.77	625.07
R201	UA	14.59 - 19.32	Background	39.07514	-89.39786	07/26/2021	5.97	620.37
R201	UA	14.59 - 19.32	Background	39.07514	-89.39786	02/07/2022	3.49	622.85
R201	UA	14.59 - 19.32	Background	39.07514	-89.39786	05/09/2022	3.07	623.27
R201	UA	14.59 - 19.32	Background	39.07514	-89.39786	08/23/2022	5.92	620.42
R205	UA	11.32 - 16.01	Water Level Only	39.06859	-89.39416	07/26/2021	5.86	618.66
R205	UA	11.32 - 16.01	Water Level Only	39.06859	-89.39416	02/07/2022	4.10	620.42
R205	UA	11.32 - 16.01	Water Level	39.06859	-89.39416	05/09/2022	3.28	621.24

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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					
R205	UA	11.32 - 16.01	Water Level Only	39.06859	-89.39416	08/23/2022	6.36	618.16
T127	UA	17.53 - 22.07	Water Level Only	39.06812	-89.40121	07/26/2021	14.43	616.53
T127	UA	17.53 - 22.07	Water Level Only	39.06812	-89.40121	02/07/2022	14.00	616.96
T127	UA	17.53 - 22.07	Water Level Only	39.06812	-89.40121	05/09/2022	13.57	617.39
T127	UA	17.53 - 22.07	Water Level Only	39.06812	-89.40121	08/23/2022	14.49	616.47
T128	UA	16.53 - 21.04	Water Level Only	39.06853	-89.40121	07/26/2021	14.12	616.81
T128	UA	16.53 - 21.04	Water Level Only	39.06853	-89.40121	02/07/2022	13.70	617.23
T128	UA	16.53 - 21.04	Water Level Only	39.06853	-89.40121	05/09/2022	13.42	617.51
T128	UA	16.53 - 21.04	Water Level Only	39.06853	-89.40121	08/23/2022	14.50	616.43
T202	UA	12.27 - 16.65	Water Level Only	39.07178	-89.39771	07/26/2021	5.99	622.64
T202	UA	12.27 - 16.65	Water Level Only	39.07178	-89.39771	02/07/2022	5.68	622.95
T202	UA	12.27 - 16.65	Water Level Only	39.07178	-89.39771	05/09/2022	3.56	625.07
T202	UA	12.27 - 16.65	Water Level Only	39.07178	-89.39771	08/23/2022	6.44	622.19
T408	LCU	20.66 - 25.49	Water Level Only	39.06435	-89.39631	07/26/2021	6.87	617.21
T408	LCU	20.66 - 25.49	Water Level Only	39.06435	-89.39631	02/07/2022	7.20	616.88
T408	LCU	20.66 - 25.49	Water Level Only	39.06435	-89.39631	05/09/2022	6.30	617.78
T408	LCU	20.66 - 25.49	Water Level Only	39.06435	-89.39631	08/23/2022	7.09	616.99
T409	LCU	21.79 - 26.59	Water Level Only	39.06030	-89.39854	07/26/2021	9.29	615.72
T409	LCU	21.79 - 26.59	Water Level Only	39.06030	-89.39854	02/07/2022	10.04	614.97
T409	LCU	21.79 - 26.59	Water Level Only	39.06030	-89.39854	05/09/2022	8.20	616.81
T409	LCU	21.79 - 26.59	Water Level Only	39.06030	-89.39854	08/23/2022	14.28	610.73
TA31	UA	15.09 - 19.57	Water Level Only	39.07137	-89.40137	07/26/2021	7.79	618.76
TA31	UA	15.09 - 19.57	Water Level Only	39.07137	-89.40137	02/07/2022	4.83	621.72
TA31	UA	15.09 - 19.57	Water Level Only	39.07137	-89.40137	05/09/2022	3.24	623.31
TA31	UA	15.09 - 19.57	Water Level Only	39.07137	-89.40137	08/23/2022	7.89	618.66
TA33	UA	12.23 - 16.89	Water Level Only	39.07156	-89.40351	07/26/2021	8.45	616.82
TA33	UA	12.23 - 16.89	Water Level Only	39.07156	-89.40351	02/07/2022	7.26	618.01
TA33	UA	12.23 - 16.89	Water Level Only	39.07156	-89.40351	05/09/2022	3.83	621.44
TA33	UA	12.23 - 16.89	Water Level Only	39.07156	-89.40351	08/23/2022	9.35	615.92
TA34	UA	10.92 - 15.41	Water Level Only	39.06963	-89.40276	07/26/2021	9.34	617.18

TABLE 1
GROUNDWATER ELEVATIONS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, 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)
TA34	UA	10.92 - 15.41	Water Level Only	39.06963	-89.40276	02/07/2022	7.76	618.76
TA34	UA	10.92 - 15.41	Water Level Only	39.06963	-89.40276	05/09/2022	5.95	620.57
TA34	UA	10.92 - 15.41	Water Level Only	39.06963	-89.40276	08/23/2022	9.51	617.01
TR32	UA	11.00 - 15.68	Water Level Only	39.07406	-89.40224	07/26/2021	5.59	616.09
TR32	UA	11.00 - 15.68	Water Level Only	39.07406	-89.40224	02/07/2022	6.47	615.21
TR32	UA	11.00 - 15.68	Water Level Only	39.07406	-89.40224	05/09/2022	5.13	616.55
TR32	UA	11.00 - 15.68	Water Level Only	39.07406	-89.40224	08/23/2022	5.91	615.77
XPW01	CCR	8.21 - 12.98	Water Level Only	39.05788	-89.39620	07/26/2021	4.84	629.73
XPW01	CCR	8.21 - 12.98	Water Level Only	39.05788	-89.39620	02/07/2022	4.32	630.25
XPW01	CCR	8.21 - 12.98	Water Level Only	39.05788	-89.39620	05/09/2022	3.64	630.93
XPW01	CCR	8.21 - 12.98	Water Level Only	39.05788	-89.39620	08/23/2022	7.90	626.67
XPW02	CCR	8.05 - 17.85	Water Level Only	39.05883	-89.39527	07/26/2021	9.91	629.78
XPW02	CCR	8.05 - 17.85	Water Level Only	39.05883	-89.39527	02/07/2022	9.31	630.38
XPW02	CCR	8.05 - 17.85	Water Level Only	39.05883	-89.39527	05/09/2022	8.63	631.06
XPW02	CCR	8.05 - 17.85	Water Level Only	39.05883	-89.39527	08/23/2022	8.88	630.81
XSG-01	CCR	NA	Water Level Only	39.05913	-89.39673	07/26/2021	5.73	629.79
XSG-01	CCR	NA	Water Level Only	39.05913	-89.39673	02/07/2022	5.25	630.27
XSG-01	CCR	NA	Water Level Only	39.05913	-89.39673	05/09/2022	4.56	630.96
XSG-01	CCR	NA	Water Level Only	39.05913	-89.39673	08/23/2022	3.07	632.45
SG-02	SW	NA	Water Level Only	39.05969	-89.39143	07/26/2021	7.43	598.44
SG-02	SW	NA	Water Level Only	39.05969	-89.39143	02/07/2022	7.35	598.52
SG-02	SW	NA	Water Level Only	39.05969	-89.39143	05/09/2022	7.35	598.52
SG-02	SW	NA	Water Level Only	39.05969	-89.39143	08/23/2022	7.45	598.42
SG-03	SW	NA	Water Level Only	39.05909	-89.39034	07/26/2021	5.17	589.77
SG-03	SW	NA	Water Level Only	39.05909	-89.39034	02/07/2022	5.01	589.93
SG-03	SW	NA	Water Level Only	39.05909	-89.39034	05/09/2022	4.99	589.95
SG-03	SW	NA	Water Level Only	39.05909	-89.39034	08/23/2022	9.81	585.13
SG-04	SW	NA	Water Level Only	39.06415	-89.39050	07/26/2021	6.69	592.83
SG-04	SW	NA	Water Level Only	39.06415	-89.39050	02/07/2022	6.52	593.00
SG-04	SW	NA	Water Level Only	39.06415	-89.39050	05/09/2022	6.36	593.16

TABLE 1
GROUNDWATER ELEVATIONS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, 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)
SG-04	SW	NA	Water Level Only	39.06415	-89.39050	08/23/2022	6.16	593.36

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
 DA = deep aquifer
 LCU = lower confining unit
 SW = surface water
 UA = uppermost aquifer

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, 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)
<i>Background Value(s)</i>	--	--	--	0.390	146	96.0	0.502	6.9/7.3	300	949
G200	Background	08/18/2021	D9	0.0160	87.0	44.0	0.383	7.2	100	540
G200	Background	05/10/2022	A1	0.0071 U	94.0	110	0.04 U	7.1	110	750
G200	Background	08/23/2022	A1R	0.0640	85.0	61.0	0.322	7.1	110	540
R201	Background	08/18/2021	D9	0.0120	110	88.0	0.472	7.0	180	740
R201	Background	05/11/2022	A1	0.0071 U	130	80.0	0.591 J-	7.0	260	870
R201	Background	08/23/2022	A1R	0.0071 U	140	86.0	0.258	7.0	240	840
G206	Compliance	08/20/2021	D9	0.01 U	83.0	21.0	0.643	7.2	130	560
G206	Compliance	11/29/2021	D9R	--	--	--	0.456	7.2	--	--
G206	Compliance	05/10/2022	A1	0.0071 U	79.0	22.0	0.344	7.1	130	490
G206	Compliance	08/23/2022	A1R	0.0071 U	92.0	21.0	0.364	6.9	140	540
G209	Compliance	08/20/2021	D9	0.0200	150	59.0	0.493	6.8	240	840
G209	Compliance	11/29/2021	D9R	--	--	--	--	7.0	--	--
G209	Compliance	05/11/2022	A1	0.0071 U	150	59.0	0.370	6.9	240	930
G209	Compliance	08/23/2022	A1R	0.0071 U	160	66.0	0.344	6.8	240	880
G212	Compliance	08/19/2021	D9	0.01 U	54.0	41.0	0.322	7.2	51.0	420
G212	Compliance	05/11/2022	A1	0.0076 J	53.0	47.0	0.04 U	7.4	53.0	400
G212	Compliance	08/24/2022	A1R	0.0071 U	59.0	43.0	0.281	6.9	54.0	530
G215	Compliance	08/19/2021	D9	0.490	180	110	0.597	7.0	440	1,300
G215	Compliance	11/29/2021	D9R	0.620	--	--	0.338	6.9	--	--
G215	Compliance	05/11/2022	A1	0.590	200	130	0.04 U	7.0	540	1,300
G215	Compliance	08/23/2022	A1R	0.600	190	150	0.165	6.8	470	1,300
G218	Compliance	08/19/2021	D9	0.01 U	150	88.0	0.630	7.1	260	1,000
G218	Compliance	11/29/2021	D9R	--	--	--	0.371	7.0	--	880
G218	Compliance	05/10/2022	A1	0.0071 U	150	96.0	0.04 U	6.8	270	920

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, 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)
G218	Compliance	08/23/2022	A1R	0.0092	170	100	0.234	6.9	350	1,100

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

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.

J- = The result is an estimated quantity, but the result may be biased low.

TABLE 3
ANALYTICAL RESULTS - APPENDIX IV PARAMETERS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, IL

Well ID	Well Type	Date	Antimony, total (mg/L)	Arsenic, total (mg/L)	Barium, total (mg/L)	Beryllium, total (mg/L)	Cadmium, total (mg/L)	Chromium, total (mg/L)	Cobalt, total (mg/L)	Fluoride, total (mg/L)	Lead, total (mg/L)	Lithium, total (mg/L)	Mercury, total (mg/L)	Molybdenum, total (mg/L)	Radium 226 + 228 (pCi/L)	Selenium, total (mg/L)	Thallium, total (mg/L)
G200	Background	05/10/2022	0.00043 U	0.00069 U	0.0520	0.00059 U	0.00074 U	0.0028 U	0.00048 U	0.04 U	0.00022 U	0.013 J	0.00014 U	0.00074 U	--	0.00220	0.00038 U
G200	Background	06/15/2022	--	--	--	--	--	--	--	--	--	--	--	--	0.337	--	--
G200	Background	08/23/2022	0.00043 U	0.00069 U	0.0520	0.00059 U	0.00074 U	0.0028 U	0.00048 U	0.322	0.00022 U	0.005 U	0.00014 U	0.00200	3.91 B	0.00140	0.00038 U
R201	Background	05/11/2022	0.00043 U	0.0120	0.110	0.00059 U	0.00074 U	0.0028 U	0.00074 J	0.591 J-	0.00150	0.0082 J	0.00014 U	0.00087 J	--	0.00074 U	0.00038 U
R201	Background	06/15/2022	--	--	--	--	--	--	--	--	--	--	--	--	0.732	--	--
R201	Background	08/23/2022	0.00043 U	0.00460	0.0910	0.00059 U	0.00074 U	0.0028 U	0.00089	0.258	0.00360	0.005 U	0.00014 U	0.00075	1.04 B	0.00074 U	0.00038 U
G206	Compliance	05/10/2022	0.00043 U	0.00069 U	0.0470	0.00059 U	0.00074 U	0.0028 U	0.00048 U	0.344	0.00022 U	0.0066 J	0.00014 U	0.00086 J	--	0.00150	0.00038 U
G206	Compliance	06/16/2022	--	--	--	--	--	--	--	--	--	--	--	--	0.743	--	--
G206	Compliance	08/23/2022	0.00043 U	0.00069 U	0.0510	0.00059 U	0.00074 U	0.0028 U	0.00078	0.364	0.00035	0.005 U	0.00014 U	0.00074 U	0.724 B	0.00074 U	0.00038 U
G209	Compliance	05/11/2022	0.00043 U	0.00820	0.0940	0.00059 U	0.00074 U	0.0028 U	0.0016 J	0.370	0.00061 J	0.0073 J	0.00014 U	0.00370	--	0.00074 U	0.00038 U
G209	Compliance	06/15/2022	--	--	--	--	--	--	--	--	--	--	--	--	0.887	--	--
G209	Compliance	08/23/2022	0.00043 U	0.00160	0.0580	0.00059 U	0.00074 U	0.0028 U	0.00048 U	0.344	0.00022 U	0.005 U	0.00014 U	0.00140	1.79 B	0.00074 U	0.00038 U
G212	Compliance	05/11/2022	0.00043 U	0.00069 U	0.0490	0.00059 U	0.00074 U	0.0028 U	0.00048 U	0.04 U	0.00022 U	0.0063 J	0.00014 U	0.00074 U	--	0.00190	0.00038 U
G212	Compliance	06/15/2022	--	--	--	--	--	--	--	--	--	--	--	--	0.507	--	--
G212	Compliance	08/24/2022	0.00043 U	0.00069 U	0.0460	0.00059 U	0.00074 U	0.0028 U	0.00048 U	0.281	0.00022 U	0.005 U	0.00014 U	0.00074 U	0.785 B	0.00084	0.00038 U
G215	Compliance	05/11/2022	0.00043 U	0.00850	0.0440	0.00059 U	0.00074 U	0.0028 U	0.00051 J	0.04 U	0.00022 U	0.0052 J	0.00014 U	0.00074 U	--	0.00074 U	0.00038 U
G215	Compliance	06/15/2022	--	--	--	--	--	--	--	--	--	--	--	--	0.673	--	--
G215	Compliance	08/23/2022	0.00043 U	0.00580	0.0440	0.00059 U	0.00074 U	0.0028 U	0.00048	0.165	0.00022 U	0.0081	0.00014 U	0.00074 U	0.998 B	0.00074 U	0.00038 U
G218	Compliance	05/10/2022	0.00043 U	0.00220	0.120	0.00059 U	0.00074 U	0.003 J	0.00078 J	0.04 U	0.00066 J	0.014 J	0.00014 U	0.00074 U	--	0.00074 U	0.00038 U
G218	Compliance	06/15/2022	--	--	--	--	--	--	--	--	--	--	--	--	0.912	--	--
G218	Compliance	08/23/2022	0.00043 U	0.00120	0.0970	0.00059 U	0.00074 U	0.0028 U	0.0007	0.234	0.00022 U	0.005 U	0.00014 U	0.00074 U	1.29 B	0.00074 U	0.00038 U

Notes:

mg/L = milligrams per liter

pCi/L = picoCuries per liter

-- = 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.

J- = The result is an estimated quantity, but the result may be biased low.

B = The analyte was found in sample and in associated method blank.

TABLE 4
STATISTICAL BACKGROUND VALUES
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, IL

Parameter	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Background Value (LPL/UPL)
Boron (mg/L)	11/23/2015 - 07/13/2017	16	56	Non-parametric UPL	0.390
Calcium (mg/L)	11/23/2015 - 07/13/2017	16	0	Parametric UPL	146
Chloride (mg/L)	11/23/2015 - 07/13/2017	16	0	Non-parametric UPL	96.0
Fluoride (mg/L)	11/23/2015 - 07/13/2017	16	0	Parametric UPL	0.502
pH (field) (SU)	11/23/2015 - 07/13/2017	16	0	Parametric LPL/UPL	6.9/7.3
Sulfate (mg/L)	11/23/2015 - 07/13/2017	16	0	Non-parametric UPL	300
Total Dissolved Solids (mg/L)	11/23/2015 - 07/13/2017	16	0	Parametric UPL	949

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

TABLE 5
GROUNDWATER PROTECTION STANDARDS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, IL

Parameter	Background					MCL/HBL	Groundwater Protection Standard*	Groundwater Protection Standard Source
	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Value			
Antimony (mg/L)	11/23/2015 - 07/13/2017	16	100	All ND - Last Reporting Limit	0.003	0.006	0.006	MCL/HBL
Arsenic (mg/L)	11/23/2015 - 07/13/2017	16	44	Non-parametric UTL	0.0100	0.010	0.010	MCL/HBL
Barium (mg/L)	11/23/2015 - 07/13/2017	16	0	Parametric UTL (log-transformed)	0.274	2	2	MCL/HBL
Beryllium (mg/L)	11/23/2015 - 07/13/2017	16	88	Non-parametric UTL	0.00670	0.004	0.00670	Background
Cadmium (mg/L)	11/23/2015 - 07/13/2017	16	94	Non-parametric UTL	0.00120	0.005	0.005	MCL/HBL
Chromium (mg/L)	11/23/2015 - 07/13/2017	16	69	Non-parametric UTL	0.0130	0.1	0.1	MCL/HBL
Cobalt (mg/L)	11/23/2015 - 07/13/2017	16	88	Non-parametric UTL	0.00740	0.006	0.00740	Background
Fluoride (mg/L)	11/23/2015 - 07/13/2017	16	0	Parametric UTL	0.524	4.0	4.0	MCL/HBL
Lead (mg/L)	11/23/2015 - 07/13/2017	16	69	Non-parametric UTL	0.0180	0.015	0.0180	Background
Lithium (mg/L)	11/23/2015 - 07/13/2017	16	88	Non-parametric UTL	0.0210	0.04	0.04	MCL/HBL
Mercury (mg/L)	11/23/2015 - 07/13/2017	16	100	All ND - Last Reporting Limit	0.0002	0.002	0.002	MCL/HBL
Molybdenum (mg/L)	11/23/2015 - 07/13/2017	16	81	Non-parametric UTL	0.00690	0.1	0.1	MCL/HBL
Radium 226 + Radium 228 (pCi/L)	11/23/2015 - 07/13/2017	16	0	Parametric UTL (log-transformed)	9.80	5	9.80	Background
Selenium (mg/L)	11/23/2015 - 07/13/2017	16	44	Non-parametric UTL	0.00970	0.05	0.05	MCL/HBL
Thallium (mg/L)	11/23/2015 - 07/13/2017	16	100	All ND - Last Reporting Limit	0.001	0.002	0.002	MCL/HBL

Notes:
 * Groundwater Protection Standard is the higher of the MCL/HBL or background.
 MCL/HBL = maximum contaminant level/health-based level
 mg/L = milligrams per liter
 ND = non-detect
 pCi/L = picoCuries per liter
 UTL = upper tolerance limit

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, IL

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
G206	Antimony, total	mg/L	A1	11/18/2015 - 05/10/2022	11	100	All ND - Last	0.00043	0.006	MCL/HBL
G206	Antimony, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	100	All ND - Last	0.00043	0.006	MCL/HBL
G206	Arsenic, total	mg/L	A1	11/18/2015 - 05/10/2022	11	64	CI around median	0.00100	0.010	MCL/HBL
G206	Arsenic, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	67	CI around median	0.000690	0.010	MCL/HBL
G206	Barium, total	mg/L	A1	11/18/2015 - 05/10/2022	11	0	CI around mean	0.0449	2	MCL/HBL
G206	Barium, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	0	CI around mean	0.0456	2	MCL/HBL
G206	Beryllium, total	mg/L	A1	11/18/2015 - 05/10/2022	11	100	All ND - Last	0.00059	0.00670	Background
G206	Beryllium, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	100	All ND - Last	0.00059	0.00670	Background
G206	Cadmium, total	mg/L	A1	11/18/2015 - 05/10/2022	11	100	All ND - Last	0.00074	0.005	MCL/HBL
G206	Cadmium, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	100	All ND - Last	0.00074	0.005	MCL/HBL
G206	Chromium, total	mg/L	A1	11/18/2015 - 05/10/2022	11	82	CI around median	0.00400	0.1	MCL/HBL
G206	Chromium, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	83	CI around median	0.00280	0.1	MCL/HBL
G206	Cobalt, total	mg/L	A1	11/18/2015 - 05/10/2022	11	100	All ND - Last	0.00048	0.00740	Background
G206	Cobalt, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	100	All ND - Last	0.00078	0.00740	Background
G206	Fluoride, total	mg/L	A1	11/18/2015 - 05/10/2022	19	5	CI around mean	0.381	4.0	MCL/HBL
G206	Fluoride, total	mg/L	A1R	11/18/2015 - 08/23/2022	20	5	CI around mean	0.380	4.0	MCL/HBL
G206	Lead, total	mg/L	A1	11/18/2015 - 05/10/2022	11	91	CI around median	0.00100	0.0180	Background
G206	Lead, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	92	CI around median	0.000350	0.0180	Background
G206	Lithium, total	mg/L	A1	11/18/2015 - 05/10/2022	9	100	All ND - Last	0.0066	0.04	MCL/HBL
G206	Lithium, total	mg/L	A1R	11/18/2015 - 08/23/2022	10	100	All ND - Last	0.005	0.04	MCL/HBL
G206	Mercury, total	mg/L	A1	11/18/2015 - 05/10/2022	11	100	All ND - Last	0.00014	0.002	MCL/HBL
G206	Mercury, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	100	All ND - Last	0.00014	0.002	MCL/HBL
G206	Molybdenum, total	mg/L	A1	11/18/2015 - 05/10/2022	11	45	CI around median	0.00100	0.1	MCL/HBL
G206	Molybdenum, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	50	CB around linear reg	-0.0000797	0.1	MCL/HBL
G206	Radium 226 + Radium 228, total	pCi/L	A1	11/18/2015 - 06/16/2022	9	0	CI around mean	0.534	9.80	Background
G206	Radium 226 + Radium 228, total	pCi/L	A1R	11/18/2015 - 08/23/2022	10	0	CI around mean	0.560	9.80	Background
G206	Selenium, total	mg/L	A1	11/18/2015 - 05/10/2022	11	82	CI around median	0.00100	0.05	MCL/HBL
G206	Selenium, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	83	CI around median	0.00100	0.05	MCL/HBL
G206	Thallium, total	mg/L	A1	11/18/2015 - 05/10/2022	11	100	All ND - Last	0.00038	0.002	MCL/HBL

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, IL

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
G206	Thallium, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	100	All ND - Last	0.00038	0.002	MCL/HBL
G209	Antimony, total	mg/L	A1	11/18/2015 - 05/11/2022	11	100	All ND - Last	0.00043	0.006	MCL/HBL
G209	Antimony, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	100	All ND - Last	0.00043	0.006	MCL/HBL
G209	Arsenic, total	mg/L	A1	11/18/2015 - 05/11/2022	11	27	CI around geomean	0.000956	0.010	MCL/HBL
G209	Arsenic, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	25	CI around geomean	0.00100	0.010	MCL/HBL
G209	Barium, total	mg/L	A1	11/18/2015 - 05/11/2022	11	0	CI around mean	0.0532	2	MCL/HBL
G209	Barium, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	0	CI around mean	0.0537	2	MCL/HBL
G209	Beryllium, total	mg/L	A1	11/18/2015 - 05/11/2022	11	100	All ND - Last	0.00059	0.00670	Background
G209	Beryllium, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	100	All ND - Last	0.00059	0.00670	Background
G209	Cadmium, total	mg/L	A1	11/18/2015 - 05/11/2022	11	100	All ND - Last	0.00074	0.005	MCL/HBL
G209	Cadmium, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	100	All ND - Last	0.00074	0.005	MCL/HBL
G209	Chromium, total	mg/L	A1	11/18/2015 - 05/11/2022	11	100	All ND - Last	0.0028	0.1	MCL/HBL
G209	Chromium, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	100	All ND - Last	0.0028	0.1	MCL/HBL
G209	Cobalt, total	mg/L	A1	11/18/2015 - 05/11/2022	11	100	All ND - Last	0.0016	0.00740	Background
G209	Cobalt, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	100	All ND - Last	0.00048	0.00740	Background
G209	Fluoride, total	mg/L	A1	11/18/2015 - 05/11/2022	19	0	CI around mean	0.394	4.0	MCL/HBL
G209	Fluoride, total	mg/L	A1R	11/18/2015 - 08/23/2022	20	0	CI around mean	0.390	4.0	MCL/HBL
G209	Lead, total	mg/L	A1	11/18/2015 - 05/11/2022	11	91	CI around median	0.00100	0.0180	Background
G209	Lead, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	92	CI around median	0.000610	0.0180	Background
G209	Lithium, total	mg/L	A1	11/18/2015 - 05/11/2022	9	100	All ND - Last	0.0073	0.04	MCL/HBL
G209	Lithium, total	mg/L	A1R	11/18/2015 - 08/23/2022	10	100	All ND - Last	0.005	0.04	MCL/HBL
G209	Mercury, total	mg/L	A1	11/18/2015 - 05/11/2022	11	100	All ND - Last	0.00014	0.002	MCL/HBL
G209	Mercury, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	100	All ND - Last	0.00014	0.002	MCL/HBL
G209	Molybdenum, total	mg/L	A1	11/18/2015 - 05/11/2022	11	18	CI around mean	0.00118	0.1	MCL/HBL
G209	Molybdenum, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	17	CI around mean	0.00123	0.1	MCL/HBL
G209	Radium 226 + Radium 228, total	pCi/L	A1	11/18/2015 - 06/15/2022	9	0	CI around mean	0.404	9.80	Background
G209	Radium 226 + Radium 228, total	pCi/L	A1R	11/18/2015 - 08/23/2022	10	0	CI around mean	0.458	9.80	Background
G209	Selenium, total	mg/L	A1	11/18/2015 - 05/11/2022	11	91	CI around median	0.00100	0.05	MCL/HBL
G209	Selenium, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	92	CI around median	0.000740	0.05	MCL/HBL

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, IL

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
G209	Thallium, total	mg/L	A1	11/18/2015 - 05/11/2022	11	91	Most recent sample	0.00038	0.002	MCL/HBL
G209	Thallium, total	mg/L	A1R	11/18/2015 - 08/23/2022	12	92	Most recent sample	0.00038	0.002	MCL/HBL
G212	Antimony, total	mg/L	A1	11/18/2015 - 05/11/2022	11	100	All ND - Last	0.00043	0.006	MCL/HBL
G212	Antimony, total	mg/L	A1R	11/18/2015 - 08/24/2022	12	100	All ND - Last	0.00043	0.006	MCL/HBL
G212	Arsenic, total	mg/L	A1	11/18/2015 - 05/11/2022	11	91	Most recent sample	0.00069	0.010	MCL/HBL
G212	Arsenic, total	mg/L	A1R	11/18/2015 - 08/24/2022	12	92	Most recent sample	0.00069	0.010	MCL/HBL
G212	Barium, total	mg/L	A1	11/18/2015 - 05/11/2022	11	0	CI around mean	0.0479	2	MCL/HBL
G212	Barium, total	mg/L	A1R	11/18/2015 - 08/24/2022	12	0	CI around mean	0.0476	2	MCL/HBL
G212	Beryllium, total	mg/L	A1	11/18/2015 - 05/11/2022	11	100	All ND - Last	0.00059	0.00670	Background
G212	Beryllium, total	mg/L	A1R	11/18/2015 - 08/24/2022	12	100	All ND - Last	0.00059	0.00670	Background
G212	Cadmium, total	mg/L	A1	11/18/2015 - 05/11/2022	11	100	All ND - Last	0.00074	0.005	MCL/HBL
G212	Cadmium, total	mg/L	A1R	11/18/2015 - 08/24/2022	12	100	All ND - Last	0.00074	0.005	MCL/HBL
G212	Chromium, total	mg/L	A1	11/18/2015 - 05/11/2022	11	91	Most recent sample	0.0028	0.1	MCL/HBL
G212	Chromium, total	mg/L	A1R	11/18/2015 - 08/24/2022	12	92	Most recent sample	0.0028	0.1	MCL/HBL
G212	Cobalt, total	mg/L	A1	11/18/2015 - 05/11/2022	11	100	All ND - Last	0.00048	0.00740	Background
G212	Cobalt, total	mg/L	A1R	11/18/2015 - 08/24/2022	12	100	All ND - Last	0.00048	0.00740	Background
G212	Fluoride, total	mg/L	A1	11/18/2015 - 05/11/2022	18	11	CI around median	0.322	4.0	MCL/HBL
G212	Fluoride, total	mg/L	A1R	11/18/2015 - 08/24/2022	19	11	CI around median	0.289	4.0	MCL/HBL
G212	Lead, total	mg/L	A1	11/18/2015 - 05/11/2022	11	82	CI around median	0.00100	0.0180	Background
G212	Lead, total	mg/L	A1R	11/18/2015 - 08/24/2022	12	83	CI around median	0.000220	0.0180	Background
G212	Lithium, total	mg/L	A1	11/18/2015 - 05/11/2022	9	100	All ND - Last	0.0063	0.04	MCL/HBL
G212	Lithium, total	mg/L	A1R	11/18/2015 - 08/24/2022	10	100	All ND - Last	0.005	0.04	MCL/HBL
G212	Mercury, total	mg/L	A1	11/18/2015 - 05/11/2022	11	100	All ND - Last	0.00014	0.002	MCL/HBL
G212	Mercury, total	mg/L	A1R	11/18/2015 - 08/24/2022	12	100	All ND - Last	0.00014	0.002	MCL/HBL
G212	Molybdenum, total	mg/L	A1	11/18/2015 - 05/11/2022	11	73	CI around median	0.00100	0.1	MCL/HBL
G212	Molybdenum, total	mg/L	A1R	11/18/2015 - 08/24/2022	12	75	CI around median	0.000740	0.1	MCL/HBL
G212	Radium 226 + Radium 228, total	pCi/L	A1	11/18/2015 - 06/15/2022	9	0	CI around mean	0.358	9.80	Background
G212	Radium 226 + Radium 228, total	pCi/L	A1R	11/18/2015 - 08/24/2022	10	0	CI around mean	0.414	9.80	Background
G212	Selenium, total	mg/L	A1	11/18/2015 - 05/11/2022	11	0	CI around mean	0.00265	0.05	MCL/HBL

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, IL

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
G212	Selenium, total	mg/L	A1R	11/18/2015 - 08/24/2022	12	8	CI around mean	0.00224	0.05	MCL/HBL
G212	Thallium, total	mg/L	A1	11/18/2015 - 05/11/2022	11	100	All ND - Last	0.00038	0.002	MCL/HBL
G212	Thallium, total	mg/L	A1R	11/18/2015 - 08/24/2022	12	100	All ND - Last	0.00038	0.002	MCL/HBL
G215	Antimony, total	mg/L	A1	11/24/2015 - 05/11/2022	11	91	CI around median	0.00300	0.006	MCL/HBL
G215	Antimony, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	92	CI around median	0.000430	0.006	MCL/HBL
G215	Arsenic, total	mg/L	A1	11/24/2015 - 05/11/2022	11	0	CI around geomean	0.00536	0.010	MCL/HBL
G215	Arsenic, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	0	CI around geomean	0.00538	0.010	MCL/HBL
G215	Barium, total	mg/L	A1	11/24/2015 - 05/11/2022	11	0	CI around mean	0.0643	2	MCL/HBL
G215	Barium, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	0	CI around mean	0.0608	2	MCL/HBL
G215	Beryllium, total	mg/L	A1	11/24/2015 - 05/11/2022	11	100	All ND - Last	0.00059	0.00670	Background
G215	Beryllium, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	100	All ND - Last	0.00059	0.00670	Background
G215	Cadmium, total	mg/L	A1	11/24/2015 - 05/11/2022	11	100	All ND - Last	0.00074	0.005	MCL/HBL
G215	Cadmium, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	100	All ND - Last	0.00074	0.005	MCL/HBL
G215	Chromium, total	mg/L	A1	11/24/2015 - 05/11/2022	11	100	All ND - Last	0.0028	0.1	MCL/HBL
G215	Chromium, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	100	All ND - Last	0.0028	0.1	MCL/HBL
G215	Cobalt, total	mg/L	A1	11/24/2015 - 05/11/2022	11	91	CI around median	0.00200	0.00740	Background
G215	Cobalt, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	92	CI around median	0.000510	0.00740	Background
G215	Fluoride, total	mg/L	A1	11/24/2015 - 05/11/2022	19	16	CI around mean	0.326	4.0	MCL/HBL
G215	Fluoride, total	mg/L	A1R	11/24/2015 - 08/23/2022	20	20	CI around mean	0.320	4.0	MCL/HBL
G215	Lead, total	mg/L	A1	11/24/2015 - 05/11/2022	11	91	CI around median	0.00100	0.0180	Background
G215	Lead, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	92	CI around median	0.000220	0.0180	Background
G215	Lithium, total	mg/L	A1	11/24/2015 - 05/11/2022	9	100	All ND - Last	0.0052	0.04	MCL/HBL
G215	Lithium, total	mg/L	A1R	11/24/2015 - 08/23/2022	10	100	All ND - Last	0.0081	0.04	MCL/HBL
G215	Mercury, total	mg/L	A1	11/24/2015 - 05/11/2022	11	100	All ND - Last	0.00014	0.002	MCL/HBL
G215	Mercury, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	100	All ND - Last	0.00014	0.002	MCL/HBL
G215	Molybdenum, total	mg/L	A1	11/24/2015 - 05/11/2022	11	91	CI around median	0.00100	0.1	MCL/HBL
G215	Molybdenum, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	92	CI around median	0.000740	0.1	MCL/HBL
G215	Radium 226 + Radium 228, total	pCi/L	A1	11/24/2015 - 06/15/2022	9	0	CI around mean	0.258	9.80	Background
G215	Radium 226 + Radium 228, total	pCi/L	A1R	11/24/2015 - 08/23/2022	10	0	CI around mean	0.352	9.80	Background

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, IL

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
G215	Selenium, total	mg/L	A1	11/24/2015 - 05/11/2022	11	91	CI around median	0.00100	0.05	MCL/HBL
G215	Selenium, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	92	CI around median	0.000740	0.05	MCL/HBL
G215	Thallium, total	mg/L	A1	11/24/2015 - 05/11/2022	11	100	All ND - Last	0.00038	0.002	MCL/HBL
G215	Thallium, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	100	All ND - Last	0.00038	0.002	MCL/HBL
G218	Antimony, total	mg/L	A1	11/24/2015 - 05/10/2022	11	100	All ND - Last	0.00043	0.006	MCL/HBL
G218	Antimony, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	100	All ND - Last	0.00043	0.006	MCL/HBL
G218	Arsenic, total	mg/L	A1	11/24/2015 - 05/10/2022	11	18	CI around geomean	0.000993	0.010	MCL/HBL
G218	Arsenic, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	17	CI around geomean	0.00101	0.010	MCL/HBL
G218	Barium, total	mg/L	A1	11/24/2015 - 05/10/2022	11	0	CI around mean	0.131	2	MCL/HBL
G218	Barium, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	0	CI around mean	0.124	2	MCL/HBL
G218	Beryllium, total	mg/L	A1	11/24/2015 - 05/10/2022	11	100	All ND - Last	0.00059	0.00670	Background
G218	Beryllium, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	100	All ND - Last	0.00059	0.00670	Background
G218	Cadmium, total	mg/L	A1	11/24/2015 - 05/10/2022	11	100	All ND - Last	0.00074	0.005	MCL/HBL
G218	Cadmium, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	100	All ND - Last	0.00074	0.005	MCL/HBL
G218	Chromium, total	mg/L	A1	11/24/2015 - 05/10/2022	11	91	CI around median	0.00400	0.1	MCL/HBL
G218	Chromium, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	92	CI around median	0.00300	0.1	MCL/HBL
G218	Cobalt, total	mg/L	A1	11/24/2015 - 05/10/2022	11	100	All ND - Last	0.00078	0.00740	Background
G218	Cobalt, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	100	All ND - Last	0.0007	0.00740	Background
G218	Fluoride, total	mg/L	A1	11/24/2015 - 05/10/2022	19	11	CI around mean	0.290	4.0	MCL/HBL
G218	Fluoride, total	mg/L	A1R	11/24/2015 - 08/23/2022	20	15	CI around mean	0.276	4.0	MCL/HBL
G218	Lead, total	mg/L	A1	11/24/2015 - 05/10/2022	11	100	All ND - Last	0.00066	0.0180	Background
G218	Lead, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	100	All ND - Last	0.00022	0.0180	Background
G218	Lithium, total	mg/L	A1	11/24/2015 - 05/10/2022	9	100	All ND - Last	0.014	0.04	MCL/HBL
G218	Lithium, total	mg/L	A1R	11/24/2015 - 08/23/2022	10	100	All ND - Last	0.005	0.04	MCL/HBL
G218	Mercury, total	mg/L	A1	11/24/2015 - 05/10/2022	11	100	All ND - Last	0.00014	0.002	MCL/HBL
G218	Mercury, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	100	All ND - Last	0.00014	0.002	MCL/HBL
G218	Molybdenum, total	mg/L	A1	11/24/2015 - 05/10/2022	11	91	CI around median	0.00100	0.1	MCL/HBL
G218	Molybdenum, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	92	CI around median	0.000740	0.1	MCL/HBL
G218	Radium 226 + Radium 228, total	pCi/L	A1	11/24/2015 - 06/15/2022	9	0	CI around mean	0.627	9.80	Background

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 103 - GMF GYPSUM STACK POND
 COFFEEN, IL

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
G218	Radium 226 + Radium 228, total	pCi/L	A1R	11/24/2015 - 08/23/2022	10	0	CI around mean	0.671	9.80	Background
G218	Selenium, total	mg/L	A1	11/24/2015 - 05/10/2022	11	100	All ND - Last	0.00074	0.05	MCL/HBL
G218	Selenium, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	100	All ND - Last	0.00074	0.05	MCL/HBL
G218	Thallium, total	mg/L	A1	11/24/2015 - 05/10/2022	11	100	All ND - Last	0.00038	0.002	MCL/HBL
G218	Thallium, total	mg/L	A1R	11/24/2015 - 08/23/2022	12	100	All ND - Last	0.00038	0.002	MCL/HBL

Notes:

mg/L = milligrams per liter

pCi/L = picocuries per liter

Sample Count = number of samples from Sampled Date Range used to calculate the Statistical Result

Statistical Calculation = method used to calculate the statistical result:

All ND - Last = All results were below the reporting limit, and the last determined reporting limit is shown

CB around linear reg = Confidence band around linear regression

CI around geomean = Confidence interval around the geometric mean

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

Most recent sample = Result for the most recently collected sample used due to insufficient data

Statistical Result = calculated in accordance with Statistical Analysis Plan using constituent concentrations observed at monitoring well during all sampling events within the specified date range

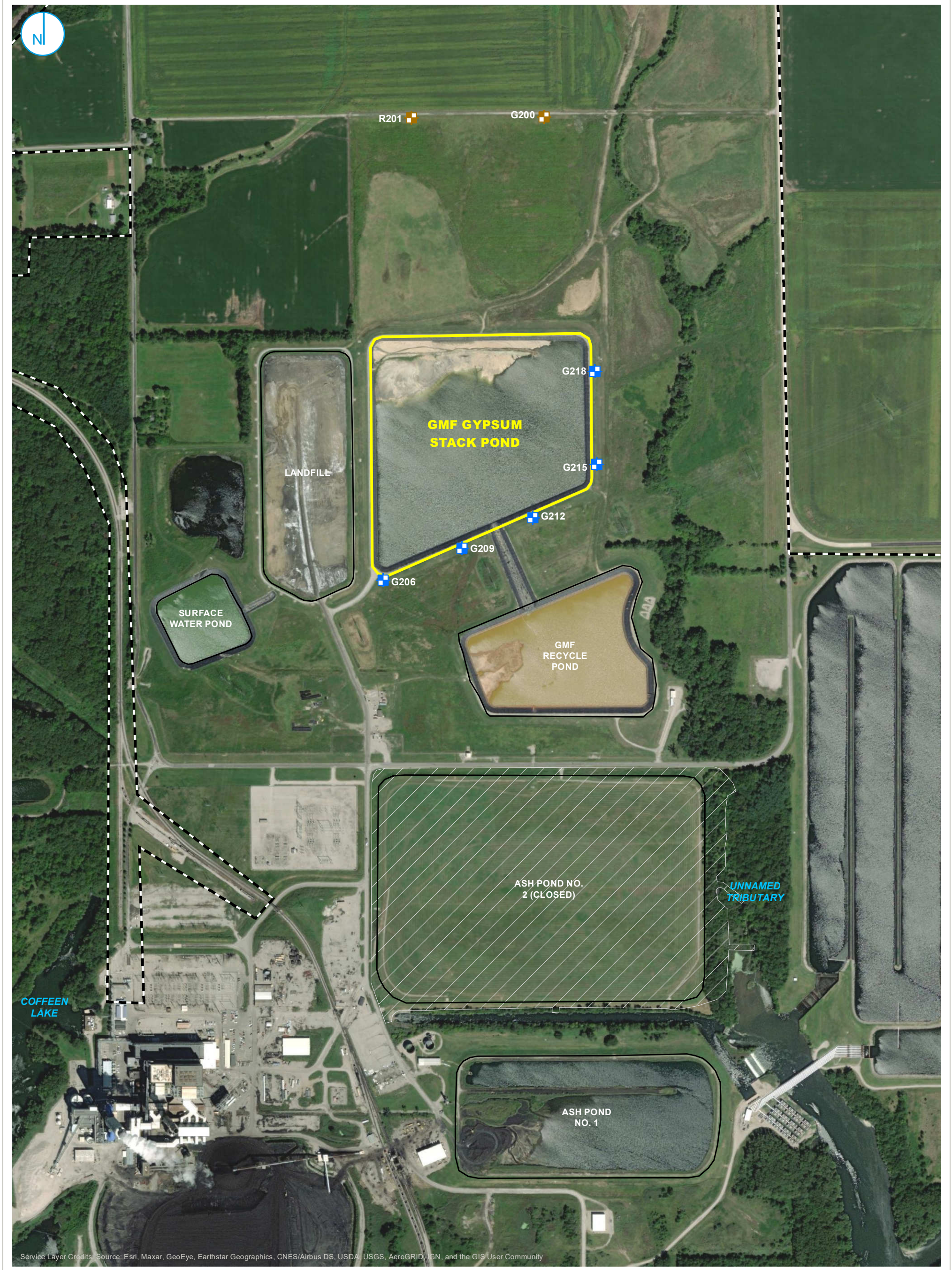
GWPS = Groundwater Protection Standard

GWPS Source:

MCL/HBL = maximum contaminant level/health-based level

Background = background concentration

FIGURES



Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- BACKGROUND WELL
- COMPLIANCE WELL
- 40 C.F.R. § 257 REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- LIMITS OF FINAL COVER
- PROPERTY BOUNDARY

MONITORING WELL LOCATION MAP

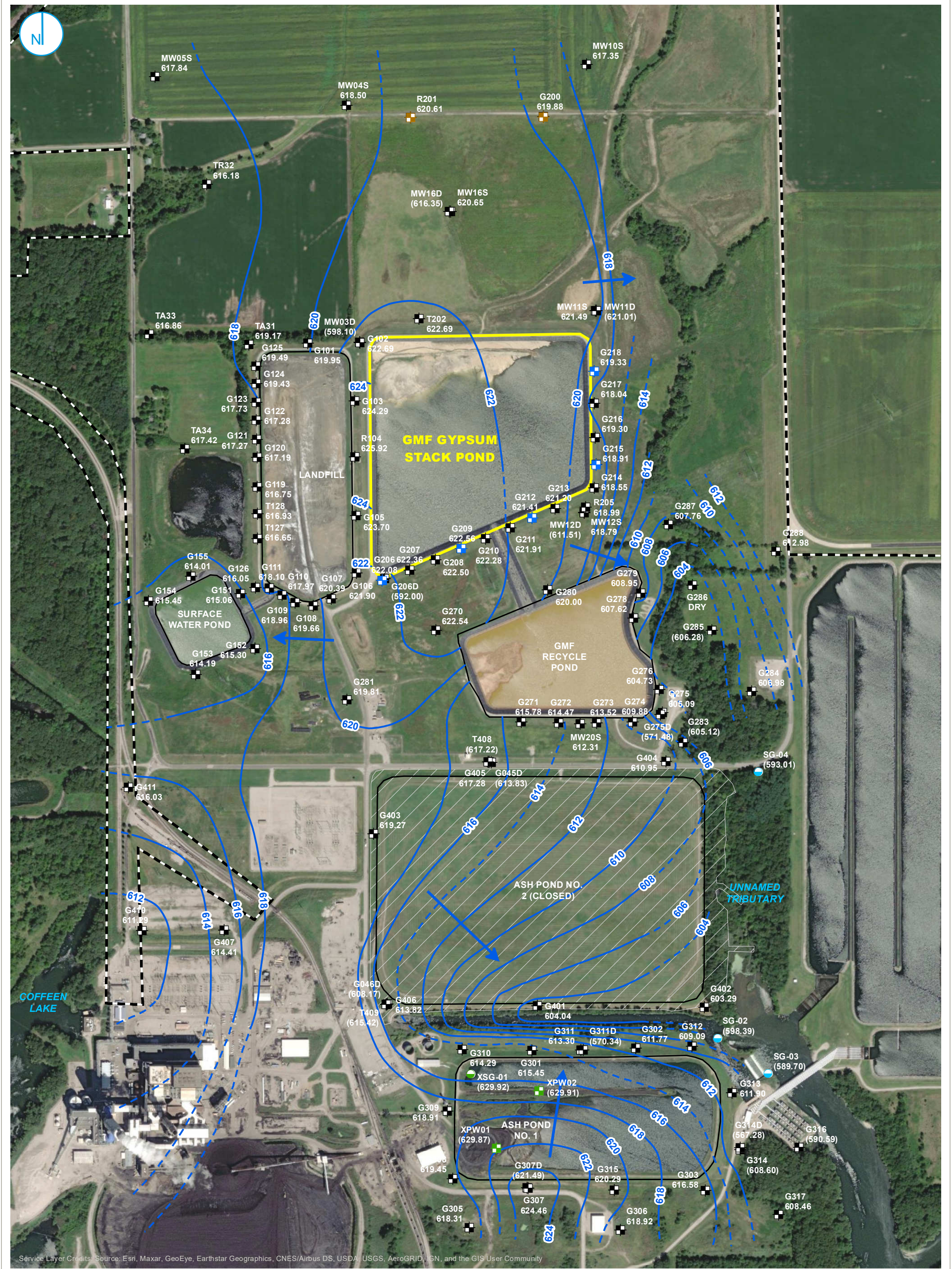
FIGURE 1

0 275 550 Feet

2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
GMF GYPSUM STACK POND
 COFFEEN POWER PLANT
 COFFEEN, ILLINOIS

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.





Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

	BACKGROUND WELL		GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
	COMPLIANCE WELL		INFERRED GROUNDWATER ELEVATION CONTOUR
	PORE WATER WELL		GROUNDWATER FLOW DIRECTION
	MONITORING WELL		40 C.F.R. § 257 REGULATED UNIT (SUBJECT UNIT)
	STAFF GAGE, CCR UNIT		SITE FEATURE
	STAFF GAGE, RIVER		LIMITS OF FINAL COVER
			PROPERTY BOUNDARY

NOTE:
ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
NM = NOT MEASURED

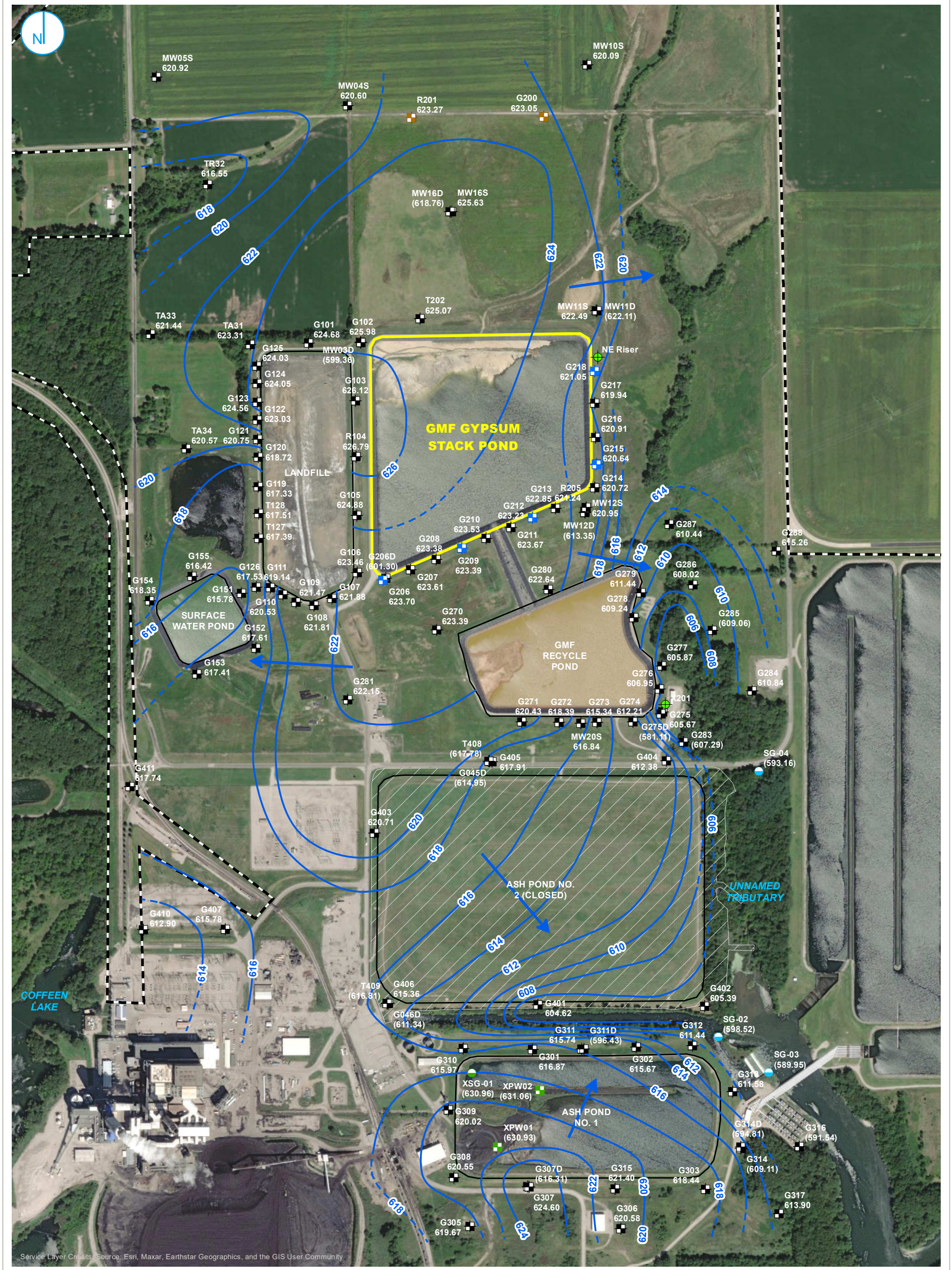
POTENTIOMETRIC SURFACE MAP AUGUST 16, 2021

FIGURE 2

2022 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF GYPSUM STACK POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





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

- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- LEACHATE WELL
- MONITORING WELL
- STAFF GAGE, CCR UNIT
- STAFF GAGE, RIVER
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
- - - INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- 40 C.F.R. § 257 REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- LIMITS OF FINAL COVER
- PROPERTY BOUNDARY

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



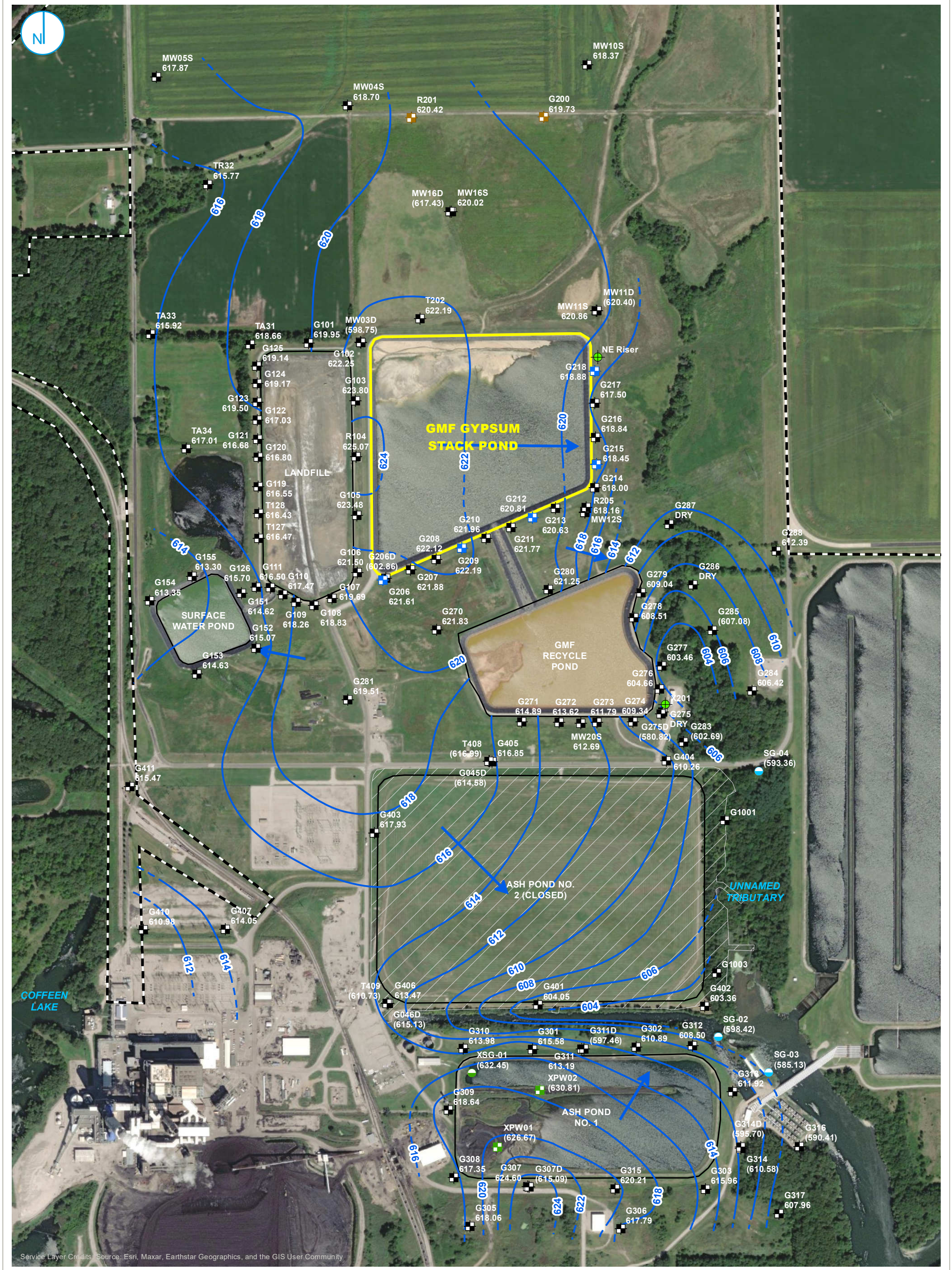
**POTENTIOMETRIC SURFACE MAP
MAY 9, 2022**

FIGURE 3

**2022 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF GYPSUM STACK POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS**

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





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

- BACKGROUND WELL
- COMPLIANCE WELL
- PORE WATER WELL
- LEACHATE WELL
- MONITORING WELL
- STAFF GAGE, CCR UNIT
- STAFF GAGE, RIVER
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- 40 C.F.R. § 257 REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- LIMITS OF FINAL COVER
- PROPERTY BOUNDARY

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 23, 2022**

FIGURE 4

**2022 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
GMF GYPSUM STACK POND
COFFEEN POWER PLANT
COFFEEN, ILLINOIS**

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



APPENDICES

**APPENDIX A
LABORATORY REPORTS**



September 27, 2021

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

Dear Steve Wiskes:

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 PDC Laboratories, Inc.

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

PDC Laboratories, Inc. 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.

Sincerely,

David G. Schindler

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





SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order EH04476

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
YES	Zero headspace, <6 mm present in VOA vials
YES	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



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 EH04994

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

Total Dissolved Solids was originally set within hold time but the weigh back did not meet QC acceptance criteria . The sample was reset one day out of hold time and is flagged with an H qualifier.





ANALYTICAL RESULTS

Sample: EH04476-01
Name: G200
Alias: UNIT 103

Sampled: 08/18/21 12:19
Received: 08/19/21 16:45
Matrix: Ground Water - Grab
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Anions - PIA (Chloride, Sulfate), Field - PIA (Depth, Dissolved oxygen, etc.), General Chemistry - PIA (Alkalinity, Fluoride, etc.), and Total Metals - PIA (Boron, Calcium, etc.).



ANALYTICAL RESULTS

Sample: EH04476-02
Name: G200 DUPLICATE
Alias: UNIT 103

Sampled: 08/18/21 12:19
Received: 08/19/21 16:45
Matrix: Ground Water - Field Duplicate
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Anions - PIA (Chloride, Fluoride, Sulfate), Field - PIA (Depth, Dissolved oxygen, etc.), General Chemistry - PIA (Alkalinity, Solids), and Total Metals - PIA (Boron, Calcium, Magnesium, Potassium, Sodium).



