Prepared for

Illinois Power Resources Generating, LLC

Date

January 31, 2025

Project No.

1940106781-007

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ASH POND

EDWARDS POWER PLANT

BARTONVILLE, ILLINOIS

CCR UNIT 301

RAMBOLL Bright ideas. Sustainable change.

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT ASH POND

Project name	**Edwards Power Plant Ash Pond**
Project no.	**1940106781-007**
Recipient	**Illinois Power Resources Generating, LLC**
Document type	**Annual Groundwater Monitoring and Corrective Action Report**
Version	**FINAL**
Date	**January 31, 2025**
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Description	**Annual Report required by 40 C.F.R. § 257.90(e)**

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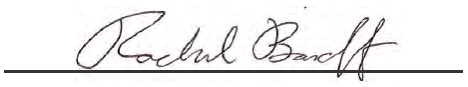

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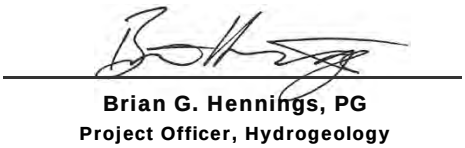

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ACRONYMS AND ABBREVIATIONS

35 I.A.C.	Title 35 of the Illinois Administrative Code
40 C.F.R.	Title 40 of the Code of Federal Regulations
A7	Quarter 1, 2024 Assessment Monitoring sampling event
A7R	Quarter 2, 2024 Assessment Monitoring resampling event
A7D	Quarter 3, 2024 Assessment Monitoring sampling event
A7DR	Quarter 4, 2024 Assessment Monitoring resampling event
AP	Ash Pond
ASD	Alternative Source Demonstration
CCR	coal combustion residuals
CMA	Corrective Measures Assessment
EPP	Edwards Power Plant
GWPS	groundwater protection standard
NA	not applicable
Ramboll	Ramboll Americas Engineering Solutions, Inc.
SAP	Multi-Site Sampling and Analysis Plan
SSI	Statistically significant increase
SSL	statistically significant level

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.) § 257.90(e) for the Ash Pond (AP) located at the Edwards Power Plant (EPP) near Bartonville, Illinois.

Groundwater is being monitored at the AP in accordance with the Assessment Monitoring Program requirements specified in 40 C.F.R. § 257.95. Assessment Monitoring was initiated at the AP on April 9, 2018.

No changes to the monitoring system occurred in 2024.

No Statistically Significant Levels (SSLs) of 40 C.F.R. § 257 Appendix IV parameters over groundwater protection standards (GWPSs) were determined in 2024; therefore, a Corrective Measures Assessment (CMA) is not required. Statistically significant increases (SSIs) of Appendix III parameters above background values were determined as discussed in **Section 3**; therefore, the AP remains in the Assessment Monitoring Program.

1. INTRODUCTION

This report has been prepared by Ramboll Americas Engineering Solutions, Inc. (Ramboll) on behalf of Illinois Power Resources Generating, LLC, to provide the information required by 40 C.F.R. § 257.90(e) for the AP located at the EPP near Bartonville, 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 **(Section 2)**, summarizes key actions completed **(Section 3)**, describes any problems encountered and actions to resolve the problems **(Section 4)**, and projects key activities for the upcoming year **(Section 5)**. 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 (**Figure 1**).
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 (**Section 3**, paragraph 1).
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 (**Section 3, Table A**).
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) (**Section 2**).
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 (see **Executive Summary**). 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 AP for calendar year 2024.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

No changes have occurred to the monitoring program status in calendar year 2024 and the AP remains in the Assessment Monitoring Program in accordance with 40 C.F.R. § 257.95.

3. KEY ACTIONS COMPLETED IN 2024

A summary of the samples collected from background and compliance monitoring wells in 2024 under the Assessment Monitoring Program is included 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 to the monitoring system occurred in 2024.

One groundwater sample was collected from each background and compliance well during each monitoring event. The AP is also regulated under Title 35 of the Illinois Administrative Code (35 I.A.C.) § 845, which requires quarterly monitoring. The groundwater monitoring systems for both programs (35 I.A.C. § 845 and 40 C.F.R. § 257) are identical, so all available data from the four quarterly monitoring events in 2024 are included in this report. All samples were collected and analyzed in accordance with the Multi-Site Sampling and Analysis Plan (SAP) (Ramboll, 2023). Data collected in accordance with 35 I.A.C. § 845 was included for statistical calculations performed in accordance with 40 C.F.R. § 257.93; however, SSLs are reported semiannually per 40 C.F.R. § 257.95(d)(1).

Potentiometric surfaces for the quarterly sampling events are included in **Figures 2 through 5**. All monitoring data and analytical results obtained under 40 C.F.R. § 257.90 through 257.98 and 35 I.A.C. § 845 in 2024 are presented in **Tables 1 through 3**. All associated laboratory reports and field data sheets are included in **Appendix A**.

Analytical data were evaluated in accordance with the Multi-Site Statistical Analysis Plan (Ramboll, 2022a), the Multi-Site Quality Assurance Project Plan (Ramboll, 2022b), and the Multi-Site Data Management Plan (Ramboll, 2022c) to determine any SSLs of Appendix IV parameters over GWPSs and SSIs of Appendix III parameters greater than background values. SSL notifications were completed in accordance with 40 C.F.R. § 257.95(g). SSIs are highlighted in **Table 2**. Statistical background values are provided in **Table 4** and a flow chart showing the statistical methodology for determination of background values is included as **Appendix B**. GWPSs are provided in **Table 5**. 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**.

Table A. 2024 Assessment Monitoring Program Summary

Event ID	Sampling Dates [1, 2, 3]	Analytical Data Receipt Date [4, 5]	SSL(s) Determination Date	SSL(s)	ASD Completion Date
A7	February 2 - 8, 2024	March 13, 2024	June 11, 2024	None	NA
A7R	April 30 – May 2, 2024	June 5, 2024	NA	NA	NA
A7D	July 15 - 18, 2024 and	August 13, 2024	November 11, 2024	None	NA
A7DR	October 29 - 31, 2024	December 4, 2024	NA	NA	NA

Notes:

ASD: Alternative Source Demonstration

NA: not applicable

SSL: Statistically Significant Level

[1] All samples were analyzed for Appendix III parameters listed in 40 C.F.R. § 257.94(e) and Appendix IV parameters listed in 40 C.F.R. § 257.95(g).

[2] The following background wells were sampled for each event: AP05S and AW-08

[3] The following compliance wells were sampled for each event: AP07S, AW-01, AW-05, AW-06, AW-09, AW-10, AW-11, AW-14, AW-15, AW-15S, AW-16, AW-17, AW-18, AW-19, and AW-21

[4] Data collected in accordance with 35 I.A.C. § 845 was included for statistical calculations performed in accordance with 40 C.F.R. § 257.95(d)(1); however, SSLs are reported semiannually per 40 C.F.R. § 257.

4. PROBLEMS ENCOUNTERED AND ACTIONS TO RESOLVE THE PROBLEMS

No problems were encountered with the groundwater monitoring program during 2024. Groundwater samples were collected and analyzed in accordance with the SAP and all data were accepted.

5. KEY ACTIVITIES PLANNED FOR 2025

The following key activities are planned for 2025:

- Continuation of the Assessment Monitoring Program with semiannual sampling for reporting purposes scheduled for the first and third quarters of 2025 (and sampling for 35 I.A.C. § 845 scheduled for the second and fourth quarters).
- 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 alternative 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 alternative 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 2025 Annual Groundwater Monitoring and Corrective Action Report.
  - If an alternative 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 2025 will be met, including associated recordkeeping/notifications required by 40 C.F.R. §§ 257.105 through 257.108.

6. REFERENCES

Code of Federal Regulations, Title 40, Chapter I, Subchapter I, Part 257, Subpart D, Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, effective April 17, 2015. Accessed from URL https://www.ecfr.gov/current/title-40/chapter-I/subchapter-I/part-257/subpart-D#page-top

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2022a. Multi-Site Statistical Analysis Plan, 40 C.F.R. § 257. 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), 2023. Multi-Site Sampling and Analysis Plan, Revision 1. October 10, 2023.

TABLES

TABLE 1
GROUNDWATER ELEVATION DATA
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
AP05S	Background	UA	01/06/2024	5.00	438.00
AP05S	Background	UA	02/06/2024	4.63	438.38
AP05S	Background	UA	03/29/2024	3.98	439.02
AP05S	Background	UA	04/29/2024	3.71	439.30
AP05S	Background	UA	05/15/2024	3.20	439.80
AP05S	Background	UA	06/15/2024	3.90	439.10
AP05S	Background	UA	07/15/2024	4.74	438.27
AP05S	Background	UA	08/28/2024	5.17	438.07
AP05S	Background	UA	09/28/2024	5.72	437.52
AP05S	Background	UA	10/28/2024	6.55	436.70
AP05S	Background	UA	11/13/2024	6.16	437.08
AP05S	Background	UA	12/04/2024	5.90	437.35
AP07S	Compliance	PMP	01/06/2024	24.48	436.53
AP07S	Compliance	PMP	02/06/2024	24.43	436.59
AP07S	Compliance	PMP	03/29/2024	24.25	436.76
AP07S	Compliance	PMP	04/29/2024	22.92	438.10
AP07S	Compliance	PMP	05/15/2024	23.93	437.08
AP07S	Compliance	PMP	06/15/2024	24.81	436.20
AP07S	Compliance	PMP	07/15/2024	24.90	436.12
AP07S	Compliance	PMP	08/28/2024	24.70	436.16
AP07S	Compliance	PMP	09/28/2024	25.09	435.77
AP07S	Compliance	PMP	10/28/2024	25.48	435.39
AP07S	Compliance	PMP	11/13/2024	24.78	436.08
AP07S	Compliance	PMP	12/04/2024	24.84	436.03
AW-01	Compliance	PMP	01/06/2024	9.65	454.94
AW-01	Compliance	PMP	02/06/2024	9.59	455.01
AW-01	Compliance	PMP	03/29/2024	9.75	454.84
AW-01	Compliance	PMP	04/29/2024	9.87	454.73
AW-01	Compliance	PMP	05/15/2024	12.13	452.46
AW-01	Compliance	PMP	06/15/2024	10.14	454.45
AW-01	Compliance	PMP	07/15/2024	10.29	454.31
AW-01	Compliance	PMP	08/28/2024	10.40	454.14
AW-01	Compliance	PMP	09/28/2024	10.15	454.38
AW-01	Compliance	PMP	10/28/2024	10.31	454.23
AW-01	Compliance	PMP	11/13/2024	12.20	452.33
AW-01	Compliance	PMP	12/04/2024	10.17	454.37
AW-05	Compliance	UA	01/06/2024	8.28	435.02
AW-05	Compliance	UA	02/06/2024	8.15	435.16
AW-05	Compliance	UA	03/29/2024	7.77	435.53
AW-05	Compliance	UA	04/29/2024	6.45	436.86
AW-05	Compliance	UA	05/15/2024	7.41	435.89
AW-05	Compliance	UA	06/15/2024	8.47	434.83
AW-05	Compliance	UA	07/15/2024	8.35	434.96
AW-05	Compliance	UA	08/28/2024	8.27	435.09
AW-05	Compliance	UA	09/28/2024	8.85	434.51
AW-05	Compliance	UA	10/28/2024	9.29	434.08

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Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
AW-05	Compliance	UA	11/13/2024	8.66	434.70
AW-05	Compliance	UA	12/04/2024	8.65	434.72
AW-06	Compliance	UA	01/06/2024	26.86	434.70
AW-06	Compliance	UA	02/06/2024	26.73	434.84
AW-06	Compliance	UA	03/29/2024	25.70	435.86
AW-06	Compliance	UA	04/29/2024	24.92	436.65
AW-06	Compliance	UA	05/15/2024	26.01	435.55
AW-06	Compliance	UA	06/15/2024	26.87	434.69
AW-06	Compliance	UA	07/15/2024	27.41	434.16
AW-06	Compliance	UA	08/28/2024	26.95	434.59
AW-06	Compliance	UA	09/28/2024	27.29	434.25
AW-06	Compliance	UA	10/28/2024	28.57	432.98
AW-06	Compliance	UA	11/13/2024	27.05	434.49
AW-06	Compliance	UA	12/04/2024	27.16	434.39
AW-08	Background	UA	01/06/2024	24.90	437.63
AW-08	Background	UA	02/06/2024	21.93	440.61
AW-08	Background	UA	03/29/2024	22.42	440.11
AW-08	Background	UA	04/29/2024	21.10	441.44
AW-08	Background	UA	05/15/2024	20.03	442.50
AW-08	Background	UA	06/15/2024	21.30	441.23
AW-08	Background	UA	07/15/2024	22.98	439.56
AW-08	Background	UA	08/28/2024	23.91	438.74
AW-08	Background	UA	09/28/2024	24.69	437.96
AW-08	Background	UA	10/28/2024	25.42	437.24
AW-08	Background	UA	11/13/2024	26.03	436.62
AW-08	Background	UA	12/04/2024	25.69	436.97
AW-09	Compliance	UA	01/06/2024	26.11	435.33
AW-09	Compliance	UA	02/06/2024	26.04	435.41
AW-09	Compliance	UA	03/29/2024	25.81	435.63
AW-09	Compliance	UA	04/29/2024	25.77	435.68
AW-09	Compliance	UA	05/15/2024	25.28	436.16
AW-09	Compliance	UA	06/15/2024	25.88	435.56
AW-09	Compliance	UA	07/15/2024	26.60	434.85
AW-09	Compliance	UA	08/28/2024	26.15	435.13
AW-09	Compliance	UA	09/28/2024	26.63	434.65
AW-09	Compliance	UA	10/28/2024	27.40	433.89
AW-09	Compliance	UA	11/13/2024	27.39	433.89
AW-09	Compliance	UA	12/04/2024	26.84	434.45
AW-10	Compliance	UA	01/06/2024	2.01	438.08
AW-10	Compliance	UA	02/06/2024	1.99	438.11
AW-10	Compliance	UA	03/29/2024	1.44	438.65
AW-10	Compliance	UA	04/29/2024	1.31	438.79
AW-10	Compliance	UA	05/15/2024	1.23	438.86
AW-10	Compliance	UA	06/15/2024	1.57	438.52
AW-10	Compliance	UA	07/15/2024	1.78	438.32
AW-10	Compliance	UA	08/28/2024	1.87	438.29

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Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
AW-10	Compliance	UA	09/28/2024	1.99	438.17
AW-10	Compliance	UA	10/28/2024	2.83	437.34
AW-10	Compliance	UA	11/13/2024	2.81	437.35
AW-10	Compliance	UA	12/04/2024	2.82	437.35
AW-11	Compliance	UA	01/06/2024	6.01	434.02
AW-11	Compliance	UA	02/06/2024	6.00	434.04
AW-11	Compliance	UA	03/29/2024	5.46	434.57
AW-11	Compliance	UA	04/29/2024	5.19	434.85
AW-11	Compliance	UA	05/15/2024	4.98	435.05
AW-11	Compliance	UA	06/15/2024	5.43	434.60
AW-11	Compliance	UA	07/15/2024	5.87	434.17
AW-11	Compliance	UA	08/28/2024	5.91	434.12
AW-11	Compliance	UA	09/28/2024	6.28	433.75
AW-11	Compliance	UA	10/28/2024	7.05	432.99
AW-11	Compliance	UA	11/13/2024	7.29	432.74
AW-11	Compliance	UA	12/04/2024	6.62	433.42
AW-14	Compliance	UA	01/06/2024	DM[1]	
AW-14	Compliance	UA	02/06/2024	6.76	432.64
AW-14	Compliance	UA	03/29/2024	DM[1]	
AW-14	Compliance	UA	04/29/2024	6.30	433.10
AW-14	Compliance	UA	05/15/2024	DM[1]	
AW-14	Compliance	UA	06/15/2024	DM[1]	
AW-14	Compliance	UA	07/15/2024	7.18	432.22
AW-14	Compliance	UA	08/28/2024	DM[1]	
AW-14	Compliance	UA	09/28/2024	8.11	431.35
AW-14	Compliance	UA	10/28/2024	9.34	430.12
AW-14	Compliance	UA	11/13/2024	8.75	430.70
AW-14	Compliance	UA	12/04/2024	7.83	431.63
AW-15	Compliance	UA	01/06/2024	9.15	432.52
AW-15	Compliance	UA	02/06/2024	8.78	432.90
AW-15	Compliance	UA	03/29/2024	8.09	433.58
AW-15	Compliance	UA	04/29/2024	8.04	433.64
AW-15	Compliance	UA	05/15/2024	8.03	433.64
AW-15	Compliance	UA	06/15/2024	8.34	433.33
AW-15	Compliance	UA	07/15/2024	8.50	433.18
AW-15	Compliance	UA	08/28/2024	8.83	432.71
AW-15	Compliance	UA	09/28/2024	9.29	432.25
AW-15	Compliance	UA	10/28/2024	9.90	431.65
AW-15	Compliance	UA	11/13/2024	9.98	431.56
AW-15	Compliance	UA	12/04/2024	9.76	431.79
AW-15S	Compliance	PMP	01/06/2024	9.63	431.24
AW-15S	Compliance	PMP	02/06/2024	9.50	431.38
AW-15S	Compliance	PMP	03/29/2024	9.45	431.42
AW-15S	Compliance	PMP	04/29/2024	8.94	431.94
AW-15S	Compliance	PMP	05/15/2024	9.73	431.14
AW-15S	Compliance	PMP	06/15/2024	9.72	431.15

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Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
AW-15S	Compliance	PMP	07/15/2024	9.91	430.97
AW-15S	Compliance	PMP	08/28/2024	9.74	431.01
AW-15S	Compliance	PMP	09/28/2024	10.22	430.53
AW-15S	Compliance	PMP	10/28/2024	11.31	429.45
AW-15S	Compliance	PMP	11/13/2024	10.98	429.77
AW-15S	Compliance	PMP	12/04/2024	9.95	430.81
AW-16	Compliance	UA	01/06/2024	25.65	436.30
AW-16	Compliance	UA	02/06/2024	25.14	436.82
AW-16	Compliance	UA	03/29/2024	24.66	437.29
AW-16	Compliance	UA	04/29/2024	24.35	437.61
AW-16	Compliance	UA	05/15/2024	24.30	437.65
AW-16	Compliance	UA	06/15/2024	24.47	437.48
AW-16	Compliance	UA	07/15/2024	24.69	437.27
AW-16	Compliance	UA	08/28/2024	24.92	437.10
AW-16	Compliance	UA	09/28/2024	25.22	436.80
AW-16	Compliance	UA	10/28/2024	25.72	436.31
AW-16	Compliance	UA	11/13/2024	25.99	436.03
AW-16	Compliance	UA	12/04/2024	26.27	435.76
AW-17	Compliance	UA	01/06/2024	25.95	436.31
AW-17	Compliance	UA	02/06/2024	26.00	436.27
AW-17	Compliance	UA	03/29/2024	25.59	436.67
AW-17	Compliance	UA	04/29/2024	25.29	436.98
AW-17	Compliance	UA	05/15/2024	25.06	437.20
AW-17	Compliance	UA	06/15/2024	25.43	436.83
AW-17	Compliance	UA	07/15/2024	25.64	436.63
AW-17	Compliance	UA	08/28/2024	25.68	436.53
AW-17	Compliance	UA	09/28/2024	DM[7]	
AW-17	Compliance	UA	10/28/2024	26.48	435.74
AW-17	Compliance	UA	11/13/2024	26.59	435.62
AW-17	Compliance	UA	12/04/2024	26.22	436.00
AW-18	Compliance	UA	01/06/2024	27.44	435.37
AW-18	Compliance	UA	02/06/2024	27.23	435.59
AW-18	Compliance	UA	03/29/2024	27.23	435.58
AW-18	Compliance	UA	04/29/2024	26.45	436.37
AW-18	Compliance	UA	05/15/2024	26.95	435.86
AW-18	Compliance	UA	06/15/2024	27.78	435.03
AW-18	Compliance	UA	07/15/2024	27.94	434.88
AW-18	Compliance	UA	08/28/2024	27.81	435.05
AW-18	Compliance	UA	09/28/2024	28.28	434.58
AW-18	Compliance	UA	10/28/2024	29.15	433.72
AW-18	Compliance	UA	11/13/2024	28.18	434.68
AW-18	Compliance	UA	12/04/2024	27.73	435.14
AW-19	Compliance	UA	01/06/2024	13.90	447.00
AW-19	Compliance	UA	02/06/2024	13.73	447.18
AW-19	Compliance	UA	03/29/2024	13.98	446.92
AW-19	Compliance	UA	04/29/2024	13.45	447.46