ANALYTICAL RESULTS

Sample: EH04476-03
Name: R201
Alias: UNIT 103

Sampled: 08/18/21 10:59
Received: 08/19/21 16:45
Matrix: Ground Water - Grab
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Anions - PIA (Chloride, Fluoride, Sulfate), Field - PIA (Depth, Dissolved oxygen, etc.), General Chemistry - PIA (Alkalinity, Solids), and Total Metals - PIA (Boron, Calcium, Magnesium, Potassium, Sodium).



ANALYTICAL RESULTS

Sample: EH04624-01
Name: R205
Alias: COFFEEN GYPSUM STACK

Sampled: 08/19/21 13:25
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	170	mg/L		08/30/21 11:38	50	50	08/30/21 11:38	CRD	EPA 300.0 REV 2.1
Fluoride	0.566	mg/L		08/30/21 11:20	1	0.250	08/30/21 11:20	CRD	EPA 300.0 REV 2.1
Sulfate	220	mg/L		08/30/21 11:38	50	50	08/30/21 11:38	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
BTM Well Elv	607.33	Feet		08/19/21 13:25	1		08/19/21 13:25	FIELD	Field*
Depth of Water (ft below LS)	17.19	Feet		08/19/21 13:25	1	-25	08/19/21 13:25	FIELD	Field*
Depth, From Measuring Point	6.03	Feet		08/19/21 13:25	1		08/19/21 13:25	FIELD	Field*
Elevation of Measuring Point (TOC)	624.52	Feet		08/19/21 13:25	1		08/19/21 13:25	FIELD	Field*
pH, Field Measured	6.81	pH Units		08/19/21 13:25	1		08/19/21 13:25	FIELD	Field*
Specific Conductance, Field Measured	1529	umhos/cm		08/19/21 13:25	1		08/19/21 13:25	FIELD	Field*
Temperature, Field Measured	67.8	°F		08/19/21 13:25	1		08/19/21 13:25	FIELD	Field*
Elevation of GW	618.49	Feet		08/19/21 13:25	1		08/19/21 13:25	FIELD	Field*
<u>General Chemistry - PIA</u>									
Cyanide	< 0.0050	mg/L		08/23/21 12:17	1	0.0050	08/23/21 12:17	AMM	ASTM D7511-09e2
Phenolics	< 5.0	ug/L		08/26/21 16:11	1	5.0	08/27/21 12:43	CRS1	EPA 420.4 Rev1
<u>Soluble Anions - PIA</u>									
Chloride, Dissolved	190	mg/L		08/30/21 10:01	50	50	08/30/21 10:01	CRD	EPA 300.0 REV 2.1
Fluoride, Dissolved	0.48	mg/L		08/30/21 09:45	1	0.25	08/30/21 09:45	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	220	mg/L		08/30/21 10:01	50	50	08/30/21 10:01	CRD	EPA 300.0 REV 2.1
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	1100	mg/L		08/24/21 13:22	1	26	08/24/21 16:02	JAA/BCR	SM 2540C
<u>Soluble Metals - PIA</u>									
Aluminum, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/14/21 13:03	JMW	EPA 6020A
Antimony, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 13:03	JMW	EPA 6020A
Arsenic, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:03	JMW	EPA 6020A
Barium, Dissolved	81	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:03	JMW	EPA 6020A
Beryllium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/15/21 09:02	JMW	EPA 6020A
Boron, Dissolved	14	ug/L		09/14/21 05:33	5	10	09/15/21 09:02	JMW	EPA 6020A
Cadmium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:03	JMW	EPA 6020A
Chromium, Dissolved	< 4.0	ug/L		09/14/21 05:33	5	4.0	09/14/21 13:03	JMW	EPA 6020A
Cobalt, Dissolved	< 2.0	ug/L		09/14/21 05:33	5	2.0	09/14/21 13:03	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-01
Name: R205
Alias: COFFEEN GYPSUM STACK

Sampled: 08/19/21 13:25
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.

Total Metals - PIA

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.



ANALYTICAL RESULTS

Sample: EH04624-02
Name: G206
Alias: COFFEEN GYPSUM STACK

Sampled: 08/20/21 11:25
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	21	mg/L		08/30/21 12:15	10	10	08/30/21 12:15	CRD	EPA 300.0 REV 2.1
Fluoride	0.643	mg/L		08/30/21 11:56	1	0.250	08/30/21 11:56	CRD	EPA 300.0 REV 2.1
Sulfate	130	mg/L		08/30/21 13:09	100	100	08/30/21 13:09	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
BTM Well Elv	607.98	Feet		08/20/21 11:25	1		08/20/21 11:25	FIELD	Field*
Depth of Water (ft below LS)	24.84	Feet		08/20/21 11:25	1	-25	08/20/21 11:25	FIELD	Field*
Depth, From Measuring Point	11.14	Feet		08/20/21 11:25	1		08/20/21 11:25	FIELD	Field*
Elevation of Measuring Point (TOC)	632.82	Feet		08/20/21 11:25	1		08/20/21 11:25	FIELD	Field*
pH, Field Measured	7.20	pH Units		08/20/21 11:25	1		08/20/21 11:25	FIELD	Field*
Specific Conductance, Field Measured	814.0	umhos/cm		08/20/21 11:25	1		08/20/21 11:25	FIELD	Field*
Temperature, Field Measured	69.0	°F		08/20/21 11:25	1		08/20/21 11:25	FIELD	Field*
Elevation of GW	621.68	Feet		08/20/21 11:25	1		08/20/21 11:25	FIELD	Field*
<u>General Chemistry - PIA</u>									
Cyanide	< 0.0050	mg/L		08/23/21 12:19	1	0.0050	08/23/21 12:19	AMM	ASTM D7511-09e2
Phenolics	< 5.0	ug/L		08/26/21 16:11	1	5.0	08/27/21 12:44	CRS1	EPA 420.4 Rev1
<u>Soluble Anions - PIA</u>									
Chloride, Dissolved	22	mg/L		08/30/21 10:33	10	10	08/30/21 10:33	CRD	EPA 300.0 REV 2.1
Fluoride, Dissolved	0.51	mg/L		08/30/21 10:17	1	0.25	08/30/21 10:17	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	140	mg/L		08/30/21 10:49	100	100	08/30/21 10:49	CRD	EPA 300.0 REV 2.1
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	560	mg/L		08/24/21 13:45	1	26	08/25/21 10:45	JAA	SM 2540C
<u>Soluble Metals - PIA</u>									
Aluminum, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/14/21 13:19	JMW	EPA 6020A
Antimony, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 13:19	JMW	EPA 6020A
Arsenic, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:19	JMW	EPA 6020A
Barium, Dissolved	48	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:19	JMW	EPA 6020A
Beryllium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:19	JMW	EPA 6020A
Boron, Dissolved	10	ug/L		09/14/21 05:33	5	10	09/15/21 09:06	JMW	EPA 6020A
Cadmium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:19	JMW	EPA 6020A
Chromium, Dissolved	< 4.0	ug/L		09/14/21 05:33	5	4.0	09/14/21 13:19	JMW	EPA 6020A
Cobalt, Dissolved	< 2.0	ug/L		09/14/21 05:33	5	2.0	09/14/21 13:19	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-02
Name: G206
Alias: COFFEEN GYPSUM STACK

Sampled: 08/20/21 11:25
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.

Total Metals - PIA

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.



ANALYTICAL RESULTS

Sample: EH04624-03
Name: G207
Alias: COFFEEN GYPSUM STACK

Sampled: 08/20/21 12:30
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	170	mg/L		08/27/21 01:50	25	25	08/27/21 01:50	crd	EPA 300.0 REV 2.1
Fluoride	0.708	mg/L		08/27/21 00:56	1	0.250	08/27/21 00:56	crd	EPA 300.0 REV 2.1
Sulfate	180	mg/L		08/27/21 01:50	25	25	08/27/21 01:50	crd	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
BTM Well Elv	607.13	Feet		08/20/21 12:30	1		08/20/21 12:30	FIELD	Field*
Depth of Water (ft below LS)	26.08	Feet		08/20/21 12:30	1	-25	08/20/21 12:30	FIELD	Field*
Depth, From Measuring Point	11.24	Feet		08/20/21 12:30	1		08/20/21 12:30	FIELD	Field*
Elevation of Measuring Point (TOC)	633.21	Feet		08/20/21 12:30	1		08/20/21 12:30	FIELD	Field*
pH, Field Measured	7.33	pH Units		08/20/21 12:30	1		08/20/21 12:30	FIELD	Field*
Specific Conductance, Field Measured	596.0	umhos/cm		08/20/21 12:30	1		08/20/21 12:30	FIELD	Field*
Temperature, Field Measured	70.5	°F		08/20/21 12:30	1		08/20/21 12:30	FIELD	Field*
Elevation of GW	621.97	Feet		08/20/21 12:30	1		08/20/21 12:30	FIELD	Field*
<u>General Chemistry - PIA</u>									
Cyanide	< 0.0050	mg/L	Q3	08/24/21 08:43	1	0.0050	08/24/21 12:51	CRS1	EPA 335.4 REV1
Phenolics	< 5.0	ug/L		08/26/21 16:11	1	5.0	08/27/21 12:45	CRS1	EPA 420.4 Rev1
<u>Soluble Anions - PIA</u>									
Chloride, Dissolved	69	mg/L		08/30/21 11:21	10	10	08/30/21 11:21	CRD	EPA 300.0 REV 2.1
Fluoride, Dissolved	0.57	mg/L		08/30/21 11:05	1	0.25	08/30/21 11:05	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	78	mg/L		08/30/21 11:21	10	10	08/30/21 11:21	CRD	EPA 300.0 REV 2.1
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	430	mg/L		08/24/21 13:45	1	26	08/25/21 10:45	JAA	SM 2540C
<u>Soluble Metals - PIA</u>									
Aluminum, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/14/21 13:23	JMW	EPA 6020A
Antimony, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 13:23	JMW	EPA 6020A
Arsenic, Dissolved	1.7	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:23	JMW	EPA 6020A
Barium, Dissolved	64	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:23	JMW	EPA 6020A
Beryllium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:23	JMW	EPA 6020A
Boron, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/15/21 09:23	JMW	EPA 6020A
Cadmium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:23	JMW	EPA 6020A
Chromium, Dissolved	< 4.0	ug/L		09/14/21 05:33	5	4.0	09/14/21 13:23	JMW	EPA 6020A
Cobalt, Dissolved	< 2.0	ug/L		09/14/21 05:33	5	2.0	09/14/21 13:23	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-03
Name: G207
Alias: COFFEEN GYPSUM STACK

Sampled: 08/20/21 12:30
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.

Total Metals - PIA

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.



ANALYTICAL RESULTS

Sample: EH04624-04
Name: G208
Alias: COFFEEN GYPSUM STACK

Sampled: 08/20/21 11:31
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	30	mg/L		08/30/21 13:45	5	5.0	08/30/21 13:45	CRD	EPA 300.0 REV 2.1
Fluoride	0.585	mg/L		09/03/21 19:56	1	0.250	09/03/21 19:56	CRD	EPA 300.0 REV 2.1
Sulfate	35	mg/L		08/30/21 13:45	5	5.0	08/30/21 13:45	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
BTM Well Elv	607.81	Feet		08/20/21 11:31	1		08/20/21 11:31	FIELD	Field*
Depth of Water (ft below LS)	25.35	Feet		08/20/21 11:31	1	-25	08/20/21 11:31	FIELD	Field*
Depth, From Measuring Point	10.86	Feet		08/20/21 11:31	1		08/20/21 11:31	FIELD	Field*
Elevation of Measuring Point (TOC)	633.16	Feet		08/20/21 11:31	1		08/20/21 11:31	FIELD	Field*
pH, Field Measured	7.40	pH Units		08/20/21 11:31	1		08/20/21 11:31	FIELD	Field*
Specific Conductance, Field Measured	445.0	umhos/cm		08/20/21 11:31	1		08/20/21 11:31	FIELD	Field*
Temperature, Field Measured	71.1	°F		08/20/21 11:31	1		08/20/21 11:31	FIELD	Field*
Elevation of GW	622.3	Feet		08/20/21 11:31	1		08/20/21 11:31	FIELD	Field*
<u>General Chemistry - PIA</u>									
Cyanide	< 0.0050	mg/L		08/24/21 08:43	1	0.0050	08/24/21 13:31	CRS1	EPA 335.4 REV1
Phenolics	< 5.0	ug/L		08/26/21 16:11	1	5.0	08/27/21 12:16	CRS1	EPA 420.4 Rev1
<u>Soluble Anions - PIA</u>									
Chloride, Dissolved	32	mg/L		08/30/21 11:53	5	5.0	08/30/21 11:53	CRD	EPA 300.0 REV 2.1
Fluoride, Dissolved	0.55	mg/L		08/30/21 11:37	1	0.25	08/30/21 11:37	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	36	mg/L		08/30/21 11:53	5	5.0	08/30/21 11:53	CRD	EPA 300.0 REV 2.1
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	290	mg/L		08/24/21 13:22	1	26	08/24/21 16:02	JAA/BCR	SM 2540C
<u>Soluble Metals - PIA</u>									
Aluminum, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/14/21 13:26	JMW	EPA 6020A
Antimony, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 13:26	JMW	EPA 6020A
Arsenic, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:26	JMW	EPA 6020A
Barium, Dissolved	91	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:26	JMW	EPA 6020A
Beryllium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:26	JMW	EPA 6020A
Boron, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/15/21 09:26	JMW	EPA 6020A
Cadmium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:26	JMW	EPA 6020A
Chromium, Dissolved	< 4.0	ug/L		09/14/21 05:33	5	4.0	09/14/21 13:26	JMW	EPA 6020A
Cobalt, Dissolved	< 2.0	ug/L		09/14/21 05:33	5	2.0	09/14/21 13:26	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-04
Name: G208
Alias: COFFEEN GYPSUM STACK

Sampled: 08/20/21 11:31
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Copper, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 13:26	JMW	EPA 6020A
Iron, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/14/21 13:26	JMW	EPA 6020A*
Lead, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:26	JMW	EPA 6020A
Manganese, Dissolved	3.2	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:26	JMW	EPA 6020A
Mercury, Dissolved	< 0.20	ug/L		09/14/21 05:33	5	0.20	09/14/21 13:26	JMW	EPA 6020A
Molybdenum, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:26	JMW	EPA 6020A
Nickel, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:26	JMW	EPA 6020A
Selenium, Dissolved	6.5	ug/L		09/07/21 10:25	1	1.0	09/07/21 14:27	JMW	EPA 6020A
Silver, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:26	JMW	EPA 6020A
Thallium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:26	JMW	EPA 6020A
Vanadium, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:26	JMW	EPA 6020A
Zinc, Dissolved	< 6.0	ug/L		09/14/21 05:33	5	6.0	09/14/21 13:26	JMW	EPA 6020A

Total Metals - PIA

Aluminum	350	ug/L		08/25/21 16:48	5	20	09/02/21 13:14	JMW	EPA 6020A
Antimony	< 3.0	ug/L		08/25/21 16:48	5	3.0	09/02/21 13:14	JMW	EPA 6020A
Arsenic	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:14	JMW	EPA 6020A
Barium	97	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:14	JMW	EPA 6020A
Beryllium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:14	JMW	EPA 6020A
Boron	< 10	ug/L		08/25/21 16:48	5	10	09/02/21 13:14	JMW	EPA 6020A
Cadmium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:14	JMW	EPA 6020A
Chromium	< 4.0	ug/L		08/25/21 16:48	5	4.0	09/02/21 13:14	JMW	EPA 6020A
Cobalt	< 2.0	ug/L		08/25/21 16:48	5	2.0	09/02/21 13:14	JMW	EPA 6020A
Copper	< 3.0	ug/L		08/25/21 16:48	5	3.0	09/02/21 13:14	JMW	EPA 6020A
Iron	940	ug/L		08/25/21 16:48	5	10	09/02/21 13:14	JMW	EPA 6020A*
Lead	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:14	JMW	EPA 6020A
Manganese	32	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:14	JMW	EPA 6020A
Mercury	< 0.20	ug/L		08/25/21 16:48	5	0.20	09/02/21 13:14	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:14	JMW	EPA 6020A
Nickel	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:14	JMW	EPA 6020A
Selenium	6.0	ug/L		08/25/21 16:48	5	1.0	09/03/21 13:11	KMC	EPA 6020A
Silver	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:14	JMW	EPA 6020A
Thallium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:14	JMW	EPA 6020A
Vanadium	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:14	JMW	EPA 6020A
Zinc	< 6.0	ug/L		08/25/21 16:48	5	6.0	09/02/21 13:14	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-05
Name: G209
Alias: COFFEEN GYPSUM STACK

Sampled: 08/20/21 09:49
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include sections for Anions - PIA, Field - PIA, General Chemistry - PIA, Soluble Anions - PIA, Soluble General Chemistry - PIA, and Soluble Metals - PIA.



ANALYTICAL RESULTS

Sample: EH04624-05
Name: G209
Alias: COFFEEN GYPSUM STACK

Sampled: 08/20/21 09:49
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Copper, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 13:30	JMW	EPA 6020A
Iron, Dissolved	1900	ug/L		09/14/21 05:33	5	10	09/14/21 13:30	JMW	EPA 6020A*
Lead, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:30	JMW	EPA 6020A
Manganese, Dissolved	320	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:30	JMW	EPA 6020A
Mercury, Dissolved	< 0.20	ug/L		09/14/21 05:33	5	0.20	09/14/21 13:30	JMW	EPA 6020A
Molybdenum, Dissolved	1.9	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:30	JMW	EPA 6020A
Nickel, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:30	JMW	EPA 6020A
Selenium, Dissolved	< 1.0	ug/L		09/07/21 10:25	1	1.0	09/07/21 14:30	JMW	EPA 6020A
Silver, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:30	JMW	EPA 6020A
Thallium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:30	JMW	EPA 6020A
Vanadium, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:30	JMW	EPA 6020A
Zinc, Dissolved	< 6.0	ug/L		09/14/21 05:33	5	6.0	09/14/21 13:30	JMW	EPA 6020A

Total Metals - PIA

Aluminum	54	ug/L		08/25/21 16:48	5	20	09/02/21 13:18	JMW	EPA 6020A
Antimony	< 3.0	ug/L		08/25/21 16:48	5	3.0	09/02/21 13:18	JMW	EPA 6020A
Arsenic	1.9	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:18	JMW	EPA 6020A
Barium	59	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:18	JMW	EPA 6020A
Beryllium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:18	JMW	EPA 6020A
Boron	20	ug/L		08/25/21 16:48	5	10	09/02/21 13:18	JMW	EPA 6020A
Cadmium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:18	JMW	EPA 6020A
Chromium	< 4.0	ug/L		08/25/21 16:48	5	4.0	09/02/21 13:18	JMW	EPA 6020A
Cobalt	< 2.0	ug/L		08/25/21 16:48	5	2.0	09/02/21 13:18	JMW	EPA 6020A
Copper	< 3.0	ug/L		08/25/21 16:48	5	3.0	09/02/21 13:18	JMW	EPA 6020A
Iron	2800	ug/L		08/25/21 16:48	5	10	09/02/21 13:18	JMW	EPA 6020A*
Lead	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:18	JMW	EPA 6020A
Manganese	380	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:18	JMW	EPA 6020A
Mercury	< 0.20	ug/L		08/25/21 16:48	5	0.20	09/02/21 13:18	JMW	EPA 6020A
Molybdenum	2.1	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:18	JMW	EPA 6020A
Nickel	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:18	JMW	EPA 6020A
Selenium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/03/21 13:15	KMC	EPA 6020A
Silver	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:18	JMW	EPA 6020A
Thallium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:18	JMW	EPA 6020A
Vanadium	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:18	JMW	EPA 6020A
Zinc	< 6.0	ug/L		08/25/21 16:48	5	6.0	09/02/21 13:18	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-06
Name: G210
Alias: COFFEEN GYPSUM STACK

Sampled: 08/20/21 09:39
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	69	mg/L		08/27/21 12:10	10	10	08/27/21 12:10	CRD	EPA 300.0 REV 2.1
Sulfate	100	mg/L		08/30/21 14:04	25	25	08/30/21 14:04	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
BTM Well Elv	606.07	Feet		08/20/21 09:39	1		08/20/21 09:39	FIELD	Field*
Depth of Water (ft below LS)	26.92	Feet		08/20/21 09:39	1	-25	08/20/21 09:39	FIELD	Field*
Depth, From Measuring Point	10.82	Feet		08/20/21 09:39	1		08/20/21 09:39	FIELD	Field*
Elevation of Measuring Point (TOC)	632.99	Feet		08/20/21 09:39	1		08/20/21 09:39	FIELD	Field*
pH, Field Measured	7.30	pH Units		08/20/21 09:39	1		08/20/21 09:39	FIELD	Field*
Specific Conductance, Field Measured	932.0	umhos/cm		08/20/21 09:39	1		08/20/21 09:39	FIELD	Field*
Temperature, Field Measured	68.5	°F		08/20/21 09:39	1		08/20/21 09:39	FIELD	Field*
Elevation of GW	622.17	Feet		08/20/21 09:39	1		08/20/21 09:39	FIELD	Field*
<u>General Chemistry - PIA</u>									
Cyanide	< 0.0050	mg/L		08/23/21 12:29	1	0.0050	08/23/21 12:29	AMM	ASTM D7511-09e2
Fluoride	0.429	mg/L		08/31/21 13:37	1	0.250	08/31/21 13:37	TTH	SM 4500F C 1997
Phenolics	< 5.0	ug/L		08/26/21 16:11	1	5.0	08/27/21 12:19	CRS1	EPA 420.4 Rev1
<u>Soluble Anions - PIA</u>									
Chloride, Dissolved	75	mg/L		08/30/21 13:29	10	10	08/30/21 13:29	CRD	EPA 300.0 REV 2.1
Fluoride, Dissolved	0.52	mg/L		08/30/21 13:13	1	0.25	08/30/21 13:13	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	100	mg/L		08/31/21 13:03	25	25	08/31/21 13:03	CRD	EPA 300.0 REV 2.1
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	570	mg/L		08/24/21 13:45	1	26	08/25/21 10:45	JAA	SM 2540C
<u>Soluble Metals - PIA</u>									
Aluminum, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/14/21 13:34	JMW	EPA 6020A
Antimony, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 13:34	JMW	EPA 6020A
Arsenic, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:34	JMW	EPA 6020A
Barium, Dissolved	40	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:34	JMW	EPA 6020A
Beryllium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:34	JMW	EPA 6020A
Boron, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/15/21 09:34	JMW	EPA 6020A
Cadmium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:34	JMW	EPA 6020A
Chromium, Dissolved	< 4.0	ug/L		09/14/21 05:33	5	4.0	09/14/21 13:34	JMW	EPA 6020A
Cobalt, Dissolved	< 2.0	ug/L		09/14/21 05:33	5	2.0	09/14/21 13:34	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-06
Name: G210
Alias: COFFEEN GYPSUM STACK

Sampled: 08/20/21 09:39
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.

Total Metals - PIA

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.



ANALYTICAL RESULTS

Sample: EH04624-07
Name: G211
Alias: COFFEEN GYPSUM STACK

Sampled: 08/20/21 13:03
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	44	mg/L		08/27/21 12:47	10	10	08/27/21 12:47	CRD	EPA 300.0 REV 2.1
Sulfate	78	mg/L		08/27/21 12:47	10	10	08/27/21 12:47	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
BTM Well Elv	607.57	Feet		08/20/21 13:03	1		08/20/21 13:03	FIELD	Field*
Depth of Water (ft below LS)	25.07	Feet		08/20/21 13:03	1	-25	08/20/21 13:03	FIELD	Field*
Depth, From Measuring Point	10.9	Feet		08/20/21 13:03	1		08/20/21 13:03	FIELD	Field*
Elevation of Measuring Point (TOC)	632.64	Feet		08/20/21 13:03	1		08/20/21 13:03	FIELD	Field*
pH, Field Measured	7.25	pH Units		08/20/21 13:03	1		08/20/21 13:03	FIELD	Field*
Specific Conductance, Field Measured	849.0	umhos/cm		08/20/21 13:03	1		08/20/21 13:03	FIELD	Field*
Temperature, Field Measured	73.9	°F		08/20/21 13:03	1		08/20/21 13:03	FIELD	Field*
Elevation of GW	621.74	Feet		08/20/21 13:03	1		08/20/21 13:03	FIELD	Field*
<u>General Chemistry - PIA</u>									
Cyanide	< 0.0050	mg/L		08/23/21 12:32	1	0.0050	08/23/21 12:32	AMM	ASTM D7511-09e2
Fluoride	0.371	mg/L		08/31/21 13:39	1	0.250	08/31/21 13:39	TTH	SM 4500F C 1997
Phenolics	< 5.0	ug/L		08/26/21 16:11	1	5.0	08/27/21 13:10	CRS1	EPA 420.4 Rev1
<u>Soluble Anions - PIA</u>									
Chloride, Dissolved	47	mg/L		08/30/21 14:02	10	10	08/30/21 14:02	CRD	EPA 300.0 REV 2.1
Fluoride, Dissolved	0.46	mg/L		08/30/21 13:45	1	0.25	08/30/21 13:45	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	80	mg/L		08/30/21 14:02	10	10	08/30/21 14:02	CRD	EPA 300.0 REV 2.1
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	530	mg/L		08/25/21 07:19	1	26	08/25/21 16:39	ADM	SM 2540C
<u>Soluble Metals - PIA</u>									
Aluminum, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/14/21 13:37	JMW	EPA 6020A
Antimony, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 13:37	JMW	EPA 6020A
Arsenic, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:37	JMW	EPA 6020A
Barium, Dissolved	85	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:37	JMW	EPA 6020A
Beryllium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:37	JMW	EPA 6020A
Boron, Dissolved	44	ug/L		09/14/21 05:33	5	10	09/15/21 09:45	JMW	EPA 6020A
Cadmium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:37	JMW	EPA 6020A
Chromium, Dissolved	< 4.0	ug/L		09/14/21 05:33	5	4.0	09/14/21 13:37	JMW	EPA 6020A
Cobalt, Dissolved	< 2.0	ug/L		09/14/21 05:33	5	2.0	09/14/21 13:37	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-07
Name: G211
Alias: COFFEEN GYPSUM STACK

Sampled: 08/20/21 13:03
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.

Total Metals - PIA

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc.



ANALYTICAL RESULTS

Sample: EH04624-08
Name: G212
Alias: COFFEEN GYPSUM STACK

Sampled: 08/19/21 12:11
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	41	mg/L		08/27/21 13:23	10	10	08/27/21 13:23	CRD	EPA 300.0 REV 2.1
Sulfate	51	mg/L		08/27/21 13:23	10	10	08/27/21 13:23	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
BTM Well Elv	608.47	Feet		08/19/21 12:11	1		08/19/21 12:11	FIELD	Field*
Depth of Water (ft below LS)	24.33	Feet		08/19/21 12:11	1	-25	08/19/21 12:11	FIELD	Field*
Depth, From Measuring Point	11.73	Feet		08/19/21 12:11	1		08/19/21 12:11	FIELD	Field*
Elevation of Measuring Point (TOC)	632.8	Feet		08/19/21 12:11	1		08/19/21 12:11	FIELD	Field*
pH, Field Measured	7.22	pH Units		08/19/21 12:11	1		08/19/21 12:11	FIELD	Field*
Specific Conductance, Field Measured	685.0	umhos/cm		08/19/21 12:11	1		08/19/21 12:11	FIELD	Field*
Temperature, Field Measured	67.1	°F		08/19/21 12:11	1		08/19/21 12:11	FIELD	Field*
Elevation of GW	621.07	Feet		08/19/21 12:11	1		08/19/21 12:11	FIELD	Field*
<u>General Chemistry - PIA</u>									
Cyanide	< 0.0050	mg/L		08/23/21 12:39	1	0.0050	08/23/21 12:39	AMM	ASTM D7511-09e2
Fluoride	0.322	mg/L		08/31/21 13:40	1	0.250	08/31/21 13:40	TTH	SM 4500F C 1997
Phenolics	< 5.0	ug/L		08/26/21 16:11	1	5.0	08/27/21 12:21	CRS1	EPA 420.4 Rev1
<u>Soluble Anions - PIA</u>									
Chloride, Dissolved	45	mg/L		08/30/21 14:34	10	10	08/30/21 14:34	CRD	EPA 300.0 REV 2.1
Fluoride, Dissolved	0.43	mg/L		08/30/21 14:18	1	0.25	08/30/21 14:18	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	54	mg/L		08/30/21 14:34	10	10	08/30/21 14:34	CRD	EPA 300.0 REV 2.1
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	420	mg/L		08/24/21 13:22	1	26	08/24/21 16:02	JAA/BCR	SM 2540C
<u>Soluble Metals - PIA</u>									
Aluminum, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/14/21 13:41	JMW	EPA 6020A
Antimony, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 13:41	JMW	EPA 6020A
Arsenic, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:41	JMW	EPA 6020A
Barium, Dissolved	46	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:41	JMW	EPA 6020A
Beryllium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:41	JMW	EPA 6020A
Boron, Dissolved	16	ug/L		09/14/21 05:33	5	10	09/15/21 09:48	JMW	EPA 6020A
Cadmium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:41	JMW	EPA 6020A
Chromium, Dissolved	< 4.0	ug/L		09/14/21 05:33	5	4.0	09/14/21 13:41	JMW	EPA 6020A
Cobalt, Dissolved	< 2.0	ug/L		09/14/21 05:33	5	2.0	09/14/21 13:41	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-08
Name: G212
Alias: COFFEEN GYPSUM STACK

Sampled: 08/19/21 12:11
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Copper, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 13:41	JMW	EPA 6020A
Iron, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/14/21 13:41	JMW	EPA 6020A*
Lead, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:41	JMW	EPA 6020A
Manganese, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:41	JMW	EPA 6020A
Mercury, Dissolved	< 0.20	ug/L		09/14/21 05:33	5	0.20	09/14/21 13:41	JMW	EPA 6020A
Molybdenum, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:41	JMW	EPA 6020A
Nickel, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:41	JMW	EPA 6020A
Selenium, Dissolved	1.5	ug/L		09/07/21 10:25	1	1.0	09/07/21 14:44	JMW	EPA 6020A
Silver, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:41	JMW	EPA 6020A
Thallium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:41	JMW	EPA 6020A
Vanadium, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:41	JMW	EPA 6020A
Zinc, Dissolved	< 6.0	ug/L		09/14/21 05:33	5	6.0	09/14/21 13:41	JMW	EPA 6020A

Total Metals - PIA

Aluminum	130	ug/L		08/25/21 16:48	5	20	09/02/21 13:47	JMW	EPA 6020A
Antimony	< 3.0	ug/L		08/25/21 16:48	5	3.0	09/02/21 13:47	JMW	EPA 6020A
Arsenic	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:47	JMW	EPA 6020A
Barium	47	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:47	JMW	EPA 6020A
Beryllium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:47	JMW	EPA 6020A
Boron	< 10	ug/L		08/25/21 16:48	5	10	09/02/21 13:47	JMW	EPA 6020A
Cadmium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:47	JMW	EPA 6020A
Chromium	< 4.0	ug/L		08/25/21 16:48	5	4.0	09/02/21 13:47	JMW	EPA 6020A
Cobalt	< 2.0	ug/L		08/25/21 16:48	5	2.0	09/02/21 13:47	JMW	EPA 6020A
Copper	< 3.0	ug/L		08/25/21 16:48	5	3.0	09/02/21 13:47	JMW	EPA 6020A
Iron	180	ug/L		08/25/21 16:48	5	10	09/02/21 13:47	JMW	EPA 6020A*
Lead	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:47	JMW	EPA 6020A
Manganese	6.5	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:47	JMW	EPA 6020A
Mercury	< 0.20	ug/L		08/25/21 16:48	5	0.20	09/02/21 13:47	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:47	JMW	EPA 6020A
Nickel	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:47	JMW	EPA 6020A
Selenium	1.4	ug/L		08/25/21 16:48	5	1.0	09/03/21 13:42	KMC	EPA 6020A
Silver	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:47	JMW	EPA 6020A
Thallium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:47	JMW	EPA 6020A
Vanadium	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:47	JMW	EPA 6020A
Zinc	< 6.0	ug/L		08/25/21 16:48	5	6.0	09/02/21 13:47	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-09
Name: G213
Alias: COFFEEN GYPSUM STACK

Sampled: 08/19/21 12:16
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	41	mg/L		08/27/21 14:36	10	10	08/27/21 14:36	CRD	EPA 300.0 REV 2.1
Sulfate	54	mg/L		08/27/21 14:36	10	10	08/27/21 14:36	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
BTM Well Elv	610.37	Feet		08/19/21 12:16	1		08/19/21 12:16	FIELD	Field*
Depth of Water (ft below LS)	22.44	Feet		08/19/21 12:16	1	-25	08/19/21 12:16	FIELD	Field*
Depth, From Measuring Point	11.95	Feet		08/19/21 12:16	1		08/19/21 12:16	FIELD	Field*
Elevation of Measuring Point (TOC)	632.81	Feet		08/19/21 12:16	1		08/19/21 12:16	FIELD	Field*
pH, Field Measured	7.15	pH Units		08/19/21 12:16	1		08/19/21 12:16	FIELD	Field*
Specific Conductance, Field Measured	666.0	umhos/cm		08/19/21 12:16	1		08/19/21 12:16	FIELD	Field*
Temperature, Field Measured	67.1	°F		08/19/21 12:16	1		08/19/21 12:16	FIELD	Field*
Elevation of GW	620.86	Feet		08/19/21 12:16	1		08/19/21 12:16	FIELD	Field*
<u>General Chemistry - PIA</u>									
Cyanide	< 0.0050	mg/L		08/23/21 12:52	1	0.0050	08/23/21 12:52	AMM	ASTM D7511-09e2
Fluoride	0.361	mg/L		08/31/21 13:41	1	0.250	08/31/21 13:41	TTH	SM 4500F C 1997
Phenolics	< 5.0	ug/L		08/26/21 16:11	1	5.0	08/27/21 12:25	CRS1	EPA 420.4 Rev1
<u>Soluble Anions - PIA</u>									
Chloride, Dissolved	43	mg/L		08/30/21 15:06	10	10	08/30/21 15:06	CRD	EPA 300.0 REV 2.1
Fluoride, Dissolved	0.45	mg/L		08/30/21 14:50	1	0.25	08/30/21 14:50	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	55	mg/L		08/30/21 15:06	10	10	08/30/21 15:06	CRD	EPA 300.0 REV 2.1
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	410	mg/L		08/24/21 13:22	1	26	08/24/21 16:02	JAA/BCR	SM 2540C
<u>Soluble Metals - PIA</u>									
Aluminum, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/14/21 13:45	JMW	EPA 6020A
Antimony, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 13:45	JMW	EPA 6020A
Arsenic, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:45	JMW	EPA 6020A
Barium, Dissolved	42	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:45	JMW	EPA 6020A
Beryllium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:45	JMW	EPA 6020A
Boron, Dissolved	12	ug/L		09/14/21 05:33	5	10	09/15/21 09:52	JMW	EPA 6020A
Cadmium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:45	JMW	EPA 6020A
Chromium, Dissolved	< 4.0	ug/L		09/14/21 05:33	5	4.0	09/14/21 13:45	JMW	EPA 6020A
Cobalt, Dissolved	< 2.0	ug/L		09/14/21 05:33	5	2.0	09/14/21 13:45	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-09
Name: G213
Alias: COFFEEN GYPSUM STACK

Sampled: 08/19/21 12:16
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Copper, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 13:45	JMW	EPA 6020A
Iron, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/14/21 13:45	JMW	EPA 6020A*
Lead, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:45	JMW	EPA 6020A
Manganese, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:45	JMW	EPA 6020A
Mercury, Dissolved	< 0.20	ug/L		09/14/21 05:33	5	0.20	09/14/21 13:45	JMW	EPA 6020A
Molybdenum, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:45	JMW	EPA 6020A
Nickel, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:45	JMW	EPA 6020A
Selenium, Dissolved	1.0	ug/L		09/07/21 10:25	1	1.0	09/07/21 14:47	JMW	EPA 6020A
Silver, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:45	JMW	EPA 6020A
Thallium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:45	JMW	EPA 6020A
Vanadium, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:45	JMW	EPA 6020A
Zinc, Dissolved	< 6.0	ug/L		09/14/21 05:33	5	6.0	09/14/21 13:45	JMW	EPA 6020A

Total Metals - PIA

Aluminum	530	ug/L		08/25/21 16:48	5	20	09/02/21 13:51	JMW	EPA 6020A
Antimony	< 3.0	ug/L		08/25/21 16:48	5	3.0	09/02/21 13:51	JMW	EPA 6020A
Arsenic	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:51	JMW	EPA 6020A
Barium	45	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:51	JMW	EPA 6020A
Beryllium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:51	JMW	EPA 6020A
Boron	< 10	ug/L		08/25/21 16:48	5	10	09/02/21 13:51	JMW	EPA 6020A
Cadmium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:51	JMW	EPA 6020A
Chromium	< 4.0	ug/L		08/25/21 16:48	5	4.0	09/02/21 13:51	JMW	EPA 6020A
Cobalt	< 2.0	ug/L		08/25/21 16:48	5	2.0	09/02/21 13:51	JMW	EPA 6020A
Copper	< 3.0	ug/L		08/25/21 16:48	5	3.0	09/02/21 13:51	JMW	EPA 6020A
Iron	950	ug/L		08/25/21 16:48	5	10	09/02/21 13:51	JMW	EPA 6020A*
Lead	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:51	JMW	EPA 6020A
Manganese	21	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:51	JMW	EPA 6020A
Mercury	< 0.20	ug/L		08/25/21 16:48	5	0.20	09/02/21 13:51	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:51	JMW	EPA 6020A
Nickel	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:51	JMW	EPA 6020A
Selenium	1.3	ug/L		08/25/21 16:48	5	1.0	09/03/21 13:46	KMC	EPA 6020A
Silver	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:51	JMW	EPA 6020A
Thallium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:51	JMW	EPA 6020A
Vanadium	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:51	JMW	EPA 6020A
Zinc	< 6.0	ug/L		08/25/21 16:48	5	6.0	09/02/21 13:51	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-10
Name: G214
Alias: COFFEEN GYPSUM STACK

Sampled: 08/19/21 13:38
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	67	mg/L		08/27/21 15:12	10	10	08/27/21 15:12	CRD	EPA 300.0 REV 2.1
Sulfate	100	mg/L		08/27/21 15:12	10	10	08/27/21 15:12	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
BTM Well Elv	607.55	Feet		08/19/21 13:38	1		08/19/21 13:38	FIELD	Field*
Depth of Water (ft below LS)	25.3	Feet		08/19/21 13:38	1	-25	08/19/21 13:38	FIELD	Field*
Depth, From Measuring Point	14.49	Feet		08/19/21 13:38	1		08/19/21 13:38	FIELD	Field*
Elevation of Measuring Point (TOC)	632.85	Feet		08/19/21 13:38	1		08/19/21 13:38	FIELD	Field*
pH, Field Measured	7.17	pH Units		08/19/21 13:38	1		08/19/21 13:38	FIELD	Field*
Specific Conductance, Field Measured	874.0	umhos/cm		08/19/21 13:38	1		08/19/21 13:38	FIELD	Field*
Temperature, Field Measured	69.4	°F		08/19/21 13:38	1		08/19/21 13:38	FIELD	Field*
Elevation of GW	618.36	Feet		08/19/21 13:38	1		08/19/21 13:38	FIELD	Field*
<u>General Chemistry - PIA</u>									
Cyanide	< 0.0050	mg/L		08/23/21 12:54	1	0.0050	08/23/21 12:54	AMM	ASTM D7511-09e2
Fluoride	0.399	mg/L		08/31/21 13:42	1	0.250	08/31/21 13:42	TTH	SM 4500F C 1997
Phenolics	< 5.0	ug/L		08/26/21 16:11	1	5.0	08/27/21 12:26	CRS1	EPA 420.4 Rev1
<u>Soluble Anions - PIA</u>									
Chloride, Dissolved	71	mg/L		08/30/21 16:10	25	25	08/30/21 16:10	CRD	EPA 300.0 REV 2.1
Fluoride, Dissolved	0.50	mg/L		08/30/21 15:22	1	0.25	08/30/21 15:22	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	96	mg/L		08/30/21 16:10	25	25	08/30/21 16:10	CRD	EPA 300.0 REV 2.1
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	590	mg/L		08/24/21 13:22	1	26	08/24/21 16:02	JAA/BCR	SM 2540C
<u>Soluble Metals - PIA</u>									
Aluminum, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/14/21 13:49	JMW	EPA 6020A
Antimony, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 13:49	JMW	EPA 6020A
Arsenic, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:49	JMW	EPA 6020A
Barium, Dissolved	65	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:49	JMW	EPA 6020A
Beryllium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:49	JMW	EPA 6020A
Boron, Dissolved	12	ug/L		09/14/21 05:33	5	10	09/15/21 09:56	JMW	EPA 6020A
Cadmium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:49	JMW	EPA 6020A
Chromium, Dissolved	< 4.0	ug/L		09/14/21 05:33	5	4.0	09/14/21 13:49	JMW	EPA 6020A
Cobalt, Dissolved	< 2.0	ug/L		09/14/21 05:33	5	2.0	09/14/21 13:49	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-10
Name: G214
Alias: COFFEEN GYPSUM STACK

Sampled: 08/19/21 13:38
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Copper, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 13:49	JMW	EPA 6020A
Iron, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/14/21 13:49	JMW	EPA 6020A*
Lead, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:49	JMW	EPA 6020A
Manganese, Dissolved	47	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:49	JMW	EPA 6020A
Mercury, Dissolved	< 0.20	ug/L		09/14/21 05:33	5	0.20	09/14/21 13:49	JMW	EPA 6020A
Molybdenum, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:49	JMW	EPA 6020A
Nickel, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:49	JMW	EPA 6020A
Selenium, Dissolved	< 1.0	ug/L		09/07/21 10:25	1	1.0	09/07/21 14:56	JMW	EPA 6020A
Silver, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:49	JMW	EPA 6020A
Thallium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:49	JMW	EPA 6020A
Vanadium, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:49	JMW	EPA 6020A
Zinc, Dissolved	< 6.0	ug/L		09/14/21 05:33	5	6.0	09/14/21 13:49	JMW	EPA 6020A

Total Metals - PIA

Aluminum	58	ug/L		08/25/21 16:48	5	20	09/02/21 13:55	JMW	EPA 6020A
Antimony	< 3.0	ug/L		08/25/21 16:48	5	3.0	09/02/21 13:55	JMW	EPA 6020A
Arsenic	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:55	JMW	EPA 6020A
Barium	66	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:55	JMW	EPA 6020A
Beryllium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:55	JMW	EPA 6020A
Boron	< 10	ug/L		08/25/21 16:48	5	10	09/02/21 13:55	JMW	EPA 6020A
Cadmium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:55	JMW	EPA 6020A
Chromium	< 4.0	ug/L		08/25/21 16:48	5	4.0	09/02/21 13:55	JMW	EPA 6020A
Cobalt	< 2.0	ug/L		08/25/21 16:48	5	2.0	09/02/21 13:55	JMW	EPA 6020A
Copper	7.8	ug/L		08/25/21 16:48	5	3.0	09/02/21 13:55	JMW	EPA 6020A
Iron	100	ug/L		08/25/21 16:48	5	10	09/02/21 13:55	JMW	EPA 6020A*
Lead	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:55	JMW	EPA 6020A
Manganese	88	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:55	JMW	EPA 6020A
Mercury	< 0.20	ug/L		08/25/21 16:48	5	0.20	09/02/21 13:55	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:55	JMW	EPA 6020A
Nickel	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:55	JMW	EPA 6020A
Selenium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/03/21 13:50	KMC	EPA 6020A
Silver	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:55	JMW	EPA 6020A
Thallium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:55	JMW	EPA 6020A
Vanadium	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:55	JMW	EPA 6020A
Zinc	6.6	ug/L		08/25/21 16:48	5	6.0	09/02/21 13:55	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-11
Name: G215
Alias: COFFEEN GYPSUM STACK

Sampled: 08/19/21 14:57
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	110	mg/L		08/26/21 21:18	25	25	08/26/21 21:18	crd	EPA 300.0 REV 2.1
Fluoride	0.597	mg/L		08/26/21 21:00	1	0.250	08/26/21 21:00	crd	EPA 300.0 REV 2.1
Sulfate	440	mg/L		08/26/21 22:12	100	100	08/26/21 22:12	crd	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
BTM Well Elv	606.18	Feet		08/19/21 14:57	1		08/19/21 14:57	FIELD	Field*
Depth of Water (ft below LS)	26.88	Feet		08/19/21 14:57	1	-25	08/19/21 14:57	FIELD	Field*
Depth, From Measuring Point	14.27	Feet		08/19/21 14:57	1		08/19/21 14:57	FIELD	Field*
Elevation of Measuring Point (TOC)	633.06	Feet		08/19/21 14:57	1		08/19/21 14:57	FIELD	Field*
pH, Field Measured	7.04	pH Units		08/19/21 14:57	1		08/19/21 14:57	FIELD	Field*
Specific Conductance, Field Measured	1636	umhos/cm		08/19/21 14:57	1		08/19/21 14:57	FIELD	Field*
Temperature, Field Measured	69.8	°F		08/19/21 14:57	1		08/19/21 14:57	FIELD	Field*
Elevation of GW	619.79	Feet		08/19/21 14:57	1		08/19/21 14:57	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	310	mg/L		08/25/21 08:46	1	10	08/25/21 08:46	BCR	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		08/25/21 08:46	1	10	08/25/21 08:46	BCR	SM 2320B 1997*
Cyanide	< 0.0050	mg/L		08/23/21 12:57	1	0.0050	08/23/21 12:57	AMM	ASTM D7511-09e2
Phenolics	< 5.0	ug/L		08/26/21 16:11	1	5.0	08/27/21 12:27	CRS1	EPA 420.4 Rev1
<u>Soluble Anions - PIA</u>									
Chloride, Dissolved	120	mg/L		08/30/21 16:58	50	50	08/30/21 16:58	CRD	EPA 300.0 REV 2.1
Fluoride, Dissolved	0.49	mg/L		08/30/21 16:26	1	0.25	08/30/21 16:26	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	460	mg/L		08/30/21 16:58	50	50	08/30/21 16:58	CRD	EPA 300.0 REV 2.1
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	1300	mg/L		08/24/21 13:45	1	26	08/25/21 10:45	JAA	SM 2540C
<u>Soluble Metals - PIA</u>									
Aluminum, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/14/21 13:52	JMW	EPA 6020A
Antimony, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 13:52	JMW	EPA 6020A
Arsenic, Dissolved	1.4	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:52	JMW	EPA 6020A
Barium, Dissolved	51	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:52	JMW	EPA 6020A
Beryllium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:52	JMW	EPA 6020A
Boron, Dissolved	480	ug/L		09/14/21 05:33	5	10	09/15/21 10:19	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-11
Name: G215
Alias: COFFEEN GYPSUM STACK

Sampled: 08/19/21 14:57
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Cadmium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:52	JMW	EPA 6020A
Chromium, Dissolved	< 4.0	ug/L		09/14/21 05:33	5	4.0	09/14/21 13:52	JMW	EPA 6020A
Cobalt, Dissolved	< 2.0	ug/L		09/14/21 05:33	5	2.0	09/14/21 13:52	JMW	EPA 6020A
Copper, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 13:52	JMW	EPA 6020A
Iron, Dissolved	1100	ug/L		09/14/21 05:33	5	10	09/14/21 13:52	JMW	EPA 6020A*
Lead, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:52	JMW	EPA 6020A
Manganese, Dissolved	510	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:52	JMW	EPA 6020A
Mercury, Dissolved	< 0.20	ug/L		09/14/21 05:33	5	0.20	09/14/21 13:52	JMW	EPA 6020A
Molybdenum, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:52	JMW	EPA 6020A
Nickel, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:52	JMW	EPA 6020A
Selenium, Dissolved	< 1.0	ug/L		09/07/21 10:25	1	1.0	09/07/21 14:59	JMW	EPA 6020A
Silver, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:52	JMW	EPA 6020A
Thallium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 13:52	JMW	EPA 6020A
Vanadium, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 13:52	JMW	EPA 6020A
Zinc, Dissolved	< 6.0	ug/L		09/14/21 05:33	5	6.0	09/14/21 13:52	JMW	EPA 6020A

Total Metals - PIA

Aluminum	120	ug/L		08/25/21 16:48	5	20	09/02/21 13:58	JMW	EPA 6020A
Antimony	< 3.0	ug/L		08/25/21 16:48	5	3.0	09/02/21 13:58	JMW	EPA 6020A
Arsenic	5.3	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:58	JMW	EPA 6020A
Barium	58	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:58	JMW	EPA 6020A
Beryllium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:58	JMW	EPA 6020A
Boron	490	ug/L		08/25/21 16:48	5	10	09/02/21 13:58	JMW	EPA 6020A
Cadmium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:58	JMW	EPA 6020A
Calcium	180	mg/L		08/25/21 16:48	5	0.15	09/02/21 13:58	JMW	EPA 6020A
Chromium	< 4.0	ug/L		08/25/21 16:48	5	4.0	09/02/21 13:58	JMW	EPA 6020A
Cobalt	< 2.0	ug/L		08/25/21 16:48	5	2.0	09/02/21 13:58	JMW	EPA 6020A
Copper	< 3.0	ug/L		08/25/21 16:48	5	3.0	09/02/21 13:58	JMW	EPA 6020A
Iron	3800	ug/L		08/25/21 16:48	5	10	09/02/21 13:58	JMW	EPA 6020A*
Lead	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:58	JMW	EPA 6020A
Magnesium	84	mg/L		08/25/21 16:48	5	0.10	09/02/21 13:58	JMW	EPA 6020A
Manganese	510	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:58	JMW	EPA 6020A
Mercury	< 0.20	ug/L		08/25/21 16:48	5	0.20	09/02/21 13:58	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:58	JMW	EPA 6020A
Nickel	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:58	JMW	EPA 6020A
Potassium	0.78	mg/L		08/25/21 16:48	5	0.10	09/02/21 13:58	JMW	EPA 6020A
Selenium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/03/21 13:54	KMC	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-11
Name: G215
Alias: COFFEEN GYPSUM STACK

Sampled: 08/19/21 14:57
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Silver	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:58	JMW	EPA 6020A
Sodium	89	mg/L		08/25/21 16:48	5	0.10	09/02/21 13:58	JMW	EPA 6020A
Thallium	< 1.0	ug/L		08/25/21 16:48	5	1.0	09/02/21 13:58	JMW	EPA 6020A
Vanadium	< 5.0	ug/L		08/25/21 16:48	5	5.0	09/02/21 13:58	JMW	EPA 6020A
Zinc	< 6.0	ug/L		08/25/21 16:48	5	6.0	09/02/21 13:58	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-12
Name: G216
Alias: COFFEEN GYPSUM STACK

Sampled: 08/19/21 15:01
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	98	mg/L		08/26/21 22:49	10	10	08/26/21 22:49	crd	EPA 300.0 REV 2.1
Fluoride	0.661	mg/L		08/26/21 22:31	1	0.250	08/26/21 22:31	crd	EPA 300.0 REV 2.1
Sulfate	400	mg/L		08/26/21 23:07	50	50	08/26/21 23:07	crd	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
BTM Well Elv	605.24	Feet		08/19/21 15:01	1		08/19/21 15:01	FIELD	Field*
Depth of Water (ft below LS)	27.52	Feet		08/19/21 15:01	1	-25	08/19/21 15:01	FIELD	Field*
Depth, From Measuring Point	13.71	Feet		08/19/21 15:01	1		08/19/21 15:01	FIELD	Field*
Elevation of Measuring Point (TOC)	632.76	Feet		08/19/21 15:01	1		08/19/21 15:01	FIELD	Field*
pH, Field Measured	7.06	pH Units		08/19/21 15:01	1		08/19/21 15:01	FIELD	Field*
Specific Conductance, Field Measured	1497	umhos/cm		08/19/21 15:01	1		08/19/21 15:01	FIELD	Field*
Temperature, Field Measured	68.8	°F		08/19/21 15:01	1		08/19/21 15:01	FIELD	Field*
Elevation of GW	619.05	Feet		08/19/21 15:01	1		08/19/21 15:01	FIELD	Field*
<u>General Chemistry - PIA</u>									
Cyanide	< 0.0050	mg/L		08/23/21 12:59	1	0.0050	08/23/21 12:59	AMM	ASTM D7511-09e2
Phenolics	< 5.0	ug/L		08/26/21 16:11	1	5.0	08/27/21 12:28	CRS1	EPA 420.4 Rev1
<u>Soluble Anions - PIA</u>									
Chloride, Dissolved	93	mg/L		08/30/21 17:30	25	25	08/30/21 17:30	CRD	EPA 300.0 REV 2.1
Fluoride, Dissolved	0.52	mg/L		08/30/21 17:14	1	0.25	08/30/21 17:14	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	400	mg/L		08/31/21 13:21	50	50	08/31/21 13:21	CRD	EPA 300.0 REV 2.1
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	1200	mg/L		08/24/21 13:45	1	26	08/25/21 10:45	JAA	SM 2540C
<u>Soluble Metals - PIA</u>									
Aluminum, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/14/21 14:07	JMW	EPA 6020A
Antimony, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 14:07	JMW	EPA 6020A
Arsenic, Dissolved	1.6	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:07	JMW	EPA 6020A
Barium, Dissolved	160	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:07	JMW	EPA 6020A
Beryllium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:07	JMW	EPA 6020A
Boron, Dissolved	180	ug/L		09/14/21 05:33	5	10	09/15/21 10:22	JMW	EPA 6020A
Cadmium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:07	JMW	EPA 6020A
Chromium, Dissolved	< 4.0	ug/L		09/14/21 05:33	5	4.0	09/14/21 14:07	JMW	EPA 6020A
Cobalt, Dissolved	7.6	ug/L		09/14/21 05:33	5	2.0	09/14/21 14:07	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-12
Name: G216
Alias: COFFEEN GYPSUM STACK

Sampled: 08/19/21 15:01
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc.

Total Metals - PIA

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc.