TABLE 1
GROUNDWATER ELEVATION DATA
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
AW-19	Compliance	UA	05/15/2024	13.56	447.35
AW-19	Compliance	UA	06/15/2024	14.17	446.73
AW-19	Compliance	UA	07/15/2024	14.16	446.75
AW-19	Compliance	UA	08/28/2024	13.98	446.91
AW-19	Compliance	UA	09/28/2024	14.38	446.51
AW-19	Compliance	UA	10/28/2024	14.68	446.22
AW-19	Compliance	UA	11/13/2024	14.05	446.84
AW-19	Compliance	UA	12/04/2024	14.03	446.87
AW-21	Compliance	UA	01/06/2024	16.97	443.80
AW-21	Compliance	UA	02/06/2024	16.71	444.07
AW-21	Compliance	UA	03/29/2024	16.70	444.08
AW-21	Compliance	UA	04/29/2024	15.67	445.11
AW-21	Compliance	UA	05/15/2024	16.37	444.40
AW-21	Compliance	UA	06/15/2024	17.70	443.07
AW-21	Compliance	UA	07/15/2024	17.90	442.88
AW-21	Compliance	UA	08/28/2024	17.73	443.05
AW-21	Compliance	UA	09/28/2024	18.35	442.43
AW-21	Compliance	UA	10/28/2024	18.71	442.08
AW-21	Compliance	UA	11/13/2024	17.46	443.32
AW-21	Compliance	UA	12/04/2024	17.64	443.15
XPW01A	Water Level	CCR	01/06/2024	11.77	452.55
XPW01A	Water Level	CCR	02/06/2024	11.48	452.85
XPW01A	Water Level	CCR	03/29/2024	11.52	452.80
XPW01A	Water Level	CCR	04/29/2024	10.29	454.04
XPW01A	Water Level	CCR	05/15/2024	11.18	453.14
XPW01A	Water Level	CCR	06/15/2024	12.16	452.16
XPW01A	Water Level	CCR	07/15/2024	11.89	452.44
XPW01A	Water Level	CCR	08/28/2024	11.94	452.35
XPW01A	Water Level	CCR	09/28/2024	12.54	451.75
XPW01A	Water Level	CCR	10/28/2024	12.98	451.32
XPW01A	Water Level	CCR	11/13/2024	11.76	452.53
XPW01A	Water Level	CCR	12/04/2024	12.08	452.22
XPW02	Water Level	CCR	01/06/2024	20.29	453.66
XPW02	Water Level	CCR	02/06/2024	19.36	454.60
XPW02	Water Level	CCR	03/29/2024	20.01	453.94
XPW02	Water Level	CCR	04/29/2024	18.45	455.51
XPW02	Water Level	CCR	05/15/2024	18.93	455.02
XPW02	Water Level	CCR	06/15/2024	20.31	453.64
XPW02	Water Level	CCR	07/15/2024	20.59	453.37
XPW02	Water Level	CCR	08/28/2024	20.53	453.37
XPW02	Water Level	CCR	09/28/2024	21.44	452.46
XPW02	Water Level	CCR	10/28/2024	22.38	451.53
XPW02	Water Level	CCR	11/13/2024	21.08	452.82
XPW02	Water Level	CCR	12/04/2024	20.79	453.12
XPW03	Water Level	CCR	01/06/2024	17.26	448.94
XPW03	Water Level	CCR	02/06/2024	16.57	449.64

TABLE 1
GROUNDWATER ELEVATION DATA
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
XPW03	Water Level	CCR	03/29/2024	16.36	449.84
XPW03	Water Level	CCR	04/29/2024	15.86	450.35
XPW03	Water Level	CCR	05/15/2024	15.76	450.44
XPW03	Water Level	CCR	06/15/2024	16.45	449.75
XPW03	Water Level	CCR	07/15/2024	16.59	449.62
XPW03	Water Level	CCR	08/28/2024	16.12	450.04
XPW03	Water Level	CCR	09/28/2024	16.92	449.24
XPW03	Water Level	CCR	10/28/2024	17.79	448.38
XPW03	Water Level	CCR	11/13/2024	16.94	449.22
XPW03	Water Level	CCR	12/04/2024	18.08	448.09
SG-01	Water Level	SW	01/06/2024	NA	434.77
SG-01	Water Level	SW	02/06/2024	NA	447.00
SG-01	Water Level	SW	03/29/2024	NA	438.79
SG-01	Water Level	SW	04/29/2024	NA	443.00
SG-01	Water Level	SW	05/15/2024	NA	444.61
SG-01	Water Level	SW	06/15/2024	NA	436.01
SG-01	Water Level	SW	07/15/2024	NA	436.00
SG-01	Water Level	SW	08/28/2024	31.80	434.41
SG-01	Water Level	SW	09/28/2024	29.17	437.04
SG-01	Water Level	SW	10/28/2024	31.00	435.22
SG-01	Water Level	SW	11/13/2024	34.80	431.41
SG-01	Water Level	SW	12/04/2024	35.69	430.53

Notes:
BMP = below measuring point
Depth to Groundwater/Groundwater Elevation Code (if applicable):
DM[1] = Depth to water was not measured.
DM[2] = Depth to water was not measured because water was above or below the staff gage markings.
DM[3] = Depth to water was not measured because the location was inaccessible.
DM[4] = Depth to water was not measured because water level was below the top of the pump.
DM[5] = Depth to water was not measured because water level was above the top of casing (artesian well).
DM[6] = Depth to water was not measured because of damage to the well.
DM[7] = Depth to water was not measured due to required pressure transducer maintenance.
DM[8] = Lab provided groundwater elevation data and not depth to water.
NA = not available/not applicable
NAVD88 = North American Vertical Datum of 1988
Monitored Unit Abbreviations:
CCR = coal combustion residuals
PMP = potential migration pathway
SW = surface water
UA = uppermost aquifer

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TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
AP05S	UA	Background	02/08/2024	A7	Boron, total	mg/L	0.280 J+	--	--	--
AP05S	UA	Background	04/30/2024	A7R	Boron, total	mg/L	0.300	--	--	--
AP05S	UA	Background	07/18/2024	A7D	Boron, total	mg/L	0.360	--	--	--
AP05S	UA	Background	10/31/2024	A7DR	Boron, total	mg/L	0.350	--	--	--
AP05S	UA	Background	02/08/2024	A7	Calcium, total	mg/L	100	--	--	--
AP05S	UA	Background	04/30/2024	A7R	Calcium, total	mg/L	100	--	--	--
AP05S	UA	Background	07/18/2024	A7D	Calcium, total	mg/L	98.0	--	--	--
AP05S	UA	Background	10/31/2024	A7DR	Calcium, total	mg/L	100	--	--	--
AP05S	UA	Background	02/08/2024	A7	Chloride, total	mg/L	39.0	--	--	--
AP05S	UA	Background	04/30/2024	A7R	Chloride, total	mg/L	42.0	--	--	--
AP05S	UA	Background	07/18/2024	A7D	Chloride, total	mg/L	47.0	--	--	--
AP05S	UA	Background	10/31/2024	A7DR	Chloride, total	mg/L	48.0	--	--	--
AP05S	UA	Background	02/08/2024	A7	Fluoride, total	mg/L	0.3 U	--	--	--
AP05S	UA	Background	04/30/2024	A7R	Fluoride, total	mg/L	0.144 J	--	--	--
AP05S	UA	Background	07/18/2024	A7D	Fluoride, total	mg/L	0.25 UJ	--	--	--
AP05S	UA	Background	10/31/2024	A7DR	Fluoride, total	mg/L	0.2 U	--	--	--
AP05S	UA	Background	02/08/2024	A7	pH (field)	SU	7.1	--	--	--
AP05S	UA	Background	04/30/2024	A7R	pH (field)	SU	6.7	--	--	--
AP05S	UA	Background	07/18/2024	A7D	pH (field)	SU	7.0	--	--	--
AP05S	UA	Background	10/31/2024	A7DR	pH (field)	SU	6.2	--	--	--
AP05S	UA	Background	02/08/2024	A7	Sulfate, total	mg/L	58.0	--	--	--
AP05S	UA	Background	04/30/2024	A7R	Sulfate, total	mg/L	1.20	--	--	--
AP05S	UA	Background	07/18/2024	A7D	Sulfate, total	mg/L	0.34 J	--	--	--
AP05S	UA	Background	10/31/2024	A7DR	Sulfate, total	mg/L	0.44 J	--	--	--
AP05S	UA	Background	02/08/2024	A7	Total Dissolved Solids	mg/L	820	--	--	--
AP05S	UA	Background	04/30/2024	A7R	Total Dissolved Solids	mg/L	900	--	--	--
AP05S	UA	Background	07/18/2024	A7D	Total Dissolved Solids	mg/L	900	--	--	--
AP05S	UA	Background	10/31/2024	A7DR	Total Dissolved Solids	mg/L	820	--	--	--
AW-08	UA	Background	02/08/2024	A7	Boron, total	mg/L	0.140 J+	--	--	--
AW-08	UA	Background	05/02/2024	A7R	Boron, total	mg/L	0.130	--	--	--
AW-08	UA	Background	07/18/2024	A7D	Boron, total	mg/L	0.110 J+	--	--	--
AW-08	UA	Background	10/30/2024	A7DR	Boron, total	mg/L	0.140	--	--	--
AW-08	UA	Background	02/08/2024	A7	Calcium, total	mg/L	140	--	--	--
AW-08	UA	Background	05/02/2024	A7R	Calcium, total	mg/L	140	--	--	--
AW-08	UA	Background	07/18/2024	A7D	Calcium, total	mg/L	140	--	--	--
AW-08	UA	Background	10/30/2024	A7DR	Calcium, total	mg/L	140	--	--	--
AW-08	UA	Background	02/08/2024	A7	Chloride, total	mg/L	18.0	--	--	--
AW-08	UA	Background	05/02/2024	A7R	Chloride, total	mg/L	15.0	--	--	--
AW-08	UA	Background	07/18/2024	A7D	Chloride, total	mg/L	17.0	--	--	--
AW-08	UA	Background	10/31/2024	A7DR	Chloride, total	mg/L	19.0	--	--	--
AW-08	UA	Background	02/08/2024	A7	Fluoride, total	mg/L	0.256 J+	--	--	--
AW-08	UA	Background	05/02/2024	A7R	Fluoride, total	mg/L	0.22 J	--	--	--
AW-08	UA	Background	07/18/2024	A7D	Fluoride, total	mg/L	0.25 UJ	--	--	--
AW-08	UA	Background	10/31/2024	A7DR	Fluoride, total	mg/L	0.207 J	--	--	--
AW-08	UA	Background	02/08/2024	A7	pH (field)	SU	6.8	--	--	--
AW-08	UA	Background	05/02/2024	A7R	pH (field)	SU	6.9	--	--	--

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
AW-08	UA	Background	07/18/2024	A7D	pH (field)	SU	7.1	--	--	--
AW-08	UA	Background	10/30/2024	A7DR	pH (field)	SU	6.9	--	--	--
AW-08	UA	Background	02/08/2024	A7	Sulfate, total	mg/L	0.38	--	--	--
AW-08	UA	Background	05/02/2024	A7R	Sulfate, total	mg/L	1.20	--	--	--
AW-08	UA	Background	07/18/2024	A7D	Sulfate, total	mg/L	0.19 J	--	--	--
AW-08	UA	Background	10/31/2024	A7DR	Sulfate, total	mg/L	0.13 U	--	--	--
AW-08	UA	Background	02/08/2024	A7	Total Dissolved Solids	mg/L	710	--	--	--
AW-08	UA	Background	05/02/2024	A7R	Total Dissolved Solids	mg/L	610	--	--	--
AW-08	UA	Background	07/18/2024	A7D	Total Dissolved Solids	mg/L	720	--	--	--
AW-08	UA	Background	10/31/2024	A7DR	Total Dissolved Solids	mg/L	700	--	--	--
AP07S	PMP	Compliance	02/08/2024	A7	Boron, total	mg/L	12.0	12.0	0.429	Reported
AP07S	PMP	Compliance	04/30/2024	A7R	Boron, total	mg/L	18.0	18.0	0.429	Confirmed
AP07S	PMP	Compliance	07/16/2024	A7D	Boron, total	mg/L	21.0	21.0	0.429	Reported
AP07S	PMP	Compliance	10/31/2024	A7DR	Boron, total	mg/L	9.90	9.90	0.429	Confirmed
AP07S	PMP	Compliance	02/08/2024	A7	Calcium, total	mg/L	170	170	177	No Exceedance
AP07S	PMP	Compliance	04/30/2024	A7R	Calcium, total	mg/L	240	240	177	Exceedance Not Confirmed
AP07S	PMP	Compliance	07/16/2024	A7D	Calcium, total	mg/L	230	230	177	Reported
AP07S	PMP	Compliance	10/31/2024	A7DR	Calcium, total	mg/L	130	130	177	No Exceedance
AP07S	PMP	Compliance	02/08/2024	A7	Chloride, total	mg/L	84.0	84.0	44.0	Reported
AP07S	PMP	Compliance	04/30/2024	A7R	Chloride, total	mg/L	73.0	73.0	44.0	Confirmed
AP07S	PMP	Compliance	07/16/2024	A7D	Chloride, total	mg/L	77.0	77.0	44.0	Reported
AP07S	PMP	Compliance	10/31/2024	A7DR	Chloride, total	mg/L	80.0	80.0	44.0	Confirmed
AP07S	PMP	Compliance	02/08/2024	A7	Fluoride, total	mg/L	0.289 J+	0.289	0.376	No Exceedance
AP07S	PMP	Compliance	04/30/2024	A7R	Fluoride, total	mg/L	0.25 UJ	0.25	0.376	No Exceedance
AP07S	PMP	Compliance	07/16/2024	A7D	Fluoride, total	mg/L	0.251	0.251	0.376	No Exceedance
AP07S	PMP	Compliance	10/31/2024	A7DR	Fluoride, total	mg/L	0.246 J	0.25	0.376	No Exceedance
AP07S	PMP	Compliance	02/08/2024	A7	pH (field)	SU	6.7	6.7	6.6/7.4	No Exceedance
AP07S	PMP	Compliance	04/30/2024	A7R	pH (field)	SU	6.9	6.9	6.6/7.4	No Exceedance
AP07S	PMP	Compliance	07/16/2024	A7D	pH (field)	SU	6.9	6.9	6.6/7.4	No Exceedance
AP07S	PMP	Compliance	10/31/2024	A7DR	pH (field)	SU	7.0	7.0	6.6/7.4	No Exceedance
AP07S	PMP	Compliance	02/08/2024	A7	Sulfate, total	mg/L	330	330	80.7	Reported
AP07S	PMP	Compliance	04/30/2024	A7R	Sulfate, total	mg/L	520	520	80.7	Confirmed
AP07S	PMP	Compliance	07/16/2024	A7D	Sulfate, total	mg/L	520	520	80.7	Reported
AP07S	PMP	Compliance	10/31/2024	A7DR	Sulfate, total	mg/L	220	220	80.7	Confirmed
AP07S	PMP	Compliance	02/08/2024	A7	Total Dissolved Solids	mg/L	980	980	955	Reported
AP07S	PMP	Compliance	04/30/2024	A7R	Total Dissolved Solids	mg/L	1,700	1,700	955	Confirmed
AP07S	PMP	Compliance	07/16/2024	A7D	Total Dissolved Solids	mg/L	1,500	1,500	955	Reported
AP07S	PMP	Compliance	10/31/2024	A7DR	Total Dissolved Solids	mg/L	740	740	955	No Exceedance
AW-01	PMP	Compliance	02/08/2024	A7	Boron, total	mg/L	0.130 J+	0.130	0.429	No Exceedance
AW-01	PMP	Compliance	04/30/2024	A7R	Boron, total	mg/L	0.0870	0.0870	0.429	No Exceedance
AW-01	PMP	Compliance	07/16/2024	A7D	Boron, total	mg/L	0.0890 J+	0.0890	0.429	No Exceedance
AW-01	PMP	Compliance	10/30/2024	A7DR	Boron, total	mg/L	0.0710	0.0710	0.429	No Exceedance
AW-01	PMP	Compliance	02/08/2024	A7	Calcium, total	mg/L	140	140	177	No Exceedance
AW-01	PMP	Compliance	04/30/2024	A7R	Calcium, total	mg/L	170	170	177	No Exceedance
AW-01	PMP	Compliance	07/16/2024	A7D	Calcium, total	mg/L	180	180	177	Reported

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
AW-01	PMP	Compliance	10/30/2024	A7DR	Calcium, total	mg/L	180	180	177	Confirmed
AW-01	PMP	Compliance	02/08/2024	A7	Chloride, total	mg/L	22.0	22.0	44.0	No Exceedance
AW-01	PMP	Compliance	04/30/2024	A7R	Chloride, total	mg/L	9.60	9.60	44.0	No Exceedance
AW-01	PMP	Compliance	07/16/2024	A7D	Chloride, total	mg/L	8.20	8.20	44.0	No Exceedance
AW-01	PMP	Compliance	10/30/2024	A7DR	Chloride, total	mg/L	7.40	7.40	44.0	No Exceedance
AW-01	PMP	Compliance	02/08/2024	A7	Fluoride, total	mg/L	0.254 J+	0.254	0.376	No Exceedance
AW-01	PMP	Compliance	04/30/2024	A7R	Fluoride, total	mg/L	0.214 J	0.25	0.376	No Exceedance
AW-01	PMP	Compliance	07/16/2024	A7D	Fluoride, total	mg/L	0.270	0.270	0.376	No Exceedance
AW-01	PMP	Compliance	10/30/2024	A7DR	Fluoride, total	mg/L	0.19 J	0.25	0.376	No Exceedance
AW-01	PMP	Compliance	02/08/2024	A7	pH (field)	SU	6.7	6.7	6.6/7.4	No Exceedance
AW-01	PMP	Compliance	04/30/2024	A7R	pH (field)	SU	7.2	7.2	6.6/7.4	No Exceedance
AW-01	PMP	Compliance	07/16/2024	A7D	pH (field)	SU	7.0	7.0	6.6/7.4	No Exceedance
AW-01	PMP	Compliance	10/30/2024	A7DR	pH (field)	SU	6.8	6.8	6.6/7.4	No Exceedance
AW-01	PMP	Compliance	02/08/2024	A7	Sulfate, total	mg/L	67.0	67.0	80.7	No Exceedance
AW-01	PMP	Compliance	04/30/2024	A7R	Sulfate, total	mg/L	50.0	50.0	80.7	No Exceedance
AW-01	PMP	Compliance	07/16/2024	A7D	Sulfate, total	mg/L	47.0	47.0	80.7	No Exceedance
AW-01	PMP	Compliance	10/30/2024	A7DR	Sulfate, total	mg/L	47.0	47.0	80.7	No Exceedance
AW-01	PMP	Compliance	02/08/2024	A7	Total Dissolved Solids	mg/L	740	740	955	No Exceedance
AW-01	PMP	Compliance	04/30/2024	A7R	Total Dissolved Solids	mg/L	870	870	955	No Exceedance
AW-01	PMP	Compliance	07/16/2024	A7D	Total Dissolved Solids	mg/L	800	800	955	No Exceedance
AW-01	PMP	Compliance	10/30/2024	A7DR	Total Dissolved Solids	mg/L	760 J	760	955	No Exceedance
AW-05	UA	Compliance	02/08/2024	A7	Boron, total	mg/L	6.20	6.20	0.429	Reported
AW-05	UA	Compliance	04/30/2024	A7R	Boron, total	mg/L	4.10	4.10	0.429	Confirmed
AW-05	UA	Compliance	07/16/2024	A7D	Boron, total	mg/L	7.40	7.40	0.429	Reported
AW-05	UA	Compliance	10/31/2024	A7DR	Boron, total	mg/L	12.0	12.0	0.429	Confirmed
AW-05	UA	Compliance	02/08/2024	A7	Calcium, total	mg/L	170	170	177	No Exceedance
AW-05	UA	Compliance	04/30/2024	A7R	Calcium, total	mg/L	160	160	177	No Exceedance
AW-05	UA	Compliance	07/16/2024	A7D	Calcium, total	mg/L	170	170	177	No Exceedance
AW-05	UA	Compliance	10/31/2024	A7DR	Calcium, total	mg/L	190	190	177	Exceedance Not Confirmed
AW-05	UA	Compliance	02/08/2024	A7	Chloride, total	mg/L	75.0	75.0	44.0	Reported
AW-05	UA	Compliance	04/30/2024	A7R	Chloride, total	mg/L	68.0	68.0	44.0	Confirmed
AW-05	UA	Compliance	07/16/2024	A7D	Chloride, total	mg/L	71.0	71.0	44.0	Reported
AW-05	UA	Compliance	10/31/2024	A7DR	Chloride, total	mg/L	91.0	91.0	44.0	Confirmed
AW-05	UA	Compliance	02/08/2024	A7	Fluoride, total	mg/L	0.3 U	0.25	0.376	No Exceedance
AW-05	UA	Compliance	04/30/2024	A7R	Fluoride, total	mg/L	0.192 J	0.25	0.376	No Exceedance
AW-05	UA	Compliance	07/16/2024	A7D	Fluoride, total	mg/L	0.25 UJ	0.25	0.376	No Exceedance
AW-05	UA	Compliance	10/31/2024	A7DR	Fluoride, total	mg/L	0.2 U	0.25	0.376	No Exceedance
AW-05	UA	Compliance	02/08/2024	A7	pH (field)	SU	6.9	6.9	6.6/7.4	No Exceedance
AW-05	UA	Compliance	04/30/2024	A7R	pH (field)	SU	7.0	7.0	6.6/7.4	No Exceedance
AW-05	UA	Compliance	07/16/2024	A7D	pH (field)	SU	7.3	7.3	6.6/7.4	No Exceedance
AW-05	UA	Compliance	10/31/2024	A7DR	pH (field)	SU	7.3	7.3	6.6/7.4	No Exceedance
AW-05	UA	Compliance	02/08/2024	A7	Sulfate, total	mg/L	400	400	80.7	Reported
AW-05	UA	Compliance	04/30/2024	A7R	Sulfate, total	mg/L	350	350	80.7	Confirmed
AW-05	UA	Compliance	07/16/2024	A7D	Sulfate, total	mg/L	390	390	80.7	Reported
AW-05	UA	Compliance	10/31/2024	A7DR	Sulfate, total	mg/L	520	520	80.7	Confirmed

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
AW-05	UA	Compliance	02/08/2024	A7	Total Dissolved Solids	mg/L	1,000	1,000	955	Reported
AW-05	UA	Compliance	04/30/2024	A7R	Total Dissolved Solids	mg/L	1,200	1,200	955	Confirmed
AW-05	UA	Compliance	07/16/2024	A7D	Total Dissolved Solids	mg/L	1,100	1,100	955	Reported
AW-05	UA	Compliance	10/31/2024	A7DR	Total Dissolved Solids	mg/L	1,100	1,100	955	Confirmed
AW-06	UA	Compliance	02/07/2024	A7	Boron, total	mg/L	0.0970 J+	0.0970	0.429	No Exceedance
AW-06	UA	Compliance	05/02/2024	A7R	Boron, total	mg/L	0.0990	0.0990	0.429	No Exceedance
AW-06	UA	Compliance	07/15/2024	A7D	Boron, total	mg/L	0.120 J+	0.120	0.429	No Exceedance
AW-06	UA	Compliance	10/29/2024	A7DR	Boron, total	mg/L	0.0980	0.0980	0.429	No Exceedance
AW-06	UA	Compliance	02/07/2024	A7	Calcium, total	mg/L	130	130	177	No Exceedance
AW-06	UA	Compliance	05/02/2024	A7R	Calcium, total	mg/L	120	120	177	No Exceedance
AW-06	UA	Compliance	07/15/2024	A7D	Calcium, total	mg/L	120	120	177	No Exceedance
AW-06	UA	Compliance	10/29/2024	A7DR	Calcium, total	mg/L	120	120	177	No Exceedance
AW-06	UA	Compliance	02/07/2024	A7	Chloride, total	mg/L	35.0	35.0	44.0	No Exceedance
AW-06	UA	Compliance	05/02/2024	A7R	Chloride, total	mg/L	31.0	31.0	44.0	No Exceedance
AW-06	UA	Compliance	07/15/2024	A7D	Chloride, total	mg/L	37.0	37.0	44.0	No Exceedance
AW-06	UA	Compliance	10/29/2024	A7DR	Chloride, total	mg/L	37.0	37.0	44.0	No Exceedance
AW-06	UA	Compliance	02/07/2024	A7	Fluoride, total	mg/L	0.263	0.263	0.376	No Exceedance
AW-06	UA	Compliance	05/02/2024	A7R	Fluoride, total	mg/L	0.307	0.307	0.376	No Exceedance
AW-06	UA	Compliance	07/15/2024	A7D	Fluoride, total	mg/L	0.321	0.321	0.376	No Exceedance
AW-06	UA	Compliance	10/29/2024	A7DR	Fluoride, total	mg/L	0.324	0.324	0.376	No Exceedance
AW-06	UA	Compliance	02/07/2024	A7	pH (field)	SU	7.3	7.3	6.6/7.4	No Exceedance
AW-06	UA	Compliance	05/02/2024	A7R	pH (field)	SU	7.0	7.0	6.6/7.4	No Exceedance
AW-06	UA	Compliance	07/15/2024	A7D	pH (field)	SU	7.0	7.0	6.6/7.4	No Exceedance
AW-06	UA	Compliance	10/29/2024	A7DR	pH (field)	SU	7.3	7.3	6.6/7.4	No Exceedance
AW-06	UA	Compliance	02/07/2024	A7	Sulfate, total	mg/L	22.0	22.0	80.7	No Exceedance
AW-06	UA	Compliance	05/02/2024	A7R	Sulfate, total	mg/L	26.0	26.0	80.7	No Exceedance
AW-06	UA	Compliance	07/15/2024	A7D	Sulfate, total	mg/L	24.0 J	24.0	80.7	No Exceedance
AW-06	UA	Compliance	10/29/2024	A7DR	Sulfate, total	mg/L	22.0	22.0	80.7	No Exceedance
AW-06	UA	Compliance	02/07/2024	A7	Total Dissolved Solids	mg/L	550	550	955	No Exceedance
AW-06	UA	Compliance	05/02/2024	A7R	Total Dissolved Solids	mg/L	580	580	955	No Exceedance
AW-06	UA	Compliance	07/15/2024	A7D	Total Dissolved Solids	mg/L	570	570	955	No Exceedance
AW-06	UA	Compliance	10/29/2024	A7DR	Total Dissolved Solids	mg/L	580	580	955	No Exceedance
AW-09	UA	Compliance	02/07/2024	A7	Boron, total	mg/L	0.280 J+	0.280	0.429	No Exceedance
AW-09	UA	Compliance	05/02/2024	A7R	Boron, total	mg/L	0.270	0.270	0.429	No Exceedance
AW-09	UA	Compliance	07/16/2024	A7D	Boron, total	mg/L	0.280	0.280	0.429	No Exceedance
AW-09	UA	Compliance	10/30/2024	A7DR	Boron, total	mg/L	0.290	0.290	0.429	No Exceedance
AW-09	UA	Compliance	02/07/2024	A7	Calcium, total	mg/L	120	120	177	No Exceedance
AW-09	UA	Compliance	05/02/2024	A7R	Calcium, total	mg/L	120	120	177	No Exceedance
AW-09	UA	Compliance	07/16/2024	A7D	Calcium, total	mg/L	120	120	177	No Exceedance
AW-09	UA	Compliance	10/30/2024	A7DR	Calcium, total	mg/L	120	120	177	No Exceedance
AW-09	UA	Compliance	02/07/2024	A7	Chloride, total	mg/L	27.0	27.0	44.0	No Exceedance
AW-09	UA	Compliance	05/02/2024	A7R	Chloride, total	mg/L	28.0	28.0	44.0	No Exceedance
AW-09	UA	Compliance	07/16/2024	A7D	Chloride, total	mg/L	26.0	26.0	44.0	No Exceedance
AW-09	UA	Compliance	10/30/2024	A7DR	Chloride, total	mg/L	26.0	26.0	44.0	No Exceedance
AW-09	UA	Compliance	02/07/2024	A7	Fluoride, total	mg/L	0.109	0.25	0.376	No Exceedance
AW-09	UA	Compliance	05/02/2024	A7R	Fluoride, total	mg/L	0.175 J	0.25	0.376	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
AW-09	UA	Compliance	07/16/2024	A7D	Fluoride, total	mg/L	0.25 UJ	0.25	0.376	No Exceedance
AW-09	UA	Compliance	10/30/2024	A7DR	Fluoride, total	mg/L	0.2 U	0.25	0.376	No Exceedance
AW-09	UA	Compliance	02/07/2024	A7	pH (field)	SU	7.1	7.1	6.6/7.4	No Exceedance
AW-09	UA	Compliance	05/02/2024	A7R	pH (field)	SU	6.9	6.9	6.6/7.4	No Exceedance
AW-09	UA	Compliance	07/16/2024	A7D	pH (field)	SU	7.0	7.0	6.6/7.4	No Exceedance
AW-09	UA	Compliance	10/30/2024	A7DR	pH (field)	SU	6.3	6.3	6.6/7.4	Exceedance Not Confirmed
AW-09	UA	Compliance	02/07/2024	A7	Sulfate, total	mg/L	0.18 U	1	80.7	No Exceedance
AW-09	UA	Compliance	05/02/2024	A7R	Sulfate, total	mg/L	0.18 U	1	80.7	No Exceedance
AW-09	UA	Compliance	07/16/2024	A7D	Sulfate, total	mg/L	0.21 J	1	80.7	No Exceedance
AW-09	UA	Compliance	10/30/2024	A7DR	Sulfate, total	mg/L	0.24 J	1	80.7	No Exceedance
AW-09	UA	Compliance	02/07/2024	A7	Total Dissolved Solids	mg/L	760	760	955	No Exceedance
AW-09	UA	Compliance	05/02/2024	A7R	Total Dissolved Solids	mg/L	770	770	955	No Exceedance
AW-09	UA	Compliance	07/16/2024	A7D	Total Dissolved Solids	mg/L	800	800	955	No Exceedance
AW-09	UA	Compliance	10/30/2024	A7DR	Total Dissolved Solids	mg/L	770	770	955	No Exceedance
AW-10	UA	Compliance	02/08/2024	A7	Boron, total	mg/L	0.490 J+	0.490	0.429	Reported
AW-10	UA	Compliance	05/02/2024	A7R	Boron, total	mg/L	0.440	0.440	0.429	Confirmed
AW-10	UA	Compliance	07/18/2024	A7D	Boron, total	mg/L	0.460	0.460	0.429	Reported
AW-10	UA	Compliance	10/30/2024	A7DR	Boron, total	mg/L	0.470	0.470	0.429	Confirmed
AW-10	UA	Compliance	02/08/2024	A7	Calcium, total	mg/L	130	130	177	No Exceedance
AW-10	UA	Compliance	05/02/2024	A7R	Calcium, total	mg/L	130	130	177	No Exceedance
AW-10	UA	Compliance	07/18/2024	A7D	Calcium, total	mg/L	140	140	177	No Exceedance
AW-10	UA	Compliance	10/30/2024	A7DR	Calcium, total	mg/L	120	120	177	No Exceedance
AW-10	UA	Compliance	02/08/2024	A7	Chloride, total	mg/L	89.0	89.0	44.0	Reported
AW-10	UA	Compliance	05/02/2024	A7R	Chloride, total	mg/L	89.0	89.0	44.0	Confirmed
AW-10	UA	Compliance	07/18/2024	A7D	Chloride, total	mg/L	89.0	89.0	44.0	Reported
AW-10	UA	Compliance	10/30/2024	A7DR	Chloride, total	mg/L	79.0	79.0	44.0	Confirmed
AW-10	UA	Compliance	02/08/2024	A7	Fluoride, total	mg/L	0.3 U	0.25	0.376	No Exceedance
AW-10	UA	Compliance	05/02/2024	A7R	Fluoride, total	mg/L	0.141 J	0.25	0.376	No Exceedance
AW-10	UA	Compliance	07/18/2024	A7D	Fluoride, total	mg/L	0.25 UJ	0.25	0.376	No Exceedance
AW-10	UA	Compliance	10/30/2024	A7DR	Fluoride, total	mg/L	0.2 U	0.25	0.376	No Exceedance
AW-10	UA	Compliance	02/08/2024	A7	pH (field)	SU	7.0	7.0	6.6/7.4	No Exceedance
AW-10	UA	Compliance	05/02/2024	A7R	pH (field)	SU	7.0	7.0	6.6/7.4	No Exceedance
AW-10	UA	Compliance	07/18/2024	A7D	pH (field)	SU	7.2	7.2	6.6/7.4	No Exceedance
AW-10	UA	Compliance	10/30/2024	A7DR	pH (field)	SU	7.0	7.0	6.6/7.4	No Exceedance
AW-10	UA	Compliance	02/08/2024	A7	Sulfate, total	mg/L	0.18 U	1	80.7	No Exceedance
AW-10	UA	Compliance	05/02/2024	A7R	Sulfate, total	mg/L	0.18 U	1	80.7	No Exceedance
AW-10	UA	Compliance	07/18/2024	A7D	Sulfate, total	mg/L	0.18 U	1	80.7	No Exceedance
AW-10	UA	Compliance	10/30/2024	A7DR	Sulfate, total	mg/L	0.22 J	1	80.7	No Exceedance
AW-10	UA	Compliance	02/08/2024	A7	Total Dissolved Solids	mg/L	1,200	1,200	955	Reported
AW-10	UA	Compliance	05/02/2024	A7R	Total Dissolved Solids	mg/L	1,200	1,200	955	Confirmed
AW-10	UA	Compliance	07/18/2024	A7D	Total Dissolved Solids	mg/L	1,200	1,200	955	Reported
AW-10	UA	Compliance	10/30/2024	A7DR	Total Dissolved Solids	mg/L	1,100	1,100	955	Confirmed
AW-11	UA	Compliance	02/08/2024	A7	Boron, total	mg/L	0.260 J+	0.260	0.429	No Exceedance
AW-11	UA	Compliance	05/01/2024	A7R	Boron, total	mg/L	0.250	0.250	0.429	No Exceedance
AW-11	UA	Compliance	07/17/2024	A7D	Boron, total	mg/L	0.230	0.230	0.429	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
AW-11	UA	Compliance	10/29/2024	A7DR	Boron, total	mg/L	0.240	0.240	0.429	No Exceedance
AW-11	UA	Compliance	02/08/2024	A7	Calcium, total	mg/L	150	150	177	No Exceedance
AW-11	UA	Compliance	05/01/2024	A7R	Calcium, total	mg/L	160	160	177	No Exceedance
AW-11	UA	Compliance	07/17/2024	A7D	Calcium, total	mg/L	150	150	177	No Exceedance
AW-11	UA	Compliance	10/29/2024	A7DR	Calcium, total	mg/L	150	150	177	No Exceedance
AW-11	UA	Compliance	02/08/2024	A7	Chloride, total	mg/L	35.0	35.0	44.0	No Exceedance
AW-11	UA	Compliance	05/01/2024	A7R	Chloride, total	mg/L	31.0	31.0	44.0	No Exceedance
AW-11	UA	Compliance	07/17/2024	A7D	Chloride, total	mg/L	33.0	33.0	44.0	No Exceedance
AW-11	UA	Compliance	10/29/2024	A7DR	Chloride, total	mg/L	36.0	36.0	44.0	No Exceedance
AW-11	UA	Compliance	02/08/2024	A7	Fluoride, total	mg/L	0.3 U	0.25	0.376	No Exceedance
AW-11	UA	Compliance	05/01/2024	A7R	Fluoride, total	mg/L	0.126 J	0.25	0.376	No Exceedance
AW-11	UA	Compliance	07/17/2024	A7D	Fluoride, total	mg/L	0.25 UJ	0.25	0.376	No Exceedance
AW-11	UA	Compliance	10/29/2024	A7DR	Fluoride, total	mg/L	0.172 U	0.25	0.376	No Exceedance
AW-11	UA	Compliance	02/08/2024	A7	pH (field)	SU	7.0	7.0	6.6/7.4	No Exceedance
AW-11	UA	Compliance	05/01/2024	A7R	pH (field)	SU	7.1	7.1	6.6/7.4	No Exceedance
AW-11	UA	Compliance	07/17/2024	A7D	pH (field)	SU	7.2	7.2	6.6/7.4	No Exceedance
AW-11	UA	Compliance	10/29/2024	A7DR	pH (field)	SU	7.0	7.0	6.6/7.4	No Exceedance
AW-11	UA	Compliance	02/08/2024	A7	Sulfate, total	mg/L	0.18 U	1	80.7	No Exceedance
AW-11	UA	Compliance	05/01/2024	A7R	Sulfate, total	mg/L	0.18 U	1	80.7	No Exceedance
AW-11	UA	Compliance	07/17/2024	A7D	Sulfate, total	mg/L	0.18 U	1	80.7	No Exceedance
AW-11	UA	Compliance	10/29/2024	A7DR	Sulfate, total	mg/L	0.13 U	1	80.7	No Exceedance
AW-11	UA	Compliance	02/08/2024	A7	Total Dissolved Solids	mg/L	950	950	955	No Exceedance
AW-11	UA	Compliance	05/01/2024	A7R	Total Dissolved Solids	mg/L	990	990	955	Exceedance Not Confirmed
AW-11	UA	Compliance	07/17/2024	A7D	Total Dissolved Solids	mg/L	1,000	1,000	955	Reported
AW-11	UA	Compliance	10/29/2024	A7DR	Total Dissolved Solids	mg/L	990	990	955	Confirmed
AW-14	UA	Compliance	02/08/2024	A7	Boron, total	mg/L	0.380 J+	0.380	0.429	No Exceedance
AW-14	UA	Compliance	05/01/2024	A7R	Boron, total	mg/L	0.260	0.260	0.429	No Exceedance
AW-14	UA	Compliance	07/17/2024	A7D	Boron, total	mg/L	0.200 J+	0.200	0.429	No Exceedance
AW-14	UA	Compliance	10/29/2024	A7DR	Boron, total	mg/L	0.190	0.190	0.429	No Exceedance
AW-14	UA	Compliance	02/08/2024	A7	Calcium, total	mg/L	160	160	177	No Exceedance
AW-14	UA	Compliance	05/01/2024	A7R	Calcium, total	mg/L	170	170	177	No Exceedance
AW-14	UA	Compliance	07/17/2024	A7D	Calcium, total	mg/L	170	170	177	No Exceedance
AW-14	UA	Compliance	10/29/2024	A7DR	Calcium, total	mg/L	170	170	177	No Exceedance
AW-14	UA	Compliance	02/08/2024	A7	Chloride, total	mg/L	42.0	42.0	44.0	No Exceedance
AW-14	UA	Compliance	05/01/2024	A7R	Chloride, total	mg/L	28.0	28.0	44.0	No Exceedance
AW-14	UA	Compliance	07/17/2024	A7D	Chloride, total	mg/L	24.0	24.0	44.0	No Exceedance
AW-14	UA	Compliance	10/29/2024	A7DR	Chloride, total	mg/L	26.0	26.0	44.0	No Exceedance
AW-14	UA	Compliance	02/08/2024	A7	Fluoride, total	mg/L	0.3 U	0.25	0.376	No Exceedance
AW-14	UA	Compliance	05/01/2024	A7R	Fluoride, total	mg/L	0.0199 U	0.25	0.376	No Exceedance
AW-14	UA	Compliance	07/17/2024	A7D	Fluoride, total	mg/L	0.25 UJ	0.25	0.376	No Exceedance
AW-14	UA	Compliance	10/29/2024	A7DR	Fluoride, total	mg/L	0.695	0.695	0.376	Exceedance Not Confirmed
AW-14	UA	Compliance	02/08/2024	A7	pH (field)	SU	7.0	7.0	6.6/7.4	No Exceedance
AW-14	UA	Compliance	05/01/2024	A7R	pH (field)	SU	7.0	7.0	6.6/7.4	No Exceedance
AW-14	UA	Compliance	07/17/2024	A7D	pH (field)	SU	7.0	7.0	6.6/7.4	No Exceedance
AW-14	UA	Compliance	10/29/2024	A7DR	pH (field)	SU	6.9	6.9	6.6/7.4	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
AW-14	UA	Compliance	02/08/2024	A7	Sulfate, total	mg/L	28.0	28.0	80.7	No Exceedance
AW-14	UA	Compliance	05/01/2024	A7R	Sulfate, total	mg/L	12.0	12.0	80.7	No Exceedance
AW-14	UA	Compliance	07/17/2024	A7D	Sulfate, total	mg/L	4.10	4.10	80.7	No Exceedance
AW-14	UA	Compliance	10/29/2024	A7DR	Sulfate, total	mg/L	3.30	3.30	80.7	No Exceedance
AW-14	UA	Compliance	02/08/2024	A7	Total Dissolved Solids	mg/L	940	940	955	No Exceedance
AW-14	UA	Compliance	05/01/2024	A7R	Total Dissolved Solids	mg/L	990	990	955	Exceedance Not Confirmed
AW-14	UA	Compliance	07/17/2024	A7D	Total Dissolved Solids	mg/L	1,000	1,000	955	Reported
AW-14	UA	Compliance	10/29/2024	A7DR	Total Dissolved Solids	mg/L	1,000	1,000	955	Confirmed
AW-15	UA	Compliance	02/08/2024	A7	Boron, total	mg/L	0.410 J+	0.410	0.429	No Exceedance
AW-15	UA	Compliance	05/01/2024	A7R	Boron, total	mg/L	0.360	0.360	0.429	No Exceedance
AW-15	UA	Compliance	07/17/2024	A7D	Boron, total	mg/L	0.350	0.350	0.429	No Exceedance
AW-15	UA	Compliance	10/29/2024	A7DR	Boron, total	mg/L	0.360	0.360	0.429	No Exceedance
AW-15	UA	Compliance	02/08/2024	A7	Calcium, total	mg/L	140	140	177	No Exceedance
AW-15	UA	Compliance	05/01/2024	A7R	Calcium, total	mg/L	140	140	177	No Exceedance
AW-15	UA	Compliance	07/17/2024	A7D	Calcium, total	mg/L	140	140	177	No Exceedance
AW-15	UA	Compliance	10/29/2024	A7DR	Calcium, total	mg/L	140	140	177	No Exceedance
AW-15	UA	Compliance	02/08/2024	A7	Chloride, total	mg/L	36.0	36.0	44.0	No Exceedance
AW-15	UA	Compliance	05/01/2024	A7R	Chloride, total	mg/L	33.0	33.0	44.0	No Exceedance
AW-15	UA	Compliance	07/17/2024	A7D	Chloride, total	mg/L	33.0	33.0	44.0	No Exceedance
AW-15	UA	Compliance	10/29/2024	A7DR	Chloride, total	mg/L	36.0	36.0	44.0	No Exceedance
AW-15	UA	Compliance	02/08/2024	A7	Fluoride, total	mg/L	0.3 U	0.25	0.376	No Exceedance
AW-15	UA	Compliance	05/01/2024	A7R	Fluoride, total	mg/L	0.072 J	0.25	0.376	No Exceedance
AW-15	UA	Compliance	07/17/2024	A7D	Fluoride, total	mg/L	0.25 UJ	0.25	0.376	No Exceedance
AW-15	UA	Compliance	10/29/2024	A7DR	Fluoride, total	mg/L	0.172 U	0.25	0.376	No Exceedance
AW-15	UA	Compliance	02/08/2024	A7	pH (field)	SU	6.8	6.8	6.6/7.4	No Exceedance
AW-15	UA	Compliance	05/01/2024	A7R	pH (field)	SU	6.8	6.8	6.6/7.4	No Exceedance
AW-15	UA	Compliance	07/17/2024	A7D	pH (field)	SU	7.0	7.0	6.6/7.4	No Exceedance
AW-15	UA	Compliance	10/29/2024	A7DR	pH (field)	SU	6.8	6.8	6.6/7.4	No Exceedance
AW-15	UA	Compliance	02/08/2024	A7	Sulfate, total	mg/L	0.18 U	1	80.7	No Exceedance
AW-15	UA	Compliance	05/01/2024	A7R	Sulfate, total	mg/L	0.18 U	1	80.7	No Exceedance
AW-15	UA	Compliance	07/17/2024	A7D	Sulfate, total	mg/L	0.24 J	1	80.7	No Exceedance
AW-15	UA	Compliance	10/29/2024	A7DR	Sulfate, total	mg/L	0.16 J	1	80.7	No Exceedance
AW-15	UA	Compliance	02/08/2024	A7	Total Dissolved Solids	mg/L	1,100	1,100	955	Reported
AW-15	UA	Compliance	05/01/2024	A7R	Total Dissolved Solids	mg/L	1,000	1,000	955	Confirmed
AW-15	UA	Compliance	07/17/2024	A7D	Total Dissolved Solids	mg/L	1,100	1,100	955	Reported
AW-15	UA	Compliance	10/29/2024	A7DR	Total Dissolved Solids	mg/L	980	980	955	Confirmed
AW-15S	PMP	Compliance	02/08/2024	A7	Boron, total	mg/L	6.80	6.80	0.429	Reported
AW-15S	PMP	Compliance	05/01/2024	A7R	Boron, total	mg/L	5.50	5.50	0.429	Confirmed
AW-15S	PMP	Compliance	07/17/2024	A7D	Boron, total	mg/L	5.60	5.60	0.429	Reported
AW-15S	PMP	Compliance	10/29/2024	A7DR	Boron, total	mg/L	6.80	6.80	0.429	Confirmed
AW-15S	PMP	Compliance	02/08/2024	A7	Calcium, total	mg/L	250	250	177	Reported
AW-15S	PMP	Compliance	05/01/2024	A7R	Calcium, total	mg/L	260	260	177	Confirmed
AW-15S	PMP	Compliance	07/17/2024	A7D	Calcium, total	mg/L	260	260	177	Reported
AW-15S	PMP	Compliance	10/29/2024	A7DR	Calcium, total	mg/L	270	270	177	Confirmed
AW-15S	PMP	Compliance	02/08/2024	A7	Chloride, total	mg/L	30.0	30.0	44.0	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
AW-15S	PMP	Compliance	05/01/2024	A7R	Chloride, total	mg/L	28.0	28.0	44.0	No Exceedance
AW-15S	PMP	Compliance	07/17/2024	A7D	Chloride, total	mg/L	30.0	30.0	44.0	No Exceedance
AW-15S	PMP	Compliance	10/29/2024	A7DR	Chloride, total	mg/L	31.0	31.0	44.0	No Exceedance
AW-15S	PMP	Compliance	02/08/2024	A7	Fluoride, total	mg/L	0.260 J+	0.260	0.376	No Exceedance
AW-15S	PMP	Compliance	05/01/2024	A7R	Fluoride, total	mg/L	0.226 J	0.25	0.376	No Exceedance
AW-15S	PMP	Compliance	07/17/2024	A7D	Fluoride, total	mg/L	0.257	0.257	0.376	No Exceedance
AW-15S	PMP	Compliance	10/29/2024	A7DR	Fluoride, total	mg/L	0.227 J	0.25	0.376	No Exceedance
AW-15S	PMP	Compliance	02/08/2024	A7	pH (field)	SU	7.0	7.0	6.6/7.4	No Exceedance
AW-15S	PMP	Compliance	05/01/2024	A7R	pH (field)	SU	6.8	6.8	6.6/7.4	No Exceedance
AW-15S	PMP	Compliance	07/17/2024	A7D	pH (field)	SU	7.1	7.1	6.6/7.4	No Exceedance
AW-15S	PMP	Compliance	10/29/2024	A7DR	pH (field)	SU	6.9	6.9	6.6/7.4	No Exceedance
AW-15S	PMP	Compliance	02/08/2024	A7	Sulfate, total	mg/L	550	550	80.7	Reported
AW-15S	PMP	Compliance	05/01/2024	A7R	Sulfate, total	mg/L	540	540	80.7	Confirmed
AW-15S	PMP	Compliance	07/17/2024	A7D	Sulfate, total	mg/L	540	540	80.7	Reported
AW-15S	PMP	Compliance	10/29/2024	A7DR	Sulfate, total	mg/L	520	520	80.7	Confirmed
AW-15S	PMP	Compliance	02/08/2024	A7	Total Dissolved Solids	mg/L	1,300	1,300	955	Reported
AW-15S	PMP	Compliance	05/01/2024	A7R	Total Dissolved Solids	mg/L	1,400	1,400	955	Confirmed
AW-15S	PMP	Compliance	07/17/2024	A7D	Total Dissolved Solids	mg/L	1,300	1,300	955	Reported
AW-15S	PMP	Compliance	10/29/2024	A7DR	Total Dissolved Solids	mg/L	1,400	1,400	955	Confirmed
AW-16	UA	Compliance	02/08/2024	A7	Boron, total	mg/L	0.490 J+	0.490	0.429	Reported
AW-16	UA	Compliance	04/30/2024	A7R	Boron, total	mg/L	0.440	0.440	0.429	Confirmed
AW-16	UA	Compliance	07/16/2024	A7D	Boron, total	mg/L	0.410	0.410	0.429	No Exceedance
AW-16	UA	Compliance	10/30/2024	A7DR	Boron, total	mg/L	0.420	0.420	0.429	No Exceedance
AW-16	UA	Compliance	02/08/2024	A7	Calcium, total	mg/L	140	140	177	No Exceedance
AW-16	UA	Compliance	04/30/2024	A7R	Calcium, total	mg/L	140	140	177	No Exceedance
AW-16	UA	Compliance	07/16/2024	A7D	Calcium, total	mg/L	140	140	177	No Exceedance
AW-16	UA	Compliance	10/30/2024	A7DR	Calcium, total	mg/L	140	140	177	No Exceedance
AW-16	UA	Compliance	02/08/2024	A7	Chloride, total	mg/L	50.0	50.0	44.0	Reported
AW-16	UA	Compliance	04/30/2024	A7R	Chloride, total	mg/L	45.0	45.0	44.0	Confirmed
AW-16	UA	Compliance	07/16/2024	A7D	Chloride, total	mg/L	47.0	47.0	44.0	Reported
AW-16	UA	Compliance	10/30/2024	A7DR	Chloride, total	mg/L	44.0	44.0	44.0	No Exceedance
AW-16	UA	Compliance	02/08/2024	A7	Fluoride, total	mg/L	0.3 U	0.25	0.376	No Exceedance
AW-16	UA	Compliance	04/30/2024	A7R	Fluoride, total	mg/L	0.064 J	0.25	0.376	No Exceedance
AW-16	UA	Compliance	07/16/2024	A7D	Fluoride, total	mg/L	0.25 UJ	0.25	0.376	No Exceedance
AW-16	UA	Compliance	10/30/2024	A7DR	Fluoride, total	mg/L	0.2 U	0.25	0.376	No Exceedance
AW-16	UA	Compliance	02/08/2024	A7	pH (field)	SU	6.5	6.5	6.6/7.4	Reported
AW-16	UA	Compliance	04/30/2024	A7R	pH (field)	SU	6.5	6.5	6.6/7.4	Confirmed
AW-16	UA	Compliance	07/16/2024	A7D	pH (field)	SU	6.7	6.7	6.6/7.4	No Exceedance
AW-16	UA	Compliance	10/30/2024	A7DR	pH (field)	SU	6.7	6.7	6.6/7.4	No Exceedance
AW-16	UA	Compliance	02/08/2024	A7	Sulfate, total	mg/L	6.10	6.10	80.7	No Exceedance
AW-16	UA	Compliance	04/30/2024	A7R	Sulfate, total	mg/L	0.32 J	1	80.7	No Exceedance
AW-16	UA	Compliance	07/16/2024	A7D	Sulfate, total	mg/L	0.33 J	1	80.7	No Exceedance
AW-16	UA	Compliance	10/30/2024	A7DR	Sulfate, total	mg/L	0.42 J	1	80.7	No Exceedance
AW-16	UA	Compliance	02/08/2024	A7	Total Dissolved Solids	mg/L	1,100	1,100	955	Reported
AW-16	UA	Compliance	04/30/2024	A7R	Total Dissolved Solids	mg/L	1,300	1,300	955	Confirmed
AW-16	UA	Compliance	07/16/2024	A7D	Total Dissolved Solids	mg/L	1,200	1,200	955	Reported