ANALYTICAL RESULTS

Sample: EH04624-13
Name: G217
Alias: COFFEEN GYPSUM STACK

Sampled: 08/19/21 16:13
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	87	mg/L		08/26/21 23:43	10	10	08/26/21 23:43	crd	EPA 300.0 REV 2.1
Fluoride	0.719	mg/L		08/26/21 23:25	1	0.250	08/26/21 23:25	crd	EPA 300.0 REV 2.1
Sulfate	230	mg/L		08/27/21 00:01	25	25	08/27/21 00:01	crd	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
BTM Well Elv	605.36	Feet		08/19/21 16:13	1		08/19/21 16:13	FIELD	Field*
Depth of Water (ft below LS)	27.74	Feet		08/19/21 16:13	1	-25	08/19/21 16:13	FIELD	Field*
Depth, From Measuring Point	15.2	Feet		08/19/21 16:13	1		08/19/21 16:13	FIELD	Field*
Elevation of Measuring Point (TOC)	633.1	Feet		08/19/21 16:13	1		08/19/21 16:13	FIELD	Field*
pH, Field Measured	7.08	pH Units		08/19/21 16:13	1		08/19/21 16:13	FIELD	Field*
Specific Conductance, Field Measured	1100	umhos/cm		08/19/21 16:13	1		08/19/21 16:13	FIELD	Field*
Temperature, Field Measured	69.6	°F		08/19/21 16:13	1		08/19/21 16:13	FIELD	Field*
Elevation of GW	617.9	Feet		08/19/21 16:13	1		08/19/21 16:13	FIELD	Field*
<u>General Chemistry - PIA</u>									
Cyanide	< 0.0050	mg/L		08/23/21 13:02	1	0.0050	08/23/21 13:02	AMM	ASTM D7511-09e2
Phenolics	< 5.0	ug/L		08/26/21 16:11	1	5.0	08/27/21 12:29	CRS1	EPA 420.4 Rev1
<u>Soluble Anions - PIA</u>									
Chloride, Dissolved	89	mg/L		08/30/21 18:02	25	25	08/30/21 18:02	CRD	EPA 300.0 REV 2.1
Fluoride, Dissolved	0.53	mg/L		08/30/21 17:46	1	0.25	08/30/21 17:46	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	240	mg/L		08/30/21 18:02	25	25	08/30/21 18:02	CRD	EPA 300.0 REV 2.1
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	850	mg/L		08/24/21 13:45	1	26	08/25/21 10:45	JAA	SM 2540C
<u>Soluble Metals - PIA</u>									
Aluminum, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/14/21 14:11	JMW	EPA 6020A
Antimony, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 14:11	JMW	EPA 6020A
Arsenic, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:11	JMW	EPA 6020A
Barium, Dissolved	97	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:11	JMW	EPA 6020A
Beryllium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:11	JMW	EPA 6020A
Boron, Dissolved	13	ug/L		09/14/21 05:33	5	10	09/15/21 10:26	JMW	EPA 6020A
Cadmium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:11	JMW	EPA 6020A
Chromium, Dissolved	< 4.0	ug/L		09/14/21 05:33	5	4.0	09/14/21 14:11	JMW	EPA 6020A
Cobalt, Dissolved	< 2.0	ug/L		09/14/21 05:33	5	2.0	09/14/21 14:11	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-13
Name: G217
Alias: COFFEEN GYPSUM STACK

Sampled: 08/19/21 16:13
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Copper, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 14:11	JMW	EPA 6020A
Iron, Dissolved	340	ug/L		09/14/21 05:33	5	10	09/14/21 14:11	JMW	EPA 6020A*
Lead, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:11	JMW	EPA 6020A
Manganese, Dissolved	230	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:11	JMW	EPA 6020A
Mercury, Dissolved	< 0.20	ug/L		09/14/21 05:33	5	0.20	09/14/21 14:11	JMW	EPA 6020A
Molybdenum, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:11	JMW	EPA 6020A
Nickel, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 14:11	JMW	EPA 6020A
Selenium, Dissolved	< 1.0	ug/L		09/07/21 10:25	1	1.0	09/07/21 15:05	JMW	EPA 6020A
Silver, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 14:11	JMW	EPA 6020A
Thallium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:11	JMW	EPA 6020A
Vanadium, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 14:11	JMW	EPA 6020A
Zinc, Dissolved	< 6.0	ug/L		09/14/21 05:33	5	6.0	09/14/21 14:11	JMW	EPA 6020A

Total Metals - PIA

Aluminum	45	ug/L		08/27/21 16:30	5	20	09/03/21 11:53	JMW	EPA 6020A
Antimony	< 3.0	ug/L		08/27/21 16:30	5	3.0	09/03/21 11:53	JMW	EPA 6020A
Arsenic	< 1.0	ug/L		08/27/21 16:30	5	1.0	09/03/21 11:53	JMW	EPA 6020A
Barium	100	ug/L		08/27/21 16:30	5	1.0	09/03/21 11:53	JMW	EPA 6020A
Beryllium	< 1.0	ug/L		08/27/21 16:30	5	1.0	09/03/21 11:53	JMW	EPA 6020A
Boron	13	ug/L		08/27/21 16:30	5	10	09/03/21 11:53	JMW	EPA 6020A
Cadmium	< 1.0	ug/L		08/27/21 16:30	5	1.0	09/03/21 11:53	JMW	EPA 6020A
Chromium	< 4.0	ug/L		08/27/21 16:30	5	4.0	09/03/21 11:53	JMW	EPA 6020A
Cobalt	< 2.0	ug/L		08/27/21 16:30	5	2.0	09/03/21 11:53	JMW	EPA 6020A
Copper	< 3.0	ug/L		08/27/21 16:30	5	3.0	09/03/21 11:53	JMW	EPA 6020A
Iron	1100	ug/L		08/27/21 16:30	5	10	09/03/21 11:53	JMW	EPA 6020A*
Lead	< 1.0	ug/L		08/27/21 16:30	5	1.0	09/03/21 11:53	JMW	EPA 6020A
Manganese	310	ug/L		08/27/21 16:30	5	1.0	09/03/21 11:53	JMW	EPA 6020A
Mercury	< 0.20	ug/L		08/27/21 16:30	5	0.20	09/03/21 11:53	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		08/27/21 16:30	5	1.0	09/03/21 11:53	JMW	EPA 6020A
Nickel	< 5.0	ug/L		08/27/21 16:30	5	5.0	09/03/21 11:53	JMW	EPA 6020A
Selenium	< 1.0	ug/L		08/27/21 16:30	1	1.0	09/07/21 11:11	JMW	EPA 6020A
Silver	< 5.0	ug/L		08/27/21 16:30	5	5.0	09/03/21 11:53	JMW	EPA 6020A
Thallium	< 1.0	ug/L		08/27/21 16:30	5	1.0	09/03/21 11:53	JMW	EPA 6020A
Vanadium	< 5.0	ug/L		08/27/21 16:30	5	5.0	09/03/21 11:53	JMW	EPA 6020A
Zinc	< 6.0	ug/L		08/27/21 16:30	5	6.0	09/03/21 11:53	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-14
Name: G218
Alias: COFFEEN GYPSUM STACK

Sampled: 08/19/21 16:12
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	88	mg/L		08/27/21 00:38	25	25	08/27/21 00:38	crd	EPA 300.0 REV 2.1
Fluoride	0.630	mg/L		08/27/21 00:20	1	0.250	08/27/21 00:20	crd	EPA 300.0 REV 2.1
Sulfate	260	mg/L		09/02/21 20:23	50	50	09/02/21 20:23	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
BTM Well Elv	606.32	Feet		08/19/21 16:12	1		08/19/21 16:12	FIELD	Field*
Depth of Water (ft below LS)	26.79	Feet		08/19/21 16:12	1	-25	08/19/21 16:12	FIELD	Field*
Depth, From Measuring Point	14.02	Feet		08/19/21 16:12	1		08/19/21 16:12	FIELD	Field*
Elevation of Measuring Point (TOC)	633.11	Feet		08/19/21 16:12	1		08/19/21 16:12	FIELD	Field*
pH, Field Measured	7.09	pH Units		08/19/21 16:12	1		08/19/21 16:12	FIELD	Field*
Specific Conductance, Field Measured	1240	umhos/cm		08/19/21 16:12	1		08/19/21 16:12	FIELD	Field*
Temperature, Field Measured	66.2	°F		08/19/21 16:12	1		08/19/21 16:12	FIELD	Field*
Elevation of GW	619.09	Feet		08/19/21 16:12	1		08/19/21 16:12	FIELD	Field*
<u>General Chemistry - PIA</u>									
Cyanide	< 0.0050	mg/L		08/23/21 13:04	1	0.0050	08/23/21 13:04	AMM	ASTM D7511-09e2
Phenolics	< 5.0	ug/L		08/26/21 16:11	1	5.0	08/27/21 12:31	CRS1	EPA 420.4 Rev1
<u>Soluble Anions - PIA</u>									
Chloride, Dissolved	95	mg/L		08/30/21 18:35	25	25	08/30/21 18:35	CRD	EPA 300.0 REV 2.1
Fluoride, Dissolved	0.47	mg/L		08/30/21 18:18	1	0.25	08/30/21 18:18	CRD	EPA 300.0 REV 2.1
Sulfate, Dissolved	260	mg/L		08/31/21 13:39	50	50	08/31/21 13:39	CRD	EPA 300.0 REV 2.1
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	910	mg/L		08/24/21 13:45	1	26	08/25/21 10:45	JAA	SM 2540C
<u>Soluble Metals - PIA</u>									
Aluminum, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/14/21 14:14	JMW	EPA 6020A
Antimony, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 14:14	JMW	EPA 6020A
Arsenic, Dissolved	1.5	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:14	JMW	EPA 6020A
Barium, Dissolved	150	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:14	JMW	EPA 6020A
Beryllium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:14	JMW	EPA 6020A
Boron, Dissolved	< 10	ug/L		09/14/21 05:33	5	10	09/15/21 10:30	JMW	EPA 6020A
Cadmium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:14	JMW	EPA 6020A
Chromium, Dissolved	< 4.0	ug/L		09/14/21 05:33	5	4.0	09/14/21 14:14	JMW	EPA 6020A
Cobalt, Dissolved	< 2.0	ug/L		09/14/21 05:33	5	2.0	09/14/21 14:14	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04624-14
Name: G218
Alias: COFFEEN GYPSUM STACK

Sampled: 08/19/21 16:12
Received: 08/20/21 14:05
Matrix: Ground Water - Grab
PO #: 1061320

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Copper, Dissolved	< 3.0	ug/L		09/14/21 05:33	5	3.0	09/14/21 14:14	JMW	EPA 6020A
Iron, Dissolved	840	ug/L		09/14/21 05:33	5	10	09/14/21 14:14	JMW	EPA 6020A*
Lead, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:14	JMW	EPA 6020A
Manganese, Dissolved	390	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:14	JMW	EPA 6020A
Mercury, Dissolved	< 0.20	ug/L		09/14/21 05:33	5	0.20	09/14/21 14:14	JMW	EPA 6020A
Molybdenum, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:14	JMW	EPA 6020A
Nickel, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 14:14	JMW	EPA 6020A
Selenium, Dissolved	< 1.0	ug/L		09/07/21 10:25	1	1.0	09/07/21 15:08	JMW	EPA 6020A
Silver, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 14:14	JMW	EPA 6020A
Thallium, Dissolved	< 1.0	ug/L		09/14/21 05:33	5	1.0	09/14/21 14:14	JMW	EPA 6020A
Vanadium, Dissolved	< 5.0	ug/L		09/14/21 05:33	5	5.0	09/14/21 14:14	JMW	EPA 6020A
Zinc, Dissolved	< 6.0	ug/L		09/14/21 05:33	5	6.0	09/14/21 14:14	JMW	EPA 6020A

Total Metals - PIA

Aluminum	120	ug/L		08/27/21 16:30	5	20	09/03/21 11:56	JMW	EPA 6020A
Antimony	< 3.0	ug/L		08/27/21 16:30	5	3.0	09/03/21 11:56	JMW	EPA 6020A
Arsenic	1.8	ug/L		08/27/21 16:30	5	1.0	09/03/21 11:56	JMW	EPA 6020A
Barium	150	ug/L		08/27/21 16:30	5	1.0	09/03/21 11:56	JMW	EPA 6020A
Beryllium	< 1.0	ug/L		08/27/21 16:30	5	1.0	09/03/21 11:56	JMW	EPA 6020A
Boron	< 10	ug/L		08/27/21 16:30	5	10	09/03/21 11:56	JMW	EPA 6020A
Cadmium	< 1.0	ug/L		08/27/21 16:30	5	1.0	09/03/21 11:56	JMW	EPA 6020A
Chromium	< 4.0	ug/L		08/27/21 16:30	5	4.0	09/03/21 11:56	JMW	EPA 6020A
Cobalt	< 2.0	ug/L		08/27/21 16:30	5	2.0	09/03/21 11:56	JMW	EPA 6020A
Copper	< 3.0	ug/L		08/27/21 16:30	5	3.0	09/03/21 11:56	JMW	EPA 6020A
Iron	1400	ug/L		08/27/21 16:30	5	10	09/03/21 11:56	JMW	EPA 6020A*
Lead	< 1.0	ug/L		08/27/21 16:30	5	1.0	09/03/21 11:56	JMW	EPA 6020A
Manganese	410	ug/L		08/27/21 16:30	5	1.0	09/03/21 11:56	JMW	EPA 6020A
Mercury	< 0.20	ug/L		08/27/21 16:30	5	0.20	09/03/21 11:56	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		08/27/21 16:30	5	1.0	09/03/21 11:56	JMW	EPA 6020A
Nickel	< 5.0	ug/L		08/27/21 16:30	5	5.0	09/03/21 11:56	JMW	EPA 6020A
Selenium	< 1.0	ug/L		08/27/21 16:30	1	1.0	09/07/21 11:14	JMW	EPA 6020A
Silver	< 5.0	ug/L		08/27/21 16:30	5	5.0	09/03/21 11:56	JMW	EPA 6020A
Thallium	< 1.0	ug/L		08/27/21 16:30	5	1.0	09/03/21 11:56	JMW	EPA 6020A
Vanadium	< 5.0	ug/L		08/27/21 16:30	5	5.0	09/03/21 11:56	JMW	EPA 6020A
Zinc	< 6.0	ug/L		08/27/21 16:30	5	6.0	09/03/21 11:56	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: EH04994-01
Name: CO_103_GPb_SOURCE WATER CCR - TOTAL
Matrix: Surface Water - Grab

Sampled: 08/23/21 11:46
Received: 08/24/21 10:25
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Anions - PIA (Chloride, Sulfate), Field - PIA (Dissolved oxygen, Oxidation Reduction Potential, pH, Specific Conductance, Temperature, Turbidity), General Chemistry - PIA (Alkalinity, Fluoride, Solids), and Total Metals - PIA (Boron, Calcium, Magnesium, Potassium, Sodium).



ANALYTICAL RESULTS

Sample: EH04994-02
Name: CO_103_GPb_SOURCE WATER CCR - FILT
Matrix: Surface Water - Grab

Sampled: 08/23/21 11:55
Received: 08/24/21 10:25
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. It contains two sections: Soluble Anions - PIA and Soluble Metals - PIA, listing various chemical parameters and their corresponding test results.



ANALYTICAL RESULTS

Sample: EH04994-03
Name: CO_103_GPC_SOURCE WATER CCR - TOTAL
Matrix: Surface Water - Grab

Sampled: 08/23/21 13:04
Received: 08/24/21 10:25
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include sections for Anions - PIA, Field - PIA, General Chemistry - PIA, and Total Metals - PIA.



ANALYTICAL RESULTS

Sample: EH04994-04
Name: CO_103_GPc_SOURCE WATER CCR - FILT
Matrix: Surface Water - Grab

Sampled: 08/23/21 13:13
Received: 08/24/21 10:25
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. It contains two sections: Soluble Anions - PIA and Soluble Metals - PIA, listing various chemical parameters and their corresponding results and methods.



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B140272 - No Prep - SM 2540C</u>									
Blank (B140272-BLK1)				Prepared & Analyzed: 08/20/21					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B140272-BS1)				Prepared & Analyzed: 08/20/21					
Solids - total dissolved solids (TDS)	947	mg/L		1000		95	84.9-109		
<u>Batch B140428 - No Prep - ASTM D7511-09e2</u>									
Calibration Blank (B140428-CCB1)				Prepared & Analyzed: 08/23/21					
Cyanide	0.00	mg/L							
Calibration Check (B140428-CCV1)				Prepared & Analyzed: 08/23/21					
Cyanide	0.0480	mg/L		0.05000		96	85-115		
<u>Batch B140534 - SW 3015 - EPA 6020A</u>									
Blank (B140534-BLK1)				Prepared: 08/23/21 Analyzed: 08/25/21					
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 (B140534-BS1)				Prepared: 08/23/21 Analyzed: 08/25/21					
Boron	553	ug/L		555.6		100	80-120		
Calcium	5.83	mg/L		5.556		105	80-120		
Magnesium	5.75	mg/L		5.556		104	80-120		
Potassium	5.97	mg/L		5.556		107	80-120		
Sodium	5.76	mg/L		5.556		104	80-120		
<u>Batch B140577 - No Prep - SM 2540C</u>									
Blank (B140577-BLK1)				Prepared & Analyzed: 08/24/21					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B140577-BS1)				Prepared & Analyzed: 08/24/21					
Solids - total dissolved solids (TDS)	987	mg/L		1000		99	84.9-109		
<u>Batch B140580 - No Prep - EPA 335.4 REV1</u>									
Blank (B140580-BLK1)				Prepared & Analyzed: 08/24/21					
Cyanide	< 0.0050	mg/L							
Blank (B140580-BLK2)				Prepared & Analyzed: 08/24/21					
Cyanide	< 0.0050	mg/L							
Blank (B140580-BLK3)				Prepared & Analyzed: 08/24/21					
Cyanide	< 0.0050	mg/L							
LCS (B140580-BS1)				Prepared & Analyzed: 08/24/21					
Cyanide	0.103	mg/L		0.1000		103	90-110		
LCS (B140580-BS2)				Prepared & Analyzed: 08/24/21					
Cyanide	0.0991	mg/L		0.1000		99	90-110		
LCS (B140580-BS3)				Prepared & Analyzed: 08/24/21					



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B140580 - No Prep - EPA 335.4 REV1</u>									
LCS (B140580-BS3)				Prepared & Analyzed: 08/24/21					
Cyanide	0.101	mg/L		0.1000		101	90-110		
<u>Batch B140631 - No Prep - SM 2540C</u>									
Blank (B140631-BLK1)				Prepared & Analyzed: 08/24/21					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B140631-BS1)				Prepared & Analyzed: 08/24/21					
Solids - total dissolved solids (TDS)	947	mg/L		1000		95	84.9-109		
<u>Batch B140635 - No Prep - SM 2540C</u>									
Blank (B140635-BLK1)				Prepared: 08/24/21 Analyzed: 08/25/21					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B140635-BS1)				Prepared: 08/24/21 Analyzed: 08/25/21					
Solids - total dissolved solids (TDS)	980	mg/L		1000		98	84.9-109		
<u>Batch B140657 - No Prep - SM 2320B 1997</u>									
Blank (B140657-BLK1)				Prepared & Analyzed: 08/24/21					
Alkalinity - bicarbonate as CaCO3	< 2.0	mg/L							
<u>Batch B140659 - No Prep - SM 2320B 1997</u>									
Blank (B140659-BLK1)				Prepared & Analyzed: 08/24/21					
Alkalinity - carbonate as CaCO3	< 2.0	mg/L							
<u>Batch B140671 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B140671-CCB1)				Prepared & Analyzed: 08/23/21					
Sulfate	0.00	mg/L							
Chloride	0.201	mg/L							
Calibration Check (B140671-CCV1)				Prepared & Analyzed: 08/23/21					
Sulfate	4.66	mg/L		5.000		93	90-110		
Chloride	4.62	mg/L		5.000		92	90-110		
<u>Batch B140674 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B140674-CCB1)				Prepared & Analyzed: 08/23/21					
Chloride	0.778	mg/L							
Sulfate	0.00	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B140674-CCV1)				Prepared & Analyzed: 08/23/21					
Fluoride	5.04	mg/L		5.000		101	90-110		
Chloride	4.75	mg/L		5.000		95	90-110		
Sulfate	4.81	mg/L		5.000		96	90-110		
<u>Batch B140692 - No Prep - SM 2540C</u>									
Blank (B140692-BLK1)				Prepared & Analyzed: 08/25/21					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B140692-BS1)				Prepared & Analyzed: 08/25/21					



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B140692 - No Prep - SM 2540C</u>									
LCS (B140692-BS1)				Prepared & Analyzed: 08/25/21					
Solids - total dissolved solids (TDS)	1000	mg/L		1000		100	84.9-109		
Duplicate (B140692-DUP1)				Sample: EH04625-02		Prepared & Analyzed: 08/25/21			
Solids - total dissolved solids (TDS)	900	mg/L			890			1	5
<u>Batch B140814 - SW 3015 - EPA 6020A</u>									
Blank (B140814-BLK1)				Prepared: 08/25/21 Analyzed: 09/02/21					
Aluminum	< 20	ug/L							
Antimony	< 3.0	ug/L							
Arsenic	< 1.0	ug/L							
Barium	< 1.0	ug/L							
Beryllium	< 1.0	ug/L							
Boron	< 10	ug/L							
Cadmium	< 1.0	ug/L							
Calcium	< 0.20	mg/L							
Chromium	< 4.0	ug/L							
Cobalt	< 2.0	ug/L							
Copper	< 3.0	ug/L							
Iron	< 10	ug/L							
Lead	< 1.0	ug/L							
Magnesium	< 0.10	mg/L							
Manganese	< 1.0	ug/L							
Mercury	< 0.20	ug/L							
Molybdenum	< 1.0	ug/L							
Nickel	< 5.0	ug/L							
Potassium	< 0.10	mg/L							
Selenium	< 1.0	ug/L							
Silver	< 5.0	ug/L							
Sodium	< 0.10	mg/L							
Thallium	< 1.0	ug/L							
Vanadium	< 5.0	ug/L							
Zinc	< 6.0	ug/L							
LCS (B140814-BS1)				Prepared: 08/25/21 Analyzed: 09/02/21					
Aluminum	583	ug/L		555.6		105	80-120		
Antimony	529	ug/L		555.6		95	80-120		
Arsenic	549	ug/L		555.6		99	80-120		
Barium	530	ug/L		555.6		95	80-120		
Beryllium	589	ug/L		555.6		106	80-120		
Boron	599	ug/L		555.6		108	80-120		
Cadmium	563	ug/L		555.6		101	80-120		
Calcium	5.68	mg/L		5.556		102	80-120		
Chromium	596	ug/L		555.6		107	80-120		
Cobalt	563	ug/L		555.6		101	80-120		
Copper	509	ug/L		555.6		92	80-120		
Iron	557	ug/L		555.6		100	80-120		
Lead	565	ug/L		555.6		102	80-120		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B140814 - SW 3015 - EPA 6020A</u>									
LCS (B140814-BS1)					Prepared: 08/25/21 Analyzed: 09/02/21				
Magnesium	5.79	mg/L		5.556		104	80-120		
Manganese	576	ug/L		555.6		104	80-120		
Mercury	53.9	ug/L		55.56		97	80-120		
Molybdenum	558	ug/L		555.6		101	80-120		
Nickel	571	ug/L		555.6		103	80-120		
Potassium	5.81	mg/L		5.556		105	80-120		
Selenium	613	ug/L		555.6		110	80-120		
Silver	561	ug/L		555.6		101	80-120		
Sodium	5.82	mg/L		5.556		105	80-120		
Thallium	555	ug/L		555.6		100	80-120		
Vanadium	576	ug/L		555.6		104	80-120		
Zinc	567	ug/L		555.6		102	80-120		
<u>Batch B140837 - No Prep - SM 2320B 1997</u>									
Blank (B140837-BLK1)					Prepared & Analyzed: 08/25/21				
Alkalinity - carbonate as CaCO3	< 2.0	mg/L							
<u>Batch B140838 - No Prep - SM 2320B 1997</u>									
Blank (B140838-BLK1)					Prepared & Analyzed: 08/25/21				
Alkalinity - bicarbonate as CaCO3	< 2.0	mg/L							
<u>Batch B140842 - No Prep - SM 2320B 1997</u>									
Blank (B140842-BLK1)					Prepared & Analyzed: 08/25/21				
Alkalinity - carbonate as CaCO3	2.50	mg/L							
Blank (B140842-BLK2)					Prepared & Analyzed: 08/25/21				
Alkalinity - carbonate as CaCO3	2.50	mg/L							
Blank (B140842-BLK3)					Prepared & Analyzed: 08/25/21				
Alkalinity - carbonate as CaCO3	2.50	mg/L							
<u>Batch B140843 - No Prep - SM 2320B 1997</u>									
Blank (B140843-BLK1)					Prepared & Analyzed: 08/25/21				
Alkalinity - bicarbonate as CaCO3	2.50	mg/L							
Blank (B140843-BLK2)					Prepared & Analyzed: 08/25/21				
Alkalinity - bicarbonate as CaCO3	2.50	mg/L							
Blank (B140843-BLK3)					Prepared & Analyzed: 08/25/21				
Alkalinity - bicarbonate as CaCO3	2.50	mg/L							
<u>Batch B140942 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B140942-CCB1)					Prepared & Analyzed: 08/25/21				
Fluoride	0.00	mg/L							
Sulfate	0.120	mg/L							
Chloride	0.802	mg/L							
Calibration Check (B140942-CCV1)					Prepared & Analyzed: 08/25/21				
Sulfate	4.86	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 B140942 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Check (B140942-CCV1)				Prepared & Analyzed: 08/25/21					
Fluoride	4.98	mg/L		5.000		100	90-110		
Chloride	4.73	mg/L		5.000		95	90-110		
<u>Batch B140963 - No Prep - EPA 420.4 Rev1</u>									
Blank (B140963-BLK1)				Prepared: 08/26/21 Analyzed: 08/27/21					
Phenolics	< 5.0	ug/L							
Blank (B140963-BLK2)				Prepared: 08/26/21 Analyzed: 08/27/21					
Phenolics	< 5.0	ug/L							
Blank (B140963-BLK3)				Prepared: 08/26/21 Analyzed: 08/27/21					
Phenolics	< 5.0	ug/L							
LCS (B140963-BS1)				Prepared: 08/26/21 Analyzed: 08/27/21					
Phenolics	97.2	ug/L		100.0		97	90-110		
LCS (B140963-BS2)				Prepared: 08/26/21 Analyzed: 08/27/21					
Phenolics	93.6	ug/L		100.0		94	90-110		
LCS (B140963-BS3)				Prepared: 08/26/21 Analyzed: 08/27/21					
Phenolics	94.3	ug/L		100.0		94	90-110		
<u>Batch B141089 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B141089-CCB1)				Prepared & Analyzed: 08/26/21					
Chloride	0.781	mg/L							
Sulfate	0.00	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B141089-CCV1)				Prepared & Analyzed: 08/26/21					
Sulfate	4.89	mg/L		5.000		98	90-110		
Fluoride	4.85	mg/L		5.000		97	90-110		
Chloride	4.78	mg/L		5.000		96	90-110		
<u>Batch B141095 - SW 3015 - EPA 6020A</u>									
Blank (B141095-BLK1)				Prepared: 08/27/21 Analyzed: 09/03/21					
Aluminum	< 20	ug/L							
Antimony	< 3.0	ug/L							
Arsenic	< 1.0	ug/L							
Barium	< 1.0	ug/L							
Beryllium	< 1.0	ug/L							
Boron	< 10	ug/L							
Cadmium	< 1.0	ug/L							
Chromium	< 4.0	ug/L							
Cobalt	< 2.0	ug/L							
Copper	< 3.0	ug/L							
Iron	< 10	ug/L							
Lead	< 1.0	ug/L							
Manganese	< 1.0	ug/L							B
Mercury	< 0.20	ug/L							
Molybdenum	< 1.0	ug/L							
Nickel	< 5.0	ug/L							



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B141095 - SW 3015 - EPA 6020A</u>									
Blank (B141095-BLK1)									
Prepared: 08/27/21 Analyzed: 09/07/21									
Selenium	< 0.20	ug/L							
Silver	< 5.0	ug/L							
Thallium	< 1.0	ug/L							
Vanadium	< 5.0	ug/L							
Zinc	< 6.0	ug/L							
LCS (B141095-BS1)									
Prepared: 08/27/21 Analyzed: 09/03/21									
Aluminum	575	ug/L		555.6		104	80-120		
Antimony	550	ug/L		555.6		99	80-120		
Arsenic	538	ug/L		555.6		97	80-120		
Barium	533	ug/L		555.6		96	80-120		
Beryllium	560	ug/L		555.6		101	80-120		
Boron	582	ug/L		555.6		105	80-120		
Cadmium	549	ug/L		555.6		99	80-120		
Chromium	539	ug/L		555.6		97	80-120		
Cobalt	540	ug/L		555.6		97	80-120		
Copper	547	ug/L		555.6		98	80-120		
Iron	570	ug/L		555.6		103	80-120		
Lead	565	ug/L		555.6		102	80-120		
Manganese	555	ug/L		555.6		100	80-120		
Mercury	53.7	ug/L		55.56		97	80-120		
Molybdenum	539	ug/L		555.6		97	80-120		
Nickel	557	ug/L		555.6		100	80-120		
Selenium	506	ug/L		555.6		91	80-120		
Silver	543	ug/L		555.6		98	80-120		
Thallium	547	ug/L		555.6		98	80-120		
Vanadium	557	ug/L		555.6		100	80-120		
Zinc	559	ug/L		555.6		101	80-120		
<u>Batch B141129 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B141129-CCB1)									
Prepared & Analyzed: 08/27/21									
Sulfate	0.00	mg/L							
Chloride	0.741	mg/L							
Calibration Check (B141129-CCV1)									
Prepared & Analyzed: 08/27/21									
Sulfate	4.83	mg/L		5.000		97	90-110		
Chloride	4.80	mg/L		5.000		96	90-110		
<u>Batch B141284 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B141284-CCB1)									
Prepared & Analyzed: 08/30/21									
Chloride	0.918	mg/L							
Fluoride	0.00	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B141284-CCV1)									
Prepared & Analyzed: 08/30/21									
Fluoride	4.76	mg/L		5.000		95	90-110		
Chloride	4.78	mg/L		5.000		96	90-110		
Sulfate	4.86	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 B141285 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B141285-CCB1)				Prepared & Analyzed: 08/30/21					
Fluoride	0.00	mg/L							
Chloride	0.843	mg/L							
Sulfate	0.110	mg/L							
Calibration Check (B141285-CCV1)				Prepared & Analyzed: 08/30/21					
Fluoride	5.06	mg/L		5.000		101	90-110		
Sulfate	4.95	mg/L		5.000		99	90-110		
Chloride	4.86	mg/L		5.000		97	90-110		
<u>Batch B141288 - No Prep - SM 4500F C 1997</u>									
Calibration Blank (B141288-CCB1)				Prepared & Analyzed: 08/31/21					
Fluoride	0.00700	mg/L							
Calibration Blank (B141288-CCB2)				Prepared & Analyzed: 08/31/21					
Fluoride	0.0170	mg/L							
Calibration Check (B141288-CCV1)				Prepared & Analyzed: 08/31/21					
Fluoride	0.733	mg/L		0.7000		105	90-110		
Calibration Check (B141288-CCV2)				Prepared & Analyzed: 08/31/21					
Fluoride	0.735	mg/L		0.7000		105	90-110		
<u>Batch B141296 - SW 3015 - EPA 6020A</u>									
Blank (B141296-BLK1)				Prepared: 08/31/21 Analyzed: 09/09/21					
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 (B141296-BS1)				Prepared: 08/31/21 Analyzed: 09/09/21					
Boron	527	ug/L		555.6		95	80-120		
Calcium	5.76	mg/L		5.556		104	80-120		
Magnesium	5.68	mg/L		5.556		102	80-120		
Potassium	5.75	mg/L		5.556		103	80-120		
Sodium	5.41	mg/L		5.556		97	80-120		
Matrix Spike (B141296-MS1)				Sample: EH04994-01		Prepared: 08/31/21 Analyzed: 09/09/21			
Boron	38600	ug/L	E, Q4	555.6	41600	NR	75-125		
Calcium	402	mg/L	Q4	5.556	398	69	75-125		
Magnesium	1240	mg/L	E, Q4	5.556	1240	NR	75-125		
Potassium	194	mg/L	Q4	5.556	191	71	75-125		
Sodium	953	mg/L	E, Q4	5.556	1000	NR	75-125		
Matrix Spike Dup (B141296-MSD1)				Sample: EH04994-01		Prepared: 08/31/21 Analyzed: 09/09/21			
Boron	34800	ug/L	E, Q4	555.6	41600	NR	75-125	10	20
Calcium	393	mg/L	Q4	5.556	398	NR	75-125	2	20
Magnesium	1170	mg/L	E, Q4	5.556	1240	NR	75-125	6	20
Potassium	187	mg/L	Q4	5.556	191	NR	75-125	4	20
Sodium	927	mg/L	E, Q4	5.556	1000	NR	75-125	3	20

Batch B141390 - No Prep - SM 2540C



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B141390 - No Prep - SM 2540C</u>									
Blank (B141390-BLK1)				Prepared & Analyzed: 09/01/21					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B141390-BS1)				Prepared & Analyzed: 09/01/21					
Solids - total dissolved solids (TDS)	973	mg/L		1000		97	84.9-109		
<u>Batch B141435 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B141435-CCB1)				Prepared & Analyzed: 08/31/21					
Chloride	0.00	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B141435-CCV1)				Prepared & Analyzed: 08/31/21					
Chloride	4.69	mg/L		5.000		94	90-110		
Sulfate	4.88	mg/L		5.000		98	90-110		
<u>Batch B141602 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B141602-CCB1)				Prepared & Analyzed: 09/01/21					
Sulfate	0.00	mg/L							
Calibration Check (B141602-CCV1)				Prepared & Analyzed: 09/01/21					
Sulfate	4.82	mg/L		5.000		96	90-110		
<u>Batch B141705 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B141705-CCB1)				Prepared & Analyzed: 09/02/21					
Sulfate	0.00	mg/L							
Calibration Check (B141705-CCV1)				Prepared & Analyzed: 09/02/21					
Sulfate	4.96	mg/L		3.000		165	90-110		
<u>Batch B141822 - 6020 Sol no prep - EPA 6020A</u>									
Blank (B141822-BLK1)				Prepared & Analyzed: 09/07/21					
Selenium	< 0.20	ug/L							
LCS (B141822-BS1)				Prepared & Analyzed: 09/07/21					
Selenium	40.3	ug/L		50.00		81	80-120		
<u>Batch B141834 - No Prep - SM 4500F C 1997</u>									
Calibration Blank (B141834-CCB1)				Prepared & Analyzed: 09/07/21					
Fluoride	0.00500	mg/L							
Calibration Blank (B141834-CCB2)				Prepared & Analyzed: 09/07/21					
Fluoride	0.0140	mg/L							
Calibration Check (B141834-CCV1)				Prepared & Analyzed: 09/07/21					
Fluoride	0.719	mg/L		0.7000		103	90-110		
Calibration Check (B141834-CCV2)				Prepared & Analyzed: 09/07/21					
Fluoride	0.695	mg/L		0.7000		99	90-110		
Matrix Spike (B141834-MS1)				Sample: EH04994-02 Prepared & Analyzed: 09/07/21					
Fluoride	58.3	mg/L	Q4	1.000	36.4	NR	80-120		
Matrix Spike Dup (B141834-MSD1)				Sample: EH04994-02 Prepared & Analyzed: 09/07/21					
Fluoride	57.8	mg/L	Q4	1.000	36.4	NR	80-120	0.8	20



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B141855 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B141855-CCB1)				Prepared & Analyzed: 09/03/21					
Chloride	0.441	mg/L							
Sulfate	0.123	mg/L							
Calibration Check (B141855-CCV1)				Prepared & Analyzed: 09/03/21					
Sulfate	4.96	mg/L		5.000		99	90-110		
Chloride	4.66	mg/L		5.000		93	90-110		
<u>Batch B141856 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B141856-CCB1)				Prepared & Analyzed: 09/03/21					
Fluoride	0.00	mg/L							
Calibration Check (B141856-CCV1)				Prepared & Analyzed: 09/03/21					
Fluoride	5.07	mg/L		5.000		101	90-110		
<u>Batch B141945 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B141945-CCB1)				Prepared & Analyzed: 09/07/21					
Sulfate	0.00	mg/L							
Calibration Check (B141945-CCV1)				Prepared & Analyzed: 09/07/21					
Sulfate	4.90	mg/L		5.000		98	90-110		
<u>Batch B142115 - No Prep - SM 4500F C 1997</u>									
Calibration Blank (B142115-CCB1)				Prepared & Analyzed: 09/09/21					
Fluoride	0.00800	mg/L							
Calibration Blank (B142115-CCB2)				Prepared & Analyzed: 09/09/21					
Fluoride	0.0110	mg/L							
Calibration Check (B142115-CCV1)				Prepared & Analyzed: 09/09/21					
Fluoride	0.731	mg/L		0.7000		104	90-110		
Calibration Check (B142115-CCV2)				Prepared & Analyzed: 09/09/21					
Fluoride	0.729	mg/L		0.7000		104	90-110		
Matrix Spike (B142115-MS1)				Sample: EH04994-01		Prepared & Analyzed: 09/09/21			
Fluoride	61.4	mg/L	Q4	1.000	40.2	NR	80-120		
Matrix Spike Dup (B142115-MSD1)				Sample: EH04994-01		Prepared & Analyzed: 09/09/21			
Fluoride	60.0	mg/L	Q4	1.000	40.2	NR	80-120	2	20
<u>Batch B142478 - 6020 Sol no prep - EPA 6020A</u>									
Blank (B142478-BLK1)				Prepared & Analyzed: 09/14/21					
Aluminum	< 10	ug/L							
Antimony	< 3.0	ug/L							
Arsenic	< 1.0	ug/L							
Barium	< 1.0	ug/L							
Beryllium	< 1.0	ug/L							
Boron	< 10	ug/L							
Cadmium	< 1.0	ug/L							
Calcium	< 0.10	mg/L							
Chromium	< 4.0	ug/L							
Cobalt	< 2.0	ug/L							
Copper	< 3.0	ug/L							



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B142478 - 6020 Sol no prep - EPA 6020A</u>									
Blank (B142478-BLK1)					Prepared & Analyzed: 09/14/21				
Iron	< 10	ug/L							
Lead	< 1.0	ug/L							
Magnesium	< 0.10	mg/L							
Manganese	< 1.0	ug/L							
Mercury	< 0.20	ug/L							
Molybdenum	< 1.0	ug/L							
Nickel	< 5.0	ug/L							
Potassium	< 0.10	mg/L							
Silver	< 5.0	ug/L							
Sodium	< 0.10	mg/L							
Thallium	< 1.0	ug/L							
Vanadium	< 5.0	ug/L							
Zinc	< 6.0	ug/L							
LCS (B142478-BS1)					Prepared & Analyzed: 09/14/21				
Aluminum	255	ug/L		250.0		102	80-120		
Antimony	249	ug/L		250.0		100	80-120		
Arsenic	240	ug/L		250.0		96	80-120		
Barium	233	ug/L		250.0		93	80-120		
Beryllium	239	ug/L		250.0		96	80-120		
Boron	2430	ug/L		2500		97	80-120		
Cadmium	232	ug/L		250.0		93	80-120		
Calcium	24.3	mg/L		25.00		97	80-120		
Chromium	236	ug/L		250.0		94	80-120		
Cobalt	252	ug/L		250.0		101	80-120		
Copper	243	ug/L		250.0		97	80-120		
Iron	24500	ug/L		25000		98	80-120		
Lead	247	ug/L		250.0		99	80-120		
Magnesium	25.8	mg/L		25.00		103	80-120		
Manganese	232	ug/L		250.0		93	80-120		
Mercury	22.5	ug/L		25.00		90	80-120		
Molybdenum	229	ug/L		250.0		92	80-120		
Nickel	238	ug/L		250.0		95	80-120		
Potassium	25.6	mg/L		25.00		102	80-120		
Silver	244	ug/L		250.0		98	80-120		
Sodium	25.3	mg/L		25.00		101	80-120		
Thallium	243	ug/L		250.0		97	80-120		
Vanadium	230	ug/L		250.0		92	80-120		
Zinc	241	ug/L		250.0		96	80-120		



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

- B Present in the method blank at 1.17 ug/L.
- E Estimated - concentration exceeds the instrument calibration range.
- H Test performed after the expiration of the appropriate regulatory/advisory maximum allowable hold time.
- Q3 Matrix Spike/Matrix Spike Duplicate both failed % recovery acceptance limits. The associated blank spike recovery was acceptable.
- 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 Schindler



Certified by: Gail Schindler, Project Manager

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: Coffeee GMF Gypsum Stack Pond Client: RAMBOLL

Project Number: 2285 Task #: Unit 103 & 105 Start Date: 8/18/2021 Time: 11:12

Field Personnel: Aaron Ramboll Finish Date: 8/18/2021 Time: 12:19

WELL INFORMATION

Well ID: G200

Casing ID: 2 _____ Inches

Screen Interval: 4.79' _____

Borehole Diameter: n/a _____ Inches

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: Bailor Pump

Bailer Type: n/a

Pump Type and Serial #: n/a

Tube/Pump Intake Depth: n/a

Stabilized Pumping Rate: 100 ml/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	6.25	11:25	6.36	12:19
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: _____ feet

Standing Water Column: _____

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 #: Soinsl mobil 101 #269022 Water Quality Probe Type and Serial # Agwater 600 #846000

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	11:25	0	6.25	0	-	-	-	-	-	-	-
purge	11:35	1000	6.36	0.11	22.50	7.17	877.41	1.32	0.00	43.9	clear
	11:37	1200	6.36	0.11	22.44	7.17	877.85	1.21	0.00	44.1	clear
	11:39	1400	6.36	0.11	22.31	7.18	877.02	1.13	0.00	42.6	clear

NOTES

CCR Dup 0.115 here

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
 SU - Standard Units
 Temp - Temperature
 °C - Degrees Celsius

Monitoring Well Evaluation Checklist

Site	Coffeen GMF Gypsum Stack Pond	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	8/18/21 and Landfill				
Well Number	G200				

Stick-up Monitoring Wells			Comments		
1. Outer protective Casing	Yes	No	NA		
Not corroded		X			
Not dented	↓				
Not cracked	↓				
Not loose	↓				
2. Inner casing	Yes	No	NA		
Not corroded		X			
Not dented	↓				
Not cracked	↓				
Not loose	↓				
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?	↓				
6. Is there a lock present?	↓				
7. Bumper posts in good condition?	↓				
Flushmount Monitoring Wells					
8. Can the lid be secured tightly?	Yes	No	NA		
9. Does the lid have a gasket that seals?			X		
10. No water in the flushmount?			X		
11. Is the well cap lockable?			X		
12. Is there a lock present?			X		
All Monitoring Wells					
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.	17.36 ft				
17. Measured total depth of well.	20.20 ft				obtained from field sheet
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: Coffeen GMF Gypsum Stack Pond Client: RAMBOLL

Project Number: 2285 Task #: Unit 103 & 105 Start Date: 8/18/2021 Time: 1011

Field Personnel: Arrol Ramboll Finish Date: 8/18/2021 Time: 1059

WELL INFORMATION

Well ID: R201

Casing ID: 2 _____ Inches

Screen Interval: 4.39' _____ Inches

Borehole Diameter: n/a _____ Inches

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: Bailor Pump

Bailer Type: n/a

Pump Type and Serial #: n/a

Tube/Pump Intake Depth: n/a

Stabilized Pumping Rate: 100 ml/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	5.98	10 15	6.23	10 59
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: _____ feet

Standing Water Column: _____

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 #: 01257 mobil 101 # 269022 Water Quality Probe Type and Serial # Hydrap 600 # RH600

WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (mis)	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	1015	0	5.48	0	-	-	-	-	-	-	-
purge	1025	1000	6.23	0.25	21.14	6.99	1189.4	0.14	0.00	-70.5	clean
	1027	1200	6.23	0.25	21.11	6.99	1195.1	0.12	0.00	-82.09	clean
	1029	1400	6.23	0.25	21.07	7.00	1172.6	0.11	0.00	-82.1	clean

NOTES

Ants in well

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
- Temp - Temperature
- mm - Degrees Celsius

Monitoring Well Evaluation Checklist

Site	Coffeen GMF Gypsum Stack Pond	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	8/18/21 and Landfill			✓	
Well Number	R201				
Stick-up Monitoring Wells			Comments		
1. Outer protective Casing			Yes	No	NA
Not corroded				X	
Not dented			✓		
Not cracked			✓		
Not loose			✓		
2. Inner casing			Yes	No	NA
Not corroded				X	
Not dented			✓		
Not cracked			✓		
Not loose			✓		
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?			✓		
7. Bumper posts in good condition?			✓		
Flushmount Monitoring Wells			Yes	No	NA
8. Can the lid be secured tightly?					X
9. Does the lid have a gasket that seals?					X
10. No water in the flushmount?					X
11. Is the well cap lockable?					X
12. Is there a lock present?					X
All Monitoring Wells			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.			17.22	ft	
17. Measured total depth of well.			19.80		Obtained from field sheet
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: Coffeen GMF Gypsum Stack Pond Client: RAMBOLL

Project Number: 2285 Task #: Unit 103 Start Date: 8/20/21 Time: 10:26

Field Personnel: Matt J. G. G. Finish Date: 8/20/21 Time: 11:25

WELL INFORMATION

Well ID: G206

Casing ID: 2 _____ inches

Screen Interval: 4.54' _____ inches

Borehole Diameter: n/a _____ inches

Filter Pack Interval: n/a _____ inches

EVENT TYPE

Well Development

Low-Flow / Low-Stress Sampling

Well Volume Approach Sampling

Other (Specify below)

PURGE INFORMATION

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

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	11.14	8/20/21/1026	12.22	8/20/21/1125
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: _____ feet

Standing Water Column: _____ 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 #: Herein depicted 4778-7 Water Quality Probe Type and Serial # Hydroval 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	10:29	0	11.14								
purge	10:39	1000	11.89	0.75	21.41	7.22	819	1.26	5.01	62.4	clear
	10:41	1200	11.93	0.79	21.29	7.22	817	1.18	4.39	63.2	clear
	10:43	1400	11.97	0.83	21.00	7.22	816	1.08	5.45	64.0	clear
	10:45	1600	12.00	0.86	20.90	7.22	815	1.02	3.24	64.8	clear
	10:47	1800	12.03	0.89	20.65	7.22	814	0.96	3.86	61.8	clear
	10:47	2000	12.06	0.92	20.65	7.22	809	0.91	3.48	66.9	clear
	10:51	2200	12.09	0.95	20.58	7.20	814	0.85	9.47	87.9	clear

NOTES

ADD MS/MSD/Day
3 CCR bottles

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
SU - Standard Units
Temp - Temperature
°C - Degrees Celsius

Monitoring Well Evaluation Checklist

Site	Coffeen GMF Gypsum Stack Pond	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	8/20/21			X	
Well Number	G206				

	Yes	No	NA	
<u>Stick-up Monitoring Wells</u>				
1. Outer protective Casing				
Not corroded		X		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?				
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>				
8. Can the lid be secured tightly?			X	
9. Does the lid have a gasket that seals?			X	
10. No water in the flushmount?			X	
11. Is the well cap lockable?			X	
12. Is there a lock present?			X	
<u>All Monitoring Wells</u>				
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.	22.42			
17. Measured total depth of well.	ft			
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

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: Coffeen GMF Gypsum Stack Pond Client: RAMBOLL
 Project Number: 2285 Task #: Unit 103 Start Date: 8/20/21 Time: 08:59
 Field Personnel: Matt Julew Finish Date: 8/20/21 Time: 09:49

WELL INFORMATION
 Well ID: G209
 Casing ID: 2 Inches
 Screen Interval: 4.54'
 Borehole Diameter: n/a Inches
 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: Bailor Pump
 Bailor Type: n/a
 Pump Type and Serial #: n/a
 Tube/Pump Intake Depth: n/a
 Stabilized Pumping Rate: 100 ml/min

DEPTH MEASUREMENTS			VOLUME CALCULATION AND PRODUCTION INFORMATION		
INITIAL	FINAL		Volume Calculation Type:	<input checked="" type="checkbox"/> Well Casing	<input type="checkbox"/> Borehole
Depth FT BTOC	Depth FT BTOC	Date/Time (24-Hour)	Volume Per Foot:		
<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	Standing Water Column: _____ feet		
<u>10.68</u>	<u>11.42</u>	<u>8/20/21/0949</u>	1 Well Volume: <u>n/a</u> Gallons	3 Well Volumes: <u>n/a</u> Gallons	
<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	
<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	Total Volumes Produced: <u>n/a</u> Gallons		
Water Level Serial #: <u>Here's dipper</u>			Well Purged Dry? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
			Water Quality Probe Type and Serial #: <u>Aquatrail 600 #762098</u>		

WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (mis)	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>09:02</u>	<u>0</u>	<u>10.68</u>								
purge	<u>09:12</u>	<u>1000</u>	<u>11.29</u>	<u>0.61</u>	<u>20.06</u>	<u>6.84</u>	<u>1295</u>	<u>0.44</u>	<u>9.92</u>	<u>-75.5</u>	<u>clear</u>
	<u>09:14</u>	<u>1200</u>	<u>11.33</u>	<u>0.65</u>	<u>19.96</u>	<u>6.85</u>	<u>1228</u>	<u>0.39</u>	<u>9.08</u>	<u>-76.6</u>	<u>clear</u>
	<u>09:16</u>	<u>1400</u>	<u>11.33</u>	<u>0.65</u>	<u>19.94</u>	<u>6.84</u>	<u>1298</u>	<u>0.36</u>	<u>5.28</u>	<u>-88.4</u>	<u>clear</u>
	<u>09:18</u>	<u>1600</u>	<u>11.33</u>	<u>0.65</u>	<u>19.92</u>	<u>6.84</u>	<u>1289</u>	<u>0.34</u>	<u>4.11</u>	<u>-80.2</u>	<u>clear</u>
	<u>09:20</u>	<u>1800</u>	<u>11.34</u>	<u>0.66</u>	<u>19.87</u>	<u>6.83</u>	<u>1284</u>	<u>0.33</u>	<u>3.25</u>	<u>-82.5</u>	<u>clear</u>

NOTES
 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

MKT 9/20/21

MKT 9/10/21

Monitoring Well Evaluation Checklist

Site	Coffeen GMF Gypsum Stack Pond	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	8/20/21			X	
Well Number	G209				

	Yes	No	NA	
Stick-up Monitoring Wells				
1. Outer protective Casing				
Not corroded		X		rust ~ 90%
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			
Flushmount Monitoring Wells				
8. Can the lid be secured tightly?			X	
9. Does the lid have a gasket that seals?			X	
10. No water in the flushmount?			X	
11. Is the well cap lockable?			X	
12. Is there a lock present?			X	
All Monitoring Wells				
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?				
16. Installed as total depth.				22.81 ft
17. Measured total depth of well.				ft
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

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: Coffeen GMF Gypsum Stack Pond Client: RAMBOLL
 Project Number: 2285 Task #: Unit 103 Start Date: 8/19/2021 Time: 1131
 Field Personnel: Saver Rambooll Finish Date: 8/19/2021 Time: 1211

WELL INFORMATION

Well ID: G212
 Casing ID: 2 _____ Inches
 Screen Interval: 4.55' _____ Inches
 Borehole Diameter: n/a _____ Inches
 Filter Pack Interval: n/a _____ Inches

EVENT TYPE

Well Development
 Low-Flow / Low-Stress Sampling
 Well Volume Approach Sampling
 Other (Specify below)

PURGE INFORMATION

Purge Method: Bailor Pump
 Bailor Type: n/a
 Pump Type and Serial #: n/a
 Tube/Pump Intake Depth: n/a
 Stabilized Pumping Rate: 100 ml/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	11.73	1133	12.12	1211
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: _____ feet
 Standing Water Column: _____ 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 #: Sol-task meter 101 # 269022 Water Quality Probe Type and Serial #: Apex 600 # 846000

WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (mis)	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	1133	0	11.73	0	-	-	-	-	-	-	-
purge	1143	1000	12.92	1.19	19.54	7.21	701.60	1.03	0.00	208.6	clear
	1145	1200	12.92	1.19	19.58	7.21	704.27	1.03	0.00	209.7	clear
	1147	1400	12.92	1.16	19.53	7.22	685.26	0.97	0.00	209.9	clear

NOTES

COND. - Actual Conductivity
 FT BTOC - Feet Below Top of Casing
 na - Not Applicable
 mm - Not Measured
 °C - Degrees Celsius

ABBREVIATIONS

ORP - Oxidation-Reduction Potential
 SEC - Specific Electrical Conductance
 SU - Standard Units
 Temp - Temperature
 °C - Degrees Celsius

Monitoring Well Evaluation Checklist

Site	Coffeen GMF Gypsum Stack Pond	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	8/19/21			✓	
Well Number	G212				

Stick-up Monitoring Wells				
<i>App 8/19/21</i>				
1. Outer protective Casing	Yes	No	NA	Comments
Not corroded	✓	X		
Not dented	✓			
Not cracked	✓			
Not loose	✓			
2. Inner casing	Yes	No	NA	
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?	✓			
Flushmount Monitoring Wells				
8. Can the lid be secured tightly?	Yes	No	NA	
9. Does the lid have a gasket that seals?			X	
10. No water in the flushmount?			X	
11. Is the well cap lockable?			X	
12. Is there a lock present?			X	
All Monitoring Wells				
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.	21.81 ft			<i>obtained from field sheet</i>
17. Measured total depth of well.	24.32 ft			
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: Coffeen GMF Gypsum Stack Pond Client: RAMBOLL
 Project Number: 2285 Task #: Unit 103 Start Date: 8/18/2021 Time: 1414
 Field Personnel: Aaron Pemberton Finish Date: 8/19/2021 Time: 1457

WELL INFORMATION	PURGE INFORMATION
Well ID: G215	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: 2 _____ inches	Bailer Type: n/a
Screen Interval: 4.39' _____ inches	Pump Type and Serial #: n/a
Borehole Diameter: n/a _____ inches	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	Date/Time (24-Hour)	Volume Calculation Type:	Well Casing	Borehole
Depth FT BTOC	Depth FT BTOC	Date/Time (24-Hour)	Volume Per Foot:	<input checked="" type="checkbox"/> Well Casing	<input type="checkbox"/> Borehole
LNAPL	n/a	n/a	Standing Water Column: _____ feet		
Groundwater	14.27	n/a	1 Well Volume: n/a Gallons	3 Well Volumes: n/a Gallons	n/a Gallons
DNAPL	n/a	n/a	5 Well Volumes: n/a Gallons	10 Well Volumes: n/a Gallons	n/a Gallons
Casing Base	n/a	n/a	Total Volumes Produced: n/a Gallons		

Water Level Serial #: SOLIST 001 # 269022 Water Quality Probe Type and Serial # ANALIN 600 # 84600

WATER QUALITY INDICATOR PARAMETERS											
Sampling Stage	Time (military)	Volume Removed (ms)	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	1416	0	14.27	0	-	-	-	-	-	-	-
purge	1426	1000	14.88	0.61	20.94	7.02	1636.7	1.26	31.63	-24.2	51.9 MPV cloudy
	1428	1200	14.88	0.61	21.01	7.02	1646.1	1.22	26.53	-25.3	51.9 MPV cloudy
	1430	1400	14.88	0.61	20.97	7.04	1635.6	1.15	28.73	-26.4	51.9 MPV cloudy

NOTES	ABBREVIATIONS
	Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing ne - 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	Coffeen GMF Gypsum Stack Pond	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	8/19/2021			✓	
Well Number	G215				

	Yes	No	NA	
Stick-up Monitoring Wells				
1. Outer protective Casing				
Not corroded		X		
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?	✓			
Flushmount Monitoring Wells				
8. Can the lid be secured tightly?			X	
9. Does the lid have a gasket that seals?			X	
10. No water in the flushmount?			X	
11. Is the well cap lockable?			X	
12. Is there a lock present?			X	
All Monitoring Wells				
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.	24.31			
17. Measured total depth of well.	26.84			obtained from well sheet
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: Coffeen GMF Gypsum Stack Pond Client: RAMBOLL
 Project Number: 2285 Task #: Unit 103 Start Date: 8/19/21 Time: 1525
 Field Personnel: Matt Sullivan Finish Date: 8/19/21 Time: 1612

WELL INFORMATION

Well ID: G218
 Casing ID: 2
 Screen Interval: 4.44'
 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: Bailor Pump
 Bailor Type: n/a
 Pump Type and Serial #: n/a
 Tube/Pump Intake Depth: n/a
 Stabilized Pumping Rate: 100 ml/min

DEPTH MEASUREMENTS

Depth FT BTOC	Date/Time (24-Hour)	Depth FT BTOC	Date/Time (24-Hour)	FINAL	
				Volume Per Foot	Volume Calculation Type: <input checked="" type="checkbox"/> Well Casing <input type="checkbox"/> Borehole
LNAPL	n/a	n/a	n/a	Standing Water Column: feet	
Groundwater	14.02	14.33	8/19/21 1612	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 #: None
 Water Quality Probe Type and Serial #: Aquatrol 600 #762098

WATER QUALITY INDICATOR PARAMETERS

Sampling Stage	Time (military)	Volume Removed (mis)	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	1529	0	14.02		19.09	7.10	1233	0.49	22.82	-45.5	c/cav
Purge	1539	1000	14.33	0.31	17.01	7.11	1235	0.41	23.05	-47.5	c/cav
	1541	1200	14.33	0.31	18.96	7.10	1235	0.37	22.75	-48.7	c/cav
	1543	1400	14.33	0.31	18.99	7.09	1240	0.37	23.89	-49.3	c/cav
	1545	1600	14.33	0.31							

NOTES

2 bottles

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
 SU - Standard Units
 Temp - Temperature
 °C - Degrees Celsius

MUC 8/19/21

8/19/21

Monitoring Well Evaluation Checklist

Site	Coffeen GMF Gypsum Stack Pond	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	8/19/21			X	
Well Number	G218				

	Yes	No	NA	
<u>Stick-up Monitoring Wells</u>				
1. Outer protective Casing				
Not corroded		X		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			
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>				
8. Can the lid be secured tightly?			X	
9. Does the lid have a gasket that seals?			X	
10. No water in the flushmount?			X	
11. Is the well cap lockable?			X	
12. Is there a lock present?			X	
<u>All Monitoring Wells</u>				
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.	25.27 ft			
17. Measured total depth of well.	ft			
General Condition				
18. Concrete pad installed?	X			
19. Concrete pad				
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

Sampling Log Field Sheet

Project Name: <u>Loffelville</u>	Date: <u>8/23/21</u>	Page <u>1</u> of <u>1</u>
Project Number: _____	Primary Activities: _____	
Field Personnel: <u>TL</u>	_____	
Company: <u>PDL</u>	_____	
Recorded By: <u>TL</u>	_____	
Weather: <u>83-91°F, Sunny, wind 7 mph S</u>		

Parameters	Data
Sampling Technique	—
Sample ID	CO_I03_GPb_SOURCE WATER - TOTAL
Rain > or < 0.1" in past 48 hours	L
Barometric Pressure	729.83
Depth to Free Liquid (if applicable)	—
Sample Depth (if applicable)	—
Pumps, Valves, or Control Mechanisms	—
GPS Coordinates	—
Sample Description (color, odor, clarity)	Slight odor/color
Field Parameters	—
pH (SU)	6.37
Dissolved Oxygen (mg/L)	8.33
Temperature (°C)	29.8
Turbidity (NTU)	12.07
Specific Conductivity (mS/cm)	29006
ORP (mV)	217.7
Volume Filtered – 10 µm filter	2500 mL
Volume Filtered – 0.45 µm filter	1250 mL
Additional field notes:	

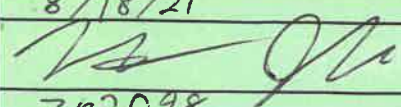
Sampling Log Field Sheet

Project Name: <u>Loffeen LLC</u>	Date: <u>8/23/21</u>	Page <u>1</u> of <u>1</u>
Project Number: _____	Primary Activities: _____	
Field Personnel: <u>TL</u>	_____	
Company: <u>PDC</u>	_____	
Recorded By: <u>TL</u>	_____	
Weather: <u>83-91°F, Sunny, Wind 7 mph S</u>		

Parameters	Data
Sampling Technique	—
Sample ID	CO_103_GPc_SOURCE WATER - TOTAL
Rain > or < 0.1" in past 48 hours	<
Barometric Pressure	729.83
Depth to Free Liquid (if applicable)	—
Sample Depth (if applicable)	—
Pumps, Valves, or Control Mechanisms	—
GPS Coordinates	—
Sample Description (color, odor, clarity)	Clear, slight odor
Field Parameters	—
pH (SU)	5.80
Dissolved Oxygen (mg/L)	8.12
Temperature (°C)	30.3
Turbidity (NTU)	4.43
Specific Conductivity (mS/cm)	29086
ORP (mV)	259.8
Volume Filtered – 10 µm filter	2500 mL
Volume Filtered – 0.45 µm filter	1250 mL

Additional field notes:

Multiparameter Meter Field Calibration Checklist

Field Personnel	Matt Julion	Date:	8/18/21
Weather conditions:	82°F - 85°F Sunny cloudy wind NW 0-5 mph	Signature:	
Make/Model	AquaTroll 600	S/N	702098

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 #:	K268-29	Lot #:	K303-35	Lot #:	K265-13
exp:	2-Oct-22	exp:	5-Nov-22	exp:	24-Sep-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 #:	OGJ264	Lot #:	OGJ268	Lot #:	OGC851
exp:	Oct-22	exp:	Oct-22	exp:	Mar-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 #:	1042917	Lot #:	OGG321
		exp:	Nov-22	exp:	Jul-21

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 #:	OGI329
Prepared by:	PDC Tech Services, Inc:	exp:	Jul-21