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
AW-16	UA	Compliance	10/30/2024	A7DR	Total Dissolved Solids	mg/L	1,200	1,200	955	Confirmed
AW-17	UA	Compliance	02/08/2024	A7	Boron, total	mg/L	0.460 J+	0.460	0.429	Exceedance Not Confirmed
AW-17	UA	Compliance	05/01/2024	A7R	Boron, total	mg/L	0.410	0.410	0.429	No Exceedance
AW-17	UA	Compliance	07/16/2024	A7D	Boron, total	mg/L	0.400	0.400	0.429	No Exceedance
AW-17	UA	Compliance	10/30/2024	A7DR	Boron, total	mg/L	0.420	0.420	0.429	No Exceedance
AW-17	UA	Compliance	02/08/2024	A7	Calcium, total	mg/L	100	100	177	No Exceedance
AW-17	UA	Compliance	05/01/2024	A7R	Calcium, total	mg/L	110	110	177	No Exceedance
AW-17	UA	Compliance	07/16/2024	A7D	Calcium, total	mg/L	100	100	177	No Exceedance
AW-17	UA	Compliance	10/30/2024	A7DR	Calcium, total	mg/L	100	100	177	No Exceedance
AW-17	UA	Compliance	02/08/2024	A7	Chloride, total	mg/L	52.0	52.0	44.0	Reported
AW-17	UA	Compliance	05/01/2024	A7R	Chloride, total	mg/L	50.0	50.0	44.0	Confirmed
AW-17	UA	Compliance	07/16/2024	A7D	Chloride, total	mg/L	50.0	50.0	44.0	Reported
AW-17	UA	Compliance	10/30/2024	A7DR	Chloride, total	mg/L	48.0	48.0	44.0	Confirmed
AW-17	UA	Compliance	02/08/2024	A7	Fluoride, total	mg/L	0.3 U	0.25	0.376	No Exceedance
AW-17	UA	Compliance	05/01/2024	A7R	Fluoride, total	mg/L	0.095 J	0.25	0.376	No Exceedance
AW-17	UA	Compliance	07/16/2024	A7D	Fluoride, total	mg/L	0.25 UJ	0.25	0.376	No Exceedance
AW-17	UA	Compliance	10/30/2024	A7DR	Fluoride, total	mg/L	0.2 U	0.25	0.376	No Exceedance
AW-17	UA	Compliance	02/08/2024	A7	pH (field)	SU	6.5	6.5	6.6/7.4	Exceedance Not Confirmed
AW-17	UA	Compliance	05/01/2024	A7R	pH (field)	SU	6.8	6.8	6.6/7.4	No Exceedance
AW-17	UA	Compliance	07/16/2024	A7D	pH (field)	SU	6.8	6.8	6.6/7.4	No Exceedance
AW-17	UA	Compliance	10/30/2024	A7DR	pH (field)	SU	6.8	6.8	6.6/7.4	No Exceedance
AW-17	UA	Compliance	02/08/2024	A7	Sulfate, total	mg/L	0.18 U	1	80.7	No Exceedance
AW-17	UA	Compliance	05/01/2024	A7R	Sulfate, total	mg/L	0.18 U	1	80.7	No Exceedance
AW-17	UA	Compliance	07/16/2024	A7D	Sulfate, total	mg/L	0.18 U	1	80.7	No Exceedance
AW-17	UA	Compliance	10/30/2024	A7DR	Sulfate, total	mg/L	0.3 J	1	80.7	No Exceedance
AW-17	UA	Compliance	02/08/2024	A7	Total Dissolved Solids	mg/L	900	900	955	No Exceedance
AW-17	UA	Compliance	05/01/2024	A7R	Total Dissolved Solids	mg/L	910	910	955	No Exceedance
AW-17	UA	Compliance	07/16/2024	A7D	Total Dissolved Solids	mg/L	940	940	955	No Exceedance
AW-17	UA	Compliance	10/30/2024	A7DR	Total Dissolved Solids	mg/L	950	950	955	No Exceedance
AW-18	UA	Compliance	02/07/2024	A7	Boron, total	mg/L	0.430 J+	0.430	0.429	Reported
AW-18	UA	Compliance	04/30/2024	A7R	Boron, total	mg/L	0.750	0.750	0.429	Confirmed
AW-18	UA	Compliance	07/16/2024	A7D	Boron, total	mg/L	0.430	0.430	0.429	Reported
AW-18	UA	Compliance	10/30/2024	A7DR	Boron, total	mg/L	1.50	1.50	0.429	Confirmed
AW-18	UA	Compliance	02/07/2024	A7	Calcium, total	mg/L	130	130	177	No Exceedance
AW-18	UA	Compliance	04/30/2024	A7R	Calcium, total	mg/L	120	120	177	No Exceedance
AW-18	UA	Compliance	07/16/2024	A7D	Calcium, total	mg/L	120	120	177	No Exceedance
AW-18	UA	Compliance	10/30/2024	A7DR	Calcium, total	mg/L	120	120	177	No Exceedance
AW-18	UA	Compliance	02/07/2024	A7	Chloride, total	mg/L	98.0	98.0	44.0	Reported
AW-18	UA	Compliance	04/30/2024	A7R	Chloride, total	mg/L	94.0	94.0	44.0	Confirmed
AW-18	UA	Compliance	07/16/2024	A7D	Chloride, total	mg/L	87.0	87.0	44.0	Reported
AW-18	UA	Compliance	10/30/2024	A7DR	Chloride, total	mg/L	77.0	77.0	44.0	Confirmed
AW-18	UA	Compliance	02/07/2024	A7	Fluoride, total	mg/L	0.075	0.25	0.376	No Exceedance
AW-18	UA	Compliance	04/30/2024	A7R	Fluoride, total	mg/L	0.11 J	0.25	0.376	No Exceedance
AW-18	UA	Compliance	07/16/2024	A7D	Fluoride, total	mg/L	0.25 UJ	0.25	0.376	No Exceedance
AW-18	UA	Compliance	10/30/2024	A7DR	Fluoride, total	mg/L	0.2 U	0.25	0.376	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
AW-18	UA	Compliance	02/07/2024	A7	pH (field)	SU	7.0	7.0	6.6/7.4	No Exceedance
AW-18	UA	Compliance	04/30/2024	A7R	pH (field)	SU	6.7	6.7	6.6/7.4	No Exceedance
AW-18	UA	Compliance	07/16/2024	A7D	pH (field)	SU	6.9	6.9	6.6/7.4	No Exceedance
AW-18	UA	Compliance	10/30/2024	A7DR	pH (field)	SU	6.6	6.6	6.6/7.4	No Exceedance
AW-18	UA	Compliance	02/07/2024	A7	Sulfate, total	mg/L	2.30	2.30	80.7	No Exceedance
AW-18	UA	Compliance	04/30/2024	A7R	Sulfate, total	mg/L	2.60	2.60	80.7	No Exceedance
AW-18	UA	Compliance	07/16/2024	A7D	Sulfate, total	mg/L	7.60	7.60	80.7	No Exceedance
AW-18	UA	Compliance	10/30/2024	A7DR	Sulfate, total	mg/L	7.30	7.30	80.7	No Exceedance
AW-18	UA	Compliance	02/07/2024	A7	Total Dissolved Solids	mg/L	880	880	955	No Exceedance
AW-18	UA	Compliance	04/30/2024	A7R	Total Dissolved Solids	mg/L	980	980	955	Exceedance Not Confirmed
AW-18	UA	Compliance	07/16/2024	A7D	Total Dissolved Solids	mg/L	920	920	955	No Exceedance
AW-18	UA	Compliance	10/30/2024	A7DR	Total Dissolved Solids	mg/L	920	920	955	No Exceedance
AW-19	UA	Compliance	02/08/2024	A7	Boron, total	mg/L	3.20	3.20	0.429	Reported
AW-19	UA	Compliance	04/30/2024	A7R	Boron, total	mg/L	2.80	2.80	0.429	Confirmed
AW-19	UA	Compliance	07/15/2024	A7D	Boron, total	mg/L	3.10	3.10	0.429	Reported
AW-19	UA	Compliance	10/31/2024	A7DR	Boron, total	mg/L	3.20	3.20	0.429	Confirmed
AW-19	UA	Compliance	02/08/2024	A7	Calcium, total	mg/L	130	130	177	No Exceedance
AW-19	UA	Compliance	04/30/2024	A7R	Calcium, total	mg/L	120	120	177	No Exceedance
AW-19	UA	Compliance	07/15/2024	A7D	Calcium, total	mg/L	120	120	177	No Exceedance
AW-19	UA	Compliance	10/31/2024	A7DR	Calcium, total	mg/L	120	120	177	No Exceedance
AW-19	UA	Compliance	02/08/2024	A7	Chloride, total	mg/L	76.0	76.0	44.0	Reported
AW-19	UA	Compliance	04/30/2024	A7R	Chloride, total	mg/L	73.0	73.0	44.0	Confirmed
AW-19	UA	Compliance	07/15/2024	A7D	Chloride, total	mg/L	75.0	75.0	44.0	Reported
AW-19	UA	Compliance	10/31/2024	A7DR	Chloride, total	mg/L	83.0	83.0	44.0	Confirmed
AW-19	UA	Compliance	02/08/2024	A7	Fluoride, total	mg/L	0.271 J+	0.271	0.376	No Exceedance
AW-19	UA	Compliance	04/30/2024	A7R	Fluoride, total	mg/L	0.248 J	0.125	0.376	No Exceedance
AW-19	UA	Compliance	07/15/2024	A7D	Fluoride, total	mg/L	0.246 J	0.25	0.376	No Exceedance
AW-19	UA	Compliance	10/31/2024	A7DR	Fluoride, total	mg/L	0.245 J	0.25	0.376	No Exceedance
AW-19	UA	Compliance	02/08/2024	A7	pH (field)	SU	6.8	6.8	6.6/7.4	No Exceedance
AW-19	UA	Compliance	04/30/2024	A7R	pH (field)	SU	6.8	6.8	6.6/7.4	No Exceedance
AW-19	UA	Compliance	07/15/2024	A7D	pH (field)	SU	7.2	7.2	6.6/7.4	No Exceedance
AW-19	UA	Compliance	10/31/2024	A7DR	pH (field)	SU	7.2	7.2	6.6/7.4	No Exceedance
AW-19	UA	Compliance	02/08/2024	A7	Sulfate, total	mg/L	54.0	54.0	80.7	No Exceedance
AW-19	UA	Compliance	04/30/2024	A7R	Sulfate, total	mg/L	55.0	55.0	80.7	No Exceedance
AW-19	UA	Compliance	07/15/2024	A7D	Sulfate, total	mg/L	54.0	54.0	80.7	No Exceedance
AW-19	UA	Compliance	10/31/2024	A7DR	Sulfate, total	mg/L	54.0	54.0	80.7	No Exceedance
AW-19	UA	Compliance	02/08/2024	A7	Total Dissolved Solids	mg/L	630	630	955	No Exceedance
AW-19	UA	Compliance	04/30/2024	A7R	Total Dissolved Solids	mg/L	760	760	955	No Exceedance
AW-19	UA	Compliance	07/15/2024	A7D	Total Dissolved Solids	mg/L	640	640	955	No Exceedance
AW-19	UA	Compliance	10/31/2024	A7DR	Total Dissolved Solids	mg/L	600	600	955	No Exceedance
AW-21	UA	Compliance	02/07/2024	A7	Boron, total	mg/L	9.30	9.30	0.429	Reported
AW-21	UA	Compliance	04/30/2024	A7R	Boron, total	mg/L	9.50	9.50	0.429	Confirmed
AW-21	UA	Compliance	07/15/2024	A7D	Boron, total	mg/L	10.0	10.0	0.429	Reported
AW-21	UA	Compliance	10/31/2024	A7DR	Boron, total	mg/L	10.0	10.0	0.429	Confirmed
AW-21	UA	Compliance	02/07/2024	A7	Calcium, total	mg/L	100	100	177	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Comparison Value	Background	SSI Type
AW-21	UA	Compliance	04/30/2024	A7R	Calcium, total	mg/L	100	100	177	No Exceedance
AW-21	UA	Compliance	07/15/2024	A7D	Calcium, total	mg/L	120	120	177	No Exceedance
AW-21	UA	Compliance	10/31/2024	A7DR	Calcium, total	mg/L	110	110	177	No Exceedance
AW-21	UA	Compliance	02/07/2024	A7	Chloride, total	mg/L	74.0	74.0	44.0	Reported
AW-21	UA	Compliance	04/30/2024	A7R	Chloride, total	mg/L	60.0	60.0	44.0	Confirmed
AW-21	UA	Compliance	07/15/2024	A7D	Chloride, total	mg/L	77.0	77.0	44.0	Reported
AW-21	UA	Compliance	10/31/2024	A7DR	Chloride, total	mg/L	85.0	85.0	44.0	Confirmed
AW-21	UA	Compliance	02/07/2024	A7	Fluoride, total	mg/L	0.232	0.125	0.376	No Exceedance
AW-21	UA	Compliance	04/30/2024	A7R	Fluoride, total	mg/L	0.279	0.279	0.376	No Exceedance
AW-21	UA	Compliance	07/15/2024	A7D	Fluoride, total	mg/L	0.319	0.319	0.376	No Exceedance
AW-21	UA	Compliance	10/31/2024	A7DR	Fluoride, total	mg/L	0.294	0.294	0.376	No Exceedance
AW-21	UA	Compliance	02/07/2024	A7	pH (field)	SU	8.9	8.9	6.6/7.4	Reported
AW-21	UA	Compliance	04/30/2024	A7R	pH (field)	SU	7.7	7.7	6.6/7.4	Confirmed
AW-21	UA	Compliance	07/15/2024	A7D	pH (field)	SU	7.3	7.3	6.6/7.4	No Exceedance
AW-21	UA	Compliance	10/31/2024	A7DR	pH (field)	SU	7.2	7.2	6.6/7.4	No Exceedance
AW-21	UA	Compliance	02/07/2024	A7	Sulfate, total	mg/L	220	220	80.7	Reported
AW-21	UA	Compliance	04/30/2024	A7R	Sulfate, total	mg/L	210	210	80.7	Confirmed
AW-21	UA	Compliance	07/15/2024	A7D	Sulfate, total	mg/L	230	230	80.7	Reported
AW-21	UA	Compliance	10/31/2024	A7DR	Sulfate, total	mg/L	240	240	80.7	Confirmed
AW-21	UA	Compliance	02/07/2024	A7	Total Dissolved Solids	mg/L	580	580	955	No Exceedance
AW-21	UA	Compliance	04/30/2024	A7R	Total Dissolved Solids	mg/L	770	770	955	No Exceedance
AW-21	UA	Compliance	07/15/2024	A7D	Total Dissolved Solids	mg/L	720	720	955	No Exceedance
AW-21	UA	Compliance	10/31/2024	A7DR	Total Dissolved Solids	mg/L	620	620	955	No Exceedance