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	NA
7a	6.99	s.u.	±0.1 s.u.	↓	↓	↓
10a	9.99	s.u.	±0.1 s.u.			
SC Zero (DI)	15.23	µS/cm	0<25 µS/cm			
SC 2000	1987.5	µS/cm	±5%	↓	↓	↓
ORP	222.10	mV	±15 mV			
DO (Zero pt)	0.01	mg/L	±0.1			
DO (Saturated)	97.03	%	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	3.98	s.u.	±0.15 s.u.	Pass	None ↓
7b	6.85	s.u.	±0.15 s.u.	↓	
10b	9.85	s.u.	±0.15 s.u.		
SC1000	1010.3	µS/cm	±5%	↓	↓

CCV (Continued Calibration Verification): 1400 Approx. every 4 hrs, unless only one well

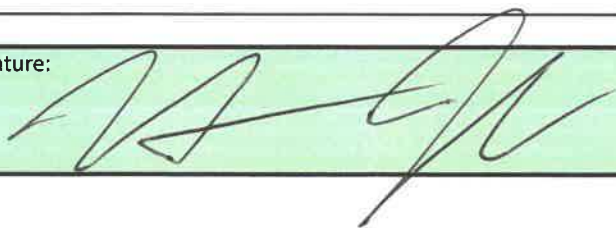
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.04	s.u.	±0.1 s.u.	Pass	No	NA
7	7.02	s.u.	±0.1 s.u.	↓	↓	↓
10	10.02	s.u.	±0.1 s.u.			
SC 1000	1013.5	µS/cm	±5%			
DO (Zero pt)	0.01	mg/L	±0.1 mg/L	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU			

CCV (Continued Calibration Verification): 1635 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	NA
7*	7.04	s.u.	±0.1 s.u.	↓	↓	↓
10	10.03	s.u.	±0.1 s.u.			
SC 1000	1016.1	µS/cm	±5%			
DO (Zero pt)	0.03	mg/L	±0.1 mg/L	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU			

Comments:

Signature:



Date:

8/18/21

Multiparameter Meter Field Calibration Checklist

Field Personnel	Joe Reed	Date:	8/19/21
Weather conditions:	80-86°F Sunny Wind-calm-NW-14mph	Signature:	Joseph R Reed
Make/Model	AquaTroll 600	S/N	762193

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 #:	K268-29	Lot #:	K303-35	Lot #:	K265-13
exp:	2-Oct-22	exp:	5-Nov-22	exp:	24-Sep-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 #:	OGJ264	Lot #:	OGJ268	Lot #:	OGC851
exp:	Oct-22	exp:	Oct-22	exp:	Mar-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 #:	1042917	Lot #:	OGG321
		exp:	Nov-22	exp:	Jul-21

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 #:	OGI329
Prepared by:	PDC Tech Services, Inc:	exp:	Jul-21

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: 920

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	4.04	s.u.	±0.1 s.u.	Pass	NA	NA
7a	7.03	s.u.	±0.1 s.u.			
10a	10.01	s.u.	±0.1 s.u.			
SC Zero (DI)	19.11	µS/cm	0<25 µS/cm			
SC 2000	2001.9	µS/cm	±5%			
ORP	221.8	mV	±15 mV			
DO (Zero pt)	0.05	mg/L	±0.1			
DO (Saturated)	99.53	%	97-100%			
Turbidity (DI)	1.09	NTU	<2 NTU			

ICV (Initial Calibration Verification)

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.07	s.u.	±0.15 s.u.	Pass	NA
7b	6.95	s.u.	±0.15 s.u.		
10b	9.98	s.u.	±0.15 s.u.		
SC1000	1010.1	µS/cm	±5%		

CCV (Continued Calibration Verification): 1330 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	NA	NA
7	7.00	s.u.	±0.1 s.u.			
10	10.03	s.u.	±0.1 s.u.			
SC 1000	1012.8	µS/cm	±5%			
DO (Zero pt)	0.05	mg/L	±0.1 mg/L			
Turbidity (DI)	1.01	NTU	<2 NTU			

CCV (Continued Calibration Verification): 1615 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	NA	NA
7*	6.97	s.u.	±0.1 s.u.			
10	10.03	s.u.	±0.1 s.u.			
SC 1000	1020.3	µS/cm	±5%			
DO (Zero pt)	0.07	mg/L	±0.1 mg/L			
Turbidity (DI)	0.89	NTU	<2 NTU			

Comments:


Signature:

Joseph R Reed

Date:

8/18/21

Multiparameter Meter Field Calibration Checklist

Field Personnel	Auror Penabaker	Date:	8/18/2021
Weather conditions:	70-86° Sunny wind NW at 1mph	Signature:	
Make/Model	AquaTroll 600	S/N	246000

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 #:	K268-29	Lot #:	K303-35	Lot #:	K265-13
exp:	2-Oct-22	exp:	5-Nov-22	exp:	24-Sep-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 #:	0GJ264	Lot #:	0GJ268	Lot #:	0GC851
exp:	Oct-22	exp:	Oct-22	exp:	Mar-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 #:	1042917	Lot #:	0GG321
		exp:	Nov-22	exp:	Jul-21

RDO	Sodium Sulfite in DI Water	ORP	Zobell's Standard
Value:	0	Value*:	229 @ 25°C
Range:	+/- 0.01	Range:	+/- 10 mV
Manufacturer:	Fisher Chemical	Manufacturer:	In-Situ
Lot #:	168261	Lot #:	0GI329
Prepared by:	PDC Tech Services, Inc:	exp:	Jul-21

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: **0912**

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	3.45	s.u.	±0.1 s.u.	pass	NO	NA
7a	6.95	s.u.	±0.1 s.u.			
10a	9.96	s.u.	±0.1 s.u.			
SC Zero (DI)	6.26	µS/cm	0<25 µS/cm			
SC 2000	1971.4	µS/cm	±5%			
ORP	237.0	mV	±15 mV			
DO (Zero pt)	0.09	mg/L	±0.1			
DO (Saturated)	97.08	%	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	
7b	6.85	s.u.	±0.15 s.u.		
10b	9.86	s.u.	±0.15 s.u.		
SC1000	986.76	µS/cm	±5%		

CCV (Continued Calibration Verification): **1350**

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	6.48	s.u.	±0.1 s.u.			
10	9.96	s.u.	±0.1 s.u.			
SC 1000	992.43	µS/cm	±5%			
DO (Zero pt)	0.09	mg/L	±0.1 mg/L			
Turbidity (DI)	0.00	NTU	<2 NTU			

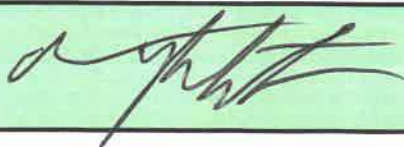
CCV (Continued Calibration Verification): **1656**

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.10	s.u.	±0.1 s.u.	pass	NO	NA
7*	7.00	s.u.	±0.1 s.u.			
10	9.96	s.u.	±0.1 s.u.			
SC 1000	972.46	µS/cm	±5%			
DO (Zero pt)	0.07	mg/L	±0.1 mg/L			
Turbidity (DI)	0.00	NTU	<2 NTU			

Comments:

Signature:



Date:

8/18/2021

Multiparameter Meter Field Calibration Checklist

Field Personnel	Aaron Rumberlon	Date:	8/19/2021
Weather conditions:	78°-85° Sunny Wind NE 10-15kph	Signature:	
Make/Model	AquaTroll 600	S/N	84600

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 regimen (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 #:	K268-29	Lot #:	K303-35	Lot #:	K265-13
exp:	2-Oct-22	exp:	5-Nov-22	exp:	24-Sep-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 #:	OGJ264	Lot #:	OGJ268	Lot #:	OGC851
exp:	Oct-22	exp:	Oct-22	exp:	Mar-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 #:	1042917	Lot #:	OGG321
		exp:	Nov-22	exp:	Jul-21

RDO	Sodium Sulfite in DI Water	ORP	Zobell's Standard
-----	----------------------------	-----	-------------------

Value:	0	Value*:	225-230 @ 24°C
Range:	+/- 0.01	Range:	+/- 10 mV
Manufacturer:	Fisher Chemical	Manufacturer:	In-Situ
Lot #:	168261	Lot #:	OGI329
Prepared by:	PDC Tech Services, Inc:	exp:	Jul-21

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: **0944**

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	3.95	s.u.	±0.1 s.u.	pass	NO	N/A
7a	6.96	s.u.	±0.1 s.u.			
10a	9.98	s.u.	±0.1 s.u.			
SC Zero (DI)	3.60	µS/cm	0<25 µS/cm			
SC 2000	2008.0	µS/cm	±5%			
ORP	239.2	mV	±15 mV			
DO (Zero pt)	0.09	mg/L	±0.1			
DO (Saturated)	97.88	%	97-100%			
Turbidity (DI)	0.00	NTU	<2 NTU			

ICV (Initial Calibration Verification)

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	3.96	s.u.	±0.15 s.u.	pass	N/A
7b	6.85	s.u.	±0.15 s.u.		
10b	9.91	s.u.	±0.15 s.u.		
SC1000	992.72	µS/cm	±5%		

CCV (Continued Calibration Verification): **1350**

Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	3.99	s.u.	±0.1 s.u.	pass	NO	N/A
7	6.98	s.u.	±0.1 s.u.			
10	9.99	s.u.	±0.1 s.u.			
SC 1000	999.74	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): **1628**

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*	7.02	s.u.	±0.1 s.u.			
10	9.98	s.u.	±0.1 s.u.			
SC 1000	1000.1	µS/cm	±5%			
DO (Zero pt)	0.08	mg/L	±0.1 mg/L			
Turbidity (DI)	0.00	NTU	<2 NTU			

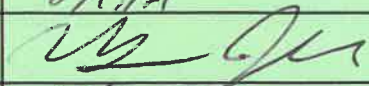
Comments:

Signature:

Date:

8/19/2021

Multiparameter Meter Field Calibration Checklist

Field Personnel	Matt Julia	Date:	8/19/21
Weather conditions:	80°-86° P. cloudy wind S & S-wind	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 #:	K268-29	Lot #:	K303-35	Lot #:	K265-13
exp:	2-Oct-22	exp:	5-Nov-22	exp:	24-Sep-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 #:	OGJ264	Lot #:	OGJ268	Lot #:	OGC851
exp:	Oct-22	exp:	Oct-22	exp:	Mar-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 #:	1042917	Lot #:	OGG321
		exp:	Nov-22	exp:	Jul-21

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 #:	OGI329
Prepared by:	PDC Tech Services, Inc:	exp:	Jul-21

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	4.04	s.u.	±0.1 s.u.	Pass	No	PA
7a	7.04	s.u.	±0.1 s.u.	↓	↓	↓
10a	10.03	s.u.	±0.1 s.u.	↓	↓	↓
SC Zero (DI)	21.73	µS/cm	0<25 µS/cm	↓	↓	↓
SC 2000	1978.9	µS/cm	±5%	↓	↓	↓
ORP	216.9 @ 24°C	mV	±15 mV	↓	↓	↓
DO (Zero pt)	0.07	mg/L	±0.1	↓	↓	↓
DO (Saturated)	98.55	%	97-100%	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	↓

ICV (Initial Calibration Verification) 09:59

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.08	s.u.	±0.15 s.u.	Pass	None
7b	6.87	s.u.	±0.15 s.u.	↓	↓
10b	9.96	s.u.	±0.15 s.u.	↓	↓
SC1000	1017.3	µS/cm	±5%	↓	↓

CCV (Continued Calibration Verification): 13:50 Approx. every 4 hrs, unless only one well

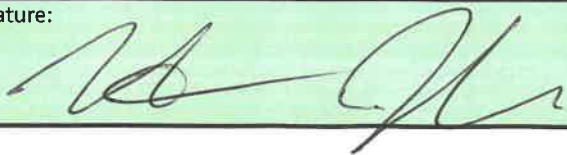
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.06	s.u.	±0.1 s.u.	Pass	No	PA
7	7.05	s.u.	±0.1 s.u.	↓	↓	↓
10	10.03	s.u.	±0.1 s.u.	↓	↓	↓
SC 1000	1008.5	µS/cm	±5%	↓	↓	↓
DO (Zero pt)	0.07	mg/L	±0.1 mg/L	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	↓

CCV (Continued Calibration Verification): 16:28 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.	Pass	No	PA
7*	7.06	s.u.	±0.1 s.u.	↓	↓	↓
10	10.04	s.u.	±0.1 s.u.	↓	↓	↓
SC 1000	996.64	µS/cm	±5%	↓	↓	↓
DO (Zero pt)	0.04	mg/L	±0.1 mg/L	↓	↓	↓
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	↓

Comments:


Signature:



Date:

8/19/21

Multiparameter Meter Field Calibration Checklist

Field Personnel	Aaron Robertson		Date:	8/20/2021	
Weather conditions:	73° - 84° F Sunny Wind SE at 2 mph		Signature:		
Make/Model	AquaTroll 600		S/N	84600	
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 #:	K268-29	Lot #:	K303-35	Lot #:	K265-13
exp:	2-Oct-22	exp:	5-Nov-22	exp:	24-Sep-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 #:	OGJ264	Lot #:	OGJ268	Lot #:	OGC851
exp:	Oct-22	exp:	Oct-22	exp:	Mar-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 #:	1042917	Lot #:	OGG321
		exp:	Nov-22	exp:	Jul-21
RDO					
Sodium Sulfite in DI Water		ORP		Zobell's Standard	
Value:	0	Value*:	229 @ 25°C		
Range:	+/- 0.01	Range:	+/- 10 mV		
Manufacturer:	Fisher Chemical	Manufacturer:	In-Situ		
Lot #:	168261	Lot #:	OGI329		
Prepared by:	PDC Tech Services, Inc:	exp:	Jul-21		
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: **0805**

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	3.96	s.u.	±0.1 s.u.	Pass	No	N/A
7a	6.96	s.u.	±0.1 s.u.	↓	↓	↓
10a	9.98	s.u.	±0.1 s.u.			
SC Zero (DI)	11.06	µS/cm	0<25 µS/cm			
SC 2000	1954.8	µS/cm	±5%			
ORP	237.3	mV	±15 mV			
DO (Zero pt)	0.08	mg/L	±0.1			
DO (Saturated)	99.99	%	97-100%			
Turbidity (DI)	0.00	NTU	<2 NTU			

ICV (Initial Calibration Verification)

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	3.96	s.u.	±0.15 s.u.	Pass	N/A
7b	6.85	s.u.	±0.15 s.u.	↓	↓
10b	9.89	s.u.	±0.15 s.u.		
SC1000	1002.4	µS/cm	±5%		

CCV (Continued Calibration Verification): **1309**

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.	Pass	No	N/A
7	6.97	s.u.	±0.1 s.u.	↓	↓	↓
10	10.00	s.u.	±0.1 s.u.			
SC 1000	1022.7	µS/cm	±5%			
DO (Zero pt)	0.09	mg/L	±0.1 mg/L			
Turbidity (DI)	0.00	NTU	<2 NTU			

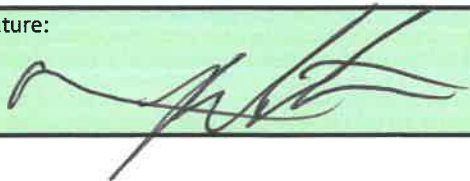
CCV (Continued Calibration Verification):

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:

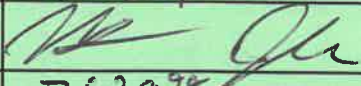
Signature:



Date:

8/20/2021

Multiparameter Meter Field Calibration Checklist

Field Personnel	Matt Wilson	Date:	8/20/21
Weather conditions:	79°-84°F wind soumy wind SE @ -5mph	Signature:	
Make/Model	AquaTroll 600	S/N	762078

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 #:	K268-29	Lot #:	K303-35	Lot #:	K265-13
exp:	2-Oct-22	exp:	5-Nov-22	exp:	24-Sep-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 #:	0GJ264	Lot #:	0GJ268	Lot #:	0GC851
exp:	Oct-22	exp:	Oct-22	exp:	Mar-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 #:	1042917	Lot #:	0GG321
		exp:	Nov-22	exp:	Jul-21

RDO	Sodium Sulfite in DI Water	ORP	Zobell's Standard
Value:	0	Value*: 220.25v	
Range:	+/- 0.01	Range:	+/- 10 mV
Manufacturer:	Fisher Chemical	Manufacturer:	In-Situ
Lot #:	168261	Lot #:	0GI329
Prepared by:	PDC Tech Services, Inc:	exp:	Jul-21

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	4.07	s.u.	±0.1 s.u.	Pass	Yes	4.00
7a	7.06	s.u.	±0.1 s.u.	↓	↓	7.00
10a	10.07	s.u.	±0.1 s.u.			10.00
SC Zero (DI)	21.38	µS/cm	0<25 µS/cm	↓	↓	NA
SC 2000	2046.3	µS/cm	±5%			
ORP	214.8 @ 250	mV	±15 mV			
DO (Zero pt)	0.07	mg/L	±0.1			
DO (Saturated)	99.94	%	97-100%			
Turbidity (DI)	0.00	NTU	<2 NTU	↓	↓	↓

ICV (Initial Calibration Verification) 08/16

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.00	s.u.	±0.15 s.u.	Pass	↓
7b	6.86	s.u.	±0.15 s.u.	↓	
10b	9.90	s.u.	±0.15 s.u.		
SC1000	1025.8	µS/cm	±5%		

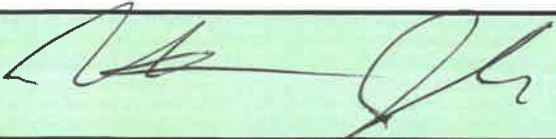
CCV (Continued Calibration Verification): 1309 Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.00	s.u.	±0.1 s.u.	Pass	NO	N/A
7	7.08	s.u.	±0.1 s.u.	↓	↓	↓
10	10.05	s.u.	±0.1 s.u.			
SC 1000	1013.5	µS/cm	±5%			
DO (Zero pt)	0.08	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:

Signature:  Date: 8/20/21

Multiparameter Meter Field Calibration Checklist

Field Personnel	Joe Reed		Date:	8/25/21	
Weather conditions:	88-90°F Sunny winds 5mph		Signature:	Joseph R. Reed	
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 #:	K268-29	Lot #:	K303-35	Lot #:	K265-13
exp:	2-Oct-22	exp:	5-Nov-22	exp:	24-Sep-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 #:	OGJ264	Lot #:	OGJ268	Lot #:	OGC851
exp:	Oct-22	exp:	Oct-22	exp:	Mar-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 #:	1042917	Lot #:	OGG321
		exp:	Nov-22	exp:	Jul-21
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 #:	OGI329	
Prepared by:	PDC Tech Services, Inc:		exp:	Jul-21	
Turbidity (if required)					
0 NTU	0 (DI Water)	1 NTU	1	10 NTU	10
Range:	Not Measured		Range:		
Manufacturer:	PDC Laboratories, Inc		Manufacturer:		
Lot #:	NA		Lot #:		
exp:	NA		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: 1115

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	4.01	s.u.	±0.1 s.u.	Pass	N/A	N/A
7a	7.00	s.u.	±0.1 s.u.	↓	↓	↓
10a	9.99	s.u.	±0.1 s.u.			
SC Zero (DI)	5.10	µS/cm	0<25 µS/cm			
SC 2000	2009.1	µS/cm	±5%			
ORP	222.3	mV	±15 mV			
DO (Zero pt)	0.03	mg/L	±0.1			
DO (Saturated)	99.81	%	97-100%			
Turbidity (DI)	0.81	NTU	<2 NTU	↓	↓	↓

ICV (Initial Calibration Verification)

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	3.98	s.u.	±0.15 s.u.	Pass	↓
7b	6.99	s.u.	±0.15 s.u.	↓	
10b	10.00	s.u.	±0.15 s.u.		
SC1000	1002.9	µS/cm	±5%	↓	

CCV (Continued Calibration Verification): 1500 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	↓	↓
7	7.01	s.u.	±0.1 s.u.			
10	10.00	s.u.	±0.1 s.u.			
SC 1000	1005.0	µS/cm	±5%			
DO (Zero pt)	0.05	mg/L	±0.1 mg/L			
Turbidity (DI)	0.19	NTU	<2 NTU			

CCV (Continued Calibration Verification): 1600 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	↓	↓
7*	7.04	s.u.	±0.1 s.u.			
10	10.02	s.u.	±0.1 s.u.			
SC 1000	1010.3	µS/cm	±5%			
DO (Zero pt)	0.04	mg/L	±0.1 mg/L			
Turbidity (DI)	0.32	NTU	<2 NTU			

Comments:

Signature:

Joseph R Reed

Date:

8/23/21

Multiparameter Meter Field Calibration Checklist

Field Personnel	Taylor Coodle		Date:	8/23/21	
Weather conditions:	83° F, Sunny, Wind 7 mph		Signature:	<i>[Signature]</i>	
Make/Model	AquaTroll 600		S/N	762193	
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 #:	K268-29	Lot #:	K303-35	Lot #:	K265-13
exp:	2-Oct-22	exp:	5-Nov-22	exp:	24-Sep-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 #:	OGJ264	Lot #:	OGJ268	Lot #:	OGC851
exp:	Oct-22	exp:	Oct-22	exp:	Mar-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 #:	1042917	Lot #:	OGG321
		exp:	Nov-22	exp:	Jul-21
RDO					
	Sodium Sulfite in DI Water		ORP	Zobell's Standard	
Value:	0		Value*:	229.0059L	
Range:	+/- 0.01		Range:	+/- 10 mV	
Manufacturer:	Fisher Chemical		Manufacturer:	In-Situ	
Lot #:	168261		Lot #:	OGI329	
Prepared by:	PDC Tech Services, Inc:		exp:	Jul-21	
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: 1123

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	4.05	s.u.	±0.1 s.u.	Pass	No	N/A
7a	7.09	s.u.	±0.1 s.u.	↓	↓	↓
10a	10.05	s.u.	±0.1 s.u.			
SC Zero (DI)	3.48	µS/cm	0<25 µS/cm			
SC 2000	2041.7	µS/cm	±5%			
ORP	220.7	mV	±15 mV			
DO (Zero pt)	.08	mg/L	±0.1			
DO (Saturated)	97.88	%	97-100%			
Turbidity (DI)	1.36	NTU	<2 NTU			

ICV (Initial Calibration Verification) 1127

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.05	s.u.	±0.15 s.u.	Pass	none
7b	7.05	s.u.	±0.15 s.u.	↓	↓
10b	10.04	s.u.	±0.15 s.u.		
SC1000	1031.7	µS/cm	±5%		

CCV (Continued Calibration Verification): 15510 Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.10	s.u.	±0.1 s.u.	Pass	No	N/A
7	7.09	s.u.	±0.1 s.u.	↓	↓	↓
10	10.10	s.u.	±0.1 s.u.			
SC 1000	1031.9	µS/cm	±5%			
DO (Zero pt)	.08	mg/L	±0.1 mg/L			
Turbidity (DI)	1.44	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: 8/23/21

EH04476-03 DW

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

RAMBOLL - MILWAUKEE
 NRT COFFEEN CCR GMF STACK

CHAIN OF CUSTODY # 1
 DATE: 8/19/21
 PAGE: 1 OF 1

LABORATORY SAMPLES SUBMITTED TO: PDC Laboratories, Inc.				CLIENT PROJECT NAME Coffeen Gypsum Stack Pond		PROJECT NUMBER / TASK NUMBER: 2285 / Unit 105	
ADDRESS: 2231 W Altorfer Drive				PROJECT CONTACT: Gail Schindler		QUOTE NO.:	
CITY: Peoria, IL 61615				SAMPLER(S): (SIGNATURE) 			
TEL: 309-683-1716		FAX: 309-692-9689		E-MAIL gschindler@pdclab.com			
TURNAROUND TIME <input type="checkbox"/> STANDARD <input type="checkbox"/> 24 HR <input checked="" type="checkbox"/> 48 HR <input type="checkbox"/> 2 HR <input checked="" type="checkbox"/> 5 DAYS							

Data Package: <u>Level 2</u> Level 4				Preservatives: A = none, B= HCL, C = H ₂ SO ₄ , D = HNO ₃ , E = methanol, F = Sodium Bisulfate, G = zinc acetate, H = other		Preservation Code (pick letter) Filtered (Yor N)	
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SPECIAL REQUIREMENTS								REQUESTED ANALYSIS																		
								Method Number and Analytes																		
								A	A	D	A															
								N	N	N	N															

LAB USE ONLY	SAMPLE ID	QC SAMPLE	FIELD COMMENTS	SAMPLE		MATRIX	SAMPLE TYPE	SAMPLE INTERVAL (ft)		#Cont	300.0-Cl, F, SO4	2540C-TDS	6020-B, Ca, Mg, Na, K	2310 - Alk CO3, Alk HCO3																		
				DATE	TIME			TOP	BOTTOM																							
	G200			8/18/21	12:19	GW	Grab			5																						
	R201			8/18/21	10:59	GW	Grab			3																						

Relinquished by: (Signature) 	Received by: (Signature) 	Date: 8/19/21	Time: 10:00AM
Relinquished by: (Signature) 	Received by: (Signature) 	Date: 8/19/21	Time: 10:45
Relinquished by: (Signature) 	Received by: (Signature) 	Date: 8/19/21	Time: 10:45



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 - COFFEEN	PROJECT NUMBER GYP SUM STACK	PROJECT LOCATION	PURCHASE ORDER #	3 ANALYSIS REQUESTED	4 (FOR LAB USE ONLY) LOGIN # EHO4624-14 LOGGED BY: REG CLIENT: VISTRA-COFFEEN PROJECT: COFFEEN GYP G1 PROJ. MGR.: GJ SCHINDLER
	ADDRESS 134 CIPS LANE	PHONE NUMBER	E-MAIL		
CITY STATE ZIP COFFEEN, IL 62017	SAMPLER (PLEASE PRINT) Aaron Pemberton	MATRIX TYPES: WW- WASTEWATER DW- DRINKING WATER GW- GROUND WATER WWSL- SLUDGE NAS- NON AQUEOUS SOLID LCHT-LEACHATE OIL-OIL SO-SOL SOL-SOLID		SB*,AS*,AL*,BA*,BE*,B* CD*,CL*,CR*,CO*,CU*,F* CN,FE*,PB*,MN*,HG*,V* MO*,NI*,PHENOL,SE* AG*,SO4*,TL*,TDS,ZN*	REMARKS *TOTAL AND DISSOLVED
CONTACT PERSON JOHN ROMANG	SAMPLER'S SIGNATURE 	BOTTLE COUNT	PRES CODE CLIENT PROVIDED		

2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE		MATRIX TYPE	BOTTLE COUNT	PRES CODE CLIENT PROVIDED	SB*,AS*,AL*,BA*,BE*,B*	CD*,CL*,CR*,CO*,CU*,F*	CN,FE*,PB*,MN*,HG*,V*	MO*,NI*,PHENOL,SE*	AG*,SO4*,TL*,TDS,ZN*	REMARKS
			GRAB	COMP									
R205	8/14/21	1325	X		GW	6							
6206	8/20/21	1125	X		GW	6							
6207	8/20/21	1230	X		GW	6							
6208	8/20/21	1131	X		GW	6							
6209	8/20/21	0949	X		GW	6							
6210	8/20/21	0939	X		GW	6							
6211	8/20/21	1303	X		GW	6							
6212	8/14/21	1211	X		GW	6							
6213	8/19/21	1216	X		GW	6							

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 PDC 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 NOT be acceptable to report to all regulatory authorities.
RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL PHONE		PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS) _____
EMAIL IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:		

7 RELINQUISHED BY: (SIGNATURE) 	DATE 8/20/2021	RECEIVED BY: (SIGNATURE)	DATE	8 COMMENTS: (FOR LAB USE ONLY) SAMPLE TEMPERATURE UPON RECEIPT 3.2 °C CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N SAMPLE(S) RECEIVED ON ICE Y OR N SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED Y OR N DATE AND TIME TAKEN FROM SAMPLE BOTTLE _____
	TIME 1535		TIME	
	RELINQUISHED BY: (SIGNATURE)	DATE	RECEIVED BY: (SIGNATURE)	
	TIME		TIME	
RELINQUISHED BY: (SIGNATURE)	DATE	RECEIVED BY: (SIGNATURE)	DATE 08/20/21	
	TIME		TIME 1535	



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 - COFFEEN	PROJECT NUMBER GYP SUM STACK	PROJECT LOCATION	PURCHASE ORDER #	3 ANALYSIS REQUESTED	4 (FOR LAB USE ONLY) LOGIN # ETH04624-14 LOGGED BY: KCR CLIENT: VISTRA-COFFEEN PROJECT: COFFEEN GYP G1 PROJ. MGR.: GJ SCHINDLER		
	ADDRESS 134 CIPS LANE	PHONE NUMBER	E-MAIL			DATE SHIPPED	
CITY COFFEEN, IL 62017	SAMPLER (PLEASE PRINT) Aaron Remberton	MATRIX TYPES: WW- WASTEWATER DW- DRINKING WATER GW- GROUND WATER WWSL- SLUDGE NAS- NON AQUEOUS SOLID LCHT-LEACHATE OL-OIL SO-SOIL SOL-SOLID		SB*,AS*,AL*,BA*,BE*,B* CD*,CL*,CR*,CO*,CU*,F* CN,FE*,PB*,MN*,HG*,V* MO*,NI*,PHENOL,SE* AG*,SO4*,TL*,TDS,ZN*	REMARKS		
STATE IL	SAMPLER'S SIGNATURE 	BOTTLE COUNT	PRES CODE CLIENT PROVIDED				
CONTACT PERSON JOHN ROMANG	DATE COLLECTED 8/20/21	TIME COLLECTED 1338	SAMPLE TYPE GRAB COMP	MATRIX TYPE	BOTTLE COUNT	PRES CODE CLIENT PROVIDED	*TOTAL AND DISSOLVED
	8/19/21	1457	X		6W	6	
	8/19/21	1501	X		6W	6	
	8/19/21	1613	X		6W	6	
	8/19/21	1612	X		6W	6	

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 PDC 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 NOT be acceptable to report to all regulatory authorities.
RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL PHONE	PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS)	
EMAIL IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:		

7 RELINQUISHED BY: (SIGNATURE) 	DATE 8/20/21	RECEIVED BY: (SIGNATURE)	DATE	8 COMMENTS: (FOR LAB USE ONLY) SAMPLE TEMPERATURE UPON RECEIPT 3.2 °C CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED Y OR N DATE AND TIME TAKEN FROM SAMPLE BOTTLE
RELINQUISHED BY: (SIGNATURE)	DATE	RECEIVED BY: (SIGNATURE)	DATE	
RELINQUISHED BY: (SIGNATURE)	DATE	RECEIVED BY: (SIGNATURE) Kathryn Gray	DATE 08/20/21	
	TIME 1535		TIME 1535	

EHO4994-04 DCW

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

RAMBOLL MILWAUKEE
NRT COFFEEN CCR GMF STACK POND SOURCE WA

CHAIN OF CUSTODY # _____
DATE: 8/23/21
PAGE: 1 OF 1

LABORATORY SAMPLES SUBMITTED TO: PDC Laboratories, Inc.				CLIENT PROJECT NAME Coffeen Source Water		PROJECT NUMBER / TASK NUMBER: 2285 / Unit 103	
ADDRESS: 2231 W Altorfer Drive				PROJECT CONTACT: Gail Schindler		QUOTE NO.:	
CITY: Peoria, IL 61615				SAMPLER(S): (SIGNATURE) 			
TEL: 309-683-1716		FAX: 309-692-9689		E-MAIL: gschindler@pdclab.com			
TURNAROUND TIME <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 2 HR <input checked="" type="checkbox"/> 5 DAYS				REQUESTED ANALYSIS			

Data Package: Level 2 Level 4	Preservatives: A = none, B= HCL, C = H ₂ SO ₄ , D = HNO ₃ , E = methanol, F = Sodium Bisulfate, G = zinc acetate, H = other	Preservation Code (pick letter) Filtered (Y or N)
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SPECIAL REQUIREMENTS

LAB USE ONLY	SAMPLE ID	FIELD COMMENTS	SAMPLE		MATRIX	SAMPLE TYPE	SAMPLE INTERVAL (ft)		#CON	ANALYSIS																	
			DATE	TIME			TOP	BOTTOM		300.0/2540-C, F, SO ₄ , TDS	6020 - B, Ca, K, Mg, Na	2310 - Alk CO ₃ , Alk HCO ₃	300.0-CI, F, SO ₄	6020 - B, Ca, K, Mg, Na													
	CO_103_GPb_SOURCE WATER - TOT		8/23/21	1146	SW	Urad			2	X	X	X															
	CO_103_GPb_SOURCE WATER - FILT			1155	SW				2				X	X													
	CO_103_GPc_SOURCE WATER - TOT			1304	SW				2	X	X	X															
	CO_103_GPc_SOURCE WATER - FILT			1313	SW				2				X	X													

Relinquished by: (Signature)	Received by: (Signature)	Date: <u>8/23/21</u>	Time: <u>1900</u>
Relinquished by: (Signature)	Received by: (Signature)	Date: <u>8/24/21</u>	Time: <u>1025</u>
Relinquished by: (Signature)	Received by: (Signature)	Date: <u>8/24/21</u>	Time: <u>1025</u>

5.8



December 13, 2021

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

Dear Steve Wiskes:

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 PDC Laboratories.

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

PDC Laboratories. 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.

Sincerely,

David G. Schindler

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





SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order EK04968

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: EK04968-01
Name: G206
Alias: UNIT 103

Sampled: 11/29/21 12:35
Received: 11/29/21 17:32
Matrix: Ground Water - Grab
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Includes 'Field - PIA' section with parameters like Depth, Dissolved oxygen, etc., and 'General Chemistry - PIA' section with Fluoride.

Sample: EK04968-02
Name: G209
Alias: UNIT 103

Sampled: 11/29/21 12:04
Received: 11/29/21 17:32
Matrix: Ground Water - Grab
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Includes 'Field - PIA' section with parameters like Depth, Dissolved oxygen, etc.



ANALYTICAL RESULTS

Sample: EK04968-03
Name: G215
Alias: UNIT 103

Sampled: 11/29/21 14:15
Received: 11/29/21 17:32
Matrix: Ground Water - Grab
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Includes sections for Field - PIA and General Chemistry - PIA.

Sample: EK04968-04
Name: G218
Alias: UNIT 103

Sampled: 11/29/21 13:15
Received: 11/29/21 17:32
Matrix: Ground Water - Grab
PO #: 1061320

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Includes sections for Field - PIA and General Chemistry - PIA.



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B149736 - No Prep - SM 2540C</u>									
Blank (B149736-BLK1)				Prepared & Analyzed: 12/01/21					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B149736-BS1)				Prepared & Analyzed: 12/01/21					
Solids - total dissolved solids (TDS)	927	mg/L		1000		93	84.9-109		
Duplicate (B149736-DUP2)				Prepared & Analyzed: 12/01/21					
Sample: EK05168-04									
Solids - total dissolved solids (TDS)	950	mg/L	M		1070			12	5
<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		
<u>Batch B149894 - SW 3015 - EPA 6020A</u>									
Blank (B149894-BLK1)				Prepared: 12/02/21 Analyzed: 12/13/21					
Boron	< 10	ug/L							
LCS (B149894-BS1)				Prepared: 12/02/21 Analyzed: 12/13/21					
Boron	547	ug/L		555.6		98	80-120		
Matrix Spike (B149894-MS1)				Prepared: 12/02/21 Analyzed: 12/13/21					
Sample: EK04968-03									
Boron	1170	ug/L		555.6	624	99	75-125		
Matrix Spike Dup (B149894-MSD1)				Prepared: 12/02/21 Analyzed: 12/13/21					
Sample: EK04968-03									
Boron	1180	ug/L		555.6	624	101	75-125	1	20



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

M Analyte failed to meet the required acceptance criteria for duplicate analysis.

Gail Schindler



Certified by: Gail Schindler, Project Manager

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION

Site: Coffeen GMF Gypsum Stack Pond Client: RAMBOLL
 Project Number: 2285 Task #: Unit 103 Start Date: 11-29-21 Time: 12:15
 Field Personnel: Sam Grant Finish Date: 11-29-21 Time: 12:35

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>G200-206</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>4.54'</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>n/a</u>
Borehole Diameter: <u>n/a</u> Inches	<input type="checkbox"/> 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:	Volume Per Foot:	Standing Water Column:	1 Well Volume:	3 Well Volumes:
	Depth FT BTOC	Date/Time (24-Hour)	Depth FT BTOC	Date/Time (24-Hour)					
LNAPL	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>				<u>n/a</u>	<u>n/a</u>
Groundwater	<u>11.02</u>	<u>12:15</u>	<u>12.22</u>	<u>12:35</u>				<u>n/a</u>	<u>n/a</u>
DNAPL	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<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>	<u>n/a</u>				<u>n/a</u>	<u>n/a</u>

Water Level Serial #: _____ Water Quality Probe Type and Serial # AgilentTroll 600 846000

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>12:25</u>	<u>1000</u>	<u>11.92</u>	<u>0.90</u>	<u>14.66</u>	<u>7.26</u>	<u>829</u>	<u>1.58</u>	<u>0.60</u>	<u>-1.9</u>	<u>clear</u>
purge	<u>12:27</u>	<u>1200</u>	<u>12.00</u>	<u>0.98</u>	<u>14.70</u>	<u>7.20</u>	<u>800</u>	<u>1.48</u>	<u>0.00</u>	<u>0.2</u>	<u>clear</u>
	<u>12:29</u>	<u>1400</u>	<u>12.06</u>	<u>1.04</u>	<u>14.65</u>	<u>7.20</u>	<u>814</u>	<u>1.48</u>	<u>0.00</u>	<u>-1.8</u>	<u>clear</u>

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

Monitoring Well Evaluation Checklist

Site	Coffeen GMF Gypsum Stack Pond	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	11-29-21			✓	
Well Number	G206				

Stick-up Monitoring Wells				Comments
1. Outer protective Casing	Yes	No	NA	
Not corroded	✓	✓		
Not dented	✓			
Not cracked	✓			
Not loose	✓			
2. Inner casing	Yes	No	NA	
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?	✓			
Flushmount Monitoring Wells				
8. Can the lid be secured tightly?	✓		X	
9. Does the lid have a gasket that seals?			X	
10. No water in the flushmount?			X	
11. Is the well cap lockable?			X	
12. Is there a lock present?			X	
All Monitoring Wells				
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.	22.42			
17. Measured total depth of well.	ft			
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: Coffeen GMF Gypsum Stack Pond Client: RAMBOLL
 Project Number: 2285 Task #: Unit 103 Start Date: 11-29-21 Time: 11:45
 Field Personnel: Sam Grant Finish Date: 11-29-21 Time: 12:04

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>G206-209</u>	<input type="checkbox"/> Well Development <input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling <input type="checkbox"/> Well Volume Approach Sampling <input type="checkbox"/> Other (Specify below)	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches		Bailer Type: <u>n/a</u>
Screen Interval: <u>4.54'</u>		Pump Type and Serial #: <u>n/a</u>
Borehole Diameter: <u>n/a</u> Inches		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: <input checked="" type="checkbox"/> Well Casing <input type="checkbox"/> Borehole			
Depth FT BTOC	Date/Time (24-Hour)	Depth FT BTOC	Date/Time (24-Hour)	Volume Per Foot: _____ feet			
LNAPL	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	Standing Water Column: _____ feet			
Groundwater	<u>10.62</u>	<u>11:45</u>	<u>11.66</u>	<u>11.66</u>	<u>12:04</u>	1 Well Volume: <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		3 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		10 Well Volumes: <u>n/a</u> Gallons	
Water Level Serial #: _____				Water Quality Probe Type and Serial #: _____			

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>11:55</u>	<u>1000</u>	<u>11.66</u>	<u>1.04</u>	<u>14.36</u>	<u>7.02</u>	<u>1274</u>	<u>0.42</u>	<u>0.00</u>	<u>-144</u>	<u>clear</u>
purge	<u>11:57</u>	<u>1200</u>	<u>11.66</u>	<u>1.04</u>	<u>14.34</u>	<u>7.01</u>	<u>1286</u>	<u>0.39</u>	<u>0.00</u>	<u>-142</u>	<u>clear</u>
	<u>11:59</u>	<u>1400</u>	<u>11.66</u>	<u>1.04</u>	<u>14.36</u>	<u>7.00</u>	<u>1307</u>	<u>0.39</u>	<u>0.00</u>	<u>-140</u>	<u>clear</u>

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

Monitoring Well Evaluation Checklist

Site	Coffeen GMF Gypsum Stack Pond	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	11-29-21			✓	
Well Number	G209				

<u>Stick-up Monitoring Wells</u>				<u>Comments</u>
1. Outer protective Casing	Yes	No	NA	
Not corroded	✓			
Not dented	✓			
Not cracked	✓			
Not loose	✓			
2. Inner casing	Yes	No	NA	
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?			X	
9. Does the lid have a gasket that seals?			X	
10. No water in the flushmount?			X	
11. Is the well cap lockable?			X	
12. Is there a lock present?			X	
<u>All Monitoring Wells</u>	Yes	No	NA	
<u>Downhole Condition</u>				
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.	22.81 ft			
17. Measured total depth of well.	ft			
<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: Coffeen GMF Gypsum Stack Pond Client: RAMBOLL
 Project Number: 2285 Task #: Unit 103 Start Date: 11-29-21 Time: 13:25
 Field Personnel: Sam Grant Finish Date: 11-29-21 Time: 14:15

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>G215</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>4.39'</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>n/a</u>
Borehole Diameter: <u>n/a</u> Inches	<input type="checkbox"/> 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:	Volume Per Foot:	Standing Water Column:	1 Well Volume:	3 Well Volumes:
	Depth FT BTOC	Date/Time (24-Hour)	Depth FT BTOC	Date/Time (24-Hour)					
LNAPL	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>				<u>n/a</u>	<u>n/a</u>
Groundwater	<u>16.80</u>	<u>13:25</u>	<u>15.11</u>	<u>14:15</u>				<u>n/a</u>	<u>n/a</u>
DNAPL	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<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>	<u>n/a</u>				<u>n/a</u>	<u>n/a</u>
Water Level Serial #: _____					Water Quality Probe Type and Serial # _____				

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>1401</u>	<u>1200</u>	<u>15.11</u>	<u>1.75</u>	<u>14.38</u>	<u>6.92</u>	<u>1780</u>	<u>0.91</u>	<u>0.00</u>	<u>-12.9</u>	<u>clear</u>
purge	<u>1403</u>	<u>1400</u>	<u>15.11</u>	<u>1.75</u>	<u>14.47</u>	<u>6.92</u>	<u>1778</u>	<u>0.83</u>	<u>0.00</u>	<u>-13.3</u>	<u>clear</u>
	<u>1405</u>	<u>1600</u>	<u>15.11</u>	<u>1.75</u>	<u>14.59</u>	<u>6.91</u>	<u>1779</u>	<u>0.80</u>	<u>0.00</u>	<u>-14.2</u>	<u>clear</u>

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

Monitoring Well Evaluation Checklist

Site	Coffeen GMF Gypsum Stack Pond	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	<u>11-29-21</u>			✓	
Well Number	<u>G215</u>				

	Yes	No	NA	
Stick-up Monitoring Wells				
1. Outer protective Casing				Comments
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?	✓			
Flushmount Monitoring Wells				
8. Can the lid be secured tightly?			X	
9. Does the lid have a gasket that seals?			X	
10. No water in the flushmount?			X	
11. Is the well cap lockable?			X	
12. Is there a lock present?			X	
All Monitoring Wells				
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.			24.31 ft	
17. Measured total depth of well.			26.88 ft	<i>fld sheet</i>
General Condition				
18. Concrete pad installed?	✓			
19. Concrete pad				
Slope away form 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: Coffeen GMF Gypsum Stack Pond Client: RAMBOLL
 Project Number: 2285 Task #: Unit 103 Start Date: 11-29-21 Time: 12:47
 Field Personnel: _____ Finish Date: 11-29-21 Time: 13:15

WELL INFORMATION	EVENT TYPE	PURGE INFORMATION
Well ID: <u>G218</u>	<input type="checkbox"/> Well Development	Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump
Casing ID: <u>2</u> Inches	<input checked="" type="checkbox"/> Low-Flow / Low-Stress Sampling	Bailer Type: <u>n/a</u>
Screen Interval: <u>4.44'</u>	<input type="checkbox"/> Well Volume Approach Sampling	Pump Type and Serial #: <u>n/a</u>
Borehole Diameter: <u>n/a</u> Inches	<input type="checkbox"/> 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:	Volume Per Foot:	Standing Water Column:	1 Well Volume:	3 Well Volumes:
	Depth FT BTOC	Date/Time (24-Hour)	Depth FT BTOC	Date/Time (24-Hour)					
LNAPL	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>				<u>n/a</u>	<u>n/a</u>
Groundwater	<u>14.26</u>	<u>12:47</u>	<u>14.64</u>	<u>13:15</u>				<u>n/a</u>	<u>n/a</u>
DNAPL	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<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>	<u>n/a</u>				<u>n/a</u>	<u>n/a</u>
Total Volumes Produced: <u>n/a</u> Gallons					Well Purged Dry? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				

Water Level Serial #: _____ Water Quality Probe Type and Serial #: _____

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>13:03</u>	<u>1500</u>	<u>14.64</u>	<u>0.38</u>	<u>14.03</u>	<u>6.97</u>	<u>1307</u>	<u>0.55</u>	<u>14.53</u>	<u>-16.7</u>	<u>clear</u>
purge	<u>13:05</u>	<u>1700</u>	<u>14.64</u>	<u>0.38</u>	<u>13.95</u>	<u>6.97</u>	<u>1309</u>	<u>0.47</u>	<u>8.42</u>	<u>-19.3</u>	<u>clear</u>
	<u>13:07</u>	<u>1900</u>	<u>14.64</u>	<u>0.38</u>	<u>13.94</u>	<u>6.97</u>	<u>1312</u>	<u>0.40</u>	<u>8.31</u>	<u>-21.4</u>	<u>clear</u>

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

Monitoring Well Evaluation Checklist

Site	Coffeen GMF Gypsum Stack Pond	Major wells repairs* required to maintain well integrity?	Yes	No	NA
Inspection Date	11-29-21			✓	
Well Number	G218				
Stick-up Monitoring Wells			Comments		
1. Outer protective Casing		Yes	No	NA	
Not corroded		✓			
Not dented		✓			
Not cracked		✓			
Not loose		✓			
2. Inner casing		Yes	No	NA	
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?		✓			
Flushmount Monitoring Wells			Yes	No	NA
8. Can the lid be secured tightly?				X	
9. Does the lid have a gasket that seals?				X	
10. No water in the flushmount?				X	
11. Is the well cap lockable?				X	
12. Is there a lock present?				X	
All Monitoring Wells			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.		25.27 ft			
17. Measured total depth of well.		ft			
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					

Multiparameter Meter Field Calibration Checklist

Field Personnel	Aaron Kembaron		Date:	11/29/2021	
Weather conditions:	41°-46° cloudy wind S at 16mph		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 regimen (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		Range:	242 @ 15°C	
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:		
Manufacturer:	PDC Laboratories, Inc		Manufacturer:		
Lot #:	NA		Lot #:		
exp:	NA		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: 1051

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	4.07	s.u.	±0.1 s.u.	PASS	NO	NA
7a	7.05	s.u.	±0.1 s.u.			
10a	10.03	s.u.	±0.1 s.u.			
SC Zero (DI)	211.81	µS/cm	0<25 µS/cm			
SC 2000	2029.8	µS/cm	±5%			
ORP	237.7	mV	±15 mV			
DO (Zero pt)	0.09	mg/L	±0.1			
DO (Saturated)	99.56	%	97-100%			
Turbidity (DI)	0.00	NTU	<2 NTU			

ICV (Initial Calibration Verification)

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.00	s.u.	±0.15 s.u.	PASS	
7b	6.94	s.u.	±0.15 s.u.		
10b	10.03	s.u.	±0.15 s.u.		
SC1000	1009.06	µS/cm	±5%		

CCV (Continued Calibration Verification): 1500 Approx. every 4 hrs, unless only one well

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4	4.10	s.u.	±0.1 s.u.	PASS	NO	NA
7	7.10	s.u.	±0.1 s.u.			
10	10.09	s.u.	±0.1 s.u.			
SC 1000	1030.4	µS/cm	±5%			
DO (Zero pt)	0.08	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:


Signature:



Date:

11/29/2021

Multiparameter Meter Field Calibration Checklist

Field Personnel	Sam Gerrard		Date:	11-29-2021	
Weather conditions:	41-46°F, wind 3 kmp/h cloudy		Signature:		
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 regimen (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 mV @ 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:

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading
4a	4.05	s.u.	±0.1 s.u.	Pass	No	NA
7a	7.08	s.u.	±0.1 s.u.			
10a	10.05	s.u.	±0.1 s.u.			
SC Zero (DI)	12.31	µS/cm	0<25 µS/cm			
SC 2000	1035.0	µS/cm	±5%			
ORP	240.6 @ 49°C	mV	±15 mV			
DO (Zero pt)	0.00	mg/L	±0.1			
DO (Saturated)	9.700	%	97-100%			
Turbidity (DI)	0.00	NTU	<2 NTU			

ICV (Initial Calibration Verification)

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?
4b	4.03	s.u.	±0.15 s.u.	Pass	None
7b	6.92	s.u.	±0.15 s.u.		
10b	9.99	s.u.	±0.15 s.u.		
SC1000	1029.7	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	4.01	s.u.	±0.1 s.u.	Pass	No	NA
7	7.01	s.u.	±0.1 s.u.			
10	10.00	s.u.	±0.1 s.u.			
SC 1000	1039.0	µS/cm	±5%			
DO (Zero pt)	0.08	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:

Signature:

James B. [Signature]

Date:

11-29-21

GK04968
[Signature]

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

RAMBOLL - MILWAUKEE
NRT COFFEEN CCR GMF STACK

CHAIN OF CUSTODY # 1
DATE: _____
PAGE: 1 OF 1

LABORATORY SAMPLES SUBMITTED TO: PDC Laboratories, Inc.					CLIENT PROJECT NAME Coffeen Gypsum Stack Pond				PROJECT NUMBER / TASK NUMBER: 2285 / Unit 105																						
ADDRESS: 2231 W Altorfer Drive					PROJECT CONTACT: Gail Schindler				QUOTE NO.:																						
CITY: Peoria, IL 61615					SAMPLER(S): (SIGNATURE) <i>[Signature]</i>																										
TEL: 309-683-1716		FAX: 309-692-9689		E-MAIL: gschindler@pdclab.com																											
TURNAROUND TIME <input type="checkbox"/> STANDARD <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> 5 DAYS					REQUESTED ANALYSIS																										
Data Package: <u>Level 2</u> Level 4					Preservatives: A = none, B = HCL, C = H ₂ SO ₄ , D = HNO ₃ , E = methanol, F = Sodium Bisulfate, G = zinc acetate, H = other		Preservation Code (pick letter) Filtered (Yor N)		Method Number and Analytes																						
SPECIAL REQUIREMENTS																															
LAB USE ONLY	SAMPLE ID	QC SAMPLE	FIELD COMMENTS	SAMPLE		MATRIX	SAMPLE TYPE	SAMPLE INTERVAL (ft)		#CON	300.0-F	2540C-TDS	6020-B	FIELD pH																	
				DATE	TIME			TOP	BOTTOM																						
	G206			11/29/12	12:35	GW				1	X																				
	G209			11/29/12	12:04	GW				1			X																		
	G215			11/29/12	14:15	GW				2	X	X																			
	G218			11/29/12	13:15	GW				1	X	X																			
Relinquished by: (Signature) <i>[Signature]</i>					Received by: (Signature)					Date: 11/29/12		Time: 1732																			
Relinquished by: (Signature)					Received by: (Signature)					Date:		Time:																			
Relinquished by: (Signature)					Received by: (Signature) <i>[Signature]</i>					Date: 11/29/12		Time: 1737																			

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2.7°



Pace Analytical Services, LLC

2231 W. Altorfer Drive

Peoria, IL 61615

(800)752-6651

November 04, 2022

John Romang
Vistra - Coffeen
134 CIPS Lane
Coffeen, IL 62017

Dear John Romang:

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 FE02142

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 FE02498

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 FF03494

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 FF03497

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: FF03494-01
Name: NE RISER
Alias: UNIT 103

Sampled: 06/15/22 10:08
Received: 06/16/22 15:30
Matrix: Ground Water - Grab
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
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Miscellaneous - Pace Analytical - Mt Juliet, Tn

Rad 226 and 228-Subcontract	0.290 J	pCi/L			1	0.411	07/20/22 14:42		904.0 903.0
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Sample: FF03497-01
Name: G200
Alias: COFFEEN GYPSUM STACK

Sampled: 06/15/22 16:00
Received: 06/16/22 15:30
Matrix: Ground Water - Grab
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
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Miscellaneous - Pace Analytical - Mt Juliet, Tn

Rad 226 and 228-Subcontract	0.337 U	pCi/L			1	0.724	07/21/22 13:25		904.0 903.0
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Sample: FF03497-02
Name: R201
Alias: COFFEEN GYPSUM STACK

Sampled: 06/15/22 16:03
Received: 06/16/22 15:30
Matrix: Ground Water - Grab
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
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Miscellaneous - Pace Analytical - Mt Juliet, Tn

Rad 226 and 228-Subcontract	0.732 J	pCi/L			1	0.845	07/21/22 13:25		904.0 903.0
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Sample: FF03497-03
Name: G206
Alias: COFFEEN GYPSUM STACK

Sampled: 06/16/22 09:46
Received: 06/16/22 15:30
Matrix: Ground Water - Grab
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
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Miscellaneous - Pace Analytical - Mt Juliet, Tn

Rad 226 and 228-Subcontract	0.743	pCi/L			1	0.638	07/21/22 13:25		904.0 903.0
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ANALYTICAL RESULTS

Sample: FF03497-04
Name: G209
Alias: COFFEEN GYPSUM STACK

Sampled: 06/15/22 14:15
Received: 06/16/22 15:30
Matrix: Ground Water - Grab
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
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Miscellaneous - Pace Analytical - Mt Juliet, Tn

Rad 226 and 228-Subcontract	0.887	pCi/L			1	0.691	07/21/22 13:25		904.0 903.0
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Sample: FF03497-05
Name: G212
Alias: COFFEEN GYPSUM STACK

Sampled: 06/15/22 13:06
Received: 06/16/22 15:30
Matrix: Ground Water - Grab
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
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Miscellaneous - Pace Analytical - Mt Juliet, Tn

Rad 226 and 228-Subcontract	0.507 J	pCi/L			1	0.645	07/21/22 13:25		904.0 903.0
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Sample: FF03497-06
Name: G215
Alias: COFFEEN GYPSUM STACK

Sampled: 06/15/22 10:58
Received: 06/16/22 15:30
Matrix: Ground Water - Grab
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
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Miscellaneous - Pace Analytical - Mt Juliet, Tn

Rad 226 and 228-Subcontract	0.673 J	pCi/L			1	0.739	07/21/22 13:25		904.0 903.0
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Sample: FF03497-07
Name: G218
Alias: COFFEEN GYPSUM STACK

Sampled: 06/15/22 10:58
Received: 06/16/22 15:30
Matrix: Ground Water - Grab
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
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Miscellaneous - Pace Analytical - Mt Juliet, Tn

Rad 226 and 228-Subcontract	0.912	pCi/L			1	0.744	07/21/22 13:25		904.0 903.0
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ANALYTICAL RESULTS



ANALYTICAL RESULTS

Sample: FE02142-01
Name: G200
Matrix: Ground Water - Grab

Sampled: 05/10/22 15:14
Received: 05/11/22 10:57
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	110	mg/L		05/23/22 20:11	25	25	05/23/22 20:11	CJP	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		05/23/22 19:16	1	0.250	05/23/22 19:16	CJP	EPA 300.0 REV 2.1
Sulfate	110	mg/L		05/23/22 20:11	25	25	05/23/22 20:11	CJP	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	3.35	Feet		05/10/22 15:14	1		05/10/22 15:14	FIELD	Field
Dissolved oxygen, Field	1.0	mg/L		05/10/22 15:14	1		05/10/22 15:14	FIELD	Field
Oxidation Reduction Potential	40.5	mV		05/10/22 15:14	1	-500	05/10/22 15:14	FIELD	Field
pH, Field Measured	7.11	pH Units		05/10/22 15:14	1		05/10/22 15:14	FIELD	Field
Specific Conductance, Field Measured	1044	umhos/cm		05/10/22 15:14	1		05/10/22 15:14	FIELD	Field
Temperature, Field Measured	17.5	°C		05/10/22 15:14	1		05/10/22 15:14	FIELD	Field
Turbidity, Field Measured	5.72	NTU		05/10/22 15:14	1	0.00	05/10/22 15:14	FIELD	Field
<u>Soluble General Chemistry - STL</u>									
Solids - total dissolved solids (TDS)	750	mg/L		05/17/22 14:40	1	17	05/17/22 15:47	WC Team	SM 2540C
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		05/12/22 08:44	5	3.0	05/12/22 16:08	JMW	EPA 6020A
Arsenic	< 1.0	ug/L		05/12/22 08:44	5	1.0	05/12/22 16:08	JMW	EPA 6020A
Barium	52	ug/L		05/12/22 08:44	5	1.0	05/12/22 16:08	JMW	EPA 6020A
Beryllium	< 1.0	ug/L		05/12/22 08:44	5	1.0	05/12/22 16:08	JMW	EPA 6020A
Boron	< 10	ug/L		05/12/22 08:44	5	10	05/13/22 08:22	JMW	EPA 6020A
Cadmium	< 1.0	ug/L		05/12/22 08:44	5	1.0	05/12/22 16:08	JMW	EPA 6020A
Calcium	94	mg/L		05/12/22 08:44	5	0.20	05/12/22 16:08	JMW	EPA 6020A
Chromium	< 4.0	ug/L		05/12/22 08:44	5	4.0	05/12/22 16:08	JMW	EPA 6020A
Cobalt	< 2.0	ug/L		05/12/22 08:44	5	2.0	05/12/22 16:08	JMW	EPA 6020A
Lead	< 1.0	ug/L		05/12/22 08:44	5	1.0	05/12/22 16:08	JMW	EPA 6020A
Magnesium	46	mg/L		05/12/22 08:44	5	0.10	05/12/22 16:08	JMW	EPA 6020A
Mercury	< 0.20	ug/L		05/12/22 08:44	5	0.20	05/12/22 16:08	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		05/12/22 08:44	5	1.0	05/12/22 16:08	JMW	EPA 6020A
Potassium	0.50	mg/L		05/12/22 08:44	5	0.10	05/12/22 16:08	JMW	EPA 6020A
Selenium	2.2	ug/L		05/12/22 08:44	5	1.0	05/12/22 16:08	JMW	EPA 6020A
Sodium	62	mg/L		05/12/22 08:44	5	0.10	05/12/22 16:08	JMW	EPA 6020A
Thallium	< 1.0	ug/L		05/12/22 08:44	5	1.0	05/12/22 16:08	JMW	EPA 6020A
Lithium	< 0.020	mg/L		05/12/22 08:44	1	0.020	06/08/22 09:39	TJJ	EPA 6010B