Notes:
-- = not applicable
Comparison Value is different from the Result when the Result is below the Reporting Limit (RL). The Result will not be used in statistical calculations due to the inherent uncertainty in results that are below the RL. Half of the RL will be substituted for these data. See the *Multi-Site Statistical Analysis Plan* (Ramboll, 2022a) for more information.
Event IDs:
A7 = Quarter 1, 2024 Assessment Monitoring sampling event
A7R = Quarter 2, 2024 Assessment Monitoring resampling event
A7D = Quarter 3, 2024 Assessment Monitoring sampling event
A7DR = Quarter 4, 2024 Assessment Monitoring resampling event
HSU = hydrostratigraphic unit:
PMP = Potential Migration Pathway
UA = Uppermost Aquifer
ID = identification
mg/L = milligrams per liter
Result Code (if applicable):
NR[1] = Parameter not analyzed.
NS[1] = Well has been, or will be, abandoned; therefore, a sample was not collected.
NS[2] = Well either needs or was undergoing maintenance; therefore, a sample was not collected.
NS[3] = The location was not accessible; therefore, a sample was not collected.
NS[4] = The location could not be found; therefore, a sample was not collected.
NS[5] = The location was damaged; therefore, a sample was not collected.
NS[6] = Sampling pump could not yield a sample.
NS[7] = Well was either dry or purged dry and did not recover sufficiently to yield adequate volume for a sample.
NS[8] = A sample was not collected.
PM[1] = Parameter not analyzed as the well purged dry during sample collection and did not sufficiently recover to yield adequate sample volume for analysis.
Result qualifiers as defined in the United States Environmental Protection Agency's *National Functional Guidelines for Inorganic Superfund Methods Data Review*, EPA 542-R-20-006. November 2020.:
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 high.
U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.
UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
Statistically Significant Increase (SSI) Type:
No Exceedance: No exceedance of the background.
Exceedance Not Confirmed: An exceedance was determined in the parent event, a resample was collected, and the resample did not confirm the exceedance; or an exceedance was not determined in the parent event but a subsequent sample collected exhibited a concentration higher than background.
Reported: An exceedance in the parent event was observed and reported.
Confirmed: A resample confirmed an observed exceedance in the parent event.
SU = Standard Units

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TABLE 3
ANALYTICAL RESULTS - APPENDIX IV PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Well Type	Date	Event ID	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)
AP05S	B	02/08/2024	A7	0.00043 U	0.00120	0.650	0.00059 U	0.00074 U	0.0039	0.00200	0.3 U	0.00210	0.0290	0.00014 U	0.00074 U	1.58	0.00074 U	0.00038 U
AP05S	B	04/30/2024	A7R	0.00043 U	0.00120	0.830	0.00059 U	0.00074 U	0.0028 U	0.001 J	0.144 J	0.00045 J	0.0280	0.00014 U	0.00074 U	1.06	0.00074 U	0.00038 U
AP05S	B	07/18/2024	A7D	0.00043 U	0.00069 U	1.10	0.00059 U	0.00074 U	0.0028 U	0.0013 J	0.25 UJ	0.00036 J	0.0300	0.00014 U	0.00074 U	4.13	0.00074 U	0.00038 U
AP05S	B	10/31/2024	A7DR	0.00043 U	0.00096 J	1.00	0.00059 U	0.00074 U	0.0028 U	0.0011 J	0.2 U	0.00022 U	0.0360	0.00018 J	0.00074 U	3.09	0.00074 U	0.00038 U
AW-08	B	02/08/2024	A7	0.00043 U	0.0120	0.300	0.00059 U	0.00074 U	0.0028 U	0.00077	0.256 J+	0.00062	0.013	0.00014 U	0.00180	1.54	0.00074 U	0.00038 U
AW-08	B	05/02/2024	A7R	0.00043 U	0.0130	0.410	0.00059 U	0.00074 U	0.0028 U	0.00048 U	0.22 J	0.00022 U	0.013 J	0.00014 U	0.00095 J	0.468	0.00074 U	0.00038 U
AW-08	B	07/18/2024	A7D	0.00043 U	0.0130	0.310	0.00059 U	0.00074 U	0.0028 U	0.00048 U	0.25 UJ	0.00022 U	0.0098 J	0.00014 U	0.00092 J	5.55	0.00074 U	0.00038 U
AW-08	B	10/30/2024	A7DR	0.00043 U	0.0140	0.360	0.00059 U	0.00074 U	0.0028 U	0.00048 U	--	0.00022 U	0.013 J	0.00014 U	0.00110	0.863	0.00074 U	0.00038 U
AW-08	B	10/31/2024	A7DR	--	--	--	--	--	--	--	0.207 J	--	--	--	--	--	--	--
AP07S	C	02/08/2024	A7	0.00043 U	0.00069 U	0.0610 J+	0.00059 U	0.00074 U	0.0028 U	0.00240	0.289 J+	0.00033	0.0065	0.00018	0.00088	0.487	0.00074 U	0.00038 U
AP07S	C	04/30/2024	A7R	0.00043 U	0.00069 U	0.0840	0.00059 U	0.00074 U	0.0028 U	0.0014 J	0.25 UJ	0.00022 U	0.0072 J	0.00014 U	0.00079 J	0.575	0.00074 U	0.00038 U
AP07S	C	07/16/2024	A7D	0.00043 U	0.00069 U	0.0700	0.00059 U	0.00074 U	0.0028 U	0.0014 J	0.251	0.00022 U	0.0065 J	0.00014 U	0.00079 J	1.03	0.00074 U	0.00038 U
AP07S	C	10/31/2024	A7DR	0.00043 U	0.00069 U	0.0400	0.00059 U	0.00074 U	0.0028 U	0.00240	0.246 J	0.00022 U	0.0066 J	0.00014 U	0.00079 J	0.796	0.00074 U	0.00038 U
AW-01	C	02/08/2024	A7	0.00043 U	0.00390	0.0880 J+	0.00059 U	0.00074 U	0.0028 U	0.001	0.254 J+	0.00041	0.01	0.00014 U	0.00480	0.444	0.00074 U	0.00038 U
AW-01	C	04/30/2024	A7R	0.00043 U	0.00530	0.0900	0.00059 U	0.00074 U	0.0028 U	0.0013 J	0.214 J	0.00022 U	0.0064 J	0.00014 U	0.00340	0.483	0.00074 U	0.00038 U
AW-01	C	07/16/2024	A7D	0.00043 U	0.00680	0.120	0.00059 U	0.00074 U	0.0028 U	0.00350	0.270	0.00022 U	0.005 U	0.00019 J	0.00330	3.92	0.00074 U	0.00038 U
AW-01	C	10/30/2024	A7DR	0.00043 U	0.00500	0.100	0.00059 U	0.00074 U	0.0028 U	0.00330	0.19 J	0.00022 U	0.005 J	0.00014 U	0.00280	0.359	0.00074 U	0.00038 U
AW-05	C	02/08/2024	A7	0.00043 U	0.00510	0.150	0.00059 U	0.00074 U	0.00890	0.00600	0.3 U	0.00450	0.0200	0.00014 U	0.00220	0.861	0.00074 U	0.00038 U
AW-05	C	04/30/2024	A7R	0.00043 U	0.00360	0.110	0.00059 U	0.00074 U	0.0033 J	0.00280	0.192 J	0.00190	0.015 J	0.00014 U	0.00190	2.22	0.00074 U	0.00038 U
AW-05	C	07/16/2024	A7D	0.00043 U	0.00320	0.100	0.00059 U	0.00074 U	0.0028 U	0.0018 J	0.25 UJ	0.00086 J	0.012 J	0.00014 U	0.00200	1.03	0.00074 U	0.00038 U
AW-05	C	10/31/2024	A7DR	0.00043 U	0.00240	0.0830	0.00059 U	0.00074 U	0.0028 U	0.0012 J	0.2 U	0.00022 U	0.013 J	0.00016 J	0.00190	0.619	0.00074 U	0.00038 U
AW-06	C	02/07/2024	A7	0.00043 U	0.00840	0.230	0.00059 U	0.00074 U	0.00460	0.00270	0.263	0.00240 J	0.013	0.00014 U	0.00640	1.20	0.00074 U	0.00038 U
AW-06	C	05/02/2024	A7R	0.00043 U	0.00570	0.200	0.00059 U	0.00074 U	0.0028 U	0.0012 J	0.307	0.00081 J	0.012 J	0.00014 U	0.00620	1.77	0.00074 U	0.00038 U
AW-06	C	07/15/2024	A7D	0.00043 U	0.00480	0.190	0.00059 U	0.00074 U	0.0028 U	0.00049 J	0.321	0.00022 U	0.0097 J	0.00014 U	0.00580	0.417	0.00074 U	0.00038 U
AW-06	C	10/29/2024	A7DR	0.00043 U	0.00440 J	0.170	0.00059 U	0.00074 U	0.0028 U	0.00052 J	0.324	0.00022 U	0.012 J	0.00014 U	0.00830	0.545	0.00074 U	0.00038 U
AW-09	C	02/07/2024	A7	0.00043 U	0.0270	0.460	0.00059 U	0.00074 U	0.0028 U	0.00210	0.109	0.00022 U	0.016	0.00014	0.0180	0.807	0.00074 U	0.00038 U
AW-09	C	05/02/2024	A7R	0.00043 U	0.0260	0.470	0.00059 U	0.00074 U	0.0028 U	0.00210	0.175 J	0.00028 J	0.017 J	0.00014 U	0.0150	1.32	0.00074 U	0.00038 U

TABLE 3
ANALYTICAL RESULTS - APPENDIX IV PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Well Type	Date	Event ID	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)
AW-09	C	07/16/2024	A7D	0.00043 U	0.0240	0.450	0.00059 U	0.00074 U	0.0028 U	0.00270	0.25 UJ	0.00092 J	0.0270	0.00014 U	0.0140	0.919	0.00074 U	0.00038 U
AW-09	C	10/30/2024	A7DR	0.00043 U	0.0200	0.380	0.00059 U	0.00074 U	0.0038 J	0.00240	0.2 U	0.00079 J	0.018 J	0.00014 U	0.0180	1.30	0.00074 U	0.00038 U
AW-10	C	02/08/2024	A7	0.00043 U	0.0110	0.870	0.00059 U	0.00074 U	0.00470	0.00430	0.3 U	0.00220	0.0430	0.00014 U	0.00150	2.08	0.00074 U	0.00038 U
AW-10	C	05/02/2024	A7R	0.00043 U	0.00970	0.900	0.00059 U	0.00074 U	0.0140 J	0.00960	0.141 J	0.00630	0.0530	0.00014 U	0.00180	2.53	0.00074 U	0.00038 U
AW-10	C	07/18/2024	A7D	0.00043 U	0.0110	1.10	0.00059 U	0.00074 U	0.0190	0.0100	0.25 UJ	0.00960	0.0490	0.00014 U	0.00130	2.43	0.00074 U	0.00038 U
AW-10	C	10/30/2024	A7DR	0.00043 U	0.00820	0.810	0.00059 U	0.00074 U	0.0038 J	0.00300	0.2 U	0.00190	0.0380	0.00014 U	0.00140	1.75	0.00074 U	0.00038 U
AW-11	C	02/08/2024	A7	0.00043 U	0.00920	1.00	0.00059 U	0.00074 U	0.0028 U	0.0019	0.3 U	0.00110	0.0230	0.00014 U	0.00091	2.82	0.00074 U	0.00038 U
AW-11	C	05/01/2024	A7R	0.00043 U	0.00770	0.820	0.00059 U	0.00074 U	0.0028 U	0.00220	0.126 J	0.00160	0.0210	0.00014 U	0.00170	1.78	0.00074 U	0.00038 U
AW-11	C	07/17/2024	A7D	0.00043 U	0.0100	0.850	0.00059 U	0.00074 U	0.0028 U	0.0016 J	0.25 UJ	0.00059 J	0.019 J	0.00014 U	0.00150	2.43	0.00074 U	0.00038 U
AW-11	C	10/29/2024	A7DR	0.00043 U	0.00910	1.00	0.00059 U	0.00074 U	0.0028 U	0.0013 J	0.172 U	0.00029 J	0.0210	0.00015 J	0.00074 U	1.62	0.00074 U	0.00038 U
AW-14	C	02/08/2024	A7	0.00063	0.00220	0.510	0.00059 U	0.00074 U	0.0028 U	0.00220	0.3 U	0.00140	0.019	0.00014 U	0.00590	1.74	0.00140	0.00038 U
AW-14	C	05/01/2024	A7R	0.00043 U	0.00210	0.600	0.00059 U	0.00074 U	0.0028 U	0.0015 J	0.0199 U	0.00022 U	0.018 J	0.00014 U	0.00170	4.49	0.00074 U	0.00038 U
AW-14	C	07/17/2024	A7D	0.00043 U	0.00260	0.810	0.00059 U	0.00074 U	0.0028 U	0.0017 J	0.25 UJ	0.00027 J	0.016 J	0.000210	0.00074 U	2.53	0.00074 U	0.00038 U
AW-14	C	10/29/2024	A7DR	0.00043 U	0.00260	0.700	0.00059 U	0.00074 U	0.0028 U	0.0018 J	0.695	0.00043 J	0.018 J	0.00019 J	0.00074 U	5.62	0.00074 U	0.00038 U
AW-15	C	02/08/2024	A7	0.00043 U	0.00180	1.70	0.00059 U	0.00074 U	0.0028 U	0.0016	0.3 U	0.00028	0.0330	0.00014 U	0.00074 U	5.34	0.00074 U	0.00038 U
AW-15	C	05/01/2024	A7R	0.00043 U	0.00087 J	1.70	0.00059 U	0.00074 U	0.0028 U	0.0015 J	0.072 J	0.00022 U	0.0290	0.00014 U	0.00074 U	7.02	0.00074 U	0.00038 U
AW-15	C	07/17/2024	A7D	0.00043 U	0.00140	1.70	0.00059 U	0.00074 U	0.0028 U	0.0016 J	0.25 UJ	0.00022 U	0.0280	0.00014 U	0.00074 U	4.39	0.00074 U	0.00038 U
AW-15	C	10/29/2024	A7DR	0.00043 U	0.00150	1.60	0.00059 U	0.00074 U	0.0028 U	0.0015 J	0.172 U	0.00022 U	0.0320	0.00014 U	0.00074 U	5.08	0.00074 U	0.00038 U
AW-15S	C	02/08/2024	A7	0.00043 U	0.00069 U	0.0730 J+	0.00059 U	0.00074 U	0.0028 U	0.00048 U	0.260 J+	0.00022 U	0.016	0.00014 U	0.00280	0.522	0.00490	0.00038 U
AW-15S	C	05/01/2024	A7R	0.00043 U	0.00069 U	0.0780	0.00059 U	0.00074 U	0.0028 U	0.00048 U	0.226 J	0.00022 U	0.014 J	0.00014 U	0.00250	0.846	0.00074 U	0.00038 U
AW-15S	C	07/17/2024	A7D	0.00043 U	0.00069 U	0.0780	0.0012 U	0.00074 U	0.0028 U	0.00048 U	0.257	0.00022 U	0.013 J	0.00014 U	0.00250	0.790	0.00074 U	0.00038 U
AW-15S	C	10/29/2024	A7DR	0.00043 U	0.00069 U	0.0780	0.00059 U	0.00074 U	0.0028 U	0.00048 U	0.227 J	0.00022 U	0.019 J	0.00015 J	0.00290	0.489	0.00074 U	0.00038 U
AW-16	C	02/08/2024	A7	0.00043 U	0.00073	1.10	0.00059 U	0.00074 U	0.0028 U	0.0014	0.3 U	0.00022 U	0.0380	0.00014 U	0.00074 U	3.46	0.00074 U	0.00038 U
AW-16	C	04/30/2024	A7R	0.00043 U	0.00120	1.20	0.00059 U	0.00074 U	0.0028 U	0.0014 J	0.064 J	0.00022 U	0.0350	0.00014 U	0.00074 U	2.44	0.00074 U	0.00038 U
AW-16	C	07/16/2024	A7D	0.00043 U	0.00120	1.10	0.00059 U	0.00074 U	0.0028 U	0.0015 J	0.25 UJ	0.00022 U	0.0300	0.00014 U	0.00074 U	5.85	0.00074 U	0.00038 U
AW-16	C	10/30/2024	A7DR	0.00043 U	0.00120	1.00	0.00059 U	0.00074 U	0.0028 U	0.0015 J	0.2 U	0.00022 U	0.0340	0.00014 U	0.00074 U	2.78	0.00074 U	0.00038 U
AW-17	C	02/08/2024	A7	0.00043 U	0.00390	1.00	0.00059 U	0.00074 U	0.0028 U	0.00240	0.3 U	0.00098	0.0360	0.00014 U	0.00074 U	2.26	0.00074 U	0.00038 U

TABLE 3
ANALYTICAL RESULTS - APPENDIX IV PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	Well Type	Date	Event ID	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)
AW-17	C	05/01/2024	A7R	0.00043 U	0.00530	1.30	0.00059 U	0.00074 U	0.0028 U	0.00210	0.095 J	0.00046 J	0.0350	0.00014 U	0.00074 U	1.75	0.00074 U	0.00038 U
AW-17	C	07/16/2024	A7D	0.00043 U	0.00350	1.00	0.00059 U	0.00074 U	0.0028 U	0.0018 J	0.25 UJ	0.00022 J	0.0330	0.00014 U	0.00074 U	4.48	0.00074 U	0.00038 U
AW-17	C	10/30/2024	A7DR	0.00043 U	0.00380	0.970	0.00059 U	0.00074 U	0.0028 U	0.0018 J	0.2 U	0.00022 U	0.0330	0.00014 U	0.00074 U	3.03	0.00074 U	0.00038 U
AW-18	C	02/07/2024	A7	0.00043 U	0.00370	1.60	0.00059 U	0.00074 U	0.0028 U	0.001	0.075	0.00069	0.0290	0.00014 U	0.00160	3.45	0.00074 U	0.00038 U
AW-18	C	04/30/2024	A7R	0.00043 U	0.00330	1.40	0.00059 U	0.00074 U	0.0028 U	0.00072 J	0.11 J	0.00065 J	0.0240	0.00014 U	0.00150	3.23	0.00074 U	0.00038 U
AW-18	C	07/16/2024	A7D	0.00043 U	0.00410	1.50	0.00059 U	0.00074 U	0.0028 U	0.00092 J	0.25 UJ	0.00063 J	0.017 J	0.00014 U	0.00130	2.87	0.00074 U	0.00038 U
AW-18	C	10/30/2024	A7DR	0.00043 U	0.00240	1.10	0.00059 U	0.00074 U	0.0170	0.00087 J	0.2 U	0.00035 J	0.0240	0.00014 U	0.00470	2.38	0.00074 U	0.00038 U
AW-19	C	02/08/2024	A7	0.00043 U	0.0150	0.200	0.00059 U	0.00074 U	0.00470	0.00240	0.271 J+	0.00290	0.015	0.00014 U	0.00390	1.17	0.00074 U	0.00038 U
AW-19	C	04/30/2024	A7R	0.00043 U	0.0130	0.190	0.00059 U	0.00074 U	0.0028 U	0.00081 J	0.248 J	0.00052 J	0.011 J	0.00014 U	0.00360	0.180	0.00074 U	0.00038 U
AW-19	C	07/15/2024	A7D	0.00043 U	0.0130	0.210	0.00059 U	0.00074 U	0.0028 U	0.0011 J	0.246 J	0.00084 J	0.011 J	0.00014 U	0.00400	2.63	0.00074 U	0.00038 U
AW-19	C	10/31/2024	A7DR	0.00043 U	0.0100	0.180	0.00059 U	0.00074 U	0.0028 U	0.00066 J	0.245 J	0.00022 U	0.012 J	0.00014 U	0.00600	1.06	0.00074 U	0.00038 U
AW-21	C	02/07/2024	A7	0.0012	0.00260	0.0670	0.00059 U	0.00074 U	0.0031	0.00073	0.232	0.00022 U	0.005 U	0.00014 U	0.0220	1.03	0.00110	0.00038 U
AW-21	C	04/30/2024	A7R	0.0022 J	0.00390	0.0790	0.00059 U	0.00074 U	0.0028 U	0.00048 U	0.279	0.00022 U	0.0067 J	0.00014 U	0.0210	0.788	0.00260	0.00038 U
AW-21	C	07/15/2024	A7D	0.00073 J	0.00130	0.0590	0.00059 U	0.00074 U	0.0028 U	0.00049 J	0.319	0.00022 U	0.005 U	0.00014 U	0.0130	1.37	0.00074 U	0.00038 U
AW-21	C	10/31/2024	A7DR	0.002 J	0.00170	0.0590	0.00059 U	0.00074 U	0.0031 J	0.00048 U	0.294	0.00022 U	0.0068 J	0.00014 U	0.0200	0.679	0.00170	0.00038 U

TABLE 3
ANALYTICAL RESULTS - APPENDIX IV PARAMETERS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Notes:
Data qualifiers as defined in the United States Environmental Protection Agency's *National Functional Guidelines for Inorganic Superfund Methods Data Review* (2020):
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 high.
U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.
UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
Event IDs:
A7 = Quarter 1, 2024 Assessment Monitoring sampling event
A7R = Quarter 2, 2024 Assessment Monitoring resampling event
A7D = Quarter 3, 2024 Assessment Monitoring sampling event
A7DR = Quarter 4, 2024 Assessment Monitoring resampling event
ID = identification
mg/L = milligrams per liter
pCi/L = picoCuries per liter
Result Code (if applicable):
NR[1] = Parameter not analyzed.
NS[1] = Well has been, or will be, abandoned; therefore, a sample was not collected.
NS[2] = Well either needs or was undergoing maintenance; therefore, a sample was not collected.
NS[3] = The location was not accessible; therefore, a sample was not collected.
NS[4] = The location could not be found; therefore, a sample was not collected.
NS[5] = The location was damaged; therefore, a sample was not collected.
NS[6] = Sampling pump could not yield a sample.
NS[7] = Well was either dry or purged dry and did not recover sufficiently to yield adequate volume for a sample.
NS[8] = A sample was not collected.
PM[1] = Parameter not analyzed as the well purged dry during sample collection and did not sufficiently recover to yield adequate sample volume for analysis.
Well Type:
B = Background
C = Compliance

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TABLE 4
STATISTICAL BACKGROUND VALUES
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Parameter	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Background Value (LPL/UPL)
Boron (mg/L)	11/09/2015 - 08/23/2017	16	0	Parametric UPL	0.429
Calcium (mg/L)	11/09/2015 - 08/23/2017	16	0	Parametric UPL	177
Chloride (mg/L)	11/09/2015 - 08/23/2017	16	0	Non-parametric UPL	44.0
Fluoride (mg/L)	11/09/2015 - 08/23/2017	16	69	Non-parametric UPL	0.376
pH (field) (SU)	11/09/2015 - 08/23/2017	16	0	Parametric LPL/UPL	6.6/7.4
Sulfate (mg/L)	11/09/2015 - 08/23/2017	16	0	Parametric UPL	80.7
Total Dissolved Solids (mg/L)	11/09/2015 - 08/23/2017	16	0	Parametric UPL	955

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

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TABLE 5
GROUNDWATER PROTECTION STANDARDS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, 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)	11/09/2015 - 08/23/2017	16	94	Non-parametric UTL	0.00410	0.006	0.006	MCL/HBL
Arsenic (mg/L)	11/09/2015 - 08/23/2017	16	0	Parametric UTL	0.0187	0.010	0.0187	Background
Barium (mg/L)	11/09/2015 - 08/23/2017	16	0	Non-parametric UTL	0.790	2.0	2.0	MCL/HBL
Beryllium (mg/L)	11/09/2015 - 08/23/2017	16	94	Non-parametric UTL	0.0140	0.004	0.0140	Background
Cadmium (mg/L)	11/09/2015 - 08/23/2017	16	100	All ND - Last Reporting Limit	0.001	0.005	0.005	MCL/HBL
Chromium (mg/L)	11/09/2015 - 08/23/2017	16	100	All ND - Last Reporting Limit	0.004	0.1	0.1	MCL/HBL
Cobalt (mg/L)	11/09/2015 - 08/23/2017	16	56	Non-parametric UTL	0.00530	0.006	0.006	MCL/HBL
Fluoride (mg/L)	11/09/2015 - 08/23/2017	16	69	Non-parametric UTL	0.376	4.0	4.0	MCL/HBL
Lead (mg/L)	11/09/2015 - 08/23/2017	16	94	Non-parametric UTL	0.00100	0.015	0.015	MCL/HBL
Lithium (mg/L)	11/09/2015 - 08/23/2017	16	0	Parametric UTL	0.0541	0.04	0.0541	Background
Mercury (mg/L)	11/09/2015 - 08/23/2017	16	100	All ND - Last Reporting Limit	0.0002	0.002	0.002	MCL/HBL
Molybdenum (mg/L)	11/09/2015 - 08/23/2017	16	0	Parametric UTL	0.0225	0.1	0.1	MCL/HBL
Radium 226 + Radium 228 (pCi/L)	11/09/2015 - 08/23/2017	16	0	Parametric UTL	2.93	5	5	MCL/HBL
Selenium (mg/L)	11/09/2015 - 08/23/2017	16	94	Non-parametric UTL	0.00120	0.05	0.05	MCL/HBL
Thallium (mg/L)	11/09/2015 - 08/23/2017	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