ANALYTICAL RESULTS

Sample: FE02142-02
Name: G206
Matrix: Ground Water - Grab

Sampled: 05/10/22 14:52
Received: 05/11/22 10:57
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	22	mg/L		05/23/22 20:47	5	5.0	05/23/22 20:47	CJP	EPA 300.0 REV 2.1
Fluoride	0.344	mg/L		05/23/22 20:29	1	0.250	05/23/22 20:29	CJP	EPA 300.0 REV 2.1
Sulfate	130	mg/L		05/23/22 21:05	50	50	05/23/22 21:05	CJP	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	9.39	Feet		05/10/22 14:52	1		05/10/22 14:52	FIELD	Field
Dissolved oxygen, Field	4.0	mg/L		05/10/22 14:52	1		05/10/22 14:52	FIELD	Field
Oxidation Reduction Potential	107	mV		05/10/22 14:52	1	-500	05/10/22 14:52	FIELD	Field
pH, Field Measured	7.07	pH Units		05/10/22 14:52	1		05/10/22 14:52	FIELD	Field
Specific Conductance, Field Measured	678.0	umhos/cm		05/10/22 14:52	1		05/10/22 14:52	FIELD	Field
Temperature, Field Measured	17.3	°C		05/10/22 14:52	1		05/10/22 14:52	FIELD	Field
Turbidity, Field Measured	3.34	NTU		05/10/22 14:52	1	0.00	05/10/22 14:52	FIELD	Field
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	490	mg/L		05/17/22 11:45	1	26	05/17/22 14:57	CGL	SM 2540C
<u>Total Metals - PIA</u>									
Antimony	< 3.0	ug/L		05/12/22 08:44	5	3.0	05/12/22 16:12	JMW	EPA 6020A
Arsenic	< 1.0	ug/L		05/12/22 08:44	5	1.0	05/12/22 16:12	JMW	EPA 6020A
Barium	47	ug/L		05/12/22 08:44	5	1.0	05/12/22 16:12	JMW	EPA 6020A
Beryllium	< 1.0	ug/L		05/12/22 08:44	5	1.0	05/12/22 16:12	JMW	EPA 6020A
Boron	< 10	ug/L		05/12/22 08:44	5	10	05/13/22 08:26	JMW	EPA 6020A
Cadmium	< 1.0	ug/L		05/12/22 08:44	5	1.0	05/12/22 16:12	JMW	EPA 6020A
Calcium	79	mg/L		05/12/22 08:44	5	0.20	05/12/22 16:12	JMW	EPA 6020A
Chromium	< 4.0	ug/L		05/12/22 08:44	5	4.0	05/12/22 16:12	JMW	EPA 6020A
Cobalt	< 2.0	ug/L		05/12/22 08:44	5	2.0	05/12/22 16:12	JMW	EPA 6020A
Lead	< 1.0	ug/L		05/12/22 08:44	5	1.0	05/12/22 16:12	JMW	EPA 6020A
Magnesium	34	mg/L		05/12/22 08:44	5	0.10	05/12/22 16:12	JMW	EPA 6020A
Mercury	< 0.20	ug/L		05/12/22 08:44	5	0.20	05/12/22 16:12	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		05/12/22 08:44	5	1.0	05/12/22 16:12	JMW	EPA 6020A
Potassium	0.37	mg/L		05/12/22 08:44	5	0.10	05/12/22 16:12	JMW	EPA 6020A
Selenium	1.5	ug/L		05/12/22 08:44	5	1.0	05/12/22 16:12	JMW	EPA 6020A
Sodium	51	mg/L		05/12/22 08:44	5	0.10	05/12/22 16:12	JMW	EPA 6020A
Thallium	< 1.0	ug/L		05/12/22 08:44	5	1.0	05/12/22 16:12	JMW	EPA 6020A
Lithium	< 0.020	mg/L		05/12/22 08:44	1	0.020	06/08/22 09:41	TJJ	EPA 6010B



ANALYTICAL RESULTS

Sample: FE02142-06
 Name: G218
 Matrix: Ground Water - Grab

Sampled: 05/10/22 14:27
 Received: 05/11/22 10:57
 PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	96	mg/L		05/23/22 22:50	50	50	05/23/22 22:50	CJP	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		05/23/22 22:32	1	0.250	05/23/22 22:32	CJP	EPA 300.0 REV 2.1
Sulfate	270	mg/L		05/23/22 22:50	50	50	05/23/22 22:50	CJP	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	12.09	Feet		05/10/22 14:27	1		05/10/22 14:27	FIELD	Field
Dissolved oxygen, Field	1.6	mg/L		05/10/22 14:27	1		05/10/22 14:27	FIELD	Field
Oxidation Reduction Potential	15.4	mV		05/10/22 14:27	1	-500	05/10/22 14:27	FIELD	Field
pH, Field Measured	6.78	pH Units		05/10/22 14:27	1		05/10/22 14:27	FIELD	Field
Specific Conductance, Field Measured	1241	umhos/cm		05/10/22 14:27	1		05/10/22 14:27	FIELD	Field
Temperature, Field Measured	20.1	°C		05/10/22 14:27	1		05/10/22 14:27	FIELD	Field
Turbidity, Field Measured	134	NTU		05/10/22 14:27	1	0.00	05/10/22 14:27	FIELD	Field
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	920	mg/L		05/17/22 11:45	1	26	05/17/22 14:57	CGL	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/19/22 11:31	5	3.0	05/23/22 10:42	JMW	EPA 6020A
Arsenic	2.2	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:42	JMW	EPA 6020A
Barium	120	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:42	JMW	EPA 6020A
Beryllium	< 1.0	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:42	JMW	EPA 6020A
Boron	< 10	ug/L		05/19/22 11:31	5	10	05/23/22 10:42	JMW	EPA 6020A
Cadmium	< 1.0	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:42	JMW	EPA 6020A
Calcium	150	mg/L		05/19/22 11:31	5	0.20	05/23/22 10:42	JMW	EPA 6020A
Chromium	< 4.0	ug/L		05/19/22 11:31	5	4.0	05/23/22 10:42	JMW	EPA 6020A
Cobalt	< 2.0	ug/L		05/19/22 11:31	5	2.0	05/23/22 10:42	JMW	EPA 6020A
Lead	< 1.0	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:42	JMW	EPA 6020A
Magnesium	62	mg/L		05/19/22 11:31	5	0.10	05/23/22 10:42	JMW	EPA 6020A
Mercury	< 0.20	ug/L		05/19/22 11:31	5	0.20	05/23/22 10:42	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		05/19/22 11:31	5	1.0	05/24/22 08:58	JMW	EPA 6020A
Potassium	0.69	mg/L		05/19/22 11:31	5	0.10	06/07/22 09:02	JMW	EPA 6020A
Selenium	< 1.0	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:42	JMW	EPA 6020A
Sodium	65	mg/L		05/19/22 11:31	5	0.10	05/23/22 10:42	JMW	EPA 6020A
Thallium	< 1.0	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:42	JMW	EPA 6020A
Lithium	< 0.020	mg/L		05/19/22 11:31	1	0.020	06/08/22 09:49	TJJ	EPA 6010B



ANALYTICAL RESULTS

Sample: FE02498-01
 Name: R201
 Matrix: Ground Water - Grab

Sampled: 05/11/22 11:06
 Received: 05/12/22 10:06
 PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	80	mg/L	Q4	05/24/22 13:23	50	50	05/24/22 13:23	CJP	EPA 300.0 REV 2.1
Fluoride	0.591	mg/L	Q3	05/24/22 11:52	1	0.250	05/24/22 11:52	CJP	EPA 300.0 REV 2.1
Sulfate	260	mg/L	Q4	05/24/22 13:23	50	50	05/24/22 13:23	CJP	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	3.69	Feet		05/11/22 11:06	1		05/11/22 11:06	FIELD	Field
Dissolved oxygen, Field	0.47	mg/L		05/11/22 11:06	1		05/11/22 11:06	FIELD	Field
Oxidation Reduction Potential	-88.7	mV		05/11/22 11:06	1	-500	05/11/22 11:06	FIELD	Field
pH, Field Measured	7.05	pH Units		05/11/22 11:06	1		05/11/22 11:06	FIELD	Field
Specific Conductance, Field Measured	1319	umhos/cm		05/11/22 11:06	1		05/11/22 11:06	FIELD	Field
Temperature, Field Measured	18.3	°C		05/11/22 11:06	1		05/11/22 11:06	FIELD	Field
Turbidity, Field Measured	226	NTU		05/11/22 11:06	1	0.00	05/11/22 11:06	FIELD	Field
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	870	mg/L		05/17/22 14:58	1	26	05/17/22 17:29	CGL	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/19/22 11:31	5	3.0	05/23/22 10:45	JMW	EPA 6020A
Arsenic	12	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:45	JMW	EPA 6020A
Barium	110	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:45	JMW	EPA 6020A
Beryllium	< 1.0	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:45	JMW	EPA 6020A
Boron	< 10	ug/L		05/19/22 11:31	5	10	05/23/22 10:45	JMW	EPA 6020A
Cadmium	< 1.0	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:45	JMW	EPA 6020A
Calcium	130	mg/L		05/19/22 11:31	5	0.20	05/23/22 10:45	JMW	EPA 6020A
Chromium	< 4.0	ug/L		05/19/22 11:31	5	4.0	05/23/22 10:45	JMW	EPA 6020A
Cobalt	< 2.0	ug/L		05/19/22 11:31	5	2.0	05/23/22 10:45	JMW	EPA 6020A
Lead	1.5	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:45	JMW	EPA 6020A
Magnesium	53	mg/L		05/19/22 11:31	5	0.10	05/23/22 10:45	JMW	EPA 6020A
Mercury	< 0.20	ug/L		05/19/22 11:31	5	0.20	05/23/22 10:45	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		05/19/22 11:31	5	1.0	05/24/22 09:02	JMW	EPA 6020A
Potassium	0.86	mg/L		05/19/22 11:31	5	0.10	06/07/22 09:05	JMW	EPA 6020A
Selenium	< 1.0	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:45	JMW	EPA 6020A
Sodium	130	mg/L		05/19/22 11:31	5	0.10	05/23/22 10:45	JMW	EPA 6020A
Thallium	< 1.0	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:45	JMW	EPA 6020A
Lithium	< 0.020	mg/L		05/19/22 11:31	1	0.020	06/08/22 09:51	TJJ	EPA 6010B



ANALYTICAL RESULTS

Sample: FE02498-03
 Name: G209
 Matrix: Ground Water - Grab

Sampled: 05/11/22 09:50
 Received: 05/12/22 10:06
 PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	59	mg/L		05/24/22 10:32	10	10	05/24/22 10:32	CJP	EPA 300.0 REV 2.1
Fluoride	0.370	mg/L		05/24/22 10:14	1	0.250	05/24/22 10:14	CJP	EPA 300.0 REV 2.1
Sulfate	240	mg/L		05/24/22 10:50	50	50	05/24/22 10:50	CJP	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	9.8	Feet		05/11/22 09:50	1		05/11/22 09:50	FIELD	Field
Dissolved oxygen, Field	0.11	mg/L		05/11/22 09:50	1		05/11/22 09:50	FIELD	Field
Oxidation Reduction Potential	44.4	mV		05/11/22 09:50	1	-500	05/11/22 09:50	FIELD	Field
pH, Field Measured	6.92	pH Units		05/11/22 09:50	1		05/11/22 09:50	FIELD	Field
Specific Conductance, Field Measured	1310	umhos/cm		05/11/22 09:50	1		05/11/22 09:50	FIELD	Field
Temperature, Field Measured	17.4	°C		05/11/22 09:50	1		05/11/22 09:50	FIELD	Field
Turbidity, Field Measured	63.7	NTU		05/11/22 09:50	1	0.00	05/11/22 09:50	FIELD	Field
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	930	mg/L		05/17/22 14:58	1	26	05/17/22 17:29	CGL	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/19/22 11:31	5	3.0	05/23/22 10:53	JMW	EPA 6020A
Arsenic	8.2	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:53	JMW	EPA 6020A
Barium	94	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:53	JMW	EPA 6020A
Beryllium	< 1.0	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:53	JMW	EPA 6020A
Boron	< 10	ug/L		05/19/22 11:31	5	10	05/23/22 10:53	JMW	EPA 6020A
Cadmium	< 1.0	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:53	JMW	EPA 6020A
Calcium	150	mg/L		05/19/22 11:31	5	0.20	05/23/22 10:53	JMW	EPA 6020A
Chromium	< 4.0	ug/L		05/19/22 11:31	5	4.0	05/23/22 10:53	JMW	EPA 6020A
Cobalt	< 2.0	ug/L		05/19/22 11:31	5	2.0	05/23/22 10:53	JMW	EPA 6020A
Lead	< 1.0	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:53	JMW	EPA 6020A
Magnesium	53	mg/L		05/19/22 11:31	5	0.10	05/23/22 10:53	JMW	EPA 6020A
Mercury	< 0.20	ug/L		05/19/22 11:31	5	0.20	05/23/22 10:53	JMW	EPA 6020A
Molybdenum	3.7	ug/L		05/19/22 11:31	5	1.0	05/24/22 09:09	JMW	EPA 6020A
Potassium	0.66	mg/L		05/19/22 11:31	5	0.10	06/07/22 09:09	JMW	EPA 6020A
Selenium	< 1.0	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:53	JMW	EPA 6020A
Sodium	78	mg/L		05/19/22 11:31	5	0.10	05/23/22 10:53	JMW	EPA 6020A
Thallium	< 1.0	ug/L		05/19/22 11:31	5	1.0	05/23/22 10:53	JMW	EPA 6020A
Lithium	< 0.020	mg/L		05/19/22 11:31	1	0.020	06/08/22 09:53	TJJ	EPA 6010B



ANALYTICAL RESULTS

Sample: FE02498-06
 Name: G212
 Matrix: Ground Water - Grab

Sampled: 05/11/22 12:31
 Received: 05/12/22 10:06
 PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	47	mg/L	Q4	05/24/22 15:04	10	10	05/24/22 15:04	CJP	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		05/24/22 14:09	1	0.250	05/24/22 14:09	CJP	EPA 300.0 REV 2.1
Sulfate	53	mg/L	Q4	05/24/22 15:04	10	10	05/24/22 15:04	CJP	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	10.17	Feet		05/11/22 12:31	1		05/11/22 12:31	FIELD	Field
Dissolved oxygen, Field	5.2	mg/L		05/11/22 12:31	1		05/11/22 12:31	FIELD	Field
Oxidation Reduction Potential	49.1	mV		05/11/22 12:31	1	-500	05/11/22 12:31	FIELD	Field
pH, Field Measured	7.38	pH Units		05/11/22 12:31	1		05/11/22 12:31	FIELD	Field
Specific Conductance, Field Measured	711.0	umhos/cm		05/11/22 12:31	1		05/11/22 12:31	FIELD	Field
Temperature, Field Measured	18.0	°C		05/11/22 12:31	1		05/11/22 12:31	FIELD	Field
Turbidity, Field Measured	1.24	NTU		05/11/22 12:31	1	0.00	05/11/22 12:31	FIELD	Field
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	400	mg/L		05/17/22 14:58	1	26	05/17/22 17:29	CGL	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/24/22 11:11	5	3.0	05/26/22 09:04	JMW	EPA 6020A
Arsenic	< 1.0	ug/L		05/24/22 11:11	5	1.0	05/26/22 09:04	JMW	EPA 6020A
Barium	49	ug/L		05/24/22 11:11	5	1.0	05/26/22 09:04	JMW	EPA 6020A
Beryllium	< 1.0	ug/L		05/24/22 11:11	5	1.0	05/26/22 09:04	JMW	EPA 6020A
Boron	< 10	ug/L		05/24/22 11:11	5	10	05/26/22 09:04	JMW	EPA 6020A
Cadmium	< 1.0	ug/L		05/24/22 11:11	5	1.0	05/26/22 09:04	JMW	EPA 6020A
Calcium	53	mg/L		05/24/22 11:11	5	0.20	05/26/22 09:04	JMW	EPA 6020A
Chromium	< 4.0	ug/L		05/24/22 11:11	5	4.0	05/26/22 09:04	JMW	EPA 6020A
Cobalt	< 2.0	ug/L		05/24/22 11:11	5	2.0	05/26/22 09:04	JMW	EPA 6020A
Lead	< 1.0	ug/L		05/24/22 11:11	5	1.0	05/26/22 09:04	JMW	EPA 6020A
Magnesium	26	mg/L		05/24/22 11:11	5	0.10	05/26/22 09:04	JMW	EPA 6020A
Mercury	< 0.20	ug/L		05/24/22 11:11	5	0.20	05/26/22 09:04	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		05/24/22 11:11	5	1.0	05/26/22 09:04	JMW	EPA 6020A
Potassium	0.21	mg/L		05/24/22 11:11	5	0.10	05/26/22 09:04	JMW	EPA 6020A
Selenium	1.9	ug/L		05/24/22 11:11	5	1.0	05/26/22 09:04	JMW	EPA 6020A
Sodium	60	mg/L		05/24/22 11:11	5	0.10	05/26/22 09:04	JMW	EPA 6020A
Thallium	< 1.0	ug/L		05/24/22 11:11	5	1.0	05/26/22 09:04	JMW	EPA 6020A
Lithium	< 0.020	mg/L	C	05/24/22 11:11	1	0.020	06/08/22 10:07	TJJ	EPA 6010B



ANALYTICAL RESULTS

Sample: FE02498-09
 Name: G215
 Matrix: Ground Water - Grab

Sampled: 05/11/22 12:03
 Received: 05/12/22 10:06
 PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	130	mg/L		05/24/22 19:17	100	100	05/24/22 19:17	CJP	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		05/24/22 18:41	1	0.250	05/24/22 18:41	CJP	EPA 300.0 REV 2.1
Sulfate	540	mg/L		05/25/22 13:20	100	100	05/25/22 13:20	CJP	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	12.77	Feet		05/11/22 16:02	1		05/11/22 16:02	FIELD	Field
Dissolved oxygen, Field	1.2	mg/L		05/11/22 16:02	1		05/11/22 16:02	FIELD	Field
Oxidation Reduction Potential	-11.7	mV		05/11/22 16:02	1	-500	05/11/22 16:02	FIELD	Field
pH, Field Measured	6.95	pH Units		05/11/22 16:02	1		05/11/22 16:02	FIELD	Field
Specific Conductance, Field Measured	1853	umhos/cm		05/11/22 16:02	1		05/11/22 16:02	FIELD	Field
Temperature, Field Measured	21.4	°C		05/11/22 16:02	1		05/11/22 16:02	FIELD	Field
Turbidity, Field Measured	3.51	NTU		05/11/22 16:02	1	0.00	05/11/22 16:02	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	450	mg/L		05/25/22 09:44	1	10	05/25/22 09:44	CWW	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		05/25/22 09:44	1	10	05/25/22 09:44	CWW	SM 2320B 1997
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1300	mg/L		05/17/22 14:58	1	26	05/17/22 17:29	CGL	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/24/22 11:11	5	3.0	05/26/22 09:15	JMW	EPA 6020A
Arsenic	8.5	ug/L		05/24/22 11:11	5	1.0	05/26/22 09:15	JMW	EPA 6020A
Barium	44	ug/L		05/24/22 11:11	5	1.0	05/26/22 09:15	JMW	EPA 6020A
Beryllium	< 1.0	ug/L		05/24/22 11:11	5	1.0	05/26/22 09:15	JMW	EPA 6020A
Boron	590	ug/L		05/24/22 11:11	5	10	05/26/22 09:15	JMW	EPA 6020A
Cadmium	< 1.0	ug/L		05/24/22 11:11	5	1.0	05/26/22 09:15	JMW	EPA 6020A
Calcium	200	mg/L		05/24/22 11:11	5	0.20	05/26/22 09:15	JMW	EPA 6020A
Chromium	< 4.0	ug/L		05/24/22 11:11	5	4.0	05/26/22 09:15	JMW	EPA 6020A
Cobalt	< 2.0	ug/L		05/24/22 11:11	5	2.0	05/26/22 09:15	JMW	EPA 6020A
Lead	< 1.0	ug/L		05/24/22 11:11	5	1.0	05/26/22 09:15	JMW	EPA 6020A
Magnesium	90	mg/L		05/24/22 11:11	5	0.10	05/26/22 09:15	JMW	EPA 6020A
Mercury	< 0.20	ug/L		05/24/22 11:11	5	0.20	05/26/22 09:15	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		05/24/22 11:11	5	1.0	05/26/22 09:15	JMW	EPA 6020A
Potassium	1.8	mg/L		05/24/22 11:11	5	0.10	05/26/22 09:15	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FE02498-09
Name: G215
Matrix: Ground Water - Grab

Sampled: 05/11/22 12:03
Received: 05/12/22 10:06
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Selenium	< 1.0	ug/L		05/24/22 11:11	5	1.0	05/26/22 09:15	JMW	EPA 6020A
Sodium	93	mg/L		05/24/22 11:11	5	0.10	05/26/22 09:15	JMW	EPA 6020A
Thallium	< 1.0	ug/L		05/24/22 11:11	5	1.0	05/26/22 09:15	JMW	EPA 6020A
Lithium	< 0.020	mg/L	C	05/24/22 11:11	1	0.020	06/08/22 10:09	TJJ	EPA 6010B

Sample: FE02498-19
Name: G04S
Matrix: Ground Water

Sampled: 05/09/22 00:00
Received: 05/12/22 15:01
PO #: 1164124

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

Depth, From Measuring Point	5.29	Feet		05/09/22 00:00	1		05/09/22 00:00	FIELD	Field
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ANALYTICAL RESULTS

Sample: FF03494-01
Name: NE RISER
Alias: UNIT 103

Sampled: 06/15/22 10:08
Received: 06/16/22 15:30
Matrix: Ground Water - Grab
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	1400	mg/L		06/28/22 22:46	500	500	06/28/22 22:46	CJP	EPA 300.0 REV 2.1
Sulfate	10000	mg/L		06/28/22 23:04	2500	2500	06/28/22 23:04	CJP	EPA 300.0 REV 2.1
Field - PIA									
Dissolved oxygen, Field	3.1	mg/L		06/15/22 10:08	1		06/15/22 10:08	FIELD	Field
Oxidation Reduction Potential	195	mV		06/15/22 10:08	1	-500	06/15/22 10:08	FIELD	Field
pH, Field Measured	7.90	pH Units		06/15/22 10:08	1		06/15/22 10:08	FIELD	Field
Specific Conductance, Field Measured	20930	umhos/cm		06/15/22 10:08	1		06/15/22 10:08	FIELD	Field
Temperature, Field Measured	27.5	°C		06/15/22 10:08	1		06/15/22 10:08	FIELD	Field
Turbidity, Field Measured	3.49	NTU		06/15/22 10:08	1	0.00	06/15/22 10:08	FIELD	Field
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	250	mg/L		06/24/22 08:56	1	10	06/24/22 08:56	CWW/KA M	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		06/24/22 08:56	1	10	06/24/22 08:56	CWW/KA M	SM 2320B 1997
Fluoride	29.2	mg/L		06/29/22 15:33	20	5.00	06/29/22 15:33	TTH	SM 4500F C 1997
Solids - total dissolved solids (TDS)	13000	mg/L		06/21/22 15:36	1	51	06/21/22 16:52	CGL	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		06/28/22 09:38	5	3.0	06/30/22 11:19	JMW	EPA 6020A
Arsenic	1.9	ug/L		06/28/22 09:38	5	1.0	06/30/22 11:19	JMW	EPA 6020A
Barium	42	ug/L		06/28/22 09:38	5	1.0	06/30/22 11:19	JMW	EPA 6020A
Beryllium	< 1.0	ug/L		06/28/22 09:38	5	1.0	06/30/22 11:19	JMW	EPA 6020A
Boron	40000	ug/L		06/28/22 09:38	100	300	06/30/22 12:56	JMW	EPA 6020A
Cadmium	2.1	ug/L		06/28/22 09:38	5	1.0	06/30/22 11:19	JMW	EPA 6020A
Calcium	490	mg/L		06/28/22 09:38	5	0.20	06/30/22 11:19	JMW	EPA 6020A
Chromium	< 4.0	ug/L		06/28/22 09:38	5	4.0	06/30/22 11:19	JMW	EPA 6020A
Cobalt	6.1	ug/L		06/28/22 09:38	5	2.0	06/30/22 11:19	JMW	EPA 6020A
Lead	< 1.0	ug/L		06/28/22 09:38	5	1.0	06/30/22 11:19	JMW	EPA 6020A
Magnesium	1100	mg/L		06/28/22 09:38	100	2.0	06/30/22 12:56	JMW	EPA 6020A
Mercury	< 0.20	ug/L		06/28/22 09:38	5	0.20	06/30/22 11:19	JMW	EPA 6020A
Molybdenum	37	ug/L		06/28/22 09:38	5	1.0	06/30/22 11:19	JMW	EPA 6020A
Potassium	110	mg/L		06/28/22 09:38	5	0.10	06/30/22 11:19	JMW	EPA 6020A
Selenium	450	ug/L		06/28/22 09:38	5	1.0	06/30/22 11:19	JMW	EPA 6020A
Sodium	330	mg/L		06/28/22 09:38	5	0.10	06/30/22 11:19	JMW	EPA 6020A



ANALYTICAL RESULTS

Sample: FF03494-01
Name: NE RISER
Alias: UNIT 103

Sampled: 06/15/22 10:08
Received: 06/16/22 15:30
Matrix: Ground Water - Grab
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	1.9	ug/L		06/28/22 09:38	5	1.0	06/30/22 11:19	JMW	EPA 6020A
Lithium	0.16	mg/L		06/28/22 09:38	1	0.020	06/28/22 12:00	TJJ	EPA 6010B

Sample: FF03497-01
Name: G200
Alias: COFFEEN GYPSUM STACK

Sampled: 06/15/22 16:00
Received: 06/16/22 15:30
Matrix: Ground Water - Grab
PO #: 1164124

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

Alkalinity - bicarbonate as CaCO3	290	mg/L		06/24/22 08:56	1	10	06/24/22 08:56	CWW/KA M	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		06/24/22 08:56	1	10	06/24/22 08:56	CWW/KA M	SM 2320B 1997

Sample: FF03497-02
Name: R201
Alias: COFFEEN GYPSUM STACK

Sampled: 06/15/22 16:03
Received: 06/16/22 15:30
Matrix: Ground Water - Grab
PO #: 1164124

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

Alkalinity - bicarbonate as CaCO3	390	mg/L		06/24/22 08:56	1	10	06/24/22 08:56	CWW/KA M	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		06/24/22 08:56	1	10	06/24/22 08:56	CWW/KA M	SM 2320B 1997

Sample: FF03497-03
Name: G206
Alias: COFFEEN GYPSUM STACK

Sampled: 06/16/22 09:46
Received: 06/16/22 15:30
Matrix: Ground Water - Grab
PO #: 1164124

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

Alkalinity - bicarbonate as CaCO3	260	mg/L		06/24/22 08:56	1	10	06/24/22 08:56	CWW/KA M	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		06/24/22 08:56	1	10	06/24/22 08:56	CWW/KA M	SM 2320B 1997



ANALYTICAL RESULTS

Sample: FF03497-04
Name: G209
Alias: COFFEEN GYPSUM STACK

Sampled: 06/15/22 14:15
Received: 06/16/22 15:30
Matrix: Ground Water - Grab
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	380	mg/L		06/24/22 08:56	1	10	06/24/22 08:56	CWW/KA M	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		06/24/22 08:56	1	10	06/24/22 08:56	CWW/KA M	SM 2320B 1997

Sample: FF03497-05
Name: G212
Alias: COFFEEN GYPSUM STACK

Sampled: 06/15/22 13:06
Received: 06/16/22 15:30
Matrix: Ground Water - Grab
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	380	mg/L		06/24/22 08:56	1	10	06/24/22 08:56	CWW/KA M	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		06/24/22 08:56	1	10	06/24/22 08:56	CWW/KA M	SM 2320B 1997

Sample: FF03497-07
Name: G218
Alias: COFFEEN GYPSUM STACK

Sampled: 06/15/22 10:58
Received: 06/16/22 15:30
Matrix: Ground Water - Grab
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	290	mg/L		06/24/22 08:56	1	10	06/24/22 08:56	CWW/KA M	SM 2320B 1997
Alkalinity - carbonate as CaCO3	< 10	mg/L		06/24/22 08:56	1	10	06/24/22 08:56	CWW/KA M	SM 2320B 1997



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B232339 - SW 3015 - EPA 6020A</u>									
Blank (B232339-BLK1)				Prepared & Analyzed: 05/12/22					
Antimony	< 3.0	ug/L							
Arsenic	< 1.0	ug/L							
Barium	< 1.0	ug/L							
Beryllium	< 1.0	ug/L							
Boron	< 10	ug/L							
Cadmium	< 1.0	ug/L							
Calcium	< 0.20	mg/L							
Chromium	< 4.0	ug/L							
Cobalt	< 2.0	ug/L							
Lead	< 1.0	ug/L							
Magnesium	< 0.10	mg/L							
Mercury	< 0.20	ug/L							
Molybdenum	< 1.0	ug/L							
Potassium	< 0.10	mg/L							
Selenium	< 1.0	ug/L							
Sodium	< 0.10	mg/L							
Thallium	< 1.0	ug/L							
Lithium	< 0.020	mg/L							
LCS (B232339-BS1)				Prepared & Analyzed: 05/12/22					
Antimony	588	ug/L		555.6		106	80-120		
Arsenic	534	ug/L		555.6		96	80-120		
Barium	545	ug/L		555.6		98	80-120		
Beryllium	539	ug/L		555.6		97	80-120		
Boron	588	ug/L		555.6		106	80-120		
Cadmium	520	ug/L		555.6		94	80-120		
Calcium	5.64	mg/L		5.556		101	80-120		
Chromium	557	ug/L		555.6		100	80-120		
Cobalt	550	ug/L		555.6		99	80-120		
Lead	536	ug/L		555.6		96	80-120		
Magnesium	5.74	mg/L		5.556		103	80-120		
Mercury	49.1	ug/L		55.56		88	80-120		
Molybdenum	531	ug/L		555.6		96	80-120		
Potassium	5.53	mg/L		5.556		99	80-120		
Selenium	531	ug/L		555.6		96	80-120		
Sodium	5.58	mg/L		5.556		101	80-120		
Thallium	536	ug/L		555.6		96	80-120		
Lithium	0.650	mg/L		0.5556		117	80-120		
<u>Batch B232754 - No Prep - SM 2540C</u>									
Blank (B232754-BLK1)				Prepared & Analyzed: 05/17/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B232754-BS1)				Prepared & Analyzed: 05/17/22					



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B232754 - No Prep - SM 2540C</u>									
LCS (B232754-BS1)				Prepared & Analyzed: 05/17/22					
Solids - total dissolved solids (TDS)	973	mg/L		1000		97	84.9-109		
<u>Batch B232796 - 04-No Prep WC - SM 2540C</u>									
Blank (B232796-BLK1)				Prepared & Analyzed: 05/17/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
<u>Batch B232803 - No Prep - SM 2540C</u>									
Blank (B232803-BLK1)				Prepared & Analyzed: 05/17/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B232803-BS1)				Prepared & Analyzed: 05/17/22					
Solids - total dissolved solids (TDS)	1010	mg/L		1000		101	84.9-109		
<u>Batch B233042 - SW 3015 - EPA 6020A</u>									
Blank (B233042-BLK1)				Prepared: 05/19/22 Analyzed: 05/23/22					
Antimony	< 3.0	ug/L							
Arsenic	< 1.0	ug/L							
Barium	< 1.0	ug/L							
Beryllium	< 1.0	ug/L							
Boron	< 10	ug/L							
Cadmium	< 1.0	ug/L							
Calcium	< 0.20	mg/L							
Chromium	< 4.0	ug/L							
Cobalt	< 2.0	ug/L							
Lead	< 1.0	ug/L							
Magnesium	< 0.10	mg/L							
Mercury	< 0.20	ug/L							
Molybdenum	< 1.0	ug/L							
Potassium	< 0.10	mg/L							
Selenium	< 1.0	ug/L							
Sodium	< 0.10	mg/L							
Thallium	< 1.0	ug/L							
Lithium	< 0.020	mg/L							
LCS (B233042-BS1)				Prepared: 05/19/22 Analyzed: 05/23/22					
Antimony	574	ug/L		555.6		103	80-120		
Arsenic	516	ug/L		555.6		93	80-120		
Barium	560	ug/L		555.6		101	80-120		
Beryllium	577	ug/L		555.6		104	80-120		
Boron	598	ug/L		555.6		108	80-120		
Cadmium	538	ug/L		555.6		97	80-120		
Calcium	6.10	mg/L		5.556		110	80-120		
Chromium	572	ug/L		555.6		103	80-120		
Cobalt	566	ug/L		555.6		102	80-120		
Lead	566	ug/L		555.6		102	80-120		
Magnesium	6.02	mg/L		5.556		108	80-120		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B233042 - SW 3015 - EPA 6020A</u>									
LCS (B233042-BS1)				Prepared: 05/19/22 Analyzed: 05/23/22					
Mercury	45.2	ug/L		55.56		81	80-120		
Molybdenum	535	ug/L		555.6		96	80-120		
Potassium	5.63	mg/L		5.556		101	80-120		
Selenium	538	ug/L		555.6		97	80-120		
Sodium	5.91	mg/L		5.556		106	80-120		
Thallium	558	ug/L		555.6		100	80-120		
Lithium	0.621	mg/L		0.5556		112	80-120		
<u>Batch B233453 - SW 3015 - EPA 6020A</u>									
Blank (B233453-BLK1)				Prepared: 05/24/22 Analyzed: 05/26/22					
Antimony	< 3.0	ug/L							
Arsenic	< 1.0	ug/L							
Barium	< 1.0	ug/L							
Beryllium	< 1.0	ug/L							
Boron	< 10	ug/L							
Cadmium	< 1.0	ug/L							
Calcium	< 0.20	mg/L							
Chromium	< 4.0	ug/L							
Cobalt	< 2.0	ug/L							
Lead	< 1.0	ug/L							
Magnesium	< 0.10	mg/L							
Mercury	< 0.20	ug/L							
Molybdenum	< 1.0	ug/L							
Potassium	< 0.10	mg/L							
Selenium	< 1.0	ug/L							
Sodium	< 0.10	mg/L							
Thallium	< 1.0	ug/L							
Lithium	< 0.020	mg/L							
LCS (B233453-BS1)				Prepared: 05/24/22 Analyzed: 05/26/22					
Antimony	582	ug/L		555.6		105	80-120		
Arsenic	519	ug/L		555.6		93	80-120		
Barium	549	ug/L		555.6		99	80-120		
Beryllium	533	ug/L		555.6		96	80-120		
Boron	586	ug/L		555.6		106	80-120		
Cadmium	532	ug/L		555.6		96	80-120		
Calcium	6.32	mg/L		5.556		114	80-120		
Chromium	565	ug/L		555.6		102	80-120		
Cobalt	549	ug/L		555.6		99	80-120		
Lead	544	ug/L		555.6		98	80-120		
Magnesium	5.99	mg/L		5.556		108	80-120		
Mercury	44.9	ug/L		55.56		81	80-120		
Molybdenum	524	ug/L		555.6		94	80-120		
Potassium	5.91	mg/L		5.556		106	80-120		
Selenium	541	ug/L		555.6		97	80-120		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B233453 - SW 3015 - EPA 6020A</u>									
LCS (B233453-BS1)				Prepared: 05/24/22 Analyzed: 05/26/22					
Sodium	5.89	mg/L		5.556		106	80-120		
Thallium	548	ug/L		555.6		99	80-120		
Lithium	0.719	mg/L	C	0.5556		130	80-120		
<u>Batch B233468 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B233468-CCB1)				Prepared & Analyzed: 05/23/22					
Chloride	0.538	mg/L							
Fluoride	0.00	mg/L							
Sulfate	0.00890	mg/L							
Calibration Check (B233468-CCV1)				Prepared & Analyzed: 05/23/22					
Sulfate	4.89	mg/L		5.000		98	90-110		
Fluoride	4.87	mg/L		5.000		97	90-110		
Chloride	4.69	mg/L		5.000		94	90-110		
<u>Batch B233470 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B233470-CCB1)				Prepared & Analyzed: 05/23/22					
Sulfate	0.0766	mg/L							
Chloride	0.104	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B233470-CCV1)				Prepared & Analyzed: 05/23/22					
Chloride	4.87	mg/L		5.000		97	90-110		
Sulfate	4.99	mg/L		5.000		100	90-110		
Fluoride	5.20	mg/L		5.000		104	90-110		
<u>Batch B233650 - No Prep - SM 2320B 1997</u>									
Blank (B233650-BLK1)				Prepared & Analyzed: 05/25/22					
Alkalinity - carbonate as CaCO3	< 2.0	mg/L							
Blank (B233650-BLK2)				Prepared & Analyzed: 05/25/22					
Alkalinity - carbonate as CaCO3	< 2.0	mg/L							
Duplicate (B233650-DUP1)				Sample: FE02498-09		Prepared & Analyzed: 05/25/22			
Alkalinity - carbonate as CaCO3	< 10	mg/L				ND			10
<u>Batch B233651 - No Prep - SM 2320B 1997</u>									
Blank (B233651-BLK1)				Prepared & Analyzed: 05/25/22					
Alkalinity - bicarbonate as CaCO3	2.50	mg/L							
Blank (B233651-BLK2)				Prepared & Analyzed: 05/25/22					
Alkalinity - bicarbonate as CaCO3	2.50	mg/L							
Duplicate (B233651-DUP1)				Sample: FE02498-09		Prepared & Analyzed: 05/25/22			
Alkalinity - bicarbonate as CaCO3	438	mg/L				450		3	10
<u>Batch B233663 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B233663-CCB1)				Prepared & Analyzed: 05/24/22					
Chloride	0.0672	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 B233663 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B233663-CCB1)				Prepared & Analyzed: 05/24/22					
Fluoride	0.00	mg/L							
Calibration Check (B233663-CCV1)				Prepared & Analyzed: 05/24/22					
Chloride	4.80	mg/L		5.000		96	90-110		
Sulfate	4.89	mg/L		5.000		98	90-110		
Fluoride	5.24	mg/L		5.000		105	90-110		
Matrix Spike (B233663-MS2)				Sample: FE02498-01		Prepared & Analyzed: 05/24/22			
Sulfate	1.00E9	mg/L	Q4	1.500	256	NR	80-120		
Chloride	1.0E9	mg/L	Q4	1.500	80	NR	80-120		
Fluoride	1.65	mg/L	Q1	1.500	0.591	70	80-120		
Matrix Spike Dup (B233663-MSD2)				Sample: FE02498-01		Prepared & Analyzed: 05/24/22			
Chloride	1.0E9	mg/L	Q4	1.500	80	NR	80-120	0	20
Sulfate	1.00E9	mg/L		1.500	256	NR	80-120	0	20
Fluoride	1.64	mg/L	Q2	1.500	0.591	70	80-120	0.4	20
<u>Batch B233665 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B233665-CCB1)				Prepared & Analyzed: 05/24/22					
Fluoride	0.00	mg/L							
Sulfate	0.0481	mg/L							
Chloride	0.00	mg/L							
Calibration Check (B233665-CCV1)				Prepared & Analyzed: 05/24/22					
Chloride	4.86	mg/L		5.000		97	90-110		
Fluoride	5.26	mg/L		5.000		105	90-110		
Sulfate	4.96	mg/L		5.000		99	90-110		
Matrix Spike (B233665-MS3)				Sample: FE02498-06		Prepared & Analyzed: 05/24/22			
Sulfate	1.00E9	mg/L	Q4	1.500	53.3	NR	80-120		
Fluoride	1.77	mg/L		1.500	ND	118	80-120		
Chloride	1.0E9	mg/L	Q4	1.500	47	NR	80-120		
Matrix Spike Dup (B233665-MSD3)				Sample: FE02498-06		Prepared & Analyzed: 05/24/22			
Fluoride	1.78	mg/L		1.500	ND	119	80-120	0.4	20
Chloride	1.0E9	mg/L	Q4	1.500	47	NR	80-120	0	20
Sulfate	1.00E9	mg/L	Q4	1.500	53.3	NR	80-120	0	20
<u>Batch B233757 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B233757-CCB1)				Prepared & Analyzed: 05/25/22					
Sulfate	0.00	mg/L							
Calibration Check (B233757-CCV1)				Prepared & Analyzed: 05/25/22					
Sulfate	4.85	mg/L		5.000		97	90-110		
<u>Batch B235957 - No Prep - SM 2540C</u>									
Blank (B235957-BLK1)				Prepared & Analyzed: 06/21/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B235957-BS1)				Prepared & Analyzed: 06/21/22					
Solids - total dissolved solids (TDS)	1000	mg/L		1000		100	84.9-109		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B236356 - No Prep - SM 2320B 1997</u>									
Blank (B236356-BLK1) Prepared & Analyzed: 06/24/22									
Alkalinity - carbonate as CaCO3	< 2.0	mg/L							
<u>Batch B236358 - No Prep - SM 2320B 1997</u>									
Blank (B236358-BLK1) Prepared & Analyzed: 06/24/22									
Alkalinity - bicarbonate as CaCO3	2.50	mg/L							
<u>Batch B236481 - SW 3015 - EPA 6020A</u>									
Blank (B236481-BLK1) Prepared & Analyzed: 06/28/22									
Antimony	< 3.0	ug/L							
Arsenic	< 1.0	ug/L							
Barium	< 1.0	ug/L							
Beryllium	< 1.0	ug/L							
Boron	< 10	ug/L							
Cadmium	< 1.0	ug/L							
Calcium	< 0.20	mg/L							
Chromium	< 4.0	ug/L							
Cobalt	< 2.0	ug/L							
Lead	< 1.0	ug/L							
Magnesium	< 0.10	mg/L							
Mercury	< 0.20	ug/L							
Molybdenum	< 1.0	ug/L							
Potassium	< 0.10	mg/L							
Selenium	< 1.0	ug/L							
Sodium	< 0.10	mg/L							
Thallium	< 1.0	ug/L							
Lithium	< 0.020	mg/L							
LCS (B236481-BS1) Prepared & Analyzed: 06/28/22									
Antimony	547	ug/L		555.6		98	80-120		
Arsenic	533	ug/L		555.6		96	80-120		
Barium	558	ug/L		555.6		100	80-120		
Beryllium	523	ug/L		555.6		94	80-120		
Boron	614	ug/L		555.6		110	80-120		
Cadmium	534	ug/L		555.6		96	80-120		
Calcium	6.63	mg/L		5.556		119	80-120		
Chromium	583	ug/L		555.6		105	80-120		
Cobalt	561	ug/L		555.6		101	80-120		
Lead	532	ug/L		555.6		96	80-120		
Magnesium	6.60	mg/L		5.556		119	80-120		
Mercury	52.9	ug/L		55.56		95	80-120		
Molybdenum	554	ug/L		555.6		100	80-120		
Potassium	6.34	mg/L		5.556		114	80-120		
Selenium	550	ug/L		555.6		99	80-120		
Sodium	5.92	mg/L		5.556		106	80-120		
Thallium	528	ug/L		555.6		95	80-120		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B236481 - SW 3015 - EPA 6010B</u>									
LCS (B236481-BS1)				Prepared & Analyzed: 06/28/22					
Lithium	0.568	mg/L		0.5556		102	80-120		
<u>Batch B236609 - No Prep - SM 4500F C 1997</u>									
Calibration Blank (B236609-CCB1)				Prepared & Analyzed: 06/29/22					
Fluoride	0.0120	mg/L							
Calibration Blank (B236609-CCB2)				Prepared & Analyzed: 06/29/22					
Fluoride	0.0170	mg/L							
Calibration Check (B236609-CCV1)				Prepared & Analyzed: 06/29/22					
Fluoride	0.668	mg/L		0.7000		95	90-110		
Calibration Check (B236609-CCV2)				Prepared & Analyzed: 06/29/22					
Fluoride	0.710	mg/L		0.7000		101	90-110		
<u>Batch B236644 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B236644-CCB1)				Prepared & Analyzed: 06/28/22					
Chloride	0.00	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B236644-CCV1)				Prepared & Analyzed: 06/28/22					
Sulfate	5.02	mg/L		5.000		100	90-110		
Chloride	4.90	mg/L		5.000		98	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

- C The associated blank spike failed to meet the required acceptance criteria.
- Q1 Matrix Spike failed % recovery acceptance limits. The associated blank spike recovery was acceptable.
- Q2 Matrix Spike Duplicate failed % recovery acceptance limits. The associated blank spike recovery was acceptable.
- Q3 Matrix Spike/Matrix Spike Duplicate both failed % recovery acceptance limits. The associated blank spike recovery was acceptable.
- 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 Schindler



Certified by: Gail Schindler, Project Manager

Pace IR - Peoria, IL

Sample Delivery Group: L1508139
Samples Received: 06/23/2022
Project Number: FF03494
Description: NRT Coffeen
Site: 001
Report To: Gail Schindler

Entire Report Reviewed By:



Donna Eidson
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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		⁹Sc

SAMPLE SUMMARY

NE RISER, UNIT 3 L1508139-01 Non-Potable Water

Collected by:
 Collected date/time: 06/15/22 10:08
 Received date/time: 06/23/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1894908	1	07/14/22 10:51	07/20/22 14:42	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1889975	1	07/07/22 15:00	07/20/22 14:42	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1889975	1	07/07/22 15:00	07/08/22 19:32	RGT	Mt. Juliet, TN

- ¹Cp
- ²Tc
- ³Ss
- ⁴Cn
- ⁵Sr
- ⁶Qc
- ⁷Gl
- ⁸Al
- ⁹Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Donna Eidson
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.257	<u>U</u>	0.205	0.388	07/20/2022 14:42	WG1894908
(T) Barium	108			62.0-143	07/20/2022 14:42	WG1894908
(T) Yttrium	100			79.0-136	07/20/2022 14:42	WG1894908

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.290	<u>J</u>	0.276	0.411	07/20/2022 14:42	WG1889975

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.290		0.185	0.136	07/08/2022 19:32	WG1889975
(T) Barium-133	105			30.0-143	07/08/2022 19:32	WG1889975

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3817573-1 07/20/22 14:42

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-228	0.0621	<u>U</u>	0.121	0.222
(T) Barium	107		107	
(T) Yttrium	104		104	

L1513844-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1513844-02 07/20/22 14:42 • (DUP) R3817573-5 07/20/22 14:42

Analyte	Original Result pCi/l	Original Uncertainty + / -	Original MDA pCi/l	DUP Result pCi/l	DUP Uncertainty + / -	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	1.76	0.280	0.455	2.07	0.298	0.455	1	16.2	0.761		20	3
(T) Barium	93.9			106	106							
(T) Yttrium	104			112	112							

Laboratory Control Sample (LCS)

(LCS) R3817573-2 07/20/22 14:42

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.27	85.4	80.0-120	
(T) Barium			109		
(T) Yttrium			113		

L1513844-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1513844-01 07/20/22 14:42 • (MS) R3817573-3 07/20/22 14:42 • (MSD) R3817573-4 07/20/22 14:42

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	10.0	2.39	10.7	10.0	83.3	76.2	1	70.0-130		6.85		20
(T) Barium		99.1		106	100	106						
(T) Yttrium		108		111	109	111						

Method Blank (MB)

(MB) R3816230-1 07/08/22 19:32

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty +/-	MB MDA pCi/l
Radium-226	0.00629	U	0.0169	0.0362
(T) Barium-133	95.0		95.0	

L1508149-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1508149-07 07/08/22 19:32 • (DUP) R3816230-5 07/08/22 19:32

Analyte	Original Result pCi/l	Original Uncertainty +/-	DUP Result pCi/l	DUP Uncertainty +/-	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.331	0.231	0.235	0.160	0.235	1	90.5	0.734	J	20	3
(T) Barium-133	120		97.1	97.1							

Laboratory Control Sample (LCS)

(LCS) R3816230-2 07/08/22 19:32

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.02	5.09	101	80.0-120	
(T) Barium-133			95.8		

L1507068-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1507068-01 07/08/22 19:32 • (MS) R3816230-3 07/08/22 19:32 • (MSD) R3816230-4 07/08/22 19:32

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier	MS RER	RPD	RPD Limits %
Radium-226	20.0	-0.0441	18.8	19.7	94.0	1	75.0-125			4.78	20
(T) Barium-133		98.6		99.6	97.6						

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCREDITATIONS & LOCATIONS

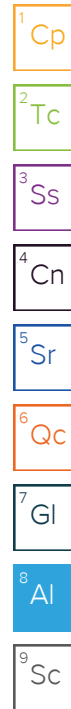
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



Internal Transfer Chain of Custody

A007



State of Origin: IL
 Cert. Needed: YES NO

Workorder Name: NRT Coffeen
 Subcontract To:
 Owner Received Date: 3/16/2022
 Results Requested By: 7/8/2002

Report To:
 Gail Schindler
 Pace Analytical - IL/MO
 2231 W. Altorfer Drive
 Peoria, IL 61615
 800-752-6651

Pace Analytical Services, LLC
 12065 Lebanon Rd
 Mt Juliet, TN
 (615)758-5858

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	Date/Time	Received By	Date/Time	Comments
1	NE RISER, UNIT 3	Grab	6/15/2022 10:08	FF03494-01	GW					
2										
3										
4										
5										
6										
7										
8										
9										
10										
<p>LAB USE ONLY</p> <p>1508139</p> <p>-01</p>										
<p>Sample Receipt Checklist</p> <p>COC Seal Present/Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable</p> <p>COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N</p> <p>Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Pres. Correct/Check: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N</p> <p>Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N</p> <p>Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N</p> <p>RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N</p>										
Transfers	Released By	Date/Time	Received By	Date/Time						
1	<i>[Signature]</i>	6/15/22 11:52	<i>[Signature]</i>	6/15/22 10:08						
2				6/15/22 10:08						
3										
<p>Needs reported as 226, 228 and also combined 226/228 Include QC summary</p>										

Cooler Temperature on Receipt _____ °C Custody Seal Y or N Received on Ice Y or N Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

NMT7
26810-28.8

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Pace IR - Peoria, IL

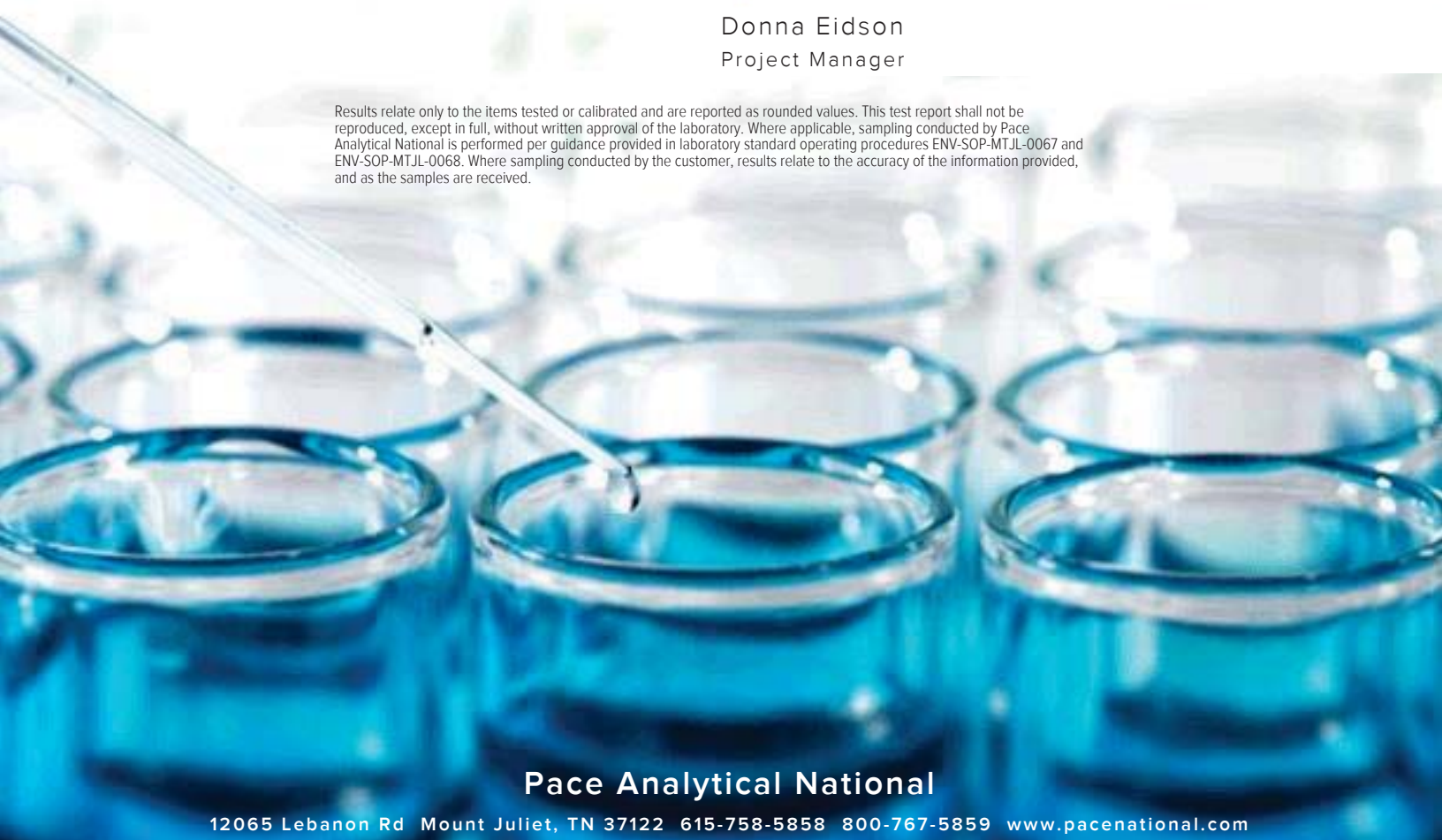
Sample Delivery Group: L1508149
Samples Received: 06/22/2022
Project Number: FF03497
Description: Coffeen
Site: 001
Report To: Gail Schindler

Entire Report Reviewed By:



Donna Eidson
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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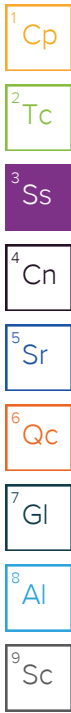
SAMPLE SUMMARY

G200 L1508149-01 Non-Potable Water

Collected by
Collected date/time
Received date/time

06/15/22 16:00 06/22/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1892915	1	07/13/22 07:22	07/21/22 13:25	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1889975	1	07/07/22 15:00	07/21/22 13:25	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1889975	1	07/07/22 15:00	07/08/22 19:32	RGT	Mt. Juliet, TN



R201 L1508149-02 Non-Potable Water

Collected by
Collected date/time
Received date/time

06/15/22 16:03 06/22/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1892915	1	07/13/22 07:22	07/21/22 13:25	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1889975	1	07/07/22 15:00	07/21/22 13:25	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1889975	1	07/07/22 15:00	07/08/22 19:32	RGT	Mt. Juliet, TN

G206 L1508149-03 Non-Potable Water

Collected by
Collected date/time
Received date/time

06/16/22 09:46 06/22/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1892915	1	07/13/22 07:22	07/21/22 13:25	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1889975	1	07/07/22 15:00	07/21/22 13:25	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1889975	1	07/07/22 15:00	07/08/22 19:32	RGT	Mt. Juliet, TN

G209 L1508149-04 Non-Potable Water

Collected by
Collected date/time
Received date/time

06/15/22 14:15 06/22/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1892915	1	07/13/22 07:22	07/21/22 13:25	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1889975	1	07/07/22 15:00	07/21/22 13:25	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1889975	1	07/07/22 15:00	07/08/22 19:32	RGT	Mt. Juliet, TN

G212 L1508149-05 Non-Potable Water

Collected by
Collected date/time
Received date/time

06/15/22 13:06 06/22/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1892915	1	07/13/22 07:22	07/21/22 13:25	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1889975	1	07/07/22 15:00	07/21/22 13:25	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1889975	1	07/07/22 15:00	07/08/22 19:32	RGT	Mt. Juliet, TN

G215 L1508149-06 Non-Potable Water

Collected by
Collected date/time
Received date/time

06/15/22 10:58 06/22/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1892915	1	07/13/22 07:22	07/21/22 13:25	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1889975	1	07/07/22 15:00	07/21/22 13:25	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1889975	1	07/07/22 15:00	07/08/22 19:32	RGT	Mt. Juliet, TN

SAMPLE SUMMARY

G218 L1508149-07 Non-Potable Water

Collected by:
 Collected date/time: 06/15/22 10:58
 Received date/time: 06/22/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1892915	1	07/13/22 07:22	07/21/22 13:25	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1889975	1	07/07/22 15:00	07/21/22 13:25	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1889975	1	07/07/22 15:00	07/08/22 19:32	RGT	Mt. Juliet, TN

- ¹Cp
- ²Tc
- ³Ss
- ⁴Cn
- ⁵Sr
- ⁶Qc
- ⁷Gl
- ⁸Al
- ⁹Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Donna Eidson
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.166	<u>U</u>	0.228	0.668	07/21/2022 13:25	WG1892915
(T) Barium	106			62.0-143	07/21/2022 13:25	WG1892915
(T) Yttrium	100			79.0-136	07/21/2022 13:25	WG1892915

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.337	<u>U</u>	0.305	0.724	07/21/2022 13:25	WG1889975

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.172	<u>J</u>	0.203	0.280	07/08/2022 19:32	WG1889975
(T) Barium-133	103			30.0-143	07/08/2022 19:32	WG1889975

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.158	<u>U</u>	0.272	0.793	07/21/2022 13:25	WG1892915
(T) Barium	91.9			62.0-143	07/21/2022 13:25	WG1892915
(T) Yttrium	106			79.0-136	07/21/2022 13:25	WG1892915

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.732	<u>J</u>	0.410	0.845	07/21/2022 13:25	WG1889975

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.574		0.307	0.291	07/08/2022 19:32	WG1889975
(T) Barium-133	97.5			30.0-143	07/08/2022 19:32	WG1889975

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.605	J	0.216	0.605	07/21/2022 13:25	WG1892915
(T) Barium	97.0			62.0-143	07/21/2022 13:25	WG1892915
(T) Yttrium	103			79.0-136	07/21/2022 13:25	WG1892915

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.743		0.268	0.638	07/21/2022 13:25	WG1889975

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.139	J	0.158	0.203	07/08/2022 19:32	WG1889975
(T) Barium-133	95.2			30.0-143	07/08/2022 19:32	WG1889975

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.673		0.221	0.615	07/21/2022 13:25	WG1892915
(T) Barium	93.5			62.0-143	07/21/2022 13:25	WG1892915
(T) Yttrium	108			79.0-136	07/21/2022 13:25	WG1892915

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.887		0.321	0.691	07/21/2022 13:25	WG1889975

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.215	J	0.233	0.314	07/08/2022 19:32	WG1889975
(T) Barium-133	98.4			30.0-143	07/08/2022 19:32	WG1889975

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.413	J	0.211	0.601	07/21/2022 13:25	WG1892915
(T) Barium	101			62.0-143	07/21/2022 13:25	WG1892915
(T) Yttrium	114			79.0-136	07/21/2022 13:25	WG1892915

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.507	J	0.259	0.645	07/21/2022 13:25	WG1889975

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0937	J	0.150	0.233	07/08/2022 19:32	WG1889975
(T) Barium-133	120			30.0-143	07/08/2022 19:32	WG1889975

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.612	J	0.247	0.697	07/21/2022 13:25	WG1892915
(T) Barium	87.5			62.0-143	07/21/2022 13:25	WG1892915
(T) Yttrium	110			79.0-136	07/21/2022 13:25	WG1892915

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.673	J	0.286	0.739	07/21/2022 13:25	WG1889975

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0606	U	0.145	0.245	07/08/2022 19:32	WG1889975
(T) Barium-133	120			30.0-143	07/08/2022 19:32	WG1889975

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.581	J	0.250	0.706	07/21/2022 13:25	WG1892915
(T) Barium	91.9			62.0-143	07/21/2022 13:25	WG1892915
(T) Yttrium	112			79.0-136	07/21/2022 13:25	WG1892915

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.912		0.340	0.744	07/21/2022 13:25	WG1889975

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.331		0.231	0.235	07/08/2022 19:32	WG1889975
(T) Barium-133	120			30.0-143	07/08/2022 19:32	WG1889975

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3818238-1 07/21/22 13:25

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-228	0.266	↓	0.116	0.328
(T) Barium	98.9		98.9	
(T) Yttrium	98.9		98.9	

L1507923-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1507923-02 07/21/22 13:25 • (DUP) R3818238-5 07/21/22 13:25

Analyte	Original Result pCi/l	Original Uncertainty + / -	Original MDA pCi/l	DUP Result pCi/l	DUP Uncertainty + / -	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.649	0.218	0.607	1.17	0.255	0.607	1	57.5	1.56		20	3
(T) Barium	102			95.3	95.3							
(T) Yttrium	106			113	113							

Laboratory Control Sample (LCS)

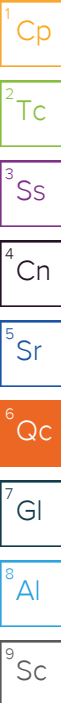
(LCS) R3818238-2 07/21/22 13:25

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.61	92.2	80.0-120	
(T) Barium			111		
(T) Yttrium			114		

L1505497-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1505497-05 07/21/22 13:25 • (MS) R3818238-3 07/21/22 13:25 • (MSD) R3818238-4 07/21/22 13:25

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	12.5	0.453	12.3	11.9	94.4	91.2	1	70.0-130			3.32		20
(T) Barium		96.7			104	106							
(T) Yttrium		113			113	116							



Method Blank (MB)

(MB) R3816230-1 07/08/22 19:32

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-226	0.00629	<u>U</u>	0.0169	0.0362
(T) Barium-133	95.0		95.0	

L1508149-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1508149-07 07/08/22 19:32 • (DUP) R3816230-5 07/08/22 19:32

Analyte	Original Result pCi/l	Original Uncertainty + / -	Original MDA pCi/l	DUP Result pCi/l	DUP Uncertainty + / -	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.331	0.231	0.235	0.125	0.160	0.235	1	90.5	0.734	<u>J</u>	20	3
(T) Barium-133	120			97.1	97.1							

Laboratory Control Sample (LCS)

(LCS) R3816230-2 07/08/22 19:32

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.02	5.09	101	80.0-120	
(T) Barium-133			95.8		

L1507068-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1507068-01 07/08/22 19:32 • (MS) R3816230-3 07/08/22 19:32 • (MSD) R3816230-4 07/08/22 19:32

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	-0.0441	18.8	19.7	94.0	98.6	1	75.0-125			4.78		20
(T) Barium-133		98.6			97.6	99.6							

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

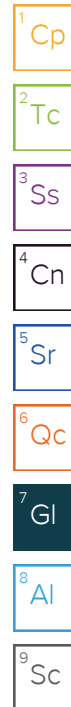
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.



ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Internal Transfer Chain of Custody

State of Origin: IL
 Cert. Needed: YES NO



Results Requested

By: 7/8/2022

Owner Received

Date: 6/16/2022

Workorder Name: COFFEEN

Report To: Subcontract To:

Gail Schindler
 Pace Analytical - IL/MO
 2231 W. Altorfer Drive
 Peoria, IL 61615
 800-752-6651

Pace Analytical Services, LLC
 12065 Lebanon Road
 Mt. Juliet, TN 37122
 (615)758-5858

1508149

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	Date/Time	Received By	Date/Time	Comments
1	G200	Grab	6/15/2022 16:00	FF03497-01	GW					
2	R201	Grab	6/15/2022 16:03	FF03497-02	GW					
3	G206	Grab	6/16/2022 9:46	FF03497-03	GW					
4	G209	Grab	6/15/2022 14:15	FF03497-04	GW					
5	G212	Grab	6/15/2022 13:06	FF03497-05	GW					
6	G215	Grab	6/15/2022 10:58	FF03497-06	GW					
7	G218	Grab	6/15/2022 10:58	FF03497-07	GW					
8										
9										
10										
Transfers Released By: <i>[Signature]</i>										
1										
2										
3										

Cooler Temperature on Receipt _____ °C Custody Seal Y or N Received on Ice Y or N Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

FMT-ALL-C-002rev.00 24March2009

DNA725.7

Sample Receipt Checklist
 COC Seal Present/Intact: N IF Applicable
 COC Signed/Accurate: N VOA Zero Headspace: N
 Bottles airtight: N Pres. Correct/Check: N
 Correct bottles used: N
 Sufficient volume sent: N
 RAD Screen <0.5 mR/hr: N



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

CHAIN OF CUSTODY RECORD
STATE WHERE SAMPLE COLLECTED IL

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

1 CLIENT VISTRA - COFFEEEN ADDRESS: 134 CIPS LANE CITY: COFFEEEN, IL 62017 STATE: IL ZIP: 62017 CONTACT PERSON: JOHN ROMANG		PROJECT LOCATION: 134 CIPS LANE PURCHASE ORDER #: 134CIPS DATE SHIPPED:	
2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT) G200 G206 G208 G216 G217 G218 G270 G279 G280		MATRIX TYPE: GW BOTTLE COUNT: 6 PRES CODE CLIENT PROVIDED:	
ANALYSIS REQUESTED: AG, SO4, TL, TDS, ZN* MO, NI, PHENOL, SE* CN, FE, PB, MN, HG, V* CD, CL, CR, CO, CU, F* SB, AS, AL, BA, BF, B*		REMARKS: *TOTAL AND DISSOLVED	
3 ANALYSIS REQUESTED:		4 (FOR LAB USE ONLY) LOGIN # FE02142-09 LOGGED BY: KEL CLIENT: VISTRA-COFFEEEN PROJECT: COFFEEEN GYP G1 PROJ. MGR.: GJ SCHINDLER	

DATE COLLECTED	TIME COLLECTED	SAMPLE GRAB	SAMPLE TYPE	MATRIX TYPE	BOTTLE COUNT	PRES CODE CLIENT PROVIDED	DATE RECEIVED	TIME RECEIVED	RECEIVED BY: (SIGNATURE)
5/10/22	1514	X	GW	GW	6		5/10/22	1630	[Signature]
	1452								
	1620								
	1610								
	1517								
	1427								
	1235								
	1137								
	1045								

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) (RUSH TAT IS SUBJECT TO PACE LABS APPROVAL AND SURCHARGE) RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL PHONE		6 DATE RESULTS NEEDED	
EMAIL IF DIFFERENT FROM ABOVE:		PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS)	

7 RELINQUISHED BY: (SIGNATURE) [Signature]		RECEIVED BY: (SIGNATURE) [Signature]	
DATE: 5/10/22	TIME: 1630	DATE: 5/10/22	TIME: 1845
DATE: 5/10/22	TIME: 1845	DATE: 05/11/22	TIME: 1800

8 COMMENTS: (FOR LAB USE ONLY)		SAMPLE TEMPERATURE UPON RECEIPT: 2.5 °C CHILL PROCESS STARTED PRIOR TO RECEIPT: Y OR N SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED: Y OR N DATE AND TIME TAKEN FROM SAMPLE BOTTLE:	
---------------------------------------	--	---	--

CHAIN OF CUSTODY RECORD

STATE WHERE SAMPLE COLLECTED IL

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

PACE ANALYTICAL SERVICES
WWW.PACELABS.COM



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

<p>1 CLIENT: VISTRA - COFFEEEN</p> <p>ADDRESS: 134 CIPS LANE</p> <p>CITY: COFFEEEN, IL 62017</p> <p>STATE: IL</p> <p>ZIP: 62017</p> <p>CONTACT PERSON: JOHN ROMANG</p>		<p>PROJECT NUMBER: _____</p> <p>PROJECT LOCATION: _____</p> <p>E-MAIL: _____</p> <p>PHONE NUMBER: _____</p> <p>DATE SHIPPED: _____</p>		<p>4 (FOR LAB USE ONLY)</p> <p>LOGIN # EG02498-10178</p> <p>LOGGED BY: Daw</p> <p>CLIENT: VISTRA-COFFEEEN</p> <p>PROJECT: COFFEEEN GYP G1</p> <p>PROJ. MGR.: GJ SCHINDLER</p>	
<p>2 (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)</p> <p>R205</p> <p>6275</p> <p>6277</p>		<p>3 ANALYSIS REQUESTED</p> <p>SB,AS,AL,BA,BE,BF,B* CD,CL,CR,CO,CU,F* CN,FE,PB,MN,HG,V* MO,NI,PHENOL,SE* AG,SO4,TL,TDS,ZN*</p>		<p>REMARKS</p> <p>*TOTAL AND DISSOLVED</p>	
<p>3 - HNO3</p> <p>4 - NAOH</p> <p>5 - NA2S2O3</p> <p>6 - UNPRESERVED</p> <p>7 - OTHER</p>		<p>MATRIX TYPES:</p> <p>WW- WASTEWATER DW- DRINKING WATER GW- GROUND WATER WWSL- SLUDGE NLS- NON AQUEOUS SOLID LCHL- LEACHATE OIL-OIL SO-SOIL SOL-SOLID</p> <p>BOTTLE COUNT</p> <p>PRES CODE CLIENT PROVIDED</p>		<p>6</p> <p>DATE COLLECTED: 5/12/22 1128</p> <p>TIME COLLECTED: 1038</p> <p>DATE COLLECTED: 5/12/22 0953</p> <p>SAMPLE TYPE COMP</p> <p>MATRIX TYPE</p> <p>DATE (PLEASE PRINT)</p> <p>SAMPLER'S SIGNATURE</p>	
<p>5 (TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH (RUSH TAT IS SUBJECT TO PACE LABS APPROVAL AND SURCHARGE))</p> <p>RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL PHONE</p> <p>EMAIL IF DIFFERENT FROM ABOVE: _____</p> <p>PHONE # IF DIFFERENT FROM ABOVE: _____</p>		<p>6</p> <p>DATE RESULTS NEEDED</p>		<p>7</p> <p>RELINQUISHED BY: (SIGNATURE)</p> <p>RELINQUISHED BY: (SIGNATURE)</p> <p>RELINQUISHED BY: (SIGNATURE)</p>	
<p>7</p> <p>RELINQUISHED BY: (SIGNATURE)</p> <p>RELINQUISHED BY: (SIGNATURE)</p> <p>RELINQUISHED BY: (SIGNATURE)</p>		<p>8</p> <p>RECEIVED BY: (SIGNATURE)</p> <p>RECEIVED BY: (SIGNATURE)</p> <p>RECEIVED BY: (SIGNATURE)</p>		<p>8</p> <p>COMMENTS: (FOR LAB USE ONLY)</p> <p>SAMPLE TEMPERATURE UPON RECEIPT: 3.5 °C</p> <p>CHILL PROCESS STARTED PRIOR TO RECEIPT SAMPLE(S) RECEIVED ON ICE</p> <p>Y OR N</p> <p>Y OR N</p> <p>Y OR N</p> <p>DATE AND TIME TAKEN FROM SAMPLE BOTTLE: 5/12/22 1501</p>	

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) _____



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REGULATORY PROGRAM (CIRCLE):
 MORBCA
 CCDD

NPDES
 RCRA
 TACO: RES OR IND/COMM

CHAIN OF CUSTODY RECORD
 STATE WHERE SAMPLE COLLECTED IL

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

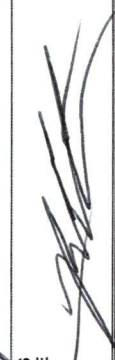
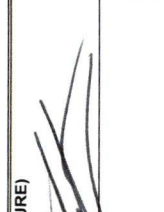
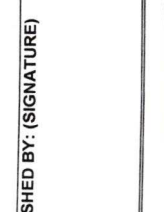
1 CLIENT VISTRA - COFFEEEN ADDRESS 134 CIPS LANE CITY COFFEEEN, IL 62017 STATE ZIP CONTACT PERSON JOHN ROMANG		PROJECT LOCATION PROJECT NUMBER MO 5R KD KL 26 GYPSUM STACK PHONE NUMBER E-MAIL DATE SHIPPED PURCHASE ORDER #		ANALYSIS REQUESTED SB*AS*AL*BA*BE*BI* CD*CL*CR*CO*CU*F* CN*FE*PB*MN*HG*V* MO*NI*PHENOL*ST* AG*SO4*TL*TD*ZN*		(FOR LAB USE ONLY) 4 LOGIN # FE2498-15 LOGGED BY Daw CLIENT: VISTRA-COFFEEN PROJECT: COFFEEEN GYP G1 PROJ. MGR.: GJ SCHINDLER	
2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT) R201 G207 G209 G210 G211 G212 G213 G214 G215		DATE COLLECTED 5/11/22 1106 1005 0950 1050 1200 1231 1344 1448 1602		SAMPLE TYPE GRAB X		MATRIX TYPE GW 6	
BOTTLE COUNT 6		PRES CODE CLIENT PROVIDED		MATRIX TYPES: SW- WASTEWATER DW- DRINKING WATER GW- GROUND WATER WW- WASTEWATER WWS- WASTEWATER LCH- LEACHATE OIL- OIL SO- SOIL SOL- SOLID		REMARKS *TOTAL AND DISSOLVED	
5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) (RUSH THAT IS SUBJECT TO PACE LABS APPROVAL AND SURCHARGE) NORMAL RUSH		CHEMICAL PRESERVATION CODES: 1 - HCL 2 - H2SO4 3 - HNO3 4 - NAOH 5 - NA2S2O3 6 - UNPRESERVED 7 - OTHER		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)		8 COMMENTS: (FOR LAB USE ONLY) SAMPLE TEMPERATURE UPON RECEIPT CHILL PROCESS STARTED PRIOR TO RECEIPT SAMPLE(S) RECEIVED ON ICE SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED DATE AND TIME TAKEN FROM SAMPLE BOTTLE	
7 RELINQUISHED BY: (SIGNATURE) RELINQUISHED BY: (SIGNATURE) RELINQUISHED BY: (SIGNATURE)		DATE 5/11/22 TIME 10:45 5/11/22 TIME 18:57 5/12/22 TIME 1600		RECEIVED BY: (SIGNATURE) RELINQUISHED BY: (SIGNATURE) RELINQUISHED BY: (SIGNATURE)		DATE 5/11/22 TIME 16:45 5/12/22 TIME 17:20 5/12/22 TIME 1600	

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

CLIENT 1 VISTRA - COFFEEEN ADDRESS 134 CIPS LANE CITY COFFEEEN, IL 62017 STATE ZIP CONTACT PERSON JOHN ROMANG		PROJECT LOCATION PROJECT NUMBER GYPSUM STACK PHONE NUMBER E-MAIL		PURCHASE ORDER # DATE SHIPPED MATRIX TYPES: HW- WASTEWATER DW- DRINKING WATER OW- GROUND WATER SW- SURFACE WATER MW- MINE WASTEWATER LW- LEACHATE SL- SOLID DL- DILUTE							
2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT) G271 G272 G273 G274 G276 G278		DATE COLLECTED 5/11/22 1203 1255 1345 1613 1530		SAMPLE TYPE GRAB X ↓ ↓ ↓ ↓		MATRIX TYPE GW ↓ ↓ ↓ ↓		BOTTLE COUNT 6 ↓ ↓ ↓ ↓		PRES CODE UNPROB ↓ ↓ ↓ ↓	
3 ANALYSIS REQUESTED SB*,AS*,AL*,BA*,BE*,B* CD*,CL*,CR*,CO*,CU*,F* CN*,FE*,PB*,MN*,HG*,V* MO*,NI*,PHENOL,SE* AG*,SO4*,TL*,TDS,ZN*		4 (FOR LAB USE ONLY) LOGIN # LOGGED BY: CLIENT: VISTRA-COFFEEN PROJECT: COFFEEEN GYP G1 PROJ. MGR.: GJ SCHINDLER		REMARKS *TOTAL AND DISSOLVED NOT required 6/5/22							
5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE): (RUSH TAT IS SUBJECT TO PACE LABS APPROVAL AND SURCHARGE) RUSH RESULT'S VIA (PLEASE CIRCLE) EMAIL PHONE EMAIL IF DIFFERENT FROM ABOVE:		6 DATE RESULTS NEEDED 5 - NA2S2O3 6 - UNPRESERVED 7 - OTHER		7 RELINQUISHED BY: (SIGNATURE) DATE 5/11/22 TIME 1645							
7 RELINQUISHED BY: (SIGNATURE) DATE 5/11/22 TIME 18:57		8 COMMENTS: (FOR LAB USE ONLY) SAMPLE TEMPERATURE UPON RECEIPT 2.5 °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 1600		RECEIVED BY: (SIGNATURE) DATE 5/11/22 TIME 1645							
8 RECEIVED BY: (SIGNATURE) DATE 5/11/22 TIME 1600		RECEIVED BY: (SIGNATURE) DATE 5/11/22 TIME 1600		RECEIVED BY: (SIGNATURE) DATE 5/11/22 TIME 1600							

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

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

1 CLIENT VISTRA - COFFEEEN ADDRESS 134 CIPS LANE CITY COFFEEEN, IL 62017 STATE ZIP CONTACT PERSON JOHN ROMANG		PROJECT LOCATION PROJECT NUMBER GYPSUM STACK PHONE NUMBER E-MAIL DATE SHIPPED PURCHASE ORDER #		ANALYSIS REQUESTED 3 ALK HCO ₃ , CO ₃ , CL, SO ₄ F, TDS, CA, MG, NA, K, SB, AS, BA, BF, B, CD, CR CO, PB, LI, HG, MO, SE, TL RAD 226/228		(FOR LAB USE ONLY) 4 LOGIN # F03494-01 LOGGED BY: DCW CLIENT: RAMBOLL MILWAUKEE PROJECT: NRT COFFEEEN CCR LGMF STACK PROJ. MGR.: GJ SCHINDLER			
2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT) NE RISER		DATE COLLECTED 6/15/22	TIME COLLECTED 7008	SAMPLE TYPE GRAB <input checked="" type="checkbox"/> COMP <input type="checkbox"/>	MATRIX TYPE	BOTTLE COUNT 3	PRES CODE CLIENT PROVIDED 3,6	REMARKS	
MATRICES TYPES: WW- WASTEWATER DW- DRINKING WATER GW- GROUND WATER NS- NON AQUEOUS SOLID LCHT- LEACHATE OIL- OIL SOL- SOLID		DATE COLLECTED TIME COLLECTED		SAMPLE TYPE GRAB <input type="checkbox"/> COMP <input type="checkbox"/>		MATRIX TYPE		BOTTLE COUNT	
SAMPLER (PLEASE PRINT) AP		DATE COLLECTED TIME COLLECTED		SAMPLE TYPE GRAB <input type="checkbox"/> COMP <input type="checkbox"/>		MATRIX TYPE		BOTTLE COUNT	
SAMPLER'S SIGNATURE 		DATE COLLECTED TIME COLLECTED		SAMPLE TYPE GRAB <input type="checkbox"/> COMP <input type="checkbox"/>		MATRIX TYPE		BOTTLE COUNT	
CHEMICAL PRESERVATION CODES: 1 - HCL 2 - H2SO4 3 - HNO3 4 - NAOH 5 - NA2S2O3 6 - UNPRESERVED 7 - OTHER		TURNAROUND TIME REQUESTED (PLEASE CIRCLE) (RUSH TAT IS SUBJECT TO PACE LABS APPROVAL AND SURCHARGE) NORMAL RUSH RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL PHONE		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.		PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS)	
RELINQUISHED BY: (SIGNATURE) 		DATE TIME 6/16/22 1530		RECEIVED BY: (SIGNATURE) RECEIVED BY: (SIGNATURE)		7 COMMENTS: (FOR LAB USE ONLY)		8 SAMPLE TEMPERATURE UPON RECEIPT 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) 88 		DATE TIME 6/16/22 1530		RECEIVED BY: (SIGNATURE) RECEIVED BY: (SIGNATURE)		9 SAMPLE TEMPERATURE UPON RECEIPT CHILL PROCESS STARTED PRIOR TO RECEIPT SAMPLE(S) RECEIVED ON ICE SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED DATE AND TIME TAKEN FROM SAMPLE BOTTLE		10 COMMENTS: (FOR LAB USE ONLY)	



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

CHAIN OF CUSTODY RECORD
 STATE WHERE SAMPLE COLLECTED IL

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

1 CLIENT VISTRA - COFFEEEN ADDRESS 134 CIPS LANE CITY COFFEEEN, IL 62017 STATE ZIP CONTACT PERSON JOHN ROMANG		PROJECT LOCATION PURCHASE ORDER # ALK CO3, HCO3 RAD 226/228		ANALYSIS REQUESTED (FOR LAB USE ONLY) LOGIN # FF03497-07 LOGGED BY: DCW CLIENT: VISTRA-COFFEEEN PROJECT: COFFEEEN GYP G1 PROJ. MGR.: GJ SCHINDLER		
2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)		DATE COLLECTED TIME COLLECTED MATRIX TYPE BOTTLER COUNT PRES CODE CLIENT PROVIDED		DATE SHIPPED MATRIX TYPES: WWA - WASTEWATER DW - DRINKING WATER GW - GROUND WATER WWSL - SLUDGE WWSL - SLUDGE WWSL - NON AQUEOUS SOLID WWSL - AQUEOUS OIL-OIL SO-SOIL SOL-SOLID		
G200		6/15/22	1600	GW	2	3,6
R201		6/15/22	1603	GW	2	3,6
G206		6/16/22	0926	GW	2	3,6
G209		6/15/22	1415	GW	2	3,6
G212		6/15/22	1306	GW	2	3,6
G215		6/15/22	1203	GW	2	3,6
G218		6/15/22	1058	GW	2	3,6
REMARKS		CHEMICAL PRESERVATION CODES: 1 - HCL 2 - H2SO4 3 - HNO3 4 - NAOH 5 - NA2S2O3 6 - UNPRESERVED 7 - OTHER				
5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) (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 DATE COLLECTED TIME COLLECTED		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) DATE TIME 6/16/22 1530		RECEIVED BY: (SIGNATURE) DATE TIME 6/16/22 1530		8 COMMENTS: (FOR LAB USE ONLY) SAMPLE TEMPERATURE UPON RECEIPT: 2.9 °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		

Site: Coffeen Gypsum

WELL/SAMPLE POINT G200

Purge Method: Low-flow / Bladder

Date: 5/10/22 Start Time: 1420 Finish/Sample Time: 1514

Well Depth (Bottom) From MP: 20.20 ft
 Min. Purge Volume: N/A Gal / L
 Depth to Water From MP: 3.35 ft
 Total Purge Volume: 2.1 Gal (C)
 Water Column Length: 16.85 ft
 Max Drawdown: N/A ft
 Well Water Volume: 10.20 Gal (C)
 Total Drawdown: 0.11 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	1440	3.46	100	7.16	1060.0	17.71	36.0	1.15	5.84
2	1442	3.46	100	7.14	1039.4	17.50	37.7	1.10	5.78
3	1444	3.46	100	7.12	1035.7	17.49	39.2	1.06	5.70
4	1446	3.46	100	7.11	1044.1	17.53	40.5	1.03	5.72
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

RF 5/10/22

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)
1	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL)

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

Final DTW: 3.46 ft

Comments _____

Sampler's Signature: 

Site: Coffeen Gypsum

WELL/SAMPLE POINT G200

Purge Method: dedicated bladder

Date: 6/15/22 Start Time: 1505 Finish/Sample Time: 1600

Well Depth (Bottom) From MP: 20.20 ft Min. Purge Volume: — Gal / L

Depth to Water From MP: 5.65 ft Total Purge Volume: 1.7 Gal 10

Water Column Length: 14.55 ft Max. Drawdown: — ft

Well Water Volume: 8.80 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	1519	5.75	100	7.97	1021.1	19.53	-112.0	0.92	573.67
2	1521	5.75	100	7.95	1017.8	19.48	-102.3	0.82	175.05
3	1523	5.75	100	7.85	1019.6	19.48	-92.8	0.77	144.45
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Casing locked/secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well cap fits securely.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Good seal/drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well has weep holes	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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>600</u>
<u>1</u>	<u>2.5 L HNO3 P</u>

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

Final DTW: 5.65 ft

Comments _____

Sampler's Signature: antim moon

Site: Coffeen Gypsum

WELL/SAMPLE POINT R201

Purge Method: Low-flow / Bladder

Date: 5/10/22 ^{MS 5/11/22} Start Time: 0955 ^{MS 5/11/22} Finish/Sample Time: 1106

Well Depth (Bottom) From MP: 19.80 ft Min. Purge Volume: NA Gal / L

Depth to Water From MP: 3.69 ~~3.50~~ ^{MS 5/11/22} ft Total Purge Volume: 2.2 Gal (C)

Water Column Length: 16.11 ~~16.30~~ ^{MS 5/11/22} ft Max Drawdown: NA ft

Well Water Volume: 9.76 ~~9.87~~ ^{MS 5/11/22} Gal (C) Total Drawdown: 0.21 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	1032	3.90	100	7.05	1323.0	18.04	-91.9	0.44	233.28
2	1034	3.90	100	7.06	1324.9	18.34	-91.1	0.46	245.15
3	1036	3.90	100	7.05	1321.4	18.31	-89.7	0.47	231.26
4	1038	3.90	100	7.05	1319.0	18.27	-88.7	0.47	226.35
5									
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)
1	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL)

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

Final DTW: 3.90 ft

Comments There was a hole in the air line and the pump appeared to be resting on bottom and not pumping. repaired air line and raised wll. Auts in well

Sampler's Signature: [Signature]

Site: Coffeen Gypsum

WELL/SAMPLE POINT R201

Purge Method: 6 1/2 min

Date: 6/15/2022 Start Time: 12:46 Finish/Sample Time: 1:03 1:15 1:22

Well Depth (Bottom) From MP: 19.80 ft Min. Purge Volume: — Gal / L

Depth to Water From MP: 5.65 ft Total Purge Volume: 1000 Gal / L (2)

Water Column Length: 14.15 ft Max Drawdown: — ft

Well Water Volume: 8.56 Gal (1) 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	1529	5.69	100	8.06	1395.5	20.26	-169.1	0.03	2.61
2	1531	5.69	100	8.08	1398.1	20.08	-173.1	0.01	2.36
3	1533	5.69	100	8.06	1404.6	20.10	-171.9	0.02	2.32
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: ATI600

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)
1	General (P, 250 mL) 500mL
1	Plastic (P, 250 mL, HNO3)

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

Final DTW: 5.69 ft

Comments lots of sediment to AMS in bottom of well

Sampler's Signature: [Signature]

Site: Coffeen Gypsum

WELL/SAMPLE POINT G206

Purge Method: Low flow / bladder

Date: 05-10-22 Start Time: 1345 Finish/Sample Time: 1452

Well Depth (Bottom) From MP: 24.84 ft
 Min. Purge Volume: _____ Gal / L
 Depth to Water From MP: 9.39 ft
 Total Purge Volume: 1000 Gal / L
 Water Column Length: 15.45 ft
 Max Drawdown: _____ ft
 Well Water Volume: 9.35 Gal / L
 Total Drawdown: 0.76 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	1415	10.10	100	7.07	756.46	16.40	105.70	4.04	2.76
2	1416	10.10	100	7.07	817.73	16.82	106.20	4.00	2.72
3	1417	10.10	100	7.07	678.03	17.26	106.70	4.00	3.34
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	<input checked="" type="checkbox"/>	
Casing locked/secure	<input checked="" type="checkbox"/>	
Well cap fits securely.	<input checked="" type="checkbox"/>	
Good seal/drainage	<input checked="" type="checkbox"/>	
Well has weep holes	<input checked="" type="checkbox"/>	

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)

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

Final DTW: 10.15 ft

Comments _____

Sampler's Signature: 

Site: Coffeen Gypsum

WELL/SAMPLE POINT G206

Purge Method: Under

Date: 6/16/2022 Start Time: 0842 Finish/Sample Time: 0946

Well Depth (Bottom) From MP: 24.84 ft Min. Purge Volume: — Gal / L

Depth to Water From MP: 11.33 ft Total Purge Volume: 1000 Gal / L ml

Water Column Length: 13.51 ft Max Drawdown: — ft

Well Water Volume: 8.17 Gal L 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	0908	11.49	100	8.08	879.44	29.93	50.9	2.38	3.92
2	0910	11.49	100	8.08	873.71	29.72	39.2	2.28	3.84
3	0912	11.49	100	8.08	864.80	29.66	31.9	2.22	3.79
4	0914	11.49	100	8.08	862.74	29.58	38.7	2.17	3.80
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.		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)
	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250-mL) <u>500mL</u>
1	<u>Plastic CP, 25L, HNO3</u>

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

Final DTW: 11.49 ft

Comments: Anal in well

Sampler's Signature: [Signature]

Site: Coffeen Gypsum

WELL/SAMPLE POINT G209

Purge Method: LOW FLOW / BLANDED

Date: 05/11/22 Start Time: 0850 Finish/Sample Time: 0950

Well Depth (Bottom) From MP: 25.26 ft
 Min. Purge Volume: _____ Gal / L
 Depth to Water From MP: 9.80 ft
 Total Purge Volume: 1000 Gal / L
 Water Column Length: 15.46 ft
 Max Drawdown: _____ ft
 Well Water Volume: 9.40 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	0910	10.05	100	6.92	1307.4	17.76	39.20	0.11	79.54
2	0911	10.07	100	6.92	1302.00	17.69	42.20	0.11	65.45
3	0912	10.08	100	6.92	1310.30	17.35	44.40	0.11	63.74
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: AT 6000

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	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Casing locked/secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well cap fits securely.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Good seal/drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well has weep holes	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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)
	Ammonia (P,250mL, H2SO4)
1	General (P,500mL)

Final DTW: 10.10 ft

Comments _____

Sampler's Signature: _____

Site: Coffeen Gypsum

WELL/SAMPLE POINT G209

Purge Method: blaster

Date: 6/15/2022 Start Time: 1314 Finish/Sample Time: 1415

Well Depth (Bottom) From MP: 25.26 ft
 Min. Purge Volume: — Gal / L
 Depth to Water From MP: 10.96 ft
 Total Purge Volume: 1000 Gal / L (2L)
 Water Column Length: 14.30 ft
 Max Drawdown: — ft
 Well Water Volume: 8.65 Gal (1)
 Total Drawdown: 0.92 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	1334	11.49	100	8.05	1299.4	23.92	-142.8	0.24	2.75
2	1336	11.49	100	8.05	1296.9	23.90	-147.0	0.23	2.71
3	1338	11.50	100	8.05	1320	23.84	-150.9	0.19	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)
	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) 500mL
1	Plastic (P, 250 mL, HNO3)

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

Final DTW: 11.88 ft

Comments _____

Sampler's Signature: 

Site: Coffeen Gypsum

WELL/SAMPLE POINT G212

Purge Method: Low-flow / Bladder

Date: 5/11/22 Start Time: 1135 Finish/Sample Time: 1231

Well Depth (Bottom) From MP: 24.33 ft Min. Purge Volume: NA Gal / L

Depth to Water From MP: 10.17 ft Total Purge Volume: 1.6 Gal (C)

Water Column Length: 14.16 ft Max Drawdown: NA ft

Well Water Volume: 8.58 Gal (C) Total Drawdown: 0.93 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	1157	10.89	100	7.36	705.79	17.98	48.8	5.38	1.48
2	1159	10.89	100	7.36	710.49	17.93	48.6	5.22	1.32
3	1201	10.90	100	7.37	710.35	17.97	48.7	5.18	1.26
4	1203	10.90	100	7.38	711.04	17.97	49.1	5.15	1.24
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

*NA
5/11/22*

Field Meter: Aquatroll 600 #84600

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)

6

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

Final DTW: 11.10 ft

Comments _____

Sampler's Signature: *[Signature]*

Site: Coffeen Gypsum

WELL/SAMPLE POINT G212

Purge Method: bladder

Date: 6/15/2022 Start Time: 1210 Finish/Sample Time: 1306

Well Depth (Bottom) From MP: 24.33 ft Min. Purge Volume: — Gal/L

Depth to Water From MP: 11.75 ft Total Purge Volume: 1000 Gal/L (mL)

Water Column Length: 12.58 ft Max Drawdown: — ft

Well Water Volume: 7.61 Gal/L (L) Total Drawdown: 1.03 ft

APP 6/15/2022

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	1220	12.62	100	8.23	700.64	17.82	45.6	2.77	1.37
2	1232	12.68	100	8.22	676.58	17.76	45.5	2.68	1.33
3	1234	12.71	100	8.20	662.77	17.70	47.0	2.54	1.26
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)
	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>500mL</u>
1	plastic (P, 2.5L, H2SO4) <u>HNO3</u>

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

APP 6/15/22 Final DTW: 12.78 ft

Comments _____

Sampler's Signature: 

Site: Coffeen Gypsum

WELL/SAMPLE POINT G215

Purge Method: Diaphragm/Low-flow

Date: 5/11/22 Start Time: 1502 Finish/Sample Time: 1602

Well Depth (Bottom) From MP: 26.88 ft Min. Purge Volume: NA Gal/L

Depth to Water From MP: 12.77 ft Total Purge Volume: 2.1 Gal

Water Column Length: 14.11 ft Max Drawdown: NA ft

Well Water Volume: 8.55 Gal 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	1520	13.07	100	6.94	1864.7	22.89	-1.2	1.60	3.50
2	1522	13.07	100	6.94	1892.4	22.46	-6.2	1.44	3.57
3	1524	13.07	100	6.95	1861.5	21.97	-8.1	1.36	3.44
4	1527	13.07	100	6.95	1857.2	21.61	-10.0	1.30	3.77
5	1529	13.07	100	6.95	1849.9	21.50	-11.2	1.27	3.98
Stabilization	1531	13.07	100	6.95	1853.8	21.41	-11.7	1.20	3.51
	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)
1	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL)

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

Final DTW: 13.07 ft

Comments _____

Sampler's Signature: 

Site: Coffeen Gypsum

WELL/SAMPLE POINT G215

Purge Method: blowdown

Date: 6/15/22 Start Time: 1106 Finish/Sample Time: 1203

Well Depth (Bottom) From MP: 26.88 ft
 Min. Purge Volume: — Gal/L
 Depth to Water From MP: 14.41 ft
 Total Purge Volume: 1000 Gal/L (NL)
 Water Column Length: 12.47 ft
 Max Drawdown: — ft
 Well Water Volume: 7.54 Gal (L)
 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	1127	14.69	100	7.46	1808.5	21.38	-42.5	2.21	2.61
2	1129	14.69	100	7.46	1802.1	21.30	-43.9	2.12	2.58
3	1131	14.69	100	7.46	1820.0	21.23	-46.3	2.02	2.46
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)
	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>800 500mL 6/15/22</u>
1	plastic (P, 250 mL, HNO3)

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

Final DTW: 14.69 ft

Comments

Sampler's Signature: 

Site: Coffeen Gypsum

WELL/SAMPLE POINT G218

Purge Method: Low Flow / blank

Date: 5/10/2022 Start Time: 1346 Finish/Sample Time: 1427

Well Depth (Bottom) From MP: 26.79 ft Min. Purge Volume: — Gal / L

Depth to Water From MP: 12.09 ft Total Purge Volume: 1000 Gal / L ml

Water Column Length: 14.70 ft Max Drawdown: — ft

Well Water Volume: 8.89 Gal / L Total Drawdown: 0.39 ft

App 5/10/22

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	1401	12.48	100	6.51	1239	20.2	27.8	1.82	100.9
2	1403	12.48	100	6.79	1246	20.3	22.1	1.76	120.3
3	1405	12.48	100	6.78	1241	20.0	15.4	1.64	134.2
4	<i>[Handwritten scribbles]</i>								
5	<i>[Handwritten scribbles]</i>								
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: A7 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)
1	Phenols (A,G,250mL, H2SO4)
1	General (P, 250 mL) <u>500mL</u>

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

Final DTW: 12.48 ft

Comments

Sampler's Signature: *[Handwritten Signature]*

Site: Coffeen Gypsum

WELL/SAMPLE POINT G218

Purge Method: blow/fe

Date: 6/15/2022 Start Time: 1010 Finish/Sample Time: 1058

Well Depth (Bottom) From MP: 26.79 ft Min. Purge Volume: - Gal/L

Depth to Water From MP: 13.53 ft Total Purge Volume: 1000 Gal (M)

Water Column Length: 12.96 ft Max Drawdown: - ft

Well Water Volume: 7.84 Gal (M) Total Drawdown: 0.37 ft

APP 6/15/22

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	1024	14.20	100	8.03	1347.9	21.23	-45.6	0.83	2.03
2	1026	14.20	100	8.01	1335.6	21.19	-57.6	0.80	1.96
3	1028	14.20	100	8.02	1353.3	21.07	-63.2	0.64	1.92
4	_____								
5	_____								
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
	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)
1	General (P, 250 mL) (P, 500mL)
1	Plastic (P, 2.5L, NNO3)

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

Final DTW: 14.20 ft

Comments _____

Sampler's Signature:

Coffeen

WELL/SAMPLE POINT NE RISER

Purge Method: 6 liter

Date: 6/15/2022 Start Time: 0912 Finish/Sample Time: 1008

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

Depth to Water From MP: - ft Total Purge Volume: 1000 Gal / L (mL)

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	0925	-	100	7.88	21152	27.38	199.2	3.00	3.30
2	0927	-	100	7.88	21084	27.45	198.8	3.06	3.20
3	0929	-	100	7.90	20934	27.53	195.3	3.12	3.49
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: A1600

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	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Casing locked/secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well cap fits securely.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Good seal/drainage		<input type="checkbox"/>
Well has weep holes		<input type="checkbox"/>

APP 6/15/22

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) 500mL
1	(Plastic 250mL, HNO3)

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

Final DTW: - ft

Comments

Sampler's Signature: *[Signature]*

Multiparameter Meter Field Calibration Checklist

Field Personnel: Joe Reed			Location: Coffeeen Pover Plant						
Weather: 72-86°F cloudy wind 12-15 mph			Environment: Dry, grassy, Dust						
Multiparameter Water Meter		Make: AquaTroll	Model: 600	Serial Number: 762215					
Water Level Meter		Make: Solinst	Model: 101	Serial Number: 336216					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	7.00	s.u.	±0.1 s.u.	Pass	NA	NA	MSI	L315-04	11/22/2023
pH 7.00a	6.98	s.u.	±0.1 s.u.	Pass	NA	NA	MSI	L172-33	6/23/2023
pH 10.00a	9.99	s.u.	±0.1 s.u.	Pass	NA	NA	MSI	L354-22	1/5/2024
SC Zero (DI)	10.10	µS/cm	0<25 µS/cm	Pass	NA	NA	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2019.1	µS/cm	±5%	Pass	NA	NA	Geotech	1GK328	Nov-22
ORP	227.2	mV	±15 mV	Pass	NA	NA	InSitu	1GL481	Sep-22
DO (Zero pt)	0.05	mg/L	±0.1	Pass	NA	NA	Macron	#000228049	8/26/2025
DO (Saturated)	98.9	%	97-100%	Pass	NA	NA	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	Pass	NA	NA	Pace Labs	N/A (DI)	N/A (DI)

23.95°

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.	Pass	NA	Geotech	1GF009	Jun-23	
pH 7.00b	7.01	s.u.	±0.15 s.u.	Pass	NA	Geotech	0GJ268	Oct-22	
pH 10.00b	10.01	s.u.	±0.15 s.u.	Pass	NA	Geotech	1GF458	Jun-23	
SC 1000	1010.1	µS/cm	±5%	Pass	NA	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	7.04	s.u.	±0.1 s.u.	Pass	NA	NA	MSI	L315-04	11/22/2023
pH 7.00a	6.98	s.u.	±0.1 s.u.	Pass	NA	NA	MSI	L172-33	6/23/2023
pH 10.00a	9.99	s.u.	±0.1 s.u.	Pass	NA	NA	MSI	L354-22	1/5/2024
SC 1000	1015.3	µS/cm	±5%	Pass	NA	NA	Ricca	2108D48	Jul-23
DO (Zero pt)	0.05	mg/L	±0.1 mg/L	Pass	NA	NA	Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	Pass	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:	Joseph R Reed	Date:	5/10/22
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Multiparameter Meter Field Calibration Checklist

Field Personnel: **AP** Location: **CO Beach Power Station**
 Weather: **72° - 86° partly cloudy** Environment: **grass, gravel, dirt**
 Wind: **S 14 mph**

Multiparameter Water Meter Make: **A7** Model: **600** Serial Number: **606127**
 Water Level Meter Make: **Heron** Model: **0300-12** Serial Number: **14CF22011S2418**

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.01	s.u.	±0.1 s.u.	Pass	NO	N/A	MSI	L315-04	11/22/2023
pH 7.00a	7.01	s.u.	±0.1 s.u.	Pass	NO	N/A	MSI	L172-33	6/23/2023
pH 10.00a	9.94	s.u.	±0.1 s.u.	Pass	NO	N/A	MSI	L354-22	1/5/2024
SC Zero (DI)	23.25	µS/cm	0<25 µS/cm	Pass	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1043.8	µS/cm	±5%	Pass	NO	N/A	Geotech	1GK328	Nov-22
ORP	214.0	mV	±15 mV	Pass	YES	231.0	InSitu	1GL481	Sep-22
DO (Zero pt)	0.02	mg/L	±0.1	Pass	NO	N/A	Macron	#000228049	8/26/2025
DO (Saturated)	80.64	%	97-100%	Pass	YES	99.65	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	1.08	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	4.01	s.u.	±0.15 s.u.	Pass	N/A	Geotech	1GF009	Jun-23		
pH 7.00b	8.87	s.u.	±0.15 s.u.	Pass	N/A	Geotech	0GJ268	Oct-22		
pH 10.00b	9.89	s.u.	±0.15 s.u.	Pass	N/A	Geotech	1GF458	Jun-23		
SC 1000	1002.1	µS/cm	±5%	Pass	N/A	Ricca	2108D48	Jul-23		

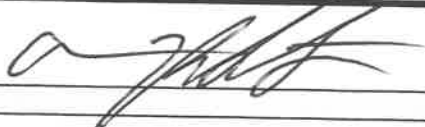
Approx. every 4 hrs, unless only one well

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	7.10	s.u.	±0.1 s.u.	Pass	NO	N/A	MSI	L172-33	6/23/2023	
pH 10.00a	10.01	s.u.	±0.1 s.u.	Pass	NO	N/A	MSI	L354-22	1/5/2024	
SC 1000	1030.0	µS/cm	±5%	Pass	NO	N/A	Ricca	2108D48	Jul-23	
DO (Zero pt)	0.05	mg/L	±0.1 mg/L	Pass	NO	N/A	Macron	#000228049	8/26/2025	
Turbidity (DI)	1.33	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: **5/10/2022**

Multiparameter Meter Field Calibration Checklist

Field Personnel: <u>Sam Grant</u>	Location: <u>Coffeen</u>
Weather: <u>72-86° F. m. Sunny, wind S 12-15mph</u>	Environment: <u>Grass, gravel</u>

Multiparameter Water Meter	Make: <u>InSitu</u>	Model: <u>AquaTroll 600</u>	Serial Number: <u>739449</u>
Water Level Meter	Make: <u>Heron</u>	Model: <u>Water Tape</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>N</u>	<u>NA</u>	MSI	L153-17	6/8/2023
pH 7.00a	<u>7.02</u>	s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023
pH 10.00a	<u>9.99</u>	s.u.	±0.1 s.u.				MSI	K344-09	12/17/2022
SC Zero (DI)	<u>17.73</u>	µS/cm	0<25 µS/cm				Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2058.8</u>	µS/cm	±5%				Geotech	1GJ517	Oct-22
ORP	<u>218.8 @ 24.14</u>	mV	±15 mV				InSitu	1GK507	Aug-22
DO (Zero pt)	<u>0.06</u>	mg/L	±0.1				Macron	#000228049	8/26/2025
DO (Saturated)	<u>98.61</u>	%	97-100%				Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.00</u>	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	<u>4.00</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>None</u>	Geotech	1GH562	Aug-23		
pH 7.00b	<u>6.93</u>	s.u.	±0.15 s.u.			Geotech	1GD360	Apr-23		
pH 10.00b	<u>9.93</u>	s.u.	±0.15 s.u.			Geotech	1GE278	May-23		
SC 1000	<u>1018.3</u>	µS/cm	±5%			Ricca	4101A25	Dec-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	<u>4.10</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>N</u>	<u>NA</u>	MSI	L315-04	11/22/2023	
pH 7.00a	<u>7.01</u>	s.u.	±0.1 s.u.				MSI	L172-33	6/23/2023	
pH 10.00a	<u>9.98</u>	s.u.	±0.1 s.u.				MSI	L354-22	1/5/2024	
SC 1000	<u>1038.7</u>	µS/cm	±5%				Ricca	2108D48	Jul-23	
DO (Zero pt)	<u>0.09</u>	mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025	
Turbidity (DI)	<u>0.00</u>	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>Sam Grant</u>	Date: <u>5/10/22</u>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: KALEB DOESKE Location: COFFEEN

Weather: 71° CLOUDY WIND 13MPH NORTH Environment:

Multiparameter Water Meter Make: AT Model: 600 Serial Number: 762098

Water Level Meter Make: WATER TRAP Model: HERRON Serial Number: 19FF22021131ML

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<u>4.04</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>10.01</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>0.40</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>2009.70</u>	µS/cm	±5%	<u>Pass</u>	<u>No</u>	<u>N/A</u>	Geotech	1GK328	Nov-22
ORP	<u>229.60</u>	mV	±15 mV	<u>Pass</u>	<u>No</u>	<u>N/A</u>	InSitu	1GL481	Sep-22
DO (Zero pt)	<u>0.09</u>	mg/L	±0.1	<u>Pass</u>	<u>No</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>98.00</u>	%	97-100%	<u>Pass</u>	<u>No</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.10</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>4.12</u>	s.u.	±0.15 s.u.	<u>Pass</u>	<u>N/A</u>	Geotech	1GF009	Jun-23	
pH 7.00b	<u>6.90</u>	s.u.	±0.15 s.u.	<u>Pass</u>	<u>N/A</u>	Geotech	0GJ268	Oct-22	
pH 10.00b	<u>9.94</u>	s.u.	±0.15 s.u.	<u>Pass</u>	<u>N/A</u>	Geotech	1GF458	Jun-23	
SC 1000	<u>1049.60</u>	µS/cm	±5%	<u>Pass</u>	<u>N/A</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>4.07</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>10.01</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>1039.20</u>	µS/cm	±5%	<u>Pass</u>	<u>No</u>	<u>N/A</u>	Ricca	2108D48	Jul-23
DO (Zero pt)	<u>0.00</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>0.42</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: [Signature] Date: 05/10/22

Multiparameter Meter Field Calibration Checklist

Field Personnel: **MHS KL** Location: **Coffeen**

Weather: **72°-86°F M. cloudy wind SSE 5-15 mph** Environment: **Dry, dirt, grass**

Multiparameter Water Meter Make: **In situ** Model: **AT600** Serial Number: **846000**

Water Level Meter Make: **Heron** Model: **drpper-T** Serial Number: **4778-T**

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	No	N/A	MSI	L315-04	11/22/2023
pH 7.00a	7.05	s.u.	±0.1 s.u.	↓	↓	↓	MSI	L172-33	6/23/2023
pH 10.00a	10.06	s.u.	±0.1 s.u.	↓	↓	↓	MSI	L354-22	1/5/2024
SC Zero (DI)	22.56	µS/cm	0<25 µS/cm	↓	↓	↓	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2053.2	µS/cm	±5%	↓	↓	↓	Geotech	1GK328	Nov-22
ORP	222.1 @ 24%	mV	±15 mV	↓	↓	↓	InSitu	1GL481	Sep-22
DO (Zero pt)	0.01	mg/L	±0.1	↓	↓	↓	Macron	#000228049	8/26/2025
DO (Saturated)	98.56	%	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	1GF009	Jun-23
pH 7.00b	6.94	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	1026.8	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	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.	↓	↓	↓	MSI	L172-33	6/23/2023
pH 10.00a	9.98	s.u.	±0.1 s.u.	↓	↓	↓	MSI	L354-22	1/5/2024
SC 1000	1037.5	µS/cm	±5%	↓	↓	↓	Ricca	2108D48	Jul-23
DO (Zero pt)	0.04	mg/L	±0.1 mg/L	↓	↓	↓	Macron	#000228049	8/26/2025
Turbidity (DI)	0.51	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: **5/10/22**

Multiparameter Meter Field Calibration Checklist

Field Personnel:	Aaron Pemberton	Location:	Colleen
Weather:	25° - 90° Windy SW mostly cloudy	Environment:	grass, dirt, gravel

Multiparameter Water Meter	Make:	A7	Model:	600	Serial Number:	606127
Water Level Meter	Make:	Hera	Model:	D-PMR-12	Serial Number:	19 FL 2201152 HB

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	9.04	s.u.	±0.1 s.u.	P			MSI	L354-22	1/5/2024
SC Zero (DI)	3.24	µS/cm	0 < 25 µS/cm	P			Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1917.0	µS/cm	±5%	P			Geotech	1GK328	Nov-22
ORP	226.0	mV	±15 mV	P			InSitu	1GL481	Sep-22
DO (Zero pt)	0.03	mg/L	±0.1	P			Macron	#000228049	8/26/2025
DO (Saturated)	0.06	%	97-100%	P			Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	1.02	NTU	< 2 NTU	P			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well Zobell 229 @ 25°C

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	N/A	Geotech	1GF009	Jun-23		
pH 7.00b	7.07	s.u.	±0.15 s.u.	P		Geotech	0GJ268	Oct-22		
pH 10.00b	9.09	s.u.	±0.15 s.u.	P		Geotech	1GF458	Jun-23		
SC 1000	1005.6	µS/cm	±5%	P		Ricca	2108D48	Jul-23		

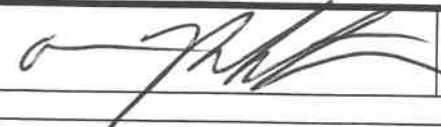
Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time:					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.		
pH 4.00a	4.10	s.u.	±0.1 s.u.	P	NO	N/A	MSI	L315-04	11/22/2023		
pH 7.00a	7.04	s.u.	±0.1 s.u.	P			MSI	L172-33	6/23/2023		
pH 10.00a	9.98	s.u.	±0.1 s.u.	P			MSI	L354-22	1/5/2024		
SC 1000	1041.0	µS/cm	±5%	P			Ricca	2108D48	Jul-23		
DO (Zero pt)	0.06	mg/L	±0.1 mg/L	P			Macron	#000228049	8/26/2025		
Turbidity (DI)	1.14	NTU	< 2 NTU	P			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:	9/16/2022
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Multiparameter Meter Field Calibration Checklist

Field Personnel:	Sam Grant	Location:	Coffee
Weather:	77-90°F, p. cloudy wind SW 5-10 mph	Environment:	

Multiparameter Water Meter	Make:	In Situ	Model:	AquaTroll 6000	Serial Number:	739450
Water Level Meter	Make:	Heron	Model:	water-Tape	Serial Number:	19FF21110154B

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	N	NA	MSI	L153-17	6/8/2023
pH 7.00a	7.03	s.u.	±0.1 s.u.	I	I	I	MSI	L172-33	6/23/2023
pH 10.00a	9.97	s.u.	±0.1 s.u.	I	I	I	MSI	K344-09	12/17/2022
SC Zero (DI)	21.84	µS/cm	0<25 µS/cm	I	I	I	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1972.0	µS/cm	±5%	I	I	I	Geotech	1GJ517	Oct-22
ORP	204.8 @ 250	mV	±15 mV	F	Y	228.8	In Situ	1GK507	Aug-22
DO (Zero pt)	0.06	mg/L	±0.1	P	N	NA	Macron	#000228049	8/26/2025
DO (Saturated)	98.11	%	97-100%	I	I	I	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	1.12	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:					
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.		
pH 4.00b	4.00	s.u.	±0.15 s.u.	P	None	Geotech	1GH562	Aug-23		
pH 7.00b	6.97	s.u.	±0.15 s.u.	I	I	Geotech	1GD360	Apr-23		
pH 10.00b	9.92	s.u.	±0.15 s.u.	I	I	Geotech	1GE278	May-23		
SC 1000	988.55	µS/cm	±5%	I	I	Ricca	4101A25	Dec-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	4.10	s.u.	±0.1 s.u.	P	N	NA	MSI	L315-04	11/22/2023	
pH 7.00a	7.09	s.u.	±0.1 s.u.	I	I	I	MSI	L172-33	6/23/2023	
pH 10.00a	10.00	s.u.	±0.1 s.u.	I	I	I	MSI	L354-22	1/5/2024	
SC 1000	967.83	µS/cm	±5%	I	I	I	Ricca	2108D48	Jul-23	
DO (Zero pt)	0.61	mg/L	±0.1 mg/L	I	I	I	Macron	#000228049	8/26/2025	
Turbidity (DI)	0.13	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	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:	5/11/22
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Multiparameter Meter Field Calibration Checklist

Field Personnel: KWD Location: COFFEEN

Weather: 75° CLOUDY WIND 5 MPH NE Environment:

Multiparameter Water Meter Make: AT Model: 600 Serial Number: 762098

Water Level Meter Make: WATER TAPE Model: HERRON Serial Number: 19FF2202131ML

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>Pass</u>	<u>NO</u>	<u>NA</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>NA</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>10.03</u>	s.u.	±0.1 s.u.	<u>Pass</u>	<u>NO</u>	<u>NA</u>	MSI	L354-22	1/5/2024
SC Zero (DI)	<u>10.06</u>	µS/cm	0<25 µS/cm	<u>Pass</u>	<u>NO</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>2018.10</u>	µS/cm	±5%	<u>Pass</u>	<u>NO</u>	<u>NA</u>	Geotech	1GK328	Nov-22
ORP	<u>225.30</u>	mV	±15 mV	<u>Pass</u>	<u>NO</u>	<u>NA</u>	InSitu	1GL481	Sep-22
DO (Zero pt)	<u>0.99</u>	mg/L	±0.1	<u>Pass</u>	<u>NO</u>	<u>NA</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>99.58</u>	%	97-100%	<u>Pass</u>	<u>NO</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>0.21</u>	NTU	<2 NTU	<u>Pass</u>	<u>NO</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	<u>4.09</u>	s.u.	±0.15 s.u.	<u>Pass</u>	<u>N/A</u>	Geotech	1GF009	Jun-23
pH 7.00b	<u>6.97</u>	s.u.	±0.15 s.u.	<u>Pass</u>	<u>N/A</u>	Geotech	0GJ268	Oct-22
pH 10.00b	<u>10.02</u>	s.u.	±0.15 s.u.	<u>Pass</u>	<u>N/A</u>	Geotech	1GF458	Jun-23
SC 1000	<u>1033.10</u>	µS/cm	±5%	<u>Pass</u>	<u>N/A</u>	Ricca	2108D48	Jul-23

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification)


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>Pass</u>	<u>NO</u>	<u>NA</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>7.07</u>	s.u.	±0.1 s.u.	<u>Pass</u>	<u>NO</u>	<u>NA</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>9.98</u>	s.u.	±0.1 s.u.	<u>Pass</u>	<u>NO</u>	<u>NA</u>	MSI	L354-22	1/5/2024
SC 1000	<u>1008.80</u>	µS/cm	±5%	<u>Pass</u>	<u>NO</u>	<u>NA</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>NA</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.20</u>	NTU	<2 NTU	<u>Pass</u>	<u>NO</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification)

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: 05/11/22

Multiparameter Meter Field Calibration Checklist

Field Personnel: MHS				Location: Coffeen			
Weather: 77-90°F, P. cloudy, wind SW 5-10 mph				Environment: Dry, grass, dirt			
Multiparameter Water Meter		Make: Ia sita	Model: AT 600	Serial Number: 846000			
Water Level Meter		Make: Aeron	Model: d:ppert	Serial Number: 4778-T			

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	7.01	s.u.	±0.1 s.u.	P	No		MSI	L172-33	6/23/2023
pH 10.00a	10.01	s.u.	±0.1 s.u.	P	No		MSI	L354-22	1/5/2024
SC Zero (DI)	14.74	µS/cm	0<25 µS/cm	P	No		Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2056.7	µS/cm	±5%	P	No		Geotech	1GK328	Nov-22
ORP	218.0 @ 27°	mV	±15 mV	P	No		InSitu	1GL481	Sep-22
DO (Zero pt)	0.00	mg/L	±0.1	P	No		Macron	#000228049	8/26/2025
DO (Saturated)	110.17	%	97-100%	F	Yes	99.85	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	1.70	NTU	<2 NTU	P	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	4.09	s.u.	±0.15 s.u.	P	None	Geotech	1GF009	Jun-23	
pH 7.00b	6.86	s.u.	±0.15 s.u.	P		Geotech	0GJ268	Oct-22	
pH 10.00b	9.87	s.u.	±0.15 s.u.	P		Geotech	1GF458	Jun-23	
SC 1000	1018.5	µS/cm	±5%	P		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.	P	No	N/A	MSI	L315-04	11/22/2023
pH 7.00a	7.00	s.u.	±0.1 s.u.	P	No		MSI	L172-33	6/23/2023
pH 10.00a	9.90	s.u.	±0.1 s.u.	P	No		MSI	L354-22	1/5/2024
SC 1000	1028.6	µS/cm	±5%	P	No		Ricca	2108D48	Jul-23
DO (Zero pt)	0.01	mg/L	±0.1 mg/L	P	No		Macron	#000228049	8/26/2025
Turbidity (DI)	1.27	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: 5/11/22
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MHS
5/11/22

Multiparameter Meter Field Calibration Checklist

Field Personnel: Joe Reed		Location: Cofflem Power Plant	
Weather: 81-90°F Sunny wind 4-9 mph		Environment: Hot Humid	
Multiparameter Water Meter	Make: AquaTroll	Model: 600	Serial Number: 762215
Water Level Meter	Make: Solinst	Model: 101	Serial Number: 336216

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.01	s.u.	±0.1 s.u.	Pass	N/A	N/A	MSI	L315-04	11/22/2023
pH 7.00a	6.96	s.u.	±0.1 s.u.	Pass	N/A	N/A	MSI	L172-33	6/23/2023
pH 10.00a	9.95	s.u.	±0.1 s.u.	Pass	N/A	N/A	MSI	L354-22	1/5/2024
SC Zero (DI)	2.84	µS/cm	0<25 µS/cm	Pass	N/A	N/A	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2021.4	µS/cm	±5%	Pass	N/A	N/A	Geotech	1GK328	Nov-22
ORP	219.9	mV	±15 mV	Pass	N/A	N/A	InSitu	1GL481	Sep-22
DO (Zero pt)	0.06	mg/L	±0.1	Pass	N/A	N/A	Macron	#000228049	8/26/2025
DO (Saturated)	99.49	%	97-100%	Pass	N/A	N/A	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	Pass	N/A	N/A	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification) Time: **800**

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.00	s.u.	±0.15 s.u.	Pass	N/A	Geotech	1GF009	Jun-23
pH 7.00b	7.01	s.u.	±0.15 s.u.	Pass	N/A	Geotech	0GJ268	Oct-22
pH 10.00b	10.01	s.u.	±0.15 s.u.	Pass	N/A	Geotech	1GF458	Jun-23
SC 1000	1010.9	µS/cm	±5%	Pass	N/A	Ricca	2108D48	Jul-23

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification) Time: **1609**

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.99	s.u.	±0.1 s.u.	Pass	N/A	N/A	MSI	L315-04	11/22/2023
pH 7.00a	7.01	s.u.	±0.1 s.u.	Pass	N/A	N/A	MSI	L172-33	6/23/2023
pH 10.00a	9.99	s.u.	±0.1 s.u.	Pass	N/A	N/A	MSI	L354-22	1/5/2024
SC 1000	1003.3	µS/cm	±5%	Pass	N/A	N/A	Ricca	2108D48	Jul-23
DO (Zero pt)	0.05	mg/L	±0.1 mg/L	Pass	N/A	N/A	Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	Pass	N/A	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:	Joseph R Reed	Date:	5/11/22
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Multiparameter Meter Field Calibration Checklist

Field Personnel: AP BG				Location: Colleen			
Weather: 82° - 95° Sunny with S LAMP				Environment: grass dirt gravel			
Multiparameter Water Meter		Make: AT	Model: 600	Serial Number: 846000			
Water Level Meter		Make: Heard	Model: D:APERT	Serial Number:			

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	NO	N/A	MSI	L315-04	11/22/2023
pH 7.00a	7.00	s.u.	±0.1 s.u.	P	NO	N/A	MSI	L172-33	6/23/2023
pH 10.00a	9.96	s.u.	±0.1 s.u.	P	NO	N/A	MSI	L354-22	1/5/2024
SC Zero (DI)	2053.1	µS/cm	0<25 µS/cm	P	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2053.5	µS/cm	±5%	P	NO	N/A	Geotech	1GK328	Nov-22
ORP	260.1	mV	±15 mV	P	YES	222.9	InSitu	1GL481	Sep-22
DO (Zero pt)	0.09	mg/L	±0.1	P	NO	N/A	Macron	#000228049	8/26/2025
DO (Saturated)	9.882	%	97-100%	P	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.00	NTU	<2 NTU	P	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)

Time: **0852**

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.06	s.u.	±0.15 s.u.	P	N/A	Geotech	1GF009	Jun-23
pH 7.00b	6.85	s.u.	±0.15 s.u.	P	N/A	Geotech	0GJ268	Oct-22
pH 10.00b	9.96	s.u.	±0.15 s.u.	P	N/A	Geotech	1GF458	Jun-23
SC 1000	1011.8	µS/cm	±5%	P	N/A	Ricca	2108D48	Jul-23

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):

Time: **1611**

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)	0.08	mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)	0.00	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: 6/15/2022
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Multiparameter Meter Field Calibration Checklist

Field Personnel: AP AM Location: COBLEN
 Weather: 82°-88° partly winky SW 10mph cloudy Environment: grass, gravel

Multiparameter Water Meter Make: A7 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	<u>4.00</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>10.00</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>4.68</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>20.16</u>	µS/cm	±5%	<u>P</u>	<u>NO</u>	<u>N/A</u>	Geotech	1GK328	Nov-22
ORP	<u>227.12</u>	mV	±15 mV	<u>P</u>	<u>NO</u>	<u>N/A</u>	InSitu	1GL481	Sep-22
DO (Zero pt)	<u>0.00</u>	mg/L	±0.1	<u>P</u>	<u>NO</u>	<u>N/A</u>	Macron	#000228049	8/26/2025
DO (Saturated)	<u>9.78</u>	%	97-100%	<u>P</u>	<u>NO</u>	<u>N/A</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>1.56</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 225 @ 28°

ICV (Initial Calibration Verification) Time: 0833

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>N/A</u>	Geotech	1GF009	Jun-23
pH 7.00b	<u>6.96</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N/A</u>	Geotech	0GJ268	Oct-22
pH 10.00b	<u>10.02</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>N/A</u>	Geotech	1GF458	Jun-23
SC 1000	<u>10.212</u>	µS/cm	±5%	<u>P</u>	<u>N/A</u>	Ricca	2108D48	Jul-23

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification): Time: 12:09

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>Y</u>	<u>4.01</u>	MSI	L315-04	11/22/2023
pH 7.00a	<u>7.02</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>Y</u>	<u>6.99</u>	MSI	L172-33	6/23/2023
pH 10.00a	<u>10.36</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>Y</u>	<u>9.92</u>	MSI	L354-22	1/5/2024
SC 1000	<u>10.20.9</u>	µS/cm	±5%	<u>P</u>	<u>Y</u>	<u>9.92</u>	Ricca	2108D48	Jul-23
DO (Zero pt)	<u>0.03</u>	mg/L	±0.1 mg/L	<u>P</u>	<u>Y</u>	<u>0.03</u>	Macron	#000228049	8/26/2025
Turbidity (DI)	<u>0.57</u>	NTU	<2 NTU	<u>P</u>	<u>Y</u>	<u>0.57</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: 6/16/2022

Austin Moore



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

November 17, 2022

John Romang
Vistra - Coffeen
134 CIPS Lane
Coffeen, IL 62017

Dear John Romang:

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,

A handwritten signature in cursive script that reads "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 FH04898

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 FH05103

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 FH05107

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 FH05287

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



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

Case Narrative

NE Riser does not allow access to measure Depth to Water .