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TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AP07S	PMP	A7	Antimony, total	mg/L	02/10/21 - 02/08/24	13	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AP07S	PMP	A7R	Antimony, total	mg/L	02/10/21 - 04/30/24	14	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AP07S	PMP	A7D	Antimony, total	mg/L	02/10/21 - 07/16/24	15	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AP07S	PMP	A7DR	Antimony, total	mg/L	02/10/21 - 10/31/24	16	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AP07S	PMP	A7	Arsenic, total	mg/L	02/10/21 - 02/08/24	13	84	CI around median	0.00100	0.0187	Background	No Exceedance
AP07S	PMP	A7R	Arsenic, total	mg/L	02/10/21 - 04/30/24	14	85	CI around median	0.00100	0.0187	Background	No Exceedance
AP07S	PMP	A7D	Arsenic, total	mg/L	02/10/21 - 07/16/24	15	86	CI around median	0.00100	0.0187	Background	No Exceedance
AP07S	PMP	A7DR	Arsenic, total	mg/L	02/10/21 - 10/31/24	16	87	CI around median	0.00100	0.0187	Background	No Exceedance
AP07S	PMP	A7	Barium, total	mg/L	02/10/21 - 02/08/24	13	0	CI around mean	0.0708	2.0	MCL/HBL	No Exceedance
AP07S	PMP	A7R	Barium, total	mg/L	02/10/21 - 04/30/24	14	0	CI around mean	0.0720	2.0	MCL/HBL	No Exceedance
AP07S	PMP	A7D	Barium, total	mg/L	02/10/21 - 07/16/24	15	0	CI around mean	0.0717	2.0	MCL/HBL	No Exceedance
AP07S	PMP	A7DR	Barium, total	mg/L	02/10/21 - 10/31/24	16	0	CI around mean	0.0681	2.0	MCL/HBL	No Exceedance
AP07S	PMP	A7	Beryllium, total	mg/L	02/10/21 - 02/08/24	13	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AP07S	PMP	A7R	Beryllium, total	mg/L	02/10/21 - 04/30/24	14	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AP07S	PMP	A7D	Beryllium, total	mg/L	02/10/21 - 07/16/24	15	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AP07S	PMP	A7DR	Beryllium, total	mg/L	02/10/21 - 10/31/24	16	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AP07S	PMP	A7	Cadmium, total	mg/L	02/10/21 - 02/08/24	13	84	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AP07S	PMP	A7R	Cadmium, total	mg/L	02/10/21 - 04/30/24	14	85	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AP07S	PMP	A7D	Cadmium, total	mg/L	02/10/21 - 07/16/24	15	86	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AP07S	PMP	A7DR	Cadmium, total	mg/L	02/10/21 - 10/31/24	16	87	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AP07S	PMP	A7	Chromium, total	mg/L	02/10/21 - 02/08/24	13	69	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AP07S	PMP	A7R	Chromium, total	mg/L	02/10/21 - 04/30/24	14	71	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AP07S	PMP	A7D	Chromium, total	mg/L	02/10/21 - 07/16/24	15	73	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AP07S	PMP	A7DR	Chromium, total	mg/L	02/10/21 - 10/31/24	16	75	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AP07S	PMP	A7	Cobalt, total	mg/L	02/10/21 - 02/08/24	13	0	CI around mean	0.00237	0.006	MCL/HBL	No Exceedance
AP07S	PMP	A7R	Cobalt, total	mg/L	02/10/21 - 04/30/24	14	7	CI around mean	0.00217	0.006	MCL/HBL	No Exceedance
AP07S	PMP	A7D	Cobalt, total	mg/L	02/10/21 - 07/16/24	15	13	CI around mean	0.00203	0.006	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AP07S	PMP	A7DR	Cobalt, total	mg/L	02/10/21 - 10/31/24	16	12	CI around mean	0.00205	0.006	MCL/HBL	No Exceedance
AP07S	PMP	A7	Fluoride, total	mg/L	02/10/21 - 02/08/24	13	69	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AP07S	PMP	A7R	Fluoride, total	mg/L	02/10/21 - 04/30/24	14	71	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AP07S	PMP	A7D	Fluoride, total	mg/L	02/10/21 - 07/16/24	15	66	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AP07S	PMP	A7DR	Fluoride, total	mg/L	02/10/21 - 10/31/24	16	68	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AP07S	PMP	A7	Lead, total	mg/L	02/10/21 - 02/08/24	13	61	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AP07S	PMP	A7R	Lead, total	mg/L	02/10/21 - 04/30/24	14	64	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AP07S	PMP	A7D	Lead, total	mg/L	02/10/21 - 07/16/24	15	66	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AP07S	PMP	A7DR	Lead, total	mg/L	02/10/21 - 10/31/24	16	68	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AP07S	PMP	A7	Lithium, total	mg/L	02/10/21 - 02/08/24	13	100	All ND - Last	0.02	0.0541	Background	No Exceedance
AP07S	PMP	A7R	Lithium, total	mg/L	02/10/21 - 04/30/24	14	100	All ND - Last	0.02	0.0541	Background	No Exceedance
AP07S	PMP	A7D	Lithium, total	mg/L	02/10/21 - 07/16/24	15	100	All ND - Last	0.02	0.0541	Background	No Exceedance
AP07S	PMP	A7DR	Lithium, total	mg/L	02/10/21 - 10/31/24	16	100	All ND - Last	0.02	0.0541	Background	No Exceedance
AP07S	PMP	A7	Mercury, total	mg/L	02/10/21 - 02/08/24	13	92	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AP07S	PMP	A7R	Mercury, total	mg/L	02/10/21 - 04/30/24	14	92	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AP07S	PMP	A7D	Mercury, total	mg/L	02/10/21 - 07/16/24	15	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AP07S	PMP	A7DR	Mercury, total	mg/L	02/10/21 - 10/31/24	16	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AP07S	PMP	A7	Molybdenum, total	mg/L	02/10/21 - 02/08/24	13	46	CI around median	0.00100	0.1	MCL/HBL	No Exceedance
AP07S	PMP	A7R	Molybdenum, total	mg/L	02/10/21 - 04/30/24	14	50	CI around median	0.00100	0.1	MCL/HBL	No Exceedance
AP07S	PMP	A7D	Molybdenum, total	mg/L	02/10/21 - 07/16/24	15	53	CI around median	0.00100	0.1	MCL/HBL	No Exceedance
AP07S	PMP	A7DR	Molybdenum, total	mg/L	02/10/21 - 10/31/24	16	56	CI around median	0.00100	0.1	MCL/HBL	No Exceedance
AP07S	PMP	A7	Radium 226 + Radium 228, total	pCi/L	02/10/21 - 02/08/24	13	0	CI around mean	0.569	5	MCL/HBL	No Exceedance
AP07S	PMP	A7R	Radium 226 + Radium 228, total	pCi/L	02/10/21 - 04/30/24	14	0	CI around mean	0.567	5	MCL/HBL	No Exceedance
AP07S	PMP	A7D	Radium 226 + Radium 228, total	pCi/L	02/10/21 - 07/16/24	15	0	CI around mean	0.602	5	MCL/HBL	No Exceedance
AP07S	PMP	A7DR	Radium 226 + Radium 228, total	pCi/L	02/10/21 - 10/31/24	16	0	CI around mean	0.617	5	MCL/HBL	No Exceedance
AP07S	PMP	A7	Selenium, total	mg/L	02/10/21 - 02/08/24	13	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AP07S	PMP	A7R	Selenium, total	mg/L	02/10/21 - 04/30/24	14	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AP07S	PMP	A7D	Selenium, total	mg/L	02/10/21 - 07/16/24	15	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AP07S	PMP	A7DR	Selenium, total	mg/L	02/10/21 - 10/31/24	16	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AP07S	PMP	A7	Thallium, total	mg/L	02/10/21 - 02/08/24	13	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AP07S	PMP	A7R	Thallium, total	mg/L	02/10/21 - 04/30/24	14	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AP07S	PMP	A7D	Thallium, total	mg/L	02/10/21 - 07/16/24	15	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AP07S	PMP	A7DR	Thallium, total	mg/L	02/10/21 - 10/31/24	16	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-01	PMP	A7	Antimony, total	mg/L	11/18/22 - 02/08/24	8	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-01	PMP	A7R	Antimony, total	mg/L	11/18/22 - 04/30/24	9	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-01	PMP	A7D	Antimony, total	mg/L	11/18/22 - 07/16/24	10	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-01	PMP	A7DR	Antimony, total	mg/L	11/18/22 - 10/30/24	11	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-01	PMP	A7	Arsenic, total	mg/L	11/18/22 - 02/08/24	8	0	CI around mean	0.00215	0.0187	Background	No Exceedance
AW-01	PMP	A7R	Arsenic, total	mg/L	11/18/22 - 04/30/24	9	0	CI around mean	0.00263	0.0187	Background	No Exceedance
AW-01	PMP	A7D	Arsenic, total	mg/L	11/18/22 - 07/16/24	10	0	CI around mean	0.00319	0.0187	Background	No Exceedance
AW-01	PMP	A7DR	Arsenic, total	mg/L	11/18/22 - 10/30/24	11	0	CI around mean	0.00340	0.0187	Background	No Exceedance
AW-01	PMP	A7	Barium, total	mg/L	11/18/22 - 02/08/24	8	0	CI around mean	0.101	2.0	MCL/HBL	No Exceedance
AW-01	PMP	A7R	Barium, total	mg/L	11/18/22 - 04/30/24	9	0	CI around mean	0.0979	2.0	MCL/HBL	No Exceedance
AW-01	PMP	A7D	Barium, total	mg/L	11/18/22 - 07/16/24	10	0	CI around mean	0.101	2.0	MCL/HBL	No Exceedance
AW-01	PMP	A7DR	Barium, total	mg/L	11/18/22 - 10/30/24	11	0	CI around mean	0.100	2.0	MCL/HBL	No Exceedance
AW-01	PMP	A7	Beryllium, total	mg/L	11/18/22 - 02/08/24	8	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-01	PMP	A7R	Beryllium, total	mg/L	11/18/22 - 04/30/24	9	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-01	PMP	A7D	Beryllium, total	mg/L	11/18/22 - 07/16/24	10	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-01	PMP	A7DR	Beryllium, total	mg/L	11/18/22 - 10/30/24	11	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-01	PMP	A7	Cadmium, total	mg/L	11/18/22 - 02/08/24	8	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-01	PMP	A7R	Cadmium, total	mg/L	11/18/22 - 04/30/24	9	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-01	PMP	A7D	Cadmium, total	mg/L	11/18/22 - 07/16/24	10	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-01	PMP	A7DR	Cadmium, total	mg/L	11/18/22 - 10/30/24	11	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-01	PMP	A7	Chromium, total	mg/L	11/18/22 - 02/08/24	8	75	CI around median	0.00400	0.1	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-01	PMP	A7R	Chromium, total	mg/L	11/18/22 - 04/30/24	9	77	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-01	PMP	A7D	Chromium, total	mg/L	11/18/22 - 07/16/24	10	80	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-01	PMP	A7DR	Chromium, total	mg/L	11/18/22 - 10/30/24	11	81	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-01	PMP	A7	Cobalt, total	mg/L	11/18/22 - 02/08/24	8	12	CI around mean	0.00224	0.006	MCL/HBL	No Exceedance
AW-01	PMP	A7R	Cobalt, total	mg/L	11/18/22 - 04/30/24	9	22	CI around mean	0.00251	0.006	MCL/HBL	No Exceedance
AW-01	PMP	A7D	Cobalt, total	mg/L	11/18/22 - 07/16/24	10	20	CI around mean	0.00264	0.006	MCL/HBL	No Exceedance
AW-01	PMP	A7DR	Cobalt, total	mg/L	11/18/22 - 10/30/24	11	18	CI around mean	0.00271	0.006	MCL/HBL	No Exceedance
AW-01	PMP	A7	Fluoride, total	mg/L	11/18/22 - 02/08/24	8	50	CI around mean	0.247	4.0	MCL/HBL	No Exceedance
AW-01	PMP	A7R	Fluoride, total	mg/L	11/18/22 - 04/30/24	9	55	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-01	PMP	A7D	Fluoride, total	mg/L	11/18/22 - 07/16/24	10	50	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-01	PMP	A7DR	Fluoride, total	mg/L	11/18/22 - 10/30/24	11	54	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-01	PMP	A7	Lead, total	mg/L	11/18/22 - 02/08/24	8	75	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-01	PMP	A7R	Lead, total	mg/L	11/18/22 - 04/30/24	9	77	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-01	PMP	A7D	Lead, total	mg/L	11/18/22 - 07/16/24	10	80	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-01	PMP	A7DR	Lead, total	mg/L	11/18/22 - 10/30/24	11	81	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-01	PMP	A7	Lithium, total	mg/L	11/18/22 - 02/08/24	8	100	All ND - Last	0.02	0.0541	Background	No Exceedance
AW-01	PMP	A7R	Lithium, total	mg/L	11/18/22 - 04/30/24	9	100	All ND - Last	0.02	0.0541	Background	No Exceedance
AW-01	PMP	A7D	Lithium, total	mg/L	11/18/22 - 07/16/24	10	100	All ND - Last	0.02	0.0541	Background	No Exceedance
AW-01	PMP	A7DR	Lithium, total	mg/L	11/18/22 - 10/30/24	11	100	All ND - Last	0.02	0.0541	Background	No Exceedance
AW-01	PMP	A7	Mercury, total	mg/L	11/18/22 - 02/08/24	8	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-01	PMP	A7R	Mercury, total	mg/L	11/18/22 - 04/30/24	9	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-01	PMP	A7D	Mercury, total	mg/L	11/18/22 - 07/16/24	10	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-01	PMP	A7DR	Mercury, total	mg/L	11/18/22 - 10/30/24	11	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-01	PMP	A7	Molybdenum, total	mg/L	11/18/22 - 02/08/24	8	0	CI around mean	0.00263	0.1	MCL/HBL	No Exceedance
AW-01	PMP	A7R	Molybdenum, total	mg/L	11/18/22 - 04/30/24	9	0	CI around mean	0.00275	0.1	MCL/HBL	No Exceedance
AW-01	PMP	A7D	Molybdenum, total	mg/L	11/18/22 - 07/16/24	10	0	CI around mean	0.00282	0.1	MCL/HBL	No Exceedance
AW-01	PMP	A7DR	Molybdenum, total	mg/L	11/18/22 - 10/30/24	11	0	CI around mean	0.00281	0.1	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-01	PMP	A7	Radium 226 + Radium 228, total	pCi/L	11/18/22 - 02/08/24	8	0	CI around mean	-0.393	5	MCL/HBL	No Exceedance
AW-01	PMP	A7R	Radium 226 + Radium 228, total	pCi/L	11/18/22 - 04/30/24	9	0	CI around median	0.288	5	MCL/HBL	No Exceedance
AW-01	PMP	A7D	Radium 226 + Radium 228, total	pCi/L	11/18/22 - 07/16/24	10	0	CI around mean	-0.00342	5	MCL/HBL	No Exceedance
AW-01	PMP	A7DR	Radium 226 + Radium 228, total	pCi/L	11/18/22 - 10/30/24	11	0	CI around median	0.288	5	MCL/HBL	No Exceedance
AW-01	PMP	A7	Selenium, total	mg/L	11/18/22 - 02/08/24	8	87	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-01	PMP	A7R	Selenium, total	mg/L	11/18/22 - 04/30/24	9	88	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-01	PMP	A7D	Selenium, total	mg/L	11/18/22 - 07/16/24	10	90	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-01	PMP	A7DR	Selenium, total	mg/L	11/18/22 - 10/30/24	11	90	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-01	PMP	A7	Thallium, total	mg/L	11/18/22 - 02/08/24	8	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-01	PMP	A7R	Thallium, total	mg/L	11/18/22 - 04/30/24	9	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-01	PMP	A7D	Thallium, total	mg/L	11/18/22 - 07/16/24	10	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-01	PMP	A7DR	Thallium, total	mg/L	11/18/22 - 10/30/24	11	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-05	UA	A7	Antimony, total	mg/L	11/09/15 - 02/08/24	17	94	Most recent sample	0.00300	0.006	MCL/HBL	No Exceedance
AW-05	UA	A7R	Antimony, total	mg/L	11/09/15 - 04/30/24	18	94	Most recent sample	0.00300	0.006	MCL/HBL	No Exceedance
AW-05	UA	A7D	Antimony, total	mg/L	11/09/15 - 07/16/24	19	94	Most recent sample	0.00300	0.006	MCL/HBL	No Exceedance
AW-05	UA	A7DR	Antimony, total	mg/L	11/09/15 - 10/31/24	20	95	Most recent sample	0.00300	0.006	MCL/HBL	No Exceedance
AW-05	UA	A7	Arsenic, total	mg/L	11/09/15 - 02/08/24	17	0	CI around geomean	0.00392	0.0187	Background	No Exceedance
AW-05	UA	A7R	Arsenic, total	mg/L	11/09/15 - 04/30/24	18	0	CI around median	0.00350	0.0187	Background	No Exceedance
AW-05	UA	A7D	Arsenic, total	mg/L	11/09/15 - 07/16/24	19	0	CI around median	0.00330	0.0187	Background	No Exceedance
AW-05	UA	A7DR	Arsenic, total	mg/L	11/09/15 - 10/31/24	20	0	CB around T-S line	-0.00486	0.0187	Background	No Exceedance
AW-05	UA	A7	Barium, total	mg/L	11/09/15 - 02/08/24	17	0	CI around geomean	0.140	2.0	MCL/HBL	No Exceedance
AW-05	UA	A7R	Barium, total	mg/L	11/09/15 - 04/30/24	18	0	CI around geomean	0.137	2.0	MCL/HBL	No Exceedance
AW-05	UA	A7D	Barium, total	mg/L	11/09/15 - 07/16/24	19	0	CB around linear reg	-0.0179	2.0	MCL/HBL	No Exceedance
AW-05	UA	A7DR	Barium, total	mg/L	11/09/15 - 10/31/24	20	0	CB around linear reg	-0.0203	2.0	MCL/HBL	No Exceedance
AW-05	UA	A7	Beryllium, total	mg/L	11/09/15 - 02/08/24	16	87	CI around median	0.00100	0.0140	Background	No Exceedance
AW-05	UA	A7R	Beryllium, total	mg/L	11/09/15 - 04/30/24	17	88	CI around median	0.00100	0.0140	Background	No Exceedance
AW-05	UA	A7D	Beryllium, total	mg/L	11/09/15 - 07/16/24	18	88	CI around median	0.00100	0.0140	Background	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-05	UA	A7DR	Beryllium, total	mg/L	11/09/15 - 10/31/24	19	89	CI around median	0.00100	0.0140	Background	No Exceedance
AW-05	UA	A7	Cadmium, total	mg/L	11/09/15 - 02/08/24	17	88	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AW-05	UA	A7R	Cadmium, total	mg/L	11/09/15 - 04/30/24	18	88	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AW-05	UA	A7D	Cadmium, total	mg/L	11/09/15 - 07/16/24	19	89	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AW-05	UA	A7DR	Cadmium, total	mg/L	11/09/15 - 10/31/24	20	90	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AW-05	UA	A7	Chromium, total	mg/L	11/09/15 - 02/08/24	17	29	CI around geomean	0.00579	0.1	MCL/HBL	No Exceedance
AW-05	UA	A7R	Chromium, total	mg/L	11/09/15 - 04/30/24	18	33	CI around geomean	0.00559	0.1	MCL/HBL	No Exceedance
AW-05	UA	A7D	Chromium, total	mg/L	11/09/15 - 07/16/24	19	36	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-05	UA	A7DR	Chromium, total	mg/L	11/09/15 - 10/31/24	20	40	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-05	UA	A7	Cobalt, total	mg/L	11/09/15 - 02/08/24	17	17	CI around geomean	0.00358	0.006	MCL/HBL	No Exceedance
AW-05	UA	A7R	Cobalt, total	mg/L	11/09/15 - 04/30/24	18	16	CI around geomean	0.00350	0.006	MCL/HBL	No Exceedance
AW-05	UA	A7D	Cobalt, total	mg/L	11/09/15 - 07/16/24	19	21	CI around geomean	0.00334	0.006	MCL/HBL	No Exceedance
AW-05	UA	A7DR	Cobalt, total	mg/L	11/09/15 - 10/31/24	20	25	CI around geomean	0.00321	0.006	MCL/HBL	No Exceedance
AW-05	UA	A7	Fluoride, total	mg/L	11/09/15 - 02/08/24	18	55	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-05	UA	A7R	Fluoride, total	mg/L	11/09/15 - 04/30/24	19	57	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-05	UA	A7D	Fluoride, total	mg/L	11/09/15 - 07/16/24	20	60	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-05	UA	A7DR	Fluoride, total	mg/L	11/09/15 - 10/31/24	21	61	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-05	UA	A7	Lead, total	mg/L	11/09/15 - 02/08/24	16	31	CI around geomean	0.00179	0.015	MCL/HBL	No Exceedance
AW-05	UA	A7R	Lead, total	mg/L	11/09/15 - 04/30/24	17	29	CI around geomean	0.00180	0.015	MCL/HBL	No Exceedance
AW-05	UA	A7D	Lead, total	mg/L	11/09/15 - 07/16/24	18	33	CI around geomean	0.00171	0.015	MCL/HBL	No Exceedance
AW-05	UA	A7DR	Lead, total	mg/L	11/09/15 - 10/31/24	19	36	CI around geomean	0.00163	0.015	MCL/HBL	No Exceedance
AW-05	UA	A7	Lithium, total	mg/L	11/09/15 - 02/08/24	17	29	CI around median	0.0200	0.0541	Background	No Exceedance
AW-05	UA	A7R	Lithium, total	mg/L	11/09/15 - 04/30/24	18	33	CI around median	0.0200	0.0541	Background	No Exceedance
AW-05	UA	A7D	Lithium, total	mg/L	11/09/15 - 07/16/24	19	36	CB around T-S line	-0.00263	0.0541	Background	No Exceedance
AW-05	UA	A7DR	Lithium, total	mg/L	11/09/15 - 10/31/24	20	40	CB around T-S line	0.00177	0.0541	Background	No Exceedance
AW-05	UA	A7	Mercury, total	mg/L	11/09/15 - 02/08/24	17	94	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-05	UA	A7R	Mercury, total	mg/L	11/09/15 - 04/30/24	18	94	CI around median	0.000200	0.002	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-05	UA	A7D	Mercury, total	mg/L	11/09/15 - 07/16/24	19	94	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-05	UA	A7DR	Mercury, total	mg/L	11/09/15 - 10/31/24	20	95	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-05	UA	A7	Molybdenum, total	mg/L	11/09/15 - 02/08/24	17	0	CI around mean	0.00208	0.1	MCL/HBL	No Exceedance
AW-05	UA	A7R	Molybdenum, total	mg/L	11/09/15 - 04/30/24	18	0	CI around mean	0.00206	0.1	MCL/HBL	No Exceedance
AW-05	UA	A7D	Molybdenum, total	mg/L	11/09/15 - 07/16/24	19	0	CI around mean	0.00205	0.1	MCL/HBL	No Exceedance
AW-05	UA	A7DR	Molybdenum, total	mg/L	11/09/15 - 10/31/24	20	0	CI around mean	0.00204	0.1	MCL/HBL	No Exceedance
AW-05	UA	A7	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 02/08/24	17	0	CI around mean	0.664	5	MCL/HBL	No Exceedance
AW-05	UA	A7R	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 04/30/24	18	0	CI around mean	0.746	5	MCL/HBL	No Exceedance
AW-05	UA	A7D	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 07/16/24	19	0	CI around mean	0.763	5	MCL/HBL	No Exceedance
AW-05	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 10/31/24	20	0	CI around mean	0.752	5	MCL/HBL	No Exceedance
AW-05	UA	A7	Selenium, total	mg/L	11/09/15 - 02/08/24	17	52	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-05	UA	A7R	Selenium, total	mg/L	11/09/15 - 04/30/24	18	55	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-05	UA	A7D	Selenium, total	mg/L	11/09/15 - 07/16/24	19	57	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-05	UA	A7DR	Selenium, total	mg/L	11/09/15 - 10/31/24	20	60	CB around T-S line	0.000643	0.05	MCL/HBL	No Exceedance
AW-05	UA	A7	Thallium, total	mg/L	11/09/15 - 02/08/24	16	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-05	UA	A7R	Thallium, total	mg/L	11/09/15 - 04/30/24	17	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-05	UA	A7D	Thallium, total	mg/L	11/09/15 - 07/16/24	18	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-05	UA	A7DR	Thallium, total	mg/L	11/09/15 - 10/31/24	19	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-06	UA	A7	Antimony, total	mg/L	11/10/15 - 02/07/24	18	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-06	UA	A7R	Antimony, total	mg/L	11/10/15 - 05/02/24	19	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-06	UA	A7D	Antimony, total	mg/L	11/10/15 - 07/15/24	20	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-06	UA	A7DR	Antimony, total	mg/L	11/10/15 - 10/29/24	21	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-06	UA	A7	Arsenic, total	mg/L	11/10/15 - 02/07/24	23	0	CI around geomean	0.00315	0.0187	Background	No Exceedance
AW-06	UA	A7R	Arsenic, total	mg/L	11/10/15 - 05/02/24	24	0	CI around geomean	0.00323	0.0187	Background	No Exceedance
AW-06	UA	A7D	Arsenic, total	mg/L	11/10/15 - 07/15/24	25	0	CI around geomean	0.00329	0.0187	Background	No Exceedance
AW-06	UA	A7DR	Arsenic, total	mg/L	11/10/15 - 10/29/24	26	0	CI around geomean	0.00333	0.0187	Background	No Exceedance
AW-06	UA	A7	Barium, total	mg/L	11/10/15 - 02/07/24	23	0	CI around median	0.180	2.0	MCL/HBL	No Exceedance