Pace Analytical Services, LLC

2231 W. Altorfer Drive

Peoria, IL 61615

(800)752-6651



ANALYTICAL RESULTS

Sample: FH04898-01
Name: G200
Alias:

Sampled: 08/23/22 10:50
Received: 08/23/22 16:21
Matrix: Ground Water - Grab
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	61	mg/L		08/29/22 18:51	10	10	08/29/22 18:51	CRD	EPA 300.0 REV 2.1
Fluoride	0.322	mg/L		08/29/22 18:33	1	0.250	08/29/22 18:33	CRD	EPA 300.0 REV 2.1
Sulfate	110	mg/L		08/29/22 19:09	100	100	08/29/22 19:09	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	6.21	Feet		08/23/22 10:50	1		08/23/22 10:50	FIELD	Field*
Dissolved oxygen, Field	0.37	mg/L		08/23/22 10:50	1		08/23/22 10:50	FIELD	Field*
Oxidation Reduction Potential	-146	mV		08/23/22 10:50	1	-500	08/23/22 10:50	FIELD	Field*
pH, Field Measured	7.06	pH Units		08/23/22 10:50	1		08/23/22 10:50	FIELD	Field*
Specific Conductance, Field Measured	820.1	umhos/cm		08/23/22 10:50	1		08/23/22 10:50	FIELD	Field*
Temperature, Field Measured	20.6	°C		08/23/22 10:50	1		08/23/22 10:50	FIELD	Field*
Turbidity, Field Measured	6.43	NTU		08/23/22 10:50	1	0.00	08/23/22 10:50	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	250	mg/L		08/30/22 12:45	1	2.0	08/30/22 12:45	CGL	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 2.0	mg/L		08/30/22 12:45	1	2.0	08/30/22 12:45	CGL	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	540	mg/L		08/25/22 16:20	1	26	08/25/22 17:36	CGL	SM 2540C
Total Metals - PIA									
Arsenic	< 1.0	ug/L		08/24/22 11:51	5	1.0	08/31/22 09:07	JMW	EPA 6020A
Barium	52	ug/L		08/24/22 11:51	5	1.0	08/30/22 11:34	JMW	EPA 6020A
Boron	64	ug/L		08/24/22 11:51	5	10	08/31/22 09:07	JMW	EPA 6020A
Calcium	85	mg/L		08/24/22 11:51	5	0.20	08/30/22 11:34	JMW	EPA 6020A
Lead	< 1.0	ug/L		08/24/22 11:51	5	1.0	08/30/22 11:34	JMW	EPA 6020A
Magnesium	39	mg/L		08/24/22 11:51	5	0.10	08/30/22 11:34	JMW	EPA 6020A
Molybdenum	2.0	ug/L		08/24/22 11:51	5	1.0	08/30/22 11:34	JMW	EPA 6020A
Potassium	0.61	mg/L		08/24/22 11:51	5	0.10	08/30/22 11:34	JMW	EPA 6020A
Selenium	1.4	ug/L		08/24/22 11:51	5	1.0	08/31/22 09:07	JMW	EPA 6020A
Sodium	58	mg/L		08/24/22 11:51	5	0.10	08/30/22 11:34	JMW	EPA 6020A
Lithium	< 20	ug/L		08/24/22 11:51	1	20	09/08/22 13:10	TJJ	EPA 6010B



ANALYTICAL RESULTS

Sample: FH05103-09
Name: SG-04
Matrix: Ground Water - Grab

Sampled: 08/23/22 00:00
Received: 08/24/22 16:35
PO #: 1164124

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

Depth, From Measuring Point	6.16	Feet		08/23/22 00:00	1		08/23/22 00:00	FIELD	Field*
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ANALYTICAL RESULTS

Sample: FH05107-01

Name: R201

Alias:

Sampled: 08/23/22 12:24

Received: 08/24/22 16:35

Matrix: Ground Water - Grab

PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	86	mg/L		08/31/22 04:35	25	25	08/31/22 04:35	CRD	EPA 300.0 REV 2.1
Fluoride	0.258	mg/L		08/31/22 04:16	1	0.250	08/31/22 04:16	CRD	EPA 300.0 REV 2.1
Sulfate	240	mg/L		08/31/22 04:35	25	25	08/31/22 04:35	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	5.9	Feet		08/23/22 12:24	1		08/23/22 12:24	FIELD	Field*
Dissolved oxygen, Field	0.68	mg/L		08/23/22 12:24	1		08/23/22 12:24	FIELD	Field*
Oxidation Reduction Potential	-109	mV		08/23/22 12:24	1	-500	08/23/22 12:24	FIELD	Field*
pH, Field Measured	6.97	pH Units		08/23/22 12:24	1		08/23/22 12:24	FIELD	Field*
Specific Conductance, Field Measured	1178	umhos/cm		08/23/22 12:24	1		08/23/22 12:24	FIELD	Field*
Temperature, Field Measured	20.0	°C		08/23/22 12:24	1		08/23/22 12:24	FIELD	Field*
Turbidity, Field Measured	2.56	NTU		08/23/22 12:24	1	0.00	08/23/22 12:24	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	380	mg/L		09/02/22 08:53	1	10	09/02/22 08:53	CGL/HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		09/02/22 08:53	1	10	09/02/22 08:53	CGL/HRF	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	840	mg/L		08/26/22 12:00	1	26	08/26/22 15:31	JAA/ZEJ	SM 2540C
Total Metals - PIA									
Arsenic	4.6	ug/L		08/29/22 09:01	5	1.0	09/13/22 14:59	JMW	EPA 6020A
Barium	91	ug/L		08/29/22 09:01	5	1.0	09/13/22 14:59	JMW	EPA 6020A
Boron	< 10	ug/L		08/29/22 09:01	5	10	09/13/22 14:59	JMW	EPA 6020A
Calcium	140	mg/L		08/29/22 09:01	5	0.20	09/13/22 14:59	JMW	EPA 6020A
Lead	3.6	ug/L		08/29/22 09:01	5	1.0	09/14/22 09:34	JMW	EPA 6020A
Magnesium	58	mg/L		08/29/22 09:01	5	0.10	09/13/22 14:59	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		08/29/22 09:01	5	1.0	09/13/22 14:59	JMW	EPA 6020A
Potassium	0.94	mg/L		08/29/22 09:01	5	0.10	09/13/22 14:59	JMW	EPA 6020A
Selenium	< 1.0	ug/L		08/29/22 09:01	5	1.0	09/13/22 14:59	JMW	EPA 6020A
Sodium	130	mg/L		08/29/22 09:01	5	0.10	09/13/22 14:59	JMW	EPA 6020A
Lithium	< 20	ug/L		08/29/22 09:01	1	20	09/08/22 13:59	TJJ	EPA 6010B



ANALYTICAL RESULTS

Sample: FH05107-02
Name: G206
Alias:

Sampled: 08/23/22 12:27
Received: 08/24/22 16:35
Matrix: Ground Water - Grab
PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	21	mg/L		08/31/22 05:13	5	5.0	08/31/22 05:13	CRD	EPA 300.0 REV 2.1
Fluoride	0.364	mg/L		08/31/22 04:54	1	0.250	08/31/22 04:54	CRD	EPA 300.0 REV 2.1
Sulfate	140	mg/L		08/31/22 05:32	50	50	08/31/22 05:32	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	11.22	Feet		08/23/22 12:27	1		08/23/22 12:27	FIELD	Field*
Dissolved oxygen, Field	1.1	mg/L		08/23/22 12:27	1		08/23/22 12:27	FIELD	Field*
Oxidation Reduction Potential	-178	mV		08/23/22 12:27	1	-500	08/23/22 12:27	FIELD	Field*
pH, Field Measured	6.86	pH Units		08/23/22 12:27	1		08/23/22 12:27	FIELD	Field*
Specific Conductance, Field Measured	430.0	umhos/cm		08/23/22 12:27	1		08/23/22 12:27	FIELD	Field*
Temperature, Field Measured	20.0	°C		08/23/22 12:27	1		08/23/22 12:27	FIELD	Field*
Turbidity, Field Measured	68.7	NTU		08/23/22 12:27	1	0.00	08/23/22 12:27	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	300	mg/L		09/02/22 08:53	1	10	09/02/22 08:53	CGL/HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		09/02/22 08:53	1	10	09/02/22 08:53	CGL/HRF	SM 2320B 1997*
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	540	mg/L		08/26/22 12:00	1	26	08/26/22 15:31	JAA/ZEJ	SM 2540C
<u>Total Metals - PIA</u>									
Arsenic	< 1.0	ug/L		08/29/22 09:01	5	1.0	09/13/22 15:03	JMW	EPA 6020A
Barium	51	ug/L		08/29/22 09:01	5	1.0	09/13/22 15:03	JMW	EPA 6020A
Boron	< 10	ug/L		08/29/22 09:01	5	10	09/13/22 15:03	JMW	EPA 6020A
Calcium	92	mg/L		08/29/22 09:01	5	0.20	09/13/22 15:03	JMW	EPA 6020A
Lead	< 1.0	ug/L		08/29/22 09:01	5	1.0	09/14/22 09:37	JMW	EPA 6020A
Magnesium	40	mg/L		08/29/22 09:01	5	0.10	09/13/22 15:03	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		08/29/22 09:01	5	1.0	09/13/22 15:03	JMW	EPA 6020A
Potassium	0.91	mg/L		08/29/22 09:01	5	0.10	09/13/22 15:03	JMW	EPA 6020A
Selenium	< 1.0	ug/L		08/29/22 09:01	5	1.0	09/13/22 15:03	JMW	EPA 6020A
Sodium	55	mg/L		08/29/22 09:01	5	0.10	09/13/22 15:03	JMW	EPA 6020A
Lithium	< 20	ug/L		08/29/22 09:01	1	20	09/08/22 14:01	TJJ	EPA 6010B



ANALYTICAL RESULTS

Sample: FH05107-05

Name: G209

Alias:

Sampled: 08/23/22 15:35

Received: 08/24/22 16:35

Matrix: Ground Water - Grab

PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	66	mg/L		09/01/22 02:02	25	25	09/01/22 02:02	CRD	EPA 300.0 REV 2.1
Fluoride	0.344	mg/L		09/01/22 01:44	1	0.250	09/01/22 01:44	CRD	EPA 300.0 REV 2.1
Sulfate	240	mg/L		09/08/22 14:50	50	50	09/08/22 14:50	CJP	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	10.82	Feet		08/23/22 15:35	1		08/23/22 15:35	FIELD	Field*
Dissolved oxygen, Field	1.2	mg/L		08/23/22 15:35	1		08/23/22 15:35	FIELD	Field*
Oxidation Reduction Potential	-120	mV		08/23/22 15:35	1	-500	08/23/22 15:35	FIELD	Field*
pH, Field Measured	6.81	pH Units		08/23/22 15:35	1		08/23/22 15:35	FIELD	Field*
Specific Conductance, Field Measured	994.0	umhos/cm		08/23/22 15:35	1		08/23/22 15:35	FIELD	Field*
Temperature, Field Measured	19.6	°C		08/23/22 15:35	1		08/23/22 15:35	FIELD	Field*
Turbidity, Field Measured	9.00	NTU		08/23/22 15:35	1	0.00	08/23/22 15:35	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	400	mg/L		09/02/22 08:53	1	10	09/02/22 08:53	CGL/HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		09/02/22 08:53	1	10	09/02/22 08:53	CGL/HRF	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	880	mg/L		08/26/22 12:00	1	26	08/26/22 15:31	JAA/ZEJ	SM 2540C
Total Metals - PIA									
Arsenic	1.6	ug/L		08/29/22 09:01	5	1.0	09/13/22 15:13	JMW	EPA 6020A
Barium	58	ug/L		08/29/22 09:01	5	1.0	09/13/22 15:13	JMW	EPA 6020A
Boron	< 10	ug/L		08/29/22 09:01	5	10	09/13/22 15:13	JMW	EPA 6020A
Calcium	160	mg/L		08/29/22 09:01	5	0.20	09/13/22 15:13	JMW	EPA 6020A
Lead	< 1.0	ug/L		08/29/22 09:01	5	1.0	09/14/22 10:01	JMW	EPA 6020A
Magnesium	57	mg/L		08/29/22 09:01	5	0.10	09/13/22 15:13	JMW	EPA 6020A
Molybdenum	1.4	ug/L		08/29/22 09:01	5	1.0	09/13/22 15:13	JMW	EPA 6020A
Potassium	0.47	mg/L		08/29/22 09:01	5	0.10	09/13/22 15:13	JMW	EPA 6020A
Selenium	< 1.0	ug/L		08/29/22 09:01	5	1.0	09/13/22 15:13	JMW	EPA 6020A
Sodium	81	mg/L		08/29/22 09:01	5	0.10	09/13/22 15:13	JMW	EPA 6020A
Lithium	< 20	ug/L		08/29/22 09:01	1	20	09/08/22 14:03	TJJ	EPA 6010B



ANALYTICAL RESULTS

Sample: FH05107-07

Name: G215

Alias:

Sampled: 08/23/22 17:45

Received: 08/24/22 16:35

Matrix: Ground Water - Grab

PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	150	mg/L		09/01/22 03:37	100	100	09/01/22 03:37	CRD	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		09/01/22 02:59	1	0.250	09/01/22 02:59	CRD	EPA 300.0 REV 2.1
Sulfate	470	mg/L		09/01/22 03:37	100	100	09/01/22 03:37	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	14.51	Feet		08/23/22 17:45	1		08/23/22 17:45	FIELD	Field*
Dissolved oxygen, Field	0.97	mg/L		08/23/22 17:45	1		08/23/22 17:45	FIELD	Field*
Oxidation Reduction Potential	-40.0	mV		08/23/22 17:45	1	-500	08/23/22 17:45	FIELD	Field*
pH, Field Measured	6.81	pH Units		08/23/22 17:45	1		08/23/22 17:45	FIELD	Field*
Specific Conductance, Field Measured	1250	umhos/cm		08/23/22 17:45	1		08/23/22 17:45	FIELD	Field*
Temperature, Field Measured	20.8	°C		08/23/22 17:45	1		08/23/22 17:45	FIELD	Field*
Turbidity, Field Measured	41.9	NTU		08/23/22 17:45	1	0.00	08/23/22 17:45	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	310	mg/L		09/02/22 08:53	1	10	09/02/22 08:53	CGL/HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		09/02/22 08:53	1	10	09/02/22 08:53	CGL/HRF	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1300	mg/L		08/26/22 12:00	1	26	08/26/22 15:31	JAA/ZEJ	SM 2540C
Total Metals - PIA									
Arsenic	5.8	ug/L		08/29/22 09:01	5	1.0	09/13/22 15:20	JMW	EPA 6020A
Barium	44	ug/L		08/29/22 09:01	5	1.0	09/13/22 15:20	JMW	EPA 6020A
Boron	600	ug/L		08/29/22 09:01	5	10	09/13/22 15:20	JMW	EPA 6020A
Calcium	190	mg/L		08/29/22 09:01	5	0.20	09/13/22 15:20	JMW	EPA 6020A
Lead	< 1.0	ug/L		08/29/22 09:01	5	1.0	09/14/22 10:08	JMW	EPA 6020A
Magnesium	93	mg/L		08/29/22 09:01	5	0.10	09/13/22 15:20	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		08/29/22 09:01	5	1.0	09/13/22 15:20	JMW	EPA 6020A
Potassium	3.1	mg/L		08/29/22 09:01	5	0.10	09/13/22 15:20	JMW	EPA 6020A
Selenium	< 1.0	ug/L		08/29/22 09:01	5	1.0	09/13/22 15:20	JMW	EPA 6020A
Sodium	98	mg/L		08/29/22 09:01	5	0.10	09/13/22 15:20	JMW	EPA 6020A
Lithium	< 20	ug/L		08/29/22 09:01	1	20	09/08/22 14:05	TJJ	EPA 6010B



ANALYTICAL RESULTS

Sample: FH05107-10

Name: G218

Alias:

Sampled: 08/23/22 14:01

Received: 08/24/22 16:35

Matrix: Ground Water - Grab

PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	100	mg/L		09/01/22 10:41	50	50	09/01/22 10:41	CRD	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		09/01/22 10:23	1	0.250	09/01/22 10:23	CRD	EPA 300.0 REV 2.1
Sulfate	350	mg/L		09/01/22 10:41	50	50	09/01/22 10:41	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Depth, From Measuring Point	14.18	Feet		08/23/22 14:01	1		08/23/22 14:01	FIELD	Field*
Dissolved oxygen, Field	1.4	mg/L		08/23/22 14:01	1		08/23/22 14:01	FIELD	Field*
Oxidation Reduction Potential	-28.0	mV		08/23/22 14:01	1	-500	08/23/22 14:01	FIELD	Field*
pH, Field Measured	6.86	pH Units		08/23/22 14:01	1		08/23/22 14:01	FIELD	Field*
Specific Conductance, Field Measured	941.0	umhos/cm		08/23/22 14:01	1		08/23/22 14:01	FIELD	Field*
Temperature, Field Measured	20.8	°C		08/23/22 14:01	1		08/23/22 14:01	FIELD	Field*
Turbidity, Field Measured	59.2	NTU		08/23/22 14:01	1	0.00	08/23/22 14:01	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	290	mg/L		09/02/22 08:53	1	10	09/02/22 08:53	CGL/HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		09/02/22 08:53	1	10	09/02/22 08:53	CGL/HRF	SM 2320B 1997*
<u>Soluble General Chemistry - PIA</u>									
Solids - total dissolved solids (TDS)	1100	mg/L		08/30/22 10:20	1	26	08/30/22 12:21	ZEJ	SM 2540C
<u>Total Metals - PIA</u>									
Arsenic	1.2	ug/L		08/29/22 10:06	5	1.0	09/12/22 17:11	JMW	EPA 6020A
Barium	97	ug/L		08/29/22 10:06	5	1.0	09/12/22 17:11	JMW	EPA 6020A
Boron	< 10	ug/L		08/29/22 10:06	5	10	09/13/22 13:33	JMW	EPA 6020A
Calcium	170	mg/L		08/29/22 10:06	5	0.20	09/13/22 13:33	JMW	EPA 6020A
Lead	< 1.0	ug/L		08/29/22 10:06	5	1.0	09/12/22 17:11	JMW	EPA 6020A
Magnesium	70	mg/L		08/29/22 10:06	5	0.10	09/13/22 13:33	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		08/29/22 10:06	5	1.0	09/12/22 17:11	JMW	EPA 6020A
Potassium	0.63	mg/L		08/29/22 10:06	5	0.10	09/13/22 13:33	JMW	EPA 6020A
Selenium	< 1.0	ug/L		08/29/22 10:06	5	1.0	09/12/22 17:11	JMW	EPA 6020A
Sodium	75	mg/L		08/29/22 10:06	5	0.10	09/13/22 13:33	JMW	EPA 6020A
Lithium	< 20	ug/L		08/29/22 10:06	1	20	09/08/22 14:12	TJJ	EPA 6010B



ANALYTICAL RESULTS

Sample: FH05107-14

Name: G212

Alias:

Sampled: 08/24/22 12:02

Received: 08/24/22 16:35

Matrix: Ground Water - Grab

PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	43	mg/L		09/01/22 14:00	10	10	09/01/22 14:00	CRD	EPA 300.0 REV 2.1
Fluoride	0.281	mg/L		09/01/22 13:42	1	0.250	09/01/22 13:42	CRD	EPA 300.0 REV 2.1
Sulfate	54	mg/L		09/01/22 14:00	10	10	09/01/22 14:00	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	12.16	Feet		08/24/22 12:02	1		08/24/22 12:02	FIELD	Field*
Dissolved oxygen, Field	2.1	mg/L		08/24/22 12:02	1		08/24/22 12:02	FIELD	Field*
Oxidation Reduction Potential	108	mV		08/24/22 12:02	1	-500	08/24/22 12:02	FIELD	Field*
pH, Field Measured	6.87	pH Units		08/24/22 12:02	1		08/24/22 12:02	FIELD	Field*
Specific Conductance, Field Measured	660.7	umhos/cm		08/24/22 12:02	1		08/24/22 12:02	FIELD	Field*
Temperature, Field Measured	19.2	°C		08/24/22 12:02	1		08/24/22 12:02	FIELD	Field*
Turbidity, Field Measured	2.91	NTU		08/24/22 12:02	1	0.00	08/24/22 12:02	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	240	mg/L		09/02/22 08:53	1	10	09/02/22 08:53	CGL/HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		09/02/22 08:53	1	10	09/02/22 08:53	CGL/HRF	SM 2320B 1997*
Soluble General Chemistry - PIA									
Solids - total dissolved solids (TDS)	530	mg/L		08/30/22 10:20	1	26	08/30/22 12:21	ZEJ	SM 2540C
Total Metals - PIA									
Arsenic	< 1.0	ug/L		08/29/22 10:06	5	1.0	09/12/22 17:26	JMW	EPA 6020A
Barium	46	ug/L		08/29/22 10:06	5	1.0	09/12/22 17:26	JMW	EPA 6020A
Boron	< 10	ug/L		08/29/22 10:06	5	10	09/13/22 15:35	JMW	EPA 6020A
Calcium	59	mg/L		08/29/22 10:06	5	0.20	09/13/22 15:35	JMW	EPA 6020A
Lead	< 1.0	ug/L		08/29/22 10:06	5	1.0	09/12/22 17:26	JMW	EPA 6020A
Magnesium	30	mg/L		08/29/22 10:06	5	0.10	09/13/22 15:35	JMW	EPA 6020A
Molybdenum	< 1.0	ug/L		08/29/22 10:06	5	1.0	09/12/22 17:26	JMW	EPA 6020A
Potassium	0.23	mg/L		08/29/22 10:06	5	0.10	09/13/22 15:35	JMW	EPA 6020A
Selenium	< 1.0	ug/L		08/29/22 10:06	5	1.0	09/12/22 17:26	JMW	EPA 6020A
Sodium	66	mg/L		08/29/22 10:06	5	0.10	09/13/22 15:35	JMW	EPA 6020A
Lithium	< 20	ug/L		08/29/22 10:06	1	20	09/08/22 14:15	TJJ	EPA 6010B



ANALYTICAL RESULTS

Sample: FH05287-10

Name: NE RISER

Alias:

Sampled: 08/25/22 10:05

Received: 08/25/22 11:32

Matrix: Ground Water - Grab

PO #: 1164124

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
<u>Anions - PIA</u>									
Chloride	1400	mg/L		09/02/22 17:41	250	250	09/02/22 17:41	CRD	EPA 300.0 REV 2.1
Sulfate	10000	mg/L		09/02/22 17:59	2500	2500	09/02/22 17:59	CRD	EPA 300.0 REV 2.1
<u>Field - PIA</u>									
Dissolved oxygen, Field	3.1	mg/L		08/25/22 10:05	1		08/25/22 10:05	FIELD	Field*
Oxidation Reduction Potential	176	mV		08/25/22 10:05	1	-500	08/25/22 10:05	FIELD	Field*
pH, Field Measured	6.89	pH Units		08/25/22 10:05	1		08/25/22 10:05	FIELD	Field*
Specific Conductance, Field Measured	13000	umhos/cm		08/25/22 10:05	1		08/25/22 10:05	FIELD	Field*
Temperature, Field Measured	24.5	°C		08/25/22 10:05	1		08/25/22 10:05	FIELD	Field*
Turbidity, Field Measured	10.4	NTU		08/25/22 10:05	1	0.00	08/25/22 10:05	FIELD	Field*
<u>General Chemistry - PIA</u>									
Alkalinity - bicarbonate as CaCO3	280	mg/L		09/02/22 08:53	1	10	09/02/22 08:53	CGL/HRF	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		09/02/22 08:53	1	10	09/02/22 08:53	CGL/HRF	SM 2320B 1997*
Fluoride	27.8	mg/L		09/20/22 15:31	10	2.50	09/20/22 15:31	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	5900	mg/L		09/01/22 12:27	1	51	09/01/22 16:28	ZEJ	SM 2540C
<u>Total Metals - PIA</u>									
Arsenic	1.9	ug/L		08/30/22 09:01	5	1.0	09/12/22 13:18	JMW	EPA 6020A
Barium	41	ug/L		08/30/22 09:01	5	1.0	09/12/22 13:18	JMW	EPA 6020A
Boron	42000	ug/L		08/30/22 09:01	100	200	09/13/22 11:34	JMW	EPA 6020A
Calcium	520	mg/L		08/30/22 09:01	100	4.0	09/13/22 11:34	JMW	EPA 6020A
Lead	< 1.0	ug/L		08/30/22 09:01	5	1.0	09/12/22 13:18	JMW	EPA 6020A
Magnesium	1200	mg/L		08/30/22 09:01	100	2.0	09/13/22 11:34	JMW	EPA 6020A
Molybdenum	36	ug/L		08/30/22 09:01	5	1.0	09/12/22 13:18	JMW	EPA 6020A
Potassium	120	mg/L		08/30/22 09:01	5	0.10	09/12/22 13:18	JMW	EPA 6020A
Selenium	450	ug/L		08/30/22 09:01	5	1.0	09/12/22 13:18	JMW	EPA 6020A
Sodium	400	mg/L		08/30/22 09:01	5	0.10	09/12/22 13:18	JMW	EPA 6020A
Lithium	150	ug/L		08/30/22 09:01	1	20	09/08/22 14:50	TJJ	EPA 6010B



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B241715 - SW 3015 - EPA 6020A</u>									
Blank (B241715-BLK1)				Prepared: 08/24/22 Analyzed: 08/26/22					
Arsenic	< 1.0	ug/L							
Barium	< 1.0	ug/L							
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Lead	< 1.0	ug/L							
Magnesium	< 0.10	mg/L							
Molybdenum	< 1.0	ug/L							
Potassium	< 0.10	mg/L							
Selenium	< 1.0	ug/L							
Sodium	< 0.10	mg/L							
Lithium	< 20	ug/L							
LCS (B241715-BS1)				Prepared: 08/24/22 Analyzed: 08/26/22					
Arsenic	523	ug/L		555.6		94	80-120		
Barium	540	ug/L		555.6		97	80-120		
Boron	651	ug/L		555.6		117	80-120		
Calcium	5.50	mg/L		5.556		99	80-120		
Lead	524	ug/L		555.6		94	80-120		
Magnesium	5.18	mg/L		5.556		93	80-120		
Molybdenum	497	ug/L		555.6		89	80-120		
Potassium	5.79	mg/L		5.556		104	80-120		
Selenium	525	ug/L		555.6		94	80-120		
Sodium	6.10	mg/L		5.556		110	80-120		
Lithium	560	ug/L		555.6		101	80-120		
<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 B241964 - No Prep - SM 2540C</u>									
Blank (B241964-BLK1)				Prepared & Analyzed: 08/26/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B241964-BS1)				Prepared & Analyzed: 08/26/22					
Solids - total dissolved solids (TDS)	977	mg/L		1000		98	84.9-109		
Duplicate (B241964-DUP2)				Sample: FH05107-01 Prepared & Analyzed: 08/26/22					
Solids - total dissolved solids (TDS)	850	mg/L			845			0.6	5
<u>Batch B242079 - SW 3015 - EPA 6020A</u>									
Blank (B242079-BLK1)				Prepared: 08/29/22 Analyzed: 09/12/22					
Arsenic	< 1.0	ug/L							



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B242079 - SW 3015 - EPA 6020A</u>									
Blank (B242079-BLK1)									
Prepared: 08/29/22 Analyzed: 09/12/22									
Barium	< 1.0	ug/L							
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Lead	< 1.0	ug/L							
Magnesium	< 0.10	mg/L							
Molybdenum	< 1.0	ug/L							
Potassium	< 0.10	mg/L							
Selenium	< 1.0	ug/L							
Sodium	< 0.10	mg/L							
Lithium	< 20	ug/L							
LCS (B242079-BS1)									
Prepared: 08/29/22 Analyzed: 09/13/22									
Arsenic	511	ug/L		555.6		92	80-120		
Barium	508	ug/L		555.6		92	80-120		
Boron	621	ug/L		555.6		112	80-120		
Calcium	5.82	mg/L		5.556		105	80-120		
Lead	579	ug/L		555.6		104	80-120		
Magnesium	6.08	mg/L		5.556		109	80-120		
Molybdenum	566	ug/L		555.6		102	80-120		
Potassium	5.91	mg/L		5.556		106	80-120		
Selenium	532	ug/L		555.6		96	80-120		
Sodium	6.14	mg/L		5.556		111	80-120		
Lithium	568	ug/L		555.6		102	80-120		
<u>Batch B242095 - SW 3015 - EPA 6020A</u>									
Blank (B242095-BLK1)									
Prepared: 08/29/22 Analyzed: 09/12/22									
Arsenic	< 1.0	ug/L							
Barium	< 1.0	ug/L							
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Lead	< 1.0	ug/L							
Magnesium	< 0.10	mg/L							
Molybdenum	< 1.0	ug/L							
Potassium	< 0.10	mg/L							
Selenium	< 1.0	ug/L							
Sodium	< 0.10	mg/L							
Lithium	< 20	ug/L							
LCS (B242095-BS1)									
Prepared: 08/29/22 Analyzed: 09/12/22									
Arsenic	552	ug/L		555.6		99	80-120		
Barium	526	ug/L		555.6		95	80-120		
Boron	561	ug/L		555.6		101	80-120		
Calcium	6.06	mg/L		5.556		109	80-120		
Lead	544	ug/L		555.6		98	80-120		
Magnesium	5.63	mg/L		5.556		101	80-120		
Molybdenum	529	ug/L		555.6		95	80-120		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B242095 - SW 3015 - EPA 6020A</u>									
LCS (B242095-BS1)				Prepared: 08/29/22 Analyzed: 09/12/22					
Potassium	5.50	mg/L		5.556		99	80-120		
Selenium	514	ug/L		555.6		92	80-120		
Sodium	5.59	mg/L		5.556		101	80-120		
Lithium	549	ug/L		555.6		99	80-120		
<u>Batch B242199 - SW 3015 - EPA 6020A</u>									
Blank (B242199-BLK1)				Prepared: 08/30/22 Analyzed: 09/06/22					
Arsenic	< 1.0	ug/L							
Barium	< 1.0	ug/L							
Boron	< 10	ug/L							
Calcium	< 0.20	mg/L							
Lead	< 1.0	ug/L							
Magnesium	< 0.10	mg/L							
Molybdenum	< 1.0	ug/L							
Potassium	< 0.10	mg/L							
Selenium	< 1.0	ug/L							
Sodium	< 0.10	mg/L							
Lithium	< 20	ug/L							
LCS (B242199-BS1)				Prepared: 08/30/22 Analyzed: 09/06/22					
Arsenic	532	ug/L		555.6		96	80-120		
Barium	541	ug/L		555.6		97	80-120		
Boron	535	ug/L		555.6		96	80-120		
Calcium	5.46	mg/L		5.556		98	80-120		
Lead	553	ug/L		555.6		100	80-120		
Magnesium	5.60	mg/L		5.556		101	80-120		
Molybdenum	521	ug/L		555.6		94	80-120		
Potassium	5.58	mg/L		5.556		100	80-120		
Selenium	527	ug/L		555.6		95	80-120		
Sodium	6.23	mg/L		5.556		112	80-120		
Lithium	530	ug/L		555.6		95	80-120		
<u>Batch B242215 - No Prep - SM 2540C</u>									
Blank (B242215-BLK1)				Prepared & Analyzed: 08/30/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B242215-BS1)				Prepared & Analyzed: 08/30/22					
Solids - total dissolved solids (TDS)	1030	mg/L		1000		103	84.9-109		
<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							
Chloride	0.610	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B242277-CCV1)				Prepared & Analyzed: 08/29/22					
Chloride	4.59	mg/L		5.000		92	90-110		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B242277 - No Prep - EPA 300.0 REV 2.1</u>									
Calibration Check (B242277-CCV1)				Prepared & Analyzed: 08/29/22					
Sulfate	4.83	mg/L		5.000		97	90-110		
Fluoride	4.88	mg/L		5.000		98	90-110		
<u>Batch B242417 - No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B242417-CCB1)				Prepared & Analyzed: 08/30/22					
Chloride	0.149	mg/L							
Fluoride	0.00	mg/L							
Sulfate	0.00	mg/L							
Calibration Blank (B242417-CCB2)				Prepared & Analyzed: 08/30/22					
Sulfate	0.00	mg/L							
Chloride	0.210	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B242417-CCV1)				Prepared & Analyzed: 08/30/22					
Chloride	5.10	mg/L		5.000		102	90-110		
Fluoride	5.24	mg/L		5.000		105	90-110		
Sulfate	5.19	mg/L		5.000		104	90-110		
Calibration Check (B242417-CCV2)				Prepared & Analyzed: 08/30/22					
Sulfate	4.89	mg/L		5.000		98	90-110		
Chloride	4.81	mg/L		5.000		96	90-110		
Fluoride	4.99	mg/L		5.000		100	90-110		
<u>Batch B242497 - No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B242497-CCB1)				Prepared & Analyzed: 08/31/22					
Chloride	0.672	mg/L							
Fluoride	0.00	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B242497-CCV1)				Prepared & Analyzed: 08/31/22					
Sulfate	4.86	mg/L		5.000		97	90-110		
Fluoride	5.04	mg/L		5.000		101	90-110		
Chloride	4.90	mg/L		5.000		98	90-110		
<u>Batch B242514 - No Prep - SM 2540C</u>									
Blank (B242514-BLK1)				Prepared & Analyzed: 09/01/22					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B242514-BS1)				Prepared & Analyzed: 09/01/22					
Solids - total dissolved solids (TDS)	967	mg/L		1000		97	84.9-109		
<u>Batch B242686 - No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B242686-CCB1)				Prepared & Analyzed: 09/01/22					
Sulfate	0.00	mg/L							
Chloride	0.351	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B242686-CCV1)				Prepared & Analyzed: 09/01/22					
Fluoride	5.27	mg/L		5.000		105	90-110		



QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>Batch B242686 - No Prep - EPA 300.0 REV 2.1</u>									
Calibration Check (B242686-CCV1)				Prepared & Analyzed: 09/01/22					
Chloride	4.99	mg/L		5.000		100	90-110		
Sulfate	5.06	mg/L		5.000		101	90-110		
<u>Batch B242704 - No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B242704-CCB1)				Prepared & Analyzed: 09/02/22					
Chloride	0.00	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B242704-CCV1)				Prepared & Analyzed: 09/02/22					
Chloride	4.79	mg/L		5.000		96	90-110		
Sulfate	4.93	mg/L		5.000		99	90-110		
<u>Batch B242713 - No Prep - SM 2320B 1997</u>									
Duplicate (B242713-DUP4)		Sample: FH05107-10		Prepared & Analyzed: 09/02/22					
Alkalinity - bicarbonate as CaCO ₃	288	mg/L			288			0	10
<u>Batch B242714 - No Prep - SM 2320B 1997</u>									
Duplicate (B242714-DUP4)		Sample: FH05107-10		Prepared & Analyzed: 09/02/22					
Alkalinity - carbonate as CaCO ₃	< 10	mg/L			ND				10
<u>Batch B243162 - IC No Prep - EPA 300.0 REV 2.1</u>									
Calibration Blank (B243162-CCB1)				Prepared & Analyzed: 09/08/22					
Sulfate	0.00	mg/L							
Calibration Check (B243162-CCV1)				Prepared & Analyzed: 09/08/22					
Sulfate	4.94	mg/L		5.000		99	90-110		
<u>Batch B244412 - No Prep - SM 4500F C 1997</u>									
Calibration Blank (B244412-CCB1)				Prepared & Analyzed: 09/20/22					
Fluoride	0.0160	mg/L							
Calibration Blank (B244412-CCB2)				Prepared & Analyzed: 09/20/22					
Fluoride	0.0180	mg/L							
Calibration Check (B244412-CCV1)				Prepared & Analyzed: 09/20/22					
Fluoride	0.681	mg/L		0.7000		97	90-110		
Calibration Check (B244412-CCV2)				Prepared & Analyzed: 09/20/22					
Fluoride	0.682	mg/L		0.7000		97	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

Gail Schindler



Certified by: Gail Schindler, Project Manager

FH04898

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: **13488 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: **Coffeen**
Project Number: **2285**

Section C
Invoice Information:

Attention: **Jason Stuckey**
Company Name: **Vistra Corp**
Address: **see Section A**
Quote Reference:
Project Manager:
Protis #:

REGULATORY AGENCY

NPDES **GROUND WATER** **DRINKING WATER**
UST **RCRA** **OTHER**

Site Location: **IL**
STATE:

ITEM #	Valid Matrix Codes MATRIX CODE DOMESTIC WATER DW WASTE WATER WW PRODUCT P SOIL/SOLID S SLURRY SL WASTE WATER AIR WASTE WATER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED	DATE	TIME	# OF CONTAINERS	Preservatives Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	Y/N	Requested Analysis Filtered (Y/N)		Project No./ Lab I.D.
										Analysis Test	Residual Chlorine (Y/N)	
1												
2	L203	WT			8/23/22	9:27	2					
3	G101				8/23/22	10:07	4					
4	G106				8/23/22	10:33	5					
5	G200				8/23/22	10:50	7					
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												

ADDITIONAL COMMENTS
COF-Q3-2022 Rev 1

RELINQUISHED BY / AFFILIATION: **Hydrogen** DATE: **8/23/22** TIME: **12:04**
ACCEPTED BY / AFFILIATION: **Jason Stuckey** DATE: **8/23/22** TIME: **12:04**

SAMPLER NAME AND SIGNATURE: **Joseph R. Ford** DATE SIGNED (MM/DD/YYYY): **8/23/22**
PRINT Name of SAMPLER:
SIGNATURE of SAMPLER:

Received on Ice (N) Custody Sealed Cooler (Y) Samples Intact (N)

Temp in °C: **2.8**

8/23/22 16:21

FHO5103

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: 1349B E. 900th St
 Email To: **Brian.Voelker@VisiraCorp.com**
 Phone: (217) 753-9911 Fax:
 Requested Due Date/TAT: **standard**

Section B
Required Project Information:

Report To: **Brian Voelker**
 Copy To: **Jason Stuckey**
 Purchase Order No.:
 Project Name: **Colleen**
 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: **IL**
 STATE:

ITEM #	Valid Matrix Codes MATRIX CODE SEWAGE WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL WASTE WATER LW VAPE V AIR AR OTHER OT TISSUE TS	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		# OF CONTAINERS	PRESERVATIVES	ANALYSIS TEST	Requested Analysis Filtered (Y/N)		Project No./ Lab I.D.										
			DATE	TIME				DATE	TIME											
1	G203	WT G	8/23/22	1723	6	Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	Analysis Test ↑	COF_257_101	COF_257_102	COF_257_103	COF_257_104	COF_257_105	COF_WPCP_102	COF_WPCP_103	COF_WPCP_104	COF_WPCP_106	COF_811_105	Residual Chlorine (Y/N)		
2	G209			1535	7															
3	G210			1630	7															
4	G215			1745	6															
5	G216			1626	6															
6	G217			1523	6															
7	G218			1401	7															
8	G274			1547	6															
9	G278			1325	6															
10	G301			1759	3															
11	G302			1700	3															
12																				
13																				
14																				
15																				
16																				

ADDITIONAL COMMENTS
COF-Q3-2022 Rev 1

RELINQUISHED BY / AFFILIATION: *[Signature]* DATE: 8-24-22 TIME: 13:38
 ACCEPTED BY / AFFILIATION: *[Signature]* DATE: 8-24-22 TIME: 16:35

SAMPLER NAME AND SIGNATURE: *[Signature]*
 PRINT Name of SAMPLER: **Joe Reed**
 SIGNATURE of SAMPLER: *[Signature]*
 DATE Signed (MM/DD/YY): 8/23/22

Temp in °C: 21
 Received on (M/D/YY): 8-24-22
 Sealed (M/D/YY): 8-24-22
 Samples Intact (M/D/YY): 8-24-22

PH05103

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	Report To: Brian Voelker	Attention: Jason Stuckey
Address: 13498 E. 900th St	Copy To: Jason Stuckey	Company Name: Visira Corp
Email To: Brian.Voelker@VisiraCorp.com	Purchase Order No.:	Address: see Section A
Phone: (217) 753-8911	Project Name: Colleen	Guest Reference: _____
Requested Due Date/TAT: standard	Project Number: 2285	Project Manager: _____
		Profile #: _____

Section B
Required Project Information:

Regulatory Agency:	NPDES	GROUND WATER	DRINKING WATER
	UST	RCRA	OTHER
Site Location:	IL		
STATE:			

ITEM #	Valid Matrix Code's MATRIX CODE DRINKING WATER DW WATER WATER WW WASTE WATER WP PRODUCT P SOIL SL SOLID S WPE WPE AIR AIR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		# OF CONTAINERS	Preservatives Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₈ Methanol Other	Requested Analysis Filtered (Y/N)	Project No./ Lab I.D.
				DATE	TIME				
1	XPW01	WTG	8/24/22	1110		2	X	COF_257_101	
2	XPW02	WTG	8/24/22	1030		2	X	COF_257_102	
3	G111			950		4	X	COF_257_103	
4	G125			956		6	X	COF_257_104	
5	G126			1129		6	X	COF_257_105	
6	G154			1045		4		COF_811_105	
7	G155			941		4		COF_WPCP_106	
8	G401			1144		8		COF_WPCP_103_104	
9	G211			1041		7			
10	G212			1202		7			
11	G303 G307			1215		3			
12	G410			118					
13	G411			956					
14	G277 ^a G15			0940					
15	G106 ^k G212 ²			1058					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	<i>W. Ryan</i>	8-21-22	13:37	<i>Paul Schindler</i>	8-24-22	15:00	Received on (Y/N)
	<i>W. Ryan</i>	8-24-22	16:35	<i>Paul Schindler</i>	8-24-22	16:35	Sealed Cooler (Y/N)
							Custody (Y/N)
							Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE	PRINT Name of SAMPLER:	DATE Signed (MM/DD/YY):
<i>Joseph A. Paul</i>	Joseph A. Paul	8/24/22
SIGNATURE of SAMPLER:		
<i>Joe Keel</i>		

PH05107

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) 759-8911 Fax:
 Requested Due Date/TAT: standard

Section B
Required Project Information:
 Repeat To: Brian Voelker
 Copy To: Jason Stuckey
 Purchase Order No.:
 Project Name: Coffeen
 Project Number: 2285

Section C
Invoice Information:
 Attention: Jason Stuckey
 Company Name: Visira Corp
 Address: see Section A
 Quote Reference: Project Manager: Profile #:
 Site Location: IL STATE:

REGULATORY AGENCY
 NPDES GROUND WATER DRINKING WATER
 UST RCRA OTHER

ITEM #	Valid Matrix Codes MATRIX DRINKING WATER DW WATER WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL WASTE WATER WWT WIPE WI AIR AIR OTHER OT TISSUE TS	Section D Required Client Information SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	Project No / Lab I.D.
1		G102	Hyerson	8-24-22	13:30	Joe Reed	8-24-22	13:40	Sealed on Ice (Y/N)	
2		G103	Ballinger	8-24-22	16:35	Joe Reed	8-24-22	16:35	Sealed Cooler (Y/N)	
3		R104							Temp in °C	
4		G105								
5		G109								
6		G110								
7		G119								
8		G120								
9		G121								
10		G122								
11		G123								
12		T127								
13		T128								
14		R261								
15		G206								
16		G207								

Requested Analysis Filtered (Y/N)

Preservatives
 H₂SO₄ HNO₃ HCl NaOH Na₂S₂O₈ Methanol Other

Analysis Test
 Residual Chlorine (Y/N)

Requested Analysis Filtered (Y/N)
 COF_257_101
 COF_257_102
 COF_257_103
 COF_257_104
 COF_257_106
 COF_WPCP_102
 COF_WPCP_103_104
 COF_WPCP_106
 COF_811_105

ADDITIONAL COMMENTS
 COF-Q3-2022 Rev 1

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER: Joe Reed
 SIGNATURE of SAMPLER: Joe Reed
 DATE Signed (MM/DD/YYYY): 8/23/22

F#05107

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) 753-9811** Fax:
 Requested Due Date/TAT: **standard**

Section B
Required Project Information:

Report To: **Brian Voelker**
 Copy To: **Jason Stuckey**
 Purchase Order No.:
 Project Name: **COFFEEN**
 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: **IL**
 STATE:

ITEM #	Valid Matrix Codes MATRIX CODE CRACKING WATER CW WATER WWT WASTE WATER WW PRODUCT P SOLID SL LIQUID/LIQUOR LQ WIPES WIP AIR AIR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		# OF CONTAINERS	Preservatives Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	Requested Analysis Filtered (Y/N)	Project No./ Lab I.D.
				DATE	TIME				
1	G209	WT	G	8/23/22	1723	6	X	COF_257_101	
2	G209	WT	G	8/23/22	1535	7	X	COF_257_102	
3	G210	WT	G	8/23/22	1630	7	X	COF_257_103	
4	G215	WT	G	8/23/22	1745	6	X	COF_257_104	
5	G216	WT	G	8/23/22	1626	6	X	COF_257_105	
6	G217	WT	G	8/23/22	1523	6	X	COF_811_105	
7	G218	WT	G	8/23/22	1401	7	X	COF_WPCP_102	
8	G274	WT	G	8/24/22	1547	6		COF_WPCP_103_104	
9	G278	WT	G	8/24/22	1325	6		COF_WPCP_103_104	
10	G301	WT	G	8/24/22	1759	3		COF_WPCP_103_104	
11	G302	WT	G	8/24/22	1700	3		COF_WPCP_103_104	
12									
13									
14									
15									
16									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
COF-Q3-2022 Rev 1	[Signature]	8-24-22	13438	[Signature]	8-24-22	13400	Received on Ice (Y/N) <input checked="" type="checkbox"/> Custody Sealed/Proper (Y/N) <input checked="" type="checkbox"/> Samples Intact (Y/N) <input checked="" type="checkbox"/>
	[Signature]	8-24-22	1635	[Signature]	8-24-22	1635	Temp in °C <input checked="" type="checkbox"/>

SAMPLER NAME AND SIGNATURE: **Joe Reed**
 PRINT Name of SAMPLER:
 SIGNATURE of SAMPLER:
 DATE Signed (MM/DD/YYYY): **8/23/22**

F709107

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: **Colleen**
 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 MATRIX CODE DW WT WW P SL V VW AR OT TS	SAMPLE TYPE (G-RAB C-COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Requested Analysis Filtered (Y/N)	Project No./ Lab I.D.
			DATE	TIME			H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₅	Methanol	Other			
1	XPW01	WT	8/24/22	1110		2	X	X	X						COF_257_101	
2	XPW02	WT	8/24/22	1030		2	X	X	X						COF_257_102	
3	G111			950		7	X	X	X						COF_257_103	
4	G105			956		4	X	X	X						COF_257_104	
5	G126			1129		6	X	X	X						COF_257_105	
6	G154			1045		5									COF_811_105	
7	G155			441		4										
8	G401			1144		2										
9	G211			1041		2										
10	G212			1202		7										
11	G303 G307			1215		3										
12	G410			1110		1										
13	G411			956		1										
14	G277*			0940		1										
15	G106*			1058		1										
16																

ADDITIONAL COMMENTS
COF-Q3-2022 Rev 1

RELINQUISHED BY / AFFILIATION: **Vistra** DATE: **8-21-22 13:37** TIME:
 ACCEPTED BY / AFFILIATION: **[Signature]** DATE: **8-24-22 1500** TIME: **1240**

SAMPLER NAME AND SIGNATURE: **[Signature]** DATE SIGNED (MM/DD/YYYY): **8/24/22** TIME: **1035**
 PRINT Name of SAMPLER: **Joe Keel**
 SIGNATURE of SAMPLER: **[Signature]**

Received on (Y/N) Sealed Cooler Custody Temp in °C

7#05287

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
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: Coffeeh
 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: IL
 STATE:

ITEM #	Valid Matrix Codes MATRIX CODE DRINKING WATER WATER PRODUCT WASTE SOIL/SOLID OIL WIPE AIR OTHER TISSUE	Valid Matrix Codes CODE DW WP SL OL WP AR OT 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 O ₂ Methanol Other	Analysis Test ↑ Y/N	Requested Analysis Filtered (Y/N)	Project No./ Lab I.D.
1			WT	G	8/24/22		4				COF_257_101
2	G151				8/24/22		4				COF_257_102
3	G152				8/24/22		4				COF_257_103
4	G153				8/24/22		4				COF_257_104
5	G213				8/24/22		6				COF_257_105
6	G214				8/24/22		6				COF_257_106
7	G270				8/24/22		7				COF_257_108
8	G271				8/24/22		7				COF_257_109
9	G272				8/24/22		6				COF_257_103
10	G279				8/24/22		7				COF_257_102
11	G280				8/24/22		7				COF_257_104
12	G303				8/24/22		3				COF_257_105
13	G306				8/24/22		3				COF_WPCP_102
14	G402				8/24/22		3				COF_WPCP_103
15	G403				8/24/22		3				COF_WPCP_104
16	G404				8/24/22		6				COF_811_105
16	G405				8/24/22		3				Residual Chlorine (Y/N)

ADDITIONAL COMMENTS

COF-Q3-2022 Rev 1

RELINQUISHED BY / AFFILIATION: *Joseph Novak* DATE: 8/25/22 TIME: 1:58 PM

ACCEPTED BY / AFFILIATION: *Joseph Novak* DATE: 8/24/22 TIME: 1:58 PM

SAMPLE CONDITIONS

Temp In °C	7.2
Received on	8/24/22
Custody Sealed	(Y/N)
Samples Intact	(Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: *Joseph Novak*

SIGNATURE of SAMPLER: *Joseph Novak*

DATE Signed (MM/DD/YYYY): 8/24/22

PH05287

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**

Report To: **Brian Voelker**
Copy To: **Jason Stuckey**

Company Name: **Vistra Corp**
Address: **see Section A**

Project Manager: **see Section A**

Project Name: **standard**
Project Number: **2285**

Section B
Required Project Information:

Report To: **Brian Voelker**
Copy To: **Jason Stuckey**

Company Name: **Vistra Corp**
Address: **see Section A**

Project Manager: **see Section A**

Project Name: **standard**
Project Number: **2285**

ITEM #	Section D Required Client Information	Valid Matrix Codes	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		# OF CONTAINERS	Preservatives										Requested Analysis Filtered (Y/N)	Project No./ Lab I.D.							
					DATE	TIME		Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ O ₃	Methanol	Other											
1	2205	DRINKING WATER WASTE WATER PRODUCT OIL WPE OTHER TISSUE	WTG	G	8/25/22	0952	6	X	X	X	X	X	X	X	X	COF_257_101	COF_257_102	COF_257_103	COF_257_104	COF_257_105	COF_WPCP_102	COF_WPCP_103_104	COF_WPCP_106	COF_811_105		
2	6273		WTG	G	8/25/22	1058	7	X	X	X	X	X	X	X	X	COF_257_101	COF_257_102	COF_257_103	COF_257_104	COF_257_105	COF_WPCP_102	COF_WPCP_103_104	COF_WPCP_106	COF_811_105		
3	6281		WTG	G	8/25/22	1121	5	X	X	X	X	X	X	X	X	COF_257_101	COF_257_102	COF_257_103	COF_257_104	COF_257_105	COF_WPCP_102	COF_WPCP_103_104	COF_WPCP_106	COF_811_105		
4	NE Riser		WTG	G	8/25/22	1005	3	X	X	X	X	X	X	X	X	COF_257_101	COF_257_102	COF_257_103	COF_257_104	COF_257_105	COF_WPCP_102	COF_WPCP_103_104	COF_WPCP_106	COF_811_105		

Section C
Requested Analysis Filtered (Y/N)

Analysis Test ↑

Y/N

Section E
Additional Comments

COF-Q3-2022 Rev 1

RELINQUISHED BY / AFFILIATION: *[Signature]* DATE: 8/25/22 TIME: 1458

ACCEPTED BY / AFFILIATION: *Paul Schendler* DATE: 8-25-22 TIME: 1458

Temp in °C: 38

SAMPLER NAME AND SIGNATURE: *Aaron Tomberlin* DATE SIGNED (MM/DD/YYYY): 8/25/2022

PRINT Name of SAMPLER: *Aaron Tomberlin*

SIGNATURE of SAMPLER: *[Signature]*

SITE

COFFEEN

SAMPLE POINT

G200

1050

Date:

8/23/22

Start Time:

1000

Finish/Sample Time:

Bladder

Well Depth (Bottom) From MP:

20.20 ft

Depth to Water From MP:

6.21 ft

Well Water Volume:

8.46 L

Water Column Length:

13.99 ft

Total Purge Volume:

1000 ml/L

Reading	Time	pH	Spec Con	Temp	DO	Turbidity	ORP
(Units)		s.u.	umhos/cm	deg C	mg/L	NTU	MV
1	10 10	7.05	818.5	20.60	0.42	10.06	-154.7
2	10 12	7.05	816.9	20.64	0.40	6.75	-149.1
3	10 14	7.06	820.1	20.59	0.37	6.43	-146.5
4							
5							

DTW

6.60
6.61
6.61

Sampled with:

AT 600

Sample Appearance:

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

End 661

Weather/Environment

80% part sunny

Remarks:

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
1	Phenols (A,G,250mL, H2SO4)
1	Cyanide (P, 250mL, NaOH)
1	Metals (P, 250mL, HNO3)
1	General (P, 500mL)
1	2.5 Liter HNO3

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

Comments

Sampler's Signature:

Joseph R Reed

SITE

COFFEEN

SAMPLE POINT

R201

Date:

8/23/22

Start Time:

1120

Finish/Sample Time:

1224

Well Depth (Bottom) From MP:

19.80 ft

Depth to Water From MP:

5.90 ft

Well Water Volume:

8.4 L

Water Column Length:

13.90 ft

Total Purge Volume:

1000 mL/L

Reading	Time	pH	Spec Con	Temp	DO	Turbidity	ORP
(Units)		s.u.	umhos/cm	deg C	mg/L	NTU	MV
1	1132	6.98	1162.1	20.04	0.71	2.68	-101.7
2	1134	6.97	1170.3	20.02	0.72	2.57	-106.1
3	1136	6.97	1177.7	19.98	0.68	2.56	-109.3
4							
5							

DTW

6.68

6.69

6.70

Sampled with:

AT 600

Sample Appearance:

Odor: None Slight Mod. Strong

Color None Slight Mod. Strong

Turb None Slight Mod Strong

Weather:/Environment

80's mostly sunny

Remarks:

End DTW
6.92

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
1	Phenols (A,G,250mL, H2SO4)
1	Cyanide (P, 250mL, NaOH)
1	Metals (P, 250mL, HNO3)
1	General (P, 500mL)
1	2.5 L

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

Comments

Sampler's Signature:

Joseph R Reed

SITE

COFFEEN

SAMPLE POINT

G206

Date: 8/23/2022 Start Time: 1115 ~~0905~~ Finish/Sample Time: 1227

Well Depth (Bottom) From MP: 24.84 ft

Depth to Water From MP: 11.22 ft

Well Water Volume: 8.24 L

Water Column Length: 13.62 ft

Total Purge Volume: 1000 mL/L

Reading	Time	pH	Spec Con	Temp	DO	Turbidity	ORP
(Units)		s.u.	umhos/cm	deg C	mg/L	NTU	MV
1	1136	6.88	428	19.8	1.26	90.5	-191
2	1138	6.87	464	19.9	1.10	96.0	-182
3	1140	6.86	430	20.0	1.11	68.7	-178
4							
5							

DFW
 PL
 $\frac{13.62}{12.31}$
 $\frac{13.62}{12.31}$
 $\frac{13.62}{12.31}$
 $\frac{13.62}{12.31}$

APF
8/23/22

Sampled with: bladder

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
1	Phenols (A,G,250mL, H2SO4)
1	Cyanide (P, 250mL, NaOH)
1	Metals (P, 250mL, HNO3)
1	General (P, 500mL)
1	(P, 2.5L, HNO3)

7

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

Comments Final DTW = 12.80 ft
Abs in water line

Sampler's Signature: _____

SITE

COFFEEN

SAMPLE POINT

G209

1441

1535

Date:

8-27-22

Start Time:

2:41 PM

Finish/Sample Time:

3:35 PM

Well Depth (Bottom) From MP:

25.26 ft

Depth to Water From MP:

10.82 ft

Well Water Volume:

1.3

Water Column Length:

14.44 ft

Total Purge Volume:

~~1.8~~ 2.1

final depth

12.06 ft 8-23

Reading	Time	pH	Spec Con	Temp	DO	Turbidity	ORP
(Units)		s.u.	umhos/cm	deg C	mg/L	NTU	MV
1	2:52	6.79	1000	19.35	1.68	10.0	-112
2	2:59	6.76	994	19.47	1.38	9.6	-118
3	2:56	6.81	994	19.58	1.23	9.0	-118 -120
4				19.58			
5							

Sampled with:

HORIBL

Sample Appearance:

Odor: None Slight Mod. Strong

Color: None Slight Mod. Strong

Turb: None Slight Mod Strong

Weather:/Environment

91° sunny dry

Remarks:

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
1	Phenols (A,G,250mL, H2SO4)
1	Cyanide (P, 250mL, NaOH)
1	Metals (P, 250mL, HNO3)
1	General (P, 500mL)
1	P 250 L HNO3

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

Comments

Sampler's Signature:

[Signature]

SITE

COFFEEN

SAMPLE POINT

G212

Date: 8-24-22 Start Time: 10:55 Finish/Sample Time: 12:02

Well Depth (Bottom) From MP: 24.33 ft

Depth to Water From MP: 12.16 ft

Water Column Length: 12.17 ft

Well Water Volume: 7.4 L

Total Purge Volume: 1.5 mL

final depth 13.17

Reading	Time	pH	Spec Con	Temp	DO	Turbidity	ORP
(Units)		s.u.	umhos/cm	deg C	mg/L	NTU	MV
1	11:16	6.89	628.31	19.23	2.19	2.99	105.2
2	11:17	6.88	641.32	19.10	2.14	2.79	107.5
3	11:18	6.87	660.79	19.18	2.09	2.91	108.0
4							
5							

12.91
12.93
12.92

Sampled with: AT 600

Sample Appearance: Odor: None Slight Mod. Strong

Color: None Slight Mod. Strong

Turb: None Slight Mod. Strong

Weather:/Environment 91° SUNNY Day

Remarks: _____

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
1	Phenols (A,G,250mL, H2SO4)
1	Cyanide (P, 250mL, NaOH)
1	Metals (P, 250mL, HNO3)
1	General (P, 500mL)
1	P, 2.5 L

~~7~~

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

Comments _____

Sampler's Signature: [Signature]

SITE **COFFEEN**

SAMPLE POINT **G215**

Date: 8/23/2022 Start Time: 1632 Finish/Sample Time: 1745

Well Depth (Bottom) From MP: 26.88 ft

Depth to Water From MP: 14.51 ft

Well Water Volume: 7.48 L

Water Column Length: 12.37 ft

Total Purge Volume: 1000 mL

Reading	Time	pH	Spec Con	Temp	DO	Turbidity	ORP	OTW
(Units)		s.u.	umhos/cm	deg C	mg/L	NTU	MV	CL
1	1637	6.82	1270	20.6	1.04	66.0	-37.0	11.93
2	1653	6.81	1250	20.7	1.05	53.3	-39.0	14.93
3	1655	6.81	1250	20.8	0.97	41.9	-40.0	14.93
4								
5								

Sampled with: 6 ladders

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
1	Phenols (A,G,250mL, H2SO4)
1	Cyanide (P, 250mL, NaOH)
1	Metals (P, 250mL, HNO3)
1	General (P, 500mL)
1	(P, 2.5L, HNO3)

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

Comments Final OTW 14.93 AC

Sampler's Signature: [Signature]

SITE

COFFEEN

SAMPLE POINT

G218

Date: 8/23/22 Start Time: 1253 Finish/Sample Time: 1401

Well Depth (Bottom) From MP: 26.79 ft

Depth to Water From MP: 14.18 ft

Well Water Volume: 7.63 L

Water Column Length: 12.61 ft

Total Purge Volume: 1000 @ 1 L

Reading	Time	pH	Spec Con	Temp	DO	Turbidity	ORP
(Units)		s.u.	umhos/cm	deg C	mg/L	NTU	MV
1	1310	6.87	940	20.7	1.57	86.2	-23.0
2	1312	6.87	939	20.7	1.46	74.8	-25.0
3	1314	6.86	941	20.8	1.42	59.2	-28.0
4							
5							

DTW
~~DTW~~
 14.65
 14.65
 14.65
APP 8/23/22

Sampled with: bladder

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
1	Phenols (A,G,250mL, H2SO4)
1	Cyanide (P, 250mL, NaOH)
1	Metals (P, 250mL, HNO3)
1	General (P, 500mL)
1	<u>CP, 2.5L, HNO3</u>

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

Comments From DTW 14.65 PL

Sampler's Signature: 

SITE

COFFEEN

NE RISER

Date: 8/25/2022 Start Time: 0904 Finish/Sample Time: 1005

Well Depth (Bottom) From MP: — ft Purge Rate: 100 mL/min

Depth to Water From MP: — ft Total Purge Volume: 1000 L / Gal (mL)

Reading	Time	DTW	Purge	pH	Spec Con	Temp	Turbidity	DO	ORP
(Units)		feet	Volume	s.u.	umhos/cm	deg C	NTU	mg/L	mV
1	0927	-	1000	6.86	10400	24.4	20.0	3.03	174.0
2	0928	-	1200	6.87	12800	24.4	15.4	3.04	175.0
3	0931	-	1400	6.89	13000	24.5	10.4	3.07	176.0
4	_____								
5	_____								

Sampled with: bladder

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
1	Plastic 2.5 L
1	Metals (P, 250mL, HNO3)
1	General (P, 500mL)

Filtered	
Qty	Bottles

Comments _____

Sampler's Signature: 

Multiparameter Meter Field Calibration Checklist

Field Personnel: Joe Reed	Location: Colleen
Weather:	Environment:

Multiparameter Water Meter	Make: Aqua Troll	Model: 600	Serial Number: 846000
Water Level Meter	Make: Solinst	Model: 101	Serial Number: 269022

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	/	MSI	L315-04	11/22/2023
pH 7.00a	7.00	s.u.	±0.1 s.u.	P	NO		MSI	L172-33	6/23/2023
pH 10.00a	9.96	s.u.	±0.1 s.u.	P	NO		MSI	L354-22	1/5/2024
SC Zero (DI)	0.0	µS/cm	0<25 µS/cm	P	NO		Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1989.1	µS/cm	±5%	P	NO		Geotech	1GK328	Nov-22
ORP	277.3	mV	±15 mV	P	NO		InSitu	1GL481	Sep-22
DO (Zero pt)	0.04	mg/L	±0.1	P	NO		Macron	#000228049	8/26/2025
DO (Saturated)	9.9	%	97-100%	P	NO		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:			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	3.99	s.u.	±0.15 s.u.	P	None	Geotech	1GF009	Jun-23	
pH 7.00b	7.02	s.u.	±0.15 s.u.	P	None	Geotech	0GJ268	Oct-22	
pH 10.00b	10.01	s.u.	±0.15 s.u.	P	None	Geotech	1GF458	Jun-23	
SC 1000	999.1	µS/cm	±5%	P	None	Ricca	2108D48	Jul-23	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: 1900			
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	7.05	s.u.	±0.1 s.u.	P	NO		MSI	L172-33	6/23/2023
pH 10.00a	10.01	s.u.	±0.1 s.u.	P	NO		MSI	L354-22	1/5/2024
SC 1000	1032.1	µS/cm	±5%	P	NO		Ricca	2108D48	Jul-23
DO (Zero pt)	0.04	mg/L	±0.1 mg/L	P	NO		Macron	#000228049	8/26/2025
Turbidity (DI)	0.1	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: Joseph A Reed	Date: 8/23/22
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Multiparameter Meter Field Calibration Checklist

Field Personnel: Sam Grant Location: Coffeen

Weather: 80-84°F, sunny wind 2mph Environment: grass/gravel road

Multiparameter Water Meter Make: InSitu Model: Aquatroll 600 Serial Number: 739449

Water Level Meter Make: Heron Model: Dipper-T Serial Number: 19FF22G152HB

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>3-pt.</u>	<u>4.00</u>	MSI	L153-17	6/8/2023
pH 7.00a	<u>7.16</u>	s.u.	±0.1 s.u.	<u>F</u>	<u>I</u>	<u>7.00</u>	MSI	L172-33	8/23/2023
pH 10.00a	<u>10.05</u>	s.u.	±0.1 s.u.	<u>P</u>	<u>I</u>	<u>10.00</u>	MSI	L118-08	5/12/2023
SC Zero (DI)	<u>11.71</u>	µS/cm	0<25 µS/cm	<u>P</u>	<u>N</u>	<u>NA</u>	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<u>1969.4</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Geotech	1GJ517	Oct-22
ORP	<u>217.8 @ 25.73mV</u>	mV	±15 mV	<u>I</u>	<u>I</u>	<u>I</u>	InSitu	1Gk507	Aug-22
DO (Zero pt)	<u>0.07</u>	mg/L	±0.1	<u>I</u>	<u>I</u>	<u>I</u>	Fischer Chemical	168261	8/26/2025
DO (Saturated)	<u>100.00</u>	%	97-100%	<u>I</u>	<u>I</u>	<u>I</u>	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<u>1.10</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: 1304

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	<u>3.92</u>	s.u.	±0.15 s.u.	<u>P</u>	<u>None</u>	Geotech	1GH562	Aug-22
pH 7.00b	<u>6.87</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>	Geotech	1GD360	Apr-22
pH 10.00b	<u>9.94</u>	s.u.	±0.15 s.u.	<u>I</u>	<u>I</u>	Geotech	1GE278	Mar-22
SC 1000	<u>980.71</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: 1904

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>N</u>	<u>NA</u>	MSI	L153-17	6/8/2023
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	8/23/2023
pH 10.00a	<u>10.04</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>1003.9</u>	µS/cm	±5%	<u>I</u>	<u>I</u>	<u>I</u>	Ricca	2108D48	Jul-23
DO (Zero pt)	<u>0.09</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>1.11</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: Sam Grant Date: 8-23-22

Multiparameter Meter Field Calibration Checklist

Field Personnel: <i>Austin Moore Brandon Glenn</i>		Location: <i>Coffee Power Station</i>							
Weather: <i>H: 81° L: 57° W: SW 0 mph Sunny</i>		Environment: <i>Grassy</i>							
Multiparameter Water Meter	Make: <i>Aquatroll</i>	Model: <i>600</i>	Serial Number: <i>762098</i>						
Water Level Meter	Make: <i>Solinst</i>	Model: <i>Water Tape 104 106</i>	Serial Number: <i>336216</i>						
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<i>7.02</i>	s.u.	±0.1 s.u.	<i>P</i>			MSI	L315-04	11/22/2023
pH 7.00a	<i>6.92</i>	s.u.	±0.1 s.u.	<i>I</i>			MSI	L172-33	6/23/2023
pH 10.00a	<i>9.98</i>	s.u.	±0.1 s.u.	<i>I</i>			MSI	L354-22	1/5/2024
SC Zero (DI)	844.1 <i>6.37</i>	µS/cm	0 < 25 µS/cm	<i>I</i>			Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<i>1911.2</i>	µS/cm	±5%	<i>I</i>			Geotech	1GK328	Nov-22
ORP	<i>213.6</i>	mV	±15 mV	<i>I</i>			InSitu	1GL481	Sep-22
DO (Zero pt)	<i>.03</i>	mg/L	±0.1	<i>I</i>			Macron	#000228049	8/26/2025
DO (Saturated)	<i>48.39</i>	%	97-100%	<i>I</i>			Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<i>1.08</i>	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:				
						<i>0830</i>				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.		
pH 4.00b	<i>4.03</i>	s.u.	±0.15 s.u.	<i>P</i>		Geotech	1GF009	Jun-23		
pH 7.00b	<i>6.15</i>	s.u.	±0.15 s.u.	<i>I</i>		Geotech	0GJ268	Oct-22		
pH 10.00b	<i>9.93</i>	s.u.	±0.15 s.u.	<i>I</i>		Geotech	1GF458	Jun-23		
SC 1000	<i>1024.3</i>	µS/cm	±5%	<i>I</i>		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	<i>4.13</i>	s.u.	±0.1 s.u.	<i>F</i>	<i>Y</i>	<i>4.00</i>	MSI	L315-04	11/22/2023	
pH 7.00a	<i>7.10</i>	s.u.	±0.1 s.u.	<i>F</i>	<i>Y</i>	<i>7.00</i>	MSI	L172-33	6/23/2023	
pH 10.00a	<i>10.09</i>	s.u.	±0.1 s.u.	<i>F</i>	<i>Y</i>	<i>10.00</i>	MSI	L354-22	1/5/2024	
SC 1000	<i>1026.0</i>	µS/cm	±5%	<i>F</i>			Ricca	2108D48	Jul-23	
DO (Zero pt)	<i>0.05</i>	mg/L	±0.1 mg/L	<i>F</i>			Macron	#000228049	8/26/2025	
Turbidity (DI)	<i>1.41</i>	NTU	< 2 NTU	<i>F</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: <i>Austin Moore</i>	Date: <i>8/23/22</i>
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Brandon Glenn

Multiparameter Meter Field Calibration Checklist

Field Personnel: Kyle Jones				Location: Coffeen					
Weather: 81 to 94° sunny				Environment: Dry					
Multiparameter Water Meter		Make: Pelicon	Model: Horiba	Serial Number: V4V1FVTF					
Water Level Meter		Make:	Model:	Serial Number:					
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	Ne	N/A	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)	4.490	µS/cm	0 < 25 µS/cm	↓	↓	↓	Pace Labs	N/A (DI)	N/A (DI)
SE 2000	—	µS/cm	±5%	↓	↓	↓	Geotech	1GK328	Nov-22
ORP	—	mV	±15 mV	↓	↓	↓	InSitu	1GL481	Sep-22
DO (Zero pt)	9.50	mg/L	±0.1	↓	↓	↓	Macron	#000228049	8/26/2025
DO (Saturated)	—	%	97-100%	↓	↓	↓	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.3	NTU	< 2 NTU	↓	↓	↓	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 8:35 AM				
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.	NA	NA	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: 7:09 PM				
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	Ne	N/A	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)	7.30	mg/L	±0.1 mg/L	↓	↓	↓	Macron	#000228049	8/26/2025
Turbidity (DI)	0.25	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: 8-23-22
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <i>AP</i>	Location: <i>Colleen</i>
Weather: <i>73-74° L sunny with NW Imp</i>	Environment: <i>grass, gravel, J.A</i>
Multiparameter Water Meter	Make: <i>Hanna</i> Model: <i>U-5000</i> Serial Number: <i>PW264503</i>
Water Level Meter	Make: <i>Hanna</i> Model: <i>D-10012</i> Serial Number: <i>19HL 2202131ML</i>

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<i>4.02</i>	s.u.	±0.1 s.u.	<i>P</i>	<i>NO</i>	<i>-</i>	MSI	L344-09	12/14/2023
pH 7.00a	<i>-</i>	s.u.	±0.1 s.u.	<i>-</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>4770</i>	µS/cm	±5%	<i>P</i>	<i>NO</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>9.75</i>	mg/L	±0.1	<i>P</i>	<i>NO</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>NO</i>	<i>-</i>	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	<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:					
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.	
pH 4.00a	<i>4.08</i>	s.u.	±0.1 s.u.	<i>P</i>	<i>NO</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>4820</i>	µS/cm	±5%	<i>P</i>	<i>NO</i>	<i>-</i>	Ricca	2108D48	Jul-23	
DO (Zero pt)	<i>9.69</i>	mg/L	±0.1 mg/L	<i>P</i>	<i>NO</i>	<i>-</i>	Macron	#000228049	8/26/2025	
Turbidity (DI)	<i>0.0</i>	NTU	<2 NTU	<i>P</i>	<i>NO</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:

Signature: <i>[Signature]</i>	Date: <i>8/23/22</i>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: Kyle Lane				Location: Coffeen					
Weather: 81° Sunny				Environment: Dry and dusty					
Multiparameter Water Meter		Make: in-situ	Model: AT 600	Serial Number: 762098					
Water Level Meter		Make: Solinst	Model: 101	Serial Number: 269022					
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	Yes	NA	MSI	L315-04	11/22/2023
pH 7.00a	7.03	s.u.	±0.1 s.u.	P	Yes	NA	MSI	L172-33	6/23/2023
pH 10.00a	10.05	s.u.	±0.1 s.u.	P	Yes	NA	MSI	L354-22	1/5/2024
SC Zero (DI)	23.58	µS/cm	0<25 µS/cm	P	Yes	NA	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	19580	µS/cm	±5%	P	Yes	NA	Geotech	1GK328	Nov-22
ORP	22.49 / 216.5	mV	±15 mV	P	Yes	NA	InSitu	1GL481	Sep-22
DO (Zero pt)	0.01	mg/L	±0.1	P	Yes	NA	Macron	#000228049	8/26/2025
DO (Saturated)	9.46	%	97-100%	P	Yes	NA	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.93	NTU	<2 NTU	P	Yes	NA	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 08:12				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	4.06	s.u.	±0.15 s.u.	P	NA	Geotech	1GF009	Jun-23	
pH 7.00b	6.93	s.u.	±0.15 s.u.	P	NA	Geotech	0GJ268	Oct-22	
pH 10.00b	10.02	s.u.	±0.15 s.u.	P	NA	Geotech	1GF458	Jun-23	
SC 1000	1093.2	µS/cm	±5%	P	NA	Ricca	2108D48	Jul-23	

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 17:03				
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	7.01	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 1000	997.8	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)	0.41	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: 8-24-2022
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <i>AT</i>		Location: <i>Colleen</i>	
Weather: <i>70°-81° R Sunny wind W 0 mph</i>		Environment: <i>gravel, gravel, & IL</i>	
Multiparameter Water Meter	Make: <i>Horsba</i>	Model: <i>U5000</i>	Serial Number: <i>PW26YJ03</i>
Water Level Meter	Make: <i>Heron</i>	Model: <i>D: 11/12</i>	Serial Number: <i>19 H 2202131ML</i>

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<i>4.08</i>	s.u.	±0.1 s.u.	<i>P</i>	<i>NO</i>	-	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 2000	<i>4500</i>	µS/cm	±5%	<i>P</i>	<i>NO</i>	-	Geotech	1GK328	Nov-22
ORP	-	mV	±15 mV	-	-	-	InSitu	1GL481	Sep-22
DO (Zero pt)	<i>0.48</i>	mg/L	±0.1	<i>P</i>	<i>NO</i>	-	Macron	#000228049	8/26/2025
DO (Saturated)	-	%	97-100%	-	-	-	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<i>0.0</i>	NTU	<2 NTU	<i>P</i>	<i>NA</i>	-	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: <i>0819</i>				
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: <i>1720</i>				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<i>4.07</i>	s.u.	±0.1 s.u.	<i>P</i>	<i>NO</i>	<i>N/A</i>	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	<i>4590</i>	µS/cm	±5%	<i>P</i>	<i>NO</i>	-	Ricca	2108D48	Jul-23
DO (Zero pt)	<i>10.02</i>	mg/L	±0.1 mg/L	<i>P</i>	<i>NO</i>	-	Macron	#000228049	8/26/2025
Turbidity (DI)	<i>0.0</i>	NTU	<2 NTU	<i>P</i>	<i>NO</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: *horsba solution used*

Signature: 	Date: <i>8/24/2022</i>
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Multiparameter Meter Field Calibration Checklist

Field Personnel:	Sam Grant	Location:	Coffee
Weather:	70-82°F, sunny, wind 0 mph	Environment:	gravel road, tall grass

Multiparameter Water Meter	Make:	InSitu	Model:	Aquatroll 600	Serial Number:	739449
Water Level Meter	Make:	Heron	Model:	Dipper-T	Serial Number:	19FF2201152HB

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.81	s.u.	±0.1 s.u.	F	3-pt.	4.00	MSI	L153-17	6/8/2023
pH 7.00a	6.89	s.u.	±0.1 s.u.	I	I	7.00	MSI	L172-33	8/23/2023
pH 10.00a	9.92	s.u.	±0.1 s.u.	P	I	10.00	MSI	L118-08	5/12/2023
SC Zero (DI)	21.12	µS/cm	0<25 µS/cm	P	N	NA	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1928.1	µS/cm	±5%	I	I	I	Geotech	1GJ517	Oct-22
ORP	224.1 @ 24.5°C	mV	±15 mV	I	I	I	InSitu	1Gk507	Aug-22
DO (Zero pt)	0.02	mg/L	±0.1	I	I	I	Fischer Chemical	168261	8/26/2025
DO (Saturated)	97.81	%	97-100%	I	I	I	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.07	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:					
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.		
pH 4.00b	4.01	s.u.	±0.15 s.u.	P	None	Geotech	1GH562	Aug-22		
pH 7.00b	6.87	s.u.	±0.15 s.u.	I	I	Geotech	1GD360	Apr-22		
pH 10.00b	9.89	s.u.	±0.15 s.u.	I	I	Geotech	1GE278	Mar-22		
SC 1000	1020.9	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	4.09	s.u.	±0.1 s.u.	P	N	NA	MSI	L153-17	6/8/2023	
pH 7.00a	7.08	s.u.	±0.1 s.u.	I	I	I	MSI	L172-33	8/23/2023	
pH 10.00a	10.10	s.u.	±0.1 s.u.	I	I	I	MSI	L118-08	5/12/2023	
SC 1000	1023.9	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)	0.00	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:		Date:	8-24-22
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Multiparameter Meter Field Calibration Checklist

Field Personnel: RALEK DESKE				Location: COFFEEN					
Weather: 60° SUNNY WIND S MAI W				Environment: GRASSY					
Multiparameter Water Meter		Make: AT	Model: 600	Serial Number: 762193					
Water Level Meter		Make: WT	Model: HERON	Serial Number: 19FF211192HB					
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	N/A	MSI	L315-04	11/22/2023
pH 7.00a	7.01	s.u.	±0.1 s.u.	Pass			MSI	L172-33	6/23/2023
pH 10.00a	10.01	s.u.	±0.1 s.u.	Pass			MSI	L354-22	1/5/2024
SC Zero (DI)	0.320	µS/cm	0<25 µS/cm	Pass			Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2038.5	µS/cm	±5%	Pass			Geotech	1GK328	Nov-22
ORP	160.10	mV	±15 mV	Pass			InSitu	1GL481	Sep-22
DO (Zero pt)	0.07	mg/L	±0.1	Pass			Macron	#000228049	8/26/2025
DO (Saturated)	99	%	97-100%	Pass			Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	1.32	NTU	<2 NTU	Pass			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 1103				
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.	
pH 4.00b	3.93	s.u.	±0.15 s.u.	Pass	No	Geotech	1GF009	Jun-23	
pH 7.00b	7.04	s.u.	±0.15 s.u.	Pass		Geotech	0GJ268	Oct-22	
pH 10.00b	9.99	s.u.	±0.15 s.u.	Pass		Geotech	1GF458	Jun-23	
SC 1000	998.4	µS/cm	±5%	Pass		Ricca	2108D48	Jul-23	

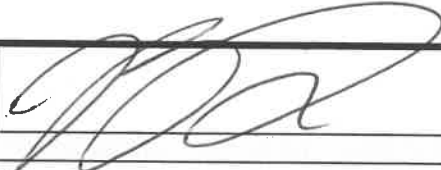
Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 1500				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.01	s.u.	±0.1 s.u.	Pass	No	N/A	MSI	L315-04	11/22/2023
pH 7.00a	7.06	s.u.	±0.1 s.u.	Pass			MSI	L172-33	6/23/2023
pH 10.00a	10.03	s.u.	±0.1 s.u.	Pass			MSI	L354-22	1/5/2024
SC 1000	994.4	µS/cm	±5%	Pass			Ricca	2108D48	Jul-23
DO (Zero pt)	0.00	mg/L	±0.1 mg/L	Pass			Macron	#000228049	8/26/2025
Turbidity (DI)	1.24	NTU	<2 NTU	Pass			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: 8/24/22
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Multiparameter Meter Field Calibration Checklist

Field Personnel: <i>Austin Moore</i>			Location: <i>Coffeen</i>						
Weather: <i>82°-57° Sunny wind SSE 1mph</i>			Environment: <i>Grassy</i>						
Multiparameter Water Meter	Make: <i>AT-600</i>	Model: <i>600</i>	Serial Number: <i>846000</i>						
Water Level Meter	Make: <i>Solinst</i>	Model: <i>BNT</i>	Serial Number: <i>336216</i>						
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	<i>4.09</i>	s.u.	±0.1 s.u.	P			MSI	L315-04	11/22/2023
pH 7.00a	<i>7.01</i>	s.u.	±0.1 s.u.	P			MSI	L172-33	6/23/2023
pH 10.00a	<i>10.01</i>	s.u.	±0.1 s.u.	P			MSI	L354-22	1/5/2024
SC Zero (DI)	<i>4.78</i>	µS/cm	0<25 µS/cm	P			Pace Labs	N/A (DI)	N/A (DI)
SC 2000	<i>1921.8</i>	µS/cm	±5%	P			Geotech	1GK328	Nov-22
ORP	<i>231.8</i>	mV	±15 mV	P			InSitu	1GL481	Sep-22
DO (Zero pt)	<i>0.01</i>	mg/L	±0.1	P			Macron	#000228049	8/26/2025
DO (Saturated)	<i>97.83</i>	%	97-100%	P			Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	<i>6.85</i>	NTU	<2 NTU	P			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)						Time: <i>0810</i>		
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	<i>4.06</i>	s.u.	±0.15 s.u.	P		Geotech	1GF009	Jun-23
pH 7.00b	<i>6.85</i>	s.u.	±0.15 s.u.	P		Geotech	0GJ268	Oct-22
pH 10.00b	<i>9.89</i>	s.u.	±0.15 s.u.	P		Geotech	1GF458	Jun-23
SC 1000	<i>986.20</i>	µS/cm	±5%	P		Ricca	2108D48	Jul-23

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):						Time: <i>1722</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.	P			MSI	L315-04	11/22/2023
pH 7.00a	<i>6.99</i>	s.u.	±0.1 s.u.	P			MSI	L172-33	6/23/2023
pH 10.00a	<i>10.06</i>	s.u.	±0.1 s.u.	P			MSI	L354-22	1/5/2024
SC 1000	<i>969.94</i>	µS/cm	±5%	P			Ricca	2108D48	Jul-23
DO (Zero pt)	<i>0.02</i>	mg/L	±0.1 mg/L	P			Macron	#000228049	8/26/2025
Turbidity (DI)	<i>6.66</i>	NTU	<2 NTU	P			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: <i>Austin Moore</i>	Date: <i>24-Aug-22</i>
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Multiparameter Meter Field Calibration Checklist

Field Personnel: Joe Reed		Location: Coffee	
Weather: 80's Sunny		Environment: grass	
Multiparameter Water Meter	Make: Horiba	Model:	Serial Number:
Water Level Meter	Make: Solinst	Model: 101	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		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 Zero (DI)		µS/cm	0<25 µS/cm				Pace Labs	N/A (DI)	N/A (DI)
SC 2000	4490	µS/cm	±5%	P			Geotech	1GK328	Nov-22
ORP	253	mV	±15 mV	P			InSitu	1GL481	Sep-22
DO (Zero pt)	10.61	mg/L	±0.1	P			Macron	#000228049	8/26/2025
DO (Setpoint)		%	97-100%	P			Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	P			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 8:35				
--	--	--	--	--	-------------------	--	--	--	--

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	2108D48	Jul-23

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 1:30				
---	--	--	--	--	-------------------	--	--	--	--

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		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			Ricca	2108D48	Jul-23
DO (Zero pt)	10.21	mg/L	±0.1 mg/L	P			Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	P			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: Joseph R Reed	Date: 8/29/22
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Pace IR - Peoria, IL

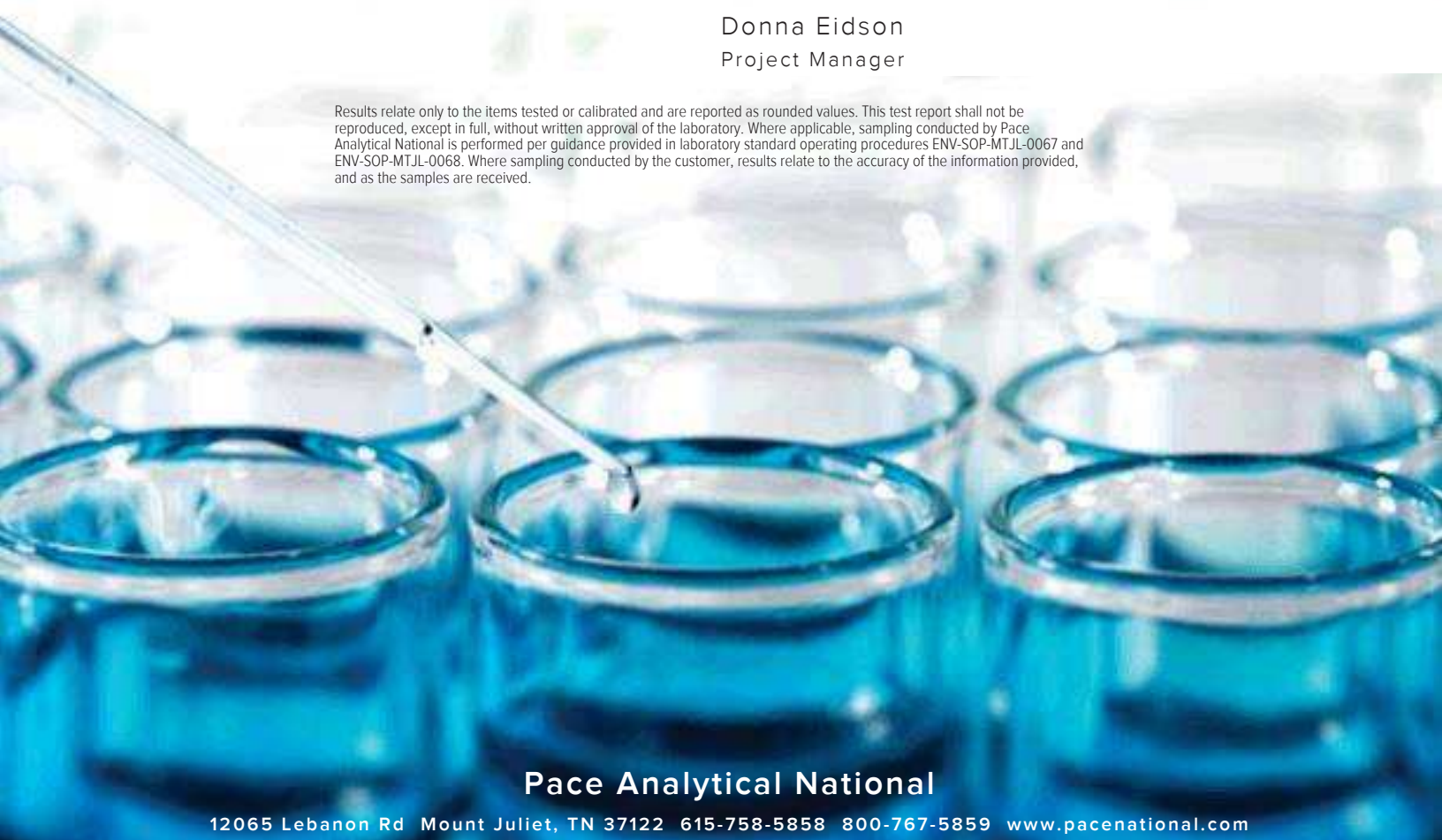
Sample Delivery Group: L1533216
Samples Received: 09/07/2022
Project Number: FH05112
Description: Vistra-Coffeen
Site: 01
Report To: Gail Schindler
2231 W. Altorfer Drive
Peoria, IL 61615

Entire Report Reviewed By:



Donna Eidson
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

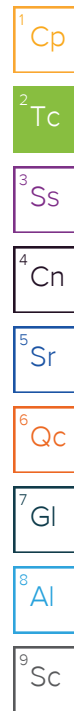


Pace Analytical National

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SAMPLE SUMMARY

R201 L1533216-01 Non-Potable Water

Collected by _____ Collected date/time 08/23/22 12:24 Received date/time 09/07/22 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932384	1	10/03/22 09:42	10/07/22 10:10	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1925718	1	09/22/22 16:00	10/07/22 10:10	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1925718	1	09/22/22 16:00	09/23/22 14:10	RGT	Mt. Juliet, TN



G206 L1533216-02 Non-Potable Water

Collected by _____ Collected date/time 08/23/22 12:27 Received date/time 09/07/22 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932384	1	10/03/22 09:42	10/07/22 10:10	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1925718	1	09/22/22 16:00	10/07/22 10:10	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1925718	1	09/22/22 16:00	09/23/22 14:12	RGT	Mt. Juliet, TN

G209 L1533216-03 Non-Potable Water

Collected by _____ Collected date/time 08/23/22 15:35 Received date/time 09/07/22 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932384	1	10/03/22 09:42	10/07/22 10:10	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1925718	1	09/22/22 16:00	10/07/22 10:10	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1925718	1	09/22/22 16:00	09/23/22 14:10	RGT	Mt. Juliet, TN

G215 L1533216-04 Non-Potable Water

Collected by _____ Collected date/time 08/23/22 17:45 Received date/time 09/07/22 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932384	1	10/03/22 09:42	10/07/22 10:10	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1925718	1	09/22/22 16:00	10/07/22 10:10	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1925718	1	09/22/22 16:00	09/23/22 14:11	RGT	Mt. Juliet, TN

G218 L1533216-05 Non-Potable Water

Collected by _____ Collected date/time 08/23/22 14:01 Received date/time 09/07/22 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932384	1	10/03/22 09:42	10/07/22 10:10	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1925718	1	09/22/22 16:00	10/07/22 10:10	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1925718	1	09/22/22 16:00	09/23/22 14:11	RGT	Mt. Juliet, TN

G212 L1533216-06 Non-Potable Water

Collected by _____ Collected date/time 08/23/22 12:02 Received date/time 09/07/22 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932384	1	10/03/22 09:42	10/07/22 10:10	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1925718	1	09/22/22 16:00	10/07/22 10:10	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1925718	1	09/22/22 16:00	09/23/22 14:11	RGT	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Donna Eidson
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.615		0.225	0.390	10/07/2022 10:10	WG1932384
(T) Barium	91.3			30.0-143	10/07/2022 10:10	WG1932384
(T) Yttrium	111			30.0-136	10/07/2022 10:10	WG1932384

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.04		0.329	0.437	10/07/2022 10:10	WG1925718

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.420		0.240	0.198	09/23/2022 14:10	WG1925718
(T) Barium-133	96.1			30.0-143	09/23/2022 14:10	WG1925718

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.639		0.195	0.333	10/07/2022 10:10	WG1932384
(T) Barium	96.0			30.0-143	10/07/2022 10:10	WG1932384
(T) Yttrium	106			30.0-136	10/07/2022 10:10	WG1932384

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.724		0.231	0.381	10/07/2022 10:10	WG1925718

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0841	J	0.123	0.185	09/23/2022 14:12	WG1925718
(T) Barium-133	99.2			30.0-143	09/23/2022 14:12	WG1925718

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.63		0.238	0.380	10/07/2022 10:10	WG1932384
(T) Barium	91.8			30.0-143	10/07/2022 10:10	WG1932384
(T) Yttrium	105			30.0-136	10/07/2022 10:10	WG1932384

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.79		0.286	0.426	10/07/2022 10:10	WG1925718

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.162	J	0.159	0.193	09/23/2022 14:10	WG1925718
(T) Barium-133	98.9			30.0-143	09/23/2022 14:10	WG1925718

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.906		0.201	0.332	10/07/2022 10:10	WG1932384
(T) Barium	92.9			30.0-143	10/07/2022 10:10	WG1932384
(T) Yttrium	104			30.0-136	10/07/2022 10:10	WG1932384

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.998		0.265	0.430	10/07/2022 10:10	WG1925718

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0917	<u>U</u>	0.172	0.273	09/23/2022 14:11	WG1925718
(T) Barium-133	105			30.0-143	09/23/2022 14:11	WG1925718

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.09		0.216	0.354	10/07/2022 10:10	WG1932384
(T) Barium	90.2			30.0-143	10/07/2022 10:10	WG1932384
(T) Yttrium	102			30.0-136	10/07/2022 10:10	WG1932384

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.29		0.274	0.398	10/07/2022 10:10	WG1925718

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.200		0.169	0.181	09/23/2022 14:11	WG1925718
(T) Barium-133	103			30.0-143	09/23/2022 14:11	WG1925718

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.736		0.277	0.477	10/07/2022 10:10	WG1932384
(T) Barium	97.1			30.0-143	10/07/2022 10:10	WG1932384
(T) Yttrium	106			30.0-136	10/07/2022 10:10	WG1932384

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.785		0.313	0.544	10/07/2022 10:10	WG1925718

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0486	<u>U</u>	0.146	0.262	09/23/2022 14:11	WG1925718
(T) Barium-133	102			30.0-143	09/23/2022 14:11	WG1925718

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3846060-1 10/07/22 10:10

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-228	0.360		0.145	0.252
(T) Barium	106		106	
(T) Yttrium	102		102	

L1533203-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1533203-02 10/07/22 10:10 • (DUP) R3846060-5 10/07/22 10:10

Analyte	Original Result pCi/l	Original Uncertainty + / -	Original MDA pCi/l	DUP Result pCi/l	DUP Uncertainty + / -	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	1.56	0.207	0.319	1.92	0.296	0.319	1	20.8	0.999		20	3
(T) Barium	93.2			96.2	96.2							
(T) Yttrium	102			105	105							

Laboratory Control Sample (LCS)

(LCS) R3846060-2 10/07/22 10:10

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.99	99.8	80.0-120	
(T) Barium			104		
(T) Yttrium			99.2		

L1539168-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1539168-04 10/07/22 10:10 • (MS) R3846060-3 10/07/22 10:10 • (MSD) R3846060-4 10/07/22 10:10

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	10.0	0.970	9.89	9.65	89.2	86.8	1	70.0-130			2.39		20
(T) Barium		99.2			98.7	103							
(T) Yttrium		105			106	105							



Method Blank (MB)

(MB) R3841464-1 09/23/22 14:10

Analyte	MB Result	MB Qualifier	MB Uncertainty	MB MDA
	pCi/l		+ / -	pCi/l
Radium-226	0.0101	<u>U</u>	0.0275	0.0522
(T) Barium-133	101		101	

L1533203-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1533203-01 09/23/22 14:10 • (DUP) R3841464-5 09/23/22 14:10

Analyte	Original Result	Original Uncertainty	Original MDA	DUP Result	DUP Uncertainty	DUP MDA	Dilution	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	+ / -	pCi/l		%			%	
Radium-226	-0.0309	0.0605	0.204	-0.00548	0.0797	0.204	1	0.000	0.254	<u>U</u>	20	3
(T) Barium-133	99.1			102	102							

Laboratory Control Sample (LCS)

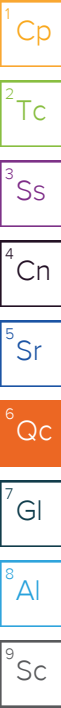
(LCS) R3841464-2 09/23/22 14:10

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-226	5.02	4.75	94.7	80.0-120	
(T) Barium-133			103		

L1534084-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1534084-02 09/23/22 14:11 • (MS) R3841464-3 09/23/22 14:10 • (MSD) R3841464-4 09/23/22 14:10

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-226	20.0	0.866	18.8	20.3	89.5	97.1	1	75.0-125			7.78		20
(T) Barium-133		98.6			100	102							



GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

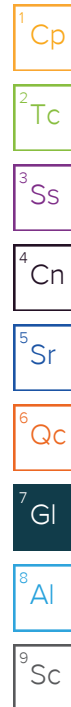
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.



ACCREDITATIONS & LOCATIONS

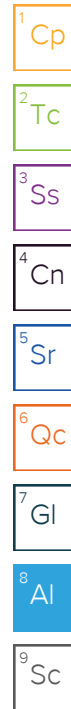
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
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Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



A081

Internal Transfer Chain of Custody



State of Origin: IL
Cert. Needed: YES NO

Owner Received Date: 8/24/2022
Results Requested By: 9/30/2022

Workorder: FH05112 Workorder Name: Vistra - Coffeen

Report To: Gail Schindler Pace Analytical - IL/MO 2231 W. Altorfer Drive Peoria, IL 61615 800-752-6651	Subcontract To: Pace Analytical Services, LLC 12065 Lebanon Rd Mt Juliet, TN (615)758-5858	Requested Analysis
---	--	--------------------

Preserved Containers

Radium 226/228

4573216

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix																LAB USE ONLY
1	R201	Grab	8/23/2022 12:24	FH05112-01	GW																01
2	G206	Grab	8/23/2022 12:27	FH05112-02	GW																02
3	G209	Grab	8/23/2022 15:35	FH05112-03	GW																03
4	G215	Grab	8/23/2022 17:45	FH05112-04	GW																04
5	G218	Grab	8/23/2022 14:01	FH05112-05	GW																05
6	G212	Grab	8/24/2022 12:02	FH05112-06	GW																06
7																					
8																					
9																					
10																					

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	<i>E. M. Now</i>	9/1/22 1352	<i>RAM M/22</i>	9/2/22 1030	Report as 226, 228 & combined 226/228.
2					Include QC summary
3					

Cooler Temperature on Receipt _____ °C Custody Seal Y or N Received on Ice Y or N Sample Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

Amb

258

Sample Receipt Checklist
 COC Seal Present/Intact: Y N If Applicable
 COC Signed/Accurate: Y N VOA Zero Headspace: Y N
 Bottles arrive intact: Y N Pres. Correct/Check: Y N
 Correct bottles used: Y N
 Sufficient volume sent: Y N
 RAD Screen <0.5 mR/hr: Y N

Pace IR - Peoria, IL

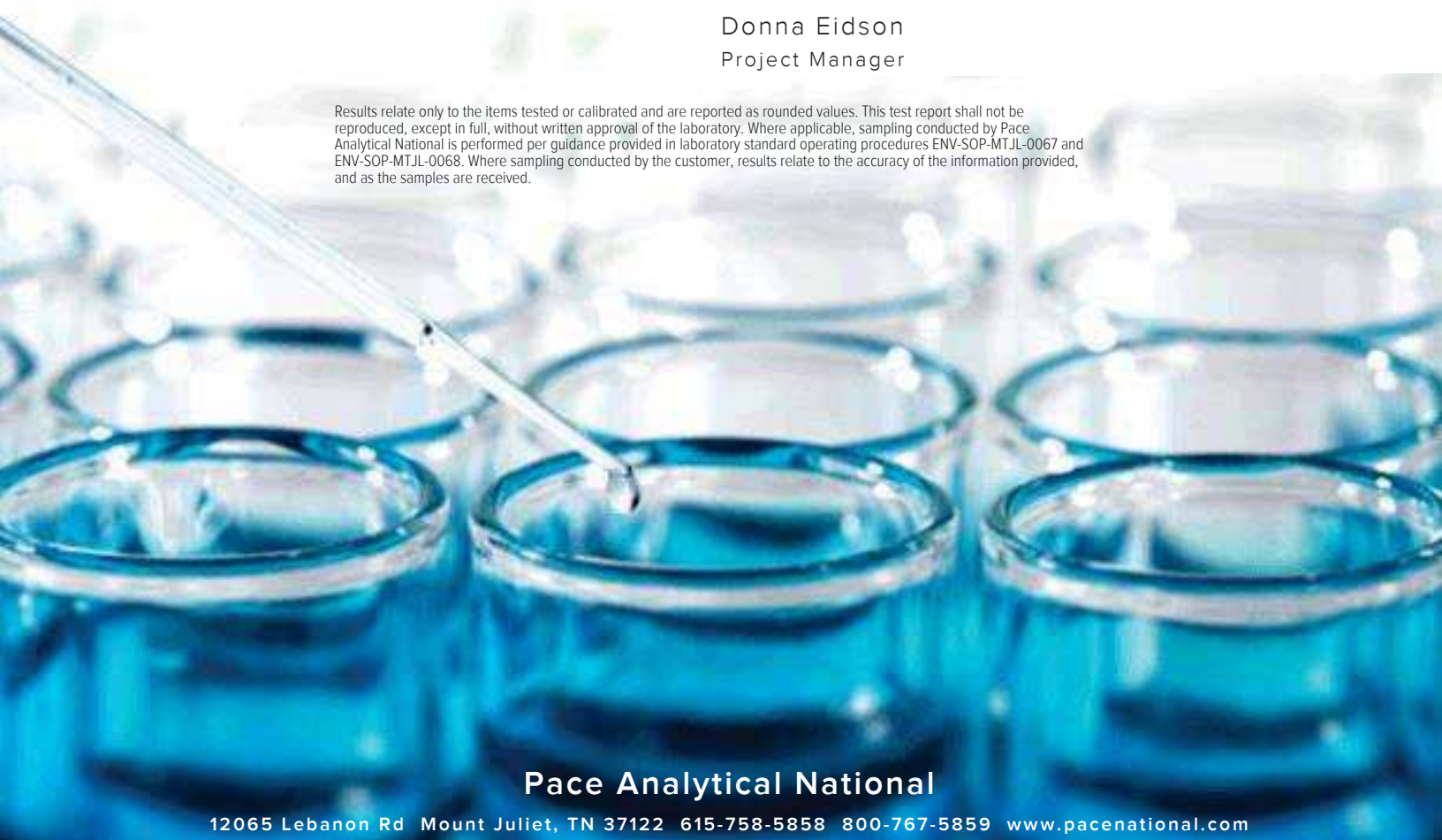
Sample Delivery Group: L1533197
Samples Received: 09/07/2022
Project Number: FH05201
Description: Prairie Path Water
Site: 01
Report To: Gail Schindler
2231 W. Altorfer Drive
Peoria, IL 61615

Entire Report Reviewed By:



Donna Eidson
Project Manager













Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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Ss: Sample Summary	3	
Cn: Case Narrative	4	
Sr: Sample Results	5	
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Qc: Quality Control Summary	6	
Radiochemistry by Method 904/9320	6	
Radiochemistry by Method SM7500Ra B M	7	
Gl: Glossary of Terms	8	
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SAMPLE SUMMARY

Collected by
Collected date/time
Received date/time

G200 L1533197-01 Non-Potable Water

08/23/22 10:50

09/07/22 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932708	1	09/27/22 08:30	10/04/22 10:01	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1933247	1	09/30/22 13:44	10/04/22 10:01	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1933247	1	09/30/22 13:44	10/03/22 12:53	RGT	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Donna Eidson
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	2.56		0.337	0.529	10/04/2022 10:01	WG1932708
(T) Barium	87.2			30.0-143	10/04/2022 10:01	WG1932708
(T) Yttrium	113			30.0-136	10/04/2022 10:01	WG1932708

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	3.91		0.544	0.583	10/04/2022 10:01	WG1933247

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	1.35		0.427	0.246	10/03/2022 12:53	WG1933247
(T) Barium-133	93.9			30.0-143	10/03/2022 12:53	WG1933247

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3844576-1 10/04/22 10:01

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-228	0.185	↓	0.140	0.250
(T) Barium	101		101	
(T) Yttrium	98.8		98.8	

L1536080-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1536080-02 10/04/22 10:01 • (DUP) R3844576-5 10/04/22 10:01

Analyte	Original Result pCi/l	Original Uncertainty + / -	Original MDA pCi/l	DUP Result pCi/l	DUP Uncertainty + / -	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.397	0.265	0.470	0.662	0.278	0.470	1	50.0	0.688		20	3
(T) Barium	113			102	102							
(T) Yttrium	104			113	113							

Laboratory Control Sample (LCS)

(LCS) R3844576-2 10/04/22 10:01

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.04	101	80.0-120	
(T) Barium			101		
(T) Yttrium			109		

L1536080-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1536080-01 10/04/22 10:01 • (MS) R3844576-3 10/04/22 10:01 • (MSD) R3844576-4 10/04/22 10:01

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	1.54	16.6	15.6	90.1	84.3	1	70.0-130			6.09		20
(T) Barium		110			110	107							
(T) Yttrium		108			112	105							

285

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3845106-5 10/03/22 13:29

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-226	0.00185	<u>U</u>	0.00887	0.0216
(T) Barium-133	102		102	

L1533221-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1533221-07 10/03/22 12:53 • (DUP) R3845106-4 10/03/22 12:53

Analyte	Original Result pCi/l	Original Uncertainty + / -	Original MDA pCi/l	DUP Result pCi/l	DUP Uncertainty + / -	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.0117	0.0723	0.169	-0.0338	0.0662	0.169	1	200	0.464	<u>U</u>	20	3
(T) Barium-133	95.1			98.0	98.0							

Laboratory Control Sample (LCS)

(LCS) R3845106-1 10/03/22 12:53

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.02	4.71	93.8	80.0-120	
(T) Barium-133			99.8		

L1533194-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1533194-01 10/03/22 12:53 • (MS) R3845106-2 10/03/22 12:53 • (MSD) R3845106-3 10/03/22 12:53

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.300	18.8	20.6	92.5	101	1	75.0-125			8.99		20
(T) Barium-133		96.6			97.9	97.2							

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

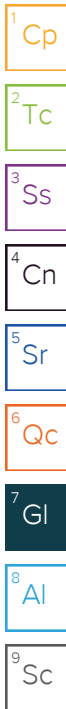
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
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Qualifier	Description
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U	Below Detectable Limits: Indicates that the analyte was not detected.



ACCREDITATIONS & LOCATIONS

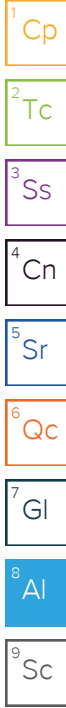
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Alabama	40660	Nebraska	NE-OS-15-05
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Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

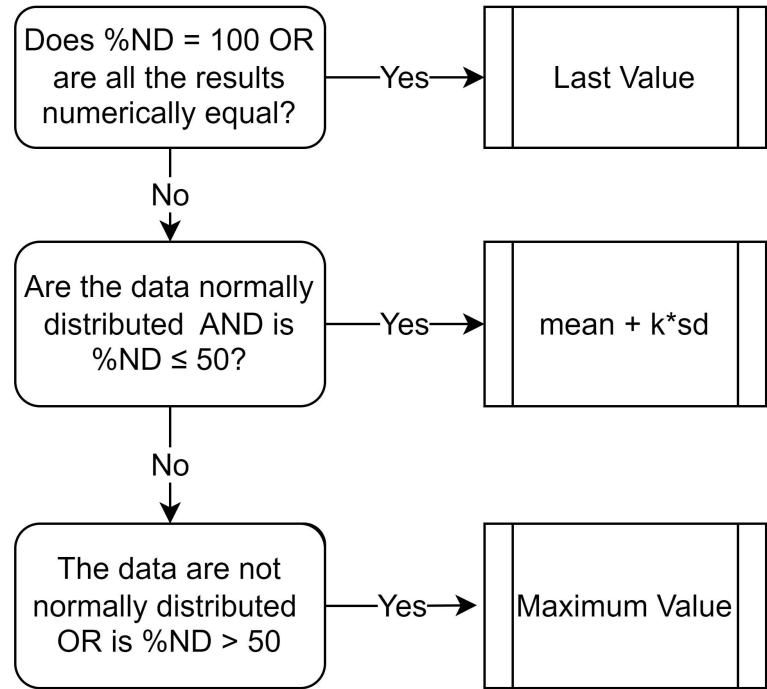
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* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



**APPENDIX B
STATISTICAL METHODOLOGY FOR DETERMINATION OF
BACKGROUND VALUES**

Notes
%ND = Percent non-detected samples
sd = standard deviation
k = kappa for tolerance limit (95% confidence/95% coverage)



**APPENDIX C
STATISTICAL METHODOLOGY FOR DETERMINATION OF
STATISTICALLY SIGNIFICANT LEVELS**

Notes
%ND = Percent non-detected samples
Future Median = Median of most recent 3 samples
MK = Mann-Kendall Trend Test
<u>Alpha Levels</u>
Normality = 0.01
MK Trend = 0.01
Residuals = 0.01
Confidence Interval = 0.01