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EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-06	UA	A7R	Barium, total	mg/L	11/10/15 - 05/02/24	24	0	CI around median	0.180	2.0	MCL/HBL	No Exceedance
AW-06	UA	A7D	Barium, total	mg/L	11/10/15 - 07/15/24	25	0	CI around median	0.180	2.0	MCL/HBL	No Exceedance
AW-06	UA	A7DR	Barium, total	mg/L	11/10/15 - 10/29/24	26	0	CI around median	0.180	2.0	MCL/HBL	No Exceedance
AW-06	UA	A7	Beryllium, total	mg/L	11/10/15 - 02/07/24	23	86	CI around median	0.00100	0.0140	Background	No Exceedance
AW-06	UA	A7R	Beryllium, total	mg/L	11/10/15 - 05/02/24	24	87	CI around median	0.00100	0.0140	Background	No Exceedance
AW-06	UA	A7D	Beryllium, total	mg/L	11/10/15 - 07/15/24	25	88	CI around median	0.00100	0.0140	Background	No Exceedance
AW-06	UA	A7DR	Beryllium, total	mg/L	11/10/15 - 10/29/24	26	88	CI around median	0.00100	0.0140	Background	No Exceedance
AW-06	UA	A7	Cadmium, total	mg/L	11/10/15 - 02/07/24	18	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-06	UA	A7R	Cadmium, total	mg/L	11/10/15 - 05/02/24	19	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-06	UA	A7D	Cadmium, total	mg/L	11/10/15 - 07/15/24	20	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-06	UA	A7DR	Cadmium, total	mg/L	11/10/15 - 10/29/24	21	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-06	UA	A7	Chromium, total	mg/L	11/10/15 - 02/07/24	23	52	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-06	UA	A7R	Chromium, total	mg/L	11/10/15 - 05/02/24	24	54	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-06	UA	A7D	Chromium, total	mg/L	11/10/15 - 07/15/24	25	56	CB around T-S line	-0.00511	0.1	MCL/HBL	No Exceedance
AW-06	UA	A7DR	Chromium, total	mg/L	11/10/15 - 10/29/24	26	57	CB around T-S line	-0.00265	0.1	MCL/HBL	No Exceedance
AW-06	UA	A7	Cobalt, total	mg/L	11/10/15 - 02/07/24	23	56	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-06	UA	A7R	Cobalt, total	mg/L	11/10/15 - 05/02/24	24	58	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-06	UA	A7D	Cobalt, total	mg/L	11/10/15 - 07/15/24	25	60	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-06	UA	A7DR	Cobalt, total	mg/L	11/10/15 - 10/29/24	26	61	CB around T-S line	-0.000951	0.006	MCL/HBL	No Exceedance
AW-06	UA	A7	Fluoride, total	mg/L	11/10/15 - 02/07/24	24	8	CB around T-S line	0.188	4.0	MCL/HBL	No Exceedance
AW-06	UA	A7R	Fluoride, total	mg/L	11/10/15 - 05/02/24	25	8	CB around T-S line	0.197	4.0	MCL/HBL	No Exceedance
AW-06	UA	A7D	Fluoride, total	mg/L	11/10/15 - 07/15/24	26	7	CB around T-S line	0.200	4.0	MCL/HBL	No Exceedance
AW-06	UA	A7DR	Fluoride, total	mg/L	11/10/15 - 10/29/24	27	7	CB around T-S line	0.212	4.0	MCL/HBL	No Exceedance
AW-06	UA	A7	Lead, total	mg/L	11/10/15 - 02/07/24	23	34	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-06	UA	A7R	Lead, total	mg/L	11/10/15 - 05/02/24	24	37	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-06	UA	A7D	Lead, total	mg/L	11/10/15 - 07/15/24	25	40	CB around T-S line	-0.00369	0.015	MCL/HBL	No Exceedance
AW-06	UA	A7DR	Lead, total	mg/L	11/10/15 - 10/29/24	26	42	CB around T-S line	-0.00254	0.015	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-06	UA	A7	Lithium, total	mg/L	11/10/15 - 02/07/24	23	47	CI around geomean	0.0128	0.0541	Background	No Exceedance
AW-06	UA	A7R	Lithium, total	mg/L	11/10/15 - 05/02/24	24	50	CI around median	0.0200	0.0541	Background	No Exceedance
AW-06	UA	A7D	Lithium, total	mg/L	11/10/15 - 07/15/24	25	52	CI around median	0.0200	0.0541	Background	No Exceedance
AW-06	UA	A7DR	Lithium, total	mg/L	11/10/15 - 10/29/24	26	53	CI around median	0.0200	0.0541	Background	No Exceedance
AW-06	UA	A7	Mercury, total	mg/L	11/10/15 - 02/07/24	18	94	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-06	UA	A7R	Mercury, total	mg/L	11/10/15 - 05/02/24	19	94	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-06	UA	A7D	Mercury, total	mg/L	11/10/15 - 07/15/24	20	95	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-06	UA	A7DR	Mercury, total	mg/L	11/10/15 - 10/29/24	21	95	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-06	UA	A7	Molybdenum, total	mg/L	11/10/15 - 02/07/24	23	0	CI around mean	0.00487	0.1	MCL/HBL	No Exceedance
AW-06	UA	A7R	Molybdenum, total	mg/L	11/10/15 - 05/02/24	24	0	CI around mean	0.00492	0.1	MCL/HBL	No Exceedance
AW-06	UA	A7D	Molybdenum, total	mg/L	11/10/15 - 07/15/24	25	0	CI around mean	0.00496	0.1	MCL/HBL	No Exceedance
AW-06	UA	A7DR	Molybdenum, total	mg/L	11/10/15 - 10/29/24	26	0	CI around mean	0.00505	0.1	MCL/HBL	No Exceedance
AW-06	UA	A7	Radium 226 + Radium 228, total	pCi/L	11/10/15 - 02/07/24	23	0	CI around mean	0.708	5	MCL/HBL	No Exceedance
AW-06	UA	A7R	Radium 226 + Radium 228, total	pCi/L	11/10/15 - 05/02/24	24	0	CI around mean	0.747	5	MCL/HBL	No Exceedance
AW-06	UA	A7D	Radium 226 + Radium 228, total	pCi/L	11/10/15 - 07/15/24	25	0	CI around mean	0.729	5	MCL/HBL	No Exceedance
AW-06	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	11/10/15 - 10/29/24	26	0	CI around mean	0.719	5	MCL/HBL	No Exceedance
AW-06	UA	A7	Selenium, total	mg/L	11/10/15 - 02/07/24	23	73	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-06	UA	A7R	Selenium, total	mg/L	11/10/15 - 05/02/24	24	75	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-06	UA	A7D	Selenium, total	mg/L	11/10/15 - 07/15/24	25	76	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-06	UA	A7DR	Selenium, total	mg/L	11/10/15 - 10/29/24	26	76	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-06	UA	A7	Thallium, total	mg/L	11/10/15 - 02/07/24	18	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-06	UA	A7R	Thallium, total	mg/L	11/10/15 - 05/02/24	19	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-06	UA	A7D	Thallium, total	mg/L	11/10/15 - 07/15/24	20	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-06	UA	A7DR	Thallium, total	mg/L	11/10/15 - 10/29/24	21	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-09	UA	A7	Antimony, total	mg/L	11/10/15 - 02/07/24	18	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-09	UA	A7R	Antimony, total	mg/L	11/10/15 - 05/02/24	19	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-09	UA	A7D	Antimony, total	mg/L	11/10/15 - 07/16/24	20	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-09	UA	A7DR	Antimony, total	mg/L	11/10/15 - 10/30/24	21	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-09	UA	A7	Arsenic, total	mg/L	11/10/15 - 02/07/24	23	13	CI around mean	0.0113	0.0187	Background	No Exceedance
AW-09	UA	A7R	Arsenic, total	mg/L	11/10/15 - 05/02/24	24	12	CI around mean	0.0119	0.0187	Background	No Exceedance
AW-09	UA	A7D	Arsenic, total	mg/L	11/10/15 - 07/16/24	25	12	CI around mean	0.0124	0.0187	Background	No Exceedance
AW-09	UA	A7DR	Arsenic, total	mg/L	11/10/15 - 10/30/24	26	11	CI around mean	0.0127	0.0187	Background	No Exceedance
AW-09	UA	A7	Barium, total	mg/L	11/10/15 - 02/07/24	23	0	CI around geomean	0.290	2.0	MCL/HBL	No Exceedance
AW-09	UA	A7R	Barium, total	mg/L	11/10/15 - 05/02/24	24	0	CI around geomean	0.296	2.0	MCL/HBL	No Exceedance
AW-09	UA	A7D	Barium, total	mg/L	11/10/15 - 07/16/24	25	0	CI around geomean	0.301	2.0	MCL/HBL	No Exceedance
AW-09	UA	A7DR	Barium, total	mg/L	11/10/15 - 10/30/24	26	0	CI around geomean	0.304	2.0	MCL/HBL	No Exceedance
AW-09	UA	A7	Beryllium, total	mg/L	11/10/15 - 02/07/24	23	82	CB around T-S line	-0.000357	0.0140	Background	No Exceedance
AW-09	UA	A7R	Beryllium, total	mg/L	11/10/15 - 05/02/24	24	83	CB around T-S line	-0.000284	0.0140	Background	No Exceedance
AW-09	UA	A7D	Beryllium, total	mg/L	11/10/15 - 07/16/24	25	84	CB around T-S line	-0.000313	0.0140	Background	No Exceedance
AW-09	UA	A7DR	Beryllium, total	mg/L	11/10/15 - 10/30/24	26	84	CB around T-S line	0.0000683	0.0140	Background	No Exceedance
AW-09	UA	A7	Cadmium, total	mg/L	11/10/15 - 02/07/24	18	88	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AW-09	UA	A7R	Cadmium, total	mg/L	11/10/15 - 05/02/24	19	89	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AW-09	UA	A7D	Cadmium, total	mg/L	11/10/15 - 07/16/24	20	90	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AW-09	UA	A7DR	Cadmium, total	mg/L	11/10/15 - 10/30/24	21	90	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AW-09	UA	A7	Chromium, total	mg/L	11/10/15 - 02/07/24	23	56	CB around T-S line	-0.0511	0.1	MCL/HBL	No Exceedance
AW-09	UA	A7R	Chromium, total	mg/L	11/10/15 - 05/02/24	24	58	CB around T-S line	-0.0427	0.1	MCL/HBL	No Exceedance
AW-09	UA	A7D	Chromium, total	mg/L	11/10/15 - 07/16/24	25	60	CB around T-S line	-0.0560	0.1	MCL/HBL	No Exceedance
AW-09	UA	A7DR	Chromium, total	mg/L	11/10/15 - 10/30/24	26	61	CB around T-S line	-0.0490	0.1	MCL/HBL	No Exceedance
AW-09	UA	A7	Cobalt, total	mg/L	11/10/15 - 02/07/24	23	4	CB around T-S line	-0.0271	0.006	MCL/HBL	No Exceedance
AW-09	UA	A7R	Cobalt, total	mg/L	11/10/15 - 05/02/24	24	4	CB around T-S line	-0.0219	0.006	MCL/HBL	No Exceedance
AW-09	UA	A7D	Cobalt, total	mg/L	11/10/15 - 07/16/24	25	4	CB around T-S line	-0.0299	0.006	MCL/HBL	No Exceedance
AW-09	UA	A7DR	Cobalt, total	mg/L	11/10/15 - 10/30/24	26	3	CB around T-S line	-0.0257	0.006	MCL/HBL	No Exceedance
AW-09	UA	A7	Fluoride, total	mg/L	11/10/15 - 02/07/24	24	62	CB around T-S line	0.187	4.0	MCL/HBL	No Exceedance
AW-09	UA	A7R	Fluoride, total	mg/L	11/10/15 - 05/02/24	25	64	CB around T-S line	0.179	4.0	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-09	UA	A7D	Fluoride, total	mg/L	11/10/15 - 07/16/24	26	65	CB around T-S line	0.177	4.0	MCL/HBL	No Exceedance
AW-09	UA	A7DR	Fluoride, total	mg/L	11/10/15 - 10/30/24	27	66	CB around T-S line	0.194	4.0	MCL/HBL	No Exceedance
AW-09	UA	A7	Lead, total	mg/L	11/10/15 - 02/07/24	23	43	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-09	UA	A7R	Lead, total	mg/L	11/10/15 - 05/02/24	24	45	CB around T-S line	-0.0235	0.015	MCL/HBL	No Exceedance
AW-09	UA	A7D	Lead, total	mg/L	11/10/15 - 07/16/24	25	48	CB around T-S line	-0.0295	0.015	MCL/HBL	No Exceedance
AW-09	UA	A7DR	Lead, total	mg/L	11/10/15 - 10/30/24	26	50	CB around T-S line	-0.0266	0.015	MCL/HBL	No Exceedance
AW-09	UA	A7	Lithium, total	mg/L	11/10/15 - 02/07/24	23	34	CB around T-S line	-0.0509	0.0541	Background	No Exceedance
AW-09	UA	A7R	Lithium, total	mg/L	11/10/15 - 05/02/24	24	37	CB around T-S line	-0.0390	0.0541	Background	No Exceedance
AW-09	UA	A7D	Lithium, total	mg/L	11/10/15 - 07/16/24	25	36	CB around T-S line	-0.0496	0.0541	Background	No Exceedance
AW-09	UA	A7DR	Lithium, total	mg/L	11/10/15 - 10/30/24	26	38	CB around T-S line	-0.0503	0.0541	Background	No Exceedance
AW-09	UA	A7	Mercury, total	mg/L	11/10/15 - 02/07/24	18	94	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-09	UA	A7R	Mercury, total	mg/L	11/10/15 - 05/02/24	19	94	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-09	UA	A7D	Mercury, total	mg/L	11/10/15 - 07/16/24	20	95	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-09	UA	A7DR	Mercury, total	mg/L	11/10/15 - 10/30/24	21	95	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-09	UA	A7	Molybdenum, total	mg/L	11/10/15 - 02/07/24	23	0	CI around mean	0.0143	0.1	MCL/HBL	No Exceedance
AW-09	UA	A7R	Molybdenum, total	mg/L	11/10/15 - 05/02/24	24	0	CI around mean	0.0143	0.1	MCL/HBL	No Exceedance
AW-09	UA	A7D	Molybdenum, total	mg/L	11/10/15 - 07/16/24	25	0	CI around mean	0.0143	0.1	MCL/HBL	No Exceedance
AW-09	UA	A7DR	Molybdenum, total	mg/L	11/10/15 - 10/30/24	26	0	CI around mean	0.0144	0.1	MCL/HBL	No Exceedance
AW-09	UA	A7	Radium 226 + Radium 228, total	pCi/L	11/10/15 - 02/07/24	23	0	CI around median	0.729	5	MCL/HBL	No Exceedance
AW-09	UA	A7R	Radium 226 + Radium 228, total	pCi/L	11/10/15 - 05/02/24	24	0	CI around median	0.771	5	MCL/HBL	No Exceedance
AW-09	UA	A7D	Radium 226 + Radium 228, total	pCi/L	11/10/15 - 07/16/24	25	0	CI around median	0.771	5	MCL/HBL	No Exceedance
AW-09	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	11/10/15 - 10/30/24	26	0	CI around median	0.803	5	MCL/HBL	No Exceedance
AW-09	UA	A7	Selenium, total	mg/L	11/10/15 - 02/07/24	23	65	CB around T-S line	-0.00204	0.05	MCL/HBL	No Exceedance
AW-09	UA	A7R	Selenium, total	mg/L	11/10/15 - 05/02/24	24	66	CB around T-S line	-0.00143	0.05	MCL/HBL	No Exceedance
AW-09	UA	A7D	Selenium, total	mg/L	11/10/15 - 07/16/24	25	68	CB around T-S line	-0.00167	0.05	MCL/HBL	No Exceedance
AW-09	UA	A7DR	Selenium, total	mg/L	11/10/15 - 10/30/24	26	69	CB around T-S line	-0.00128	0.05	MCL/HBL	No Exceedance
AW-09	UA	A7	Thallium, total	mg/L	11/10/15 - 02/07/24	18	94	CI around median	0.00100	0.002	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-09	UA	A7R	Thallium, total	mg/L	11/10/15 - 05/02/24	19	94	CI around median	0.00100	0.002	MCL/HBL	No Exceedance
AW-09	UA	A7D	Thallium, total	mg/L	11/10/15 - 07/16/24	20	95	CI around median	0.00100	0.002	MCL/HBL	No Exceedance
AW-09	UA	A7DR	Thallium, total	mg/L	11/10/15 - 10/30/24	21	95	CI around median	0.00100	0.002	MCL/HBL	No Exceedance
AW-10	UA	A7	Antimony, total	mg/L	11/09/15 - 02/08/24	19	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-10	UA	A7R	Antimony, total	mg/L	11/09/15 - 05/02/24	20	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-10	UA	A7D	Antimony, total	mg/L	11/09/15 - 07/18/24	21	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-10	UA	A7DR	Antimony, total	mg/L	11/09/15 - 10/30/24	22	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-10	UA	A7	Arsenic, total	mg/L	11/09/15 - 02/08/24	24	0	CI around median	0.00990	0.0187	Background	No Exceedance
AW-10	UA	A7R	Arsenic, total	mg/L	11/09/15 - 05/02/24	25	0	CI around median	0.00990	0.0187	Background	No Exceedance
AW-10	UA	A7D	Arsenic, total	mg/L	11/09/15 - 07/18/24	26	0	CI around median	0.00990	0.0187	Background	No Exceedance
AW-10	UA	A7DR	Arsenic, total	mg/L	11/09/15 - 10/30/24	27	0	CI around median	0.00990	0.0187	Background	No Exceedance
AW-10	UA	A7	Barium, total	mg/L	11/09/15 - 02/08/24	24	0	CI around median	0.980	2.0	MCL/HBL	No Exceedance
AW-10	UA	A7R	Barium, total	mg/L	11/09/15 - 05/02/24	25	0	CI around median	0.930	2.0	MCL/HBL	No Exceedance
AW-10	UA	A7D	Barium, total	mg/L	11/09/15 - 07/18/24	26	0	CI around median	0.980	2.0	MCL/HBL	No Exceedance
AW-10	UA	A7DR	Barium, total	mg/L	11/09/15 - 10/30/24	27	0	CI around median	0.930	2.0	MCL/HBL	No Exceedance
AW-10	UA	A7	Beryllium, total	mg/L	11/09/15 - 02/08/24	24	75	CI around median	0.00100	0.0140	Background	No Exceedance
AW-10	UA	A7R	Beryllium, total	mg/L	11/09/15 - 05/02/24	25	76	CI around median	0.00100	0.0140	Background	No Exceedance
AW-10	UA	A7D	Beryllium, total	mg/L	11/09/15 - 07/18/24	26	76	CI around median	0.00100	0.0140	Background	No Exceedance
AW-10	UA	A7DR	Beryllium, total	mg/L	11/09/15 - 10/30/24	27	77	CI around median	0.00100	0.0140	Background	No Exceedance
AW-10	UA	A7	Cadmium, total	mg/L	11/09/15 - 02/08/24	19	94	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AW-10	UA	A7R	Cadmium, total	mg/L	11/09/15 - 05/02/24	20	95	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AW-10	UA	A7D	Cadmium, total	mg/L	11/09/15 - 07/18/24	21	95	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AW-10	UA	A7DR	Cadmium, total	mg/L	11/09/15 - 10/30/24	22	95	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AW-10	UA	A7	Chromium, total	mg/L	11/09/15 - 02/08/24	24	33	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-10	UA	A7R	Chromium, total	mg/L	11/09/15 - 05/02/24	25	32	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-10	UA	A7D	Chromium, total	mg/L	11/09/15 - 07/18/24	26	30	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-10	UA	A7DR	Chromium, total	mg/L	11/09/15 - 10/30/24	27	33	CI around median	0.00400	0.1	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-10	UA	A7	Cobalt, total	mg/L	11/09/15 - 02/08/24	24	4	CI around geomean	0.00378	0.006	MCL/HBL	No Exceedance
AW-10	UA	A7R	Cobalt, total	mg/L	11/09/15 - 05/02/24	25	4	CI around geomean	0.00393	0.006	MCL/HBL	No Exceedance
AW-10	UA	A7D	Cobalt, total	mg/L	11/09/15 - 07/18/24	26	3	CI around geomean	0.00408	0.006	MCL/HBL	No Exceedance
AW-10	UA	A7DR	Cobalt, total	mg/L	11/09/15 - 10/30/24	27	3	CI around geomean	0.00402	0.006	MCL/HBL	No Exceedance
AW-10	UA	A7	Fluoride, total	mg/L	11/09/15 - 02/08/24	25	96	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-10	UA	A7R	Fluoride, total	mg/L	11/09/15 - 05/02/24	26	96	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-10	UA	A7D	Fluoride, total	mg/L	11/09/15 - 07/18/24	27	96	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-10	UA	A7DR	Fluoride, total	mg/L	11/09/15 - 10/30/24	28	96	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-10	UA	A7	Lead, total	mg/L	11/09/15 - 02/08/24	24	12	CI around geomean	0.00200	0.015	MCL/HBL	No Exceedance
AW-10	UA	A7R	Lead, total	mg/L	11/09/15 - 05/02/24	25	12	CI around geomean	0.00210	0.015	MCL/HBL	No Exceedance
AW-10	UA	A7D	Lead, total	mg/L	11/09/15 - 07/18/24	26	11	CI around geomean	0.00222	0.015	MCL/HBL	No Exceedance
AW-10	UA	A7DR	Lead, total	mg/L	11/09/15 - 10/30/24	27	11	CI around geomean	0.00221	0.015	MCL/HBL	No Exceedance
AW-10	UA	A7	Lithium, total	mg/L	11/09/15 - 02/08/24	24	0	CB around T-S line	-0.0292	0.0541	Background	No Exceedance
AW-10	UA	A7R	Lithium, total	mg/L	11/09/15 - 05/02/24	25	0	CB around T-S line	-0.0200	0.0541	Background	No Exceedance
AW-10	UA	A7D	Lithium, total	mg/L	11/09/15 - 07/18/24	26	0	CB around T-S line	-0.0148	0.0541	Background	No Exceedance
AW-10	UA	A7DR	Lithium, total	mg/L	11/09/15 - 10/30/24	27	0	CB around T-S line	-0.0132	0.0541	Background	No Exceedance
AW-10	UA	A7	Mercury, total	mg/L	11/09/15 - 02/08/24	19	94	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-10	UA	A7R	Mercury, total	mg/L	11/09/15 - 05/02/24	20	95	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-10	UA	A7D	Mercury, total	mg/L	11/09/15 - 07/18/24	21	95	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-10	UA	A7DR	Mercury, total	mg/L	11/09/15 - 10/30/24	22	95	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-10	UA	A7	Molybdenum, total	mg/L	11/09/15 - 02/08/24	24	25	CB around T-S line	-0.000447	0.1	MCL/HBL	No Exceedance
AW-10	UA	A7R	Molybdenum, total	mg/L	11/09/15 - 05/02/24	25	24	CI around median	0.00110	0.1	MCL/HBL	No Exceedance
AW-10	UA	A7D	Molybdenum, total	mg/L	11/09/15 - 07/18/24	26	23	CI around median	0.00120	0.1	MCL/HBL	No Exceedance
AW-10	UA	A7DR	Molybdenum, total	mg/L	11/09/15 - 10/30/24	27	22	CI around median	0.00120	0.1	MCL/HBL	No Exceedance
AW-10	UA	A7	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 02/08/24	24	0	CI around mean	2.32	5	MCL/HBL	No Exceedance
AW-10	UA	A7R	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 05/02/24	25	0	CI around mean	2.32	5	MCL/HBL	No Exceedance
AW-10	UA	A7D	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 07/18/24	26	0	CI around mean	2.33	5	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-10	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 10/30/24	27	0	CI around geomean	2.11	5	MCL/HBL	No Exceedance
AW-10	UA	A7	Selenium, total	mg/L	11/09/15 - 02/08/24	24	62	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-10	UA	A7R	Selenium, total	mg/L	11/09/15 - 05/02/24	25	64	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-10	UA	A7D	Selenium, total	mg/L	11/09/15 - 07/18/24	26	65	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-10	UA	A7DR	Selenium, total	mg/L	11/09/15 - 10/30/24	27	66	CB around T-S line	-0.0000197	0.05	MCL/HBL	No Exceedance
AW-10	UA	A7	Thallium, total	mg/L	11/09/15 - 02/08/24	19	94	CI around median	0.00100	0.002	MCL/HBL	No Exceedance
AW-10	UA	A7R	Thallium, total	mg/L	11/09/15 - 05/02/24	20	95	CI around median	0.00100	0.002	MCL/HBL	No Exceedance
AW-10	UA	A7D	Thallium, total	mg/L	11/09/15 - 07/18/24	21	95	CI around median	0.00100	0.002	MCL/HBL	No Exceedance
AW-10	UA	A7DR	Thallium, total	mg/L	11/09/15 - 10/30/24	22	95	CI around median	0.00100	0.002	MCL/HBL	No Exceedance
AW-11	UA	A7	Antimony, total	mg/L	11/09/15 - 02/08/24	18	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-11	UA	A7R	Antimony, total	mg/L	11/09/15 - 05/01/24	19	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-11	UA	A7D	Antimony, total	mg/L	11/09/15 - 07/17/24	20	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-11	UA	A7DR	Antimony, total	mg/L	11/09/15 - 10/29/24	21	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-11	UA	A7	Arsenic, total	mg/L	11/09/15 - 02/08/24	23	0	CI around geomean	0.00906	0.0187	Background	No Exceedance
AW-11	UA	A7R	Arsenic, total	mg/L	11/09/15 - 05/01/24	24	0	CI around geomean	0.00897	0.0187	Background	No Exceedance
AW-11	UA	A7D	Arsenic, total	mg/L	11/09/15 - 07/17/24	25	0	CI around geomean	0.00902	0.0187	Background	No Exceedance
AW-11	UA	A7DR	Arsenic, total	mg/L	11/09/15 - 10/29/24	26	0	CI around geomean	0.00902	0.0187	Background	No Exceedance
AW-11	UA	A7	Barium, total	mg/L	11/09/15 - 02/08/24	23	0	CI around geomean	0.875	2.0	MCL/HBL	No Exceedance
AW-11	UA	A7R	Barium, total	mg/L	11/09/15 - 05/01/24	24	0	CI around geomean	0.871	2.0	MCL/HBL	No Exceedance
AW-11	UA	A7D	Barium, total	mg/L	11/09/15 - 07/17/24	25	0	CI around median	0.840	2.0	MCL/HBL	No Exceedance
AW-11	UA	A7DR	Barium, total	mg/L	11/09/15 - 10/29/24	26	0	CI around median	0.840	2.0	MCL/HBL	No Exceedance
AW-11	UA	A7	Beryllium, total	mg/L	11/09/15 - 02/08/24	23	78	CI around median	0.00100	0.0140	Background	No Exceedance
AW-11	UA	A7R	Beryllium, total	mg/L	11/09/15 - 05/01/24	24	79	CI around median	0.00100	0.0140	Background	No Exceedance
AW-11	UA	A7D	Beryllium, total	mg/L	11/09/15 - 07/17/24	25	80	CI around median	0.00100	0.0140	Background	No Exceedance
AW-11	UA	A7DR	Beryllium, total	mg/L	11/09/15 - 10/29/24	26	80	CI around median	0.00100	0.0140	Background	No Exceedance
AW-11	UA	A7	Cadmium, total	mg/L	11/09/15 - 02/08/24	18	83	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AW-11	UA	A7R	Cadmium, total	mg/L	11/09/15 - 05/01/24	19	84	CI around median	0.00100	0.005	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-11	UA	A7D	Cadmium, total	mg/L	11/09/15 - 07/17/24	20	85	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AW-11	UA	A7DR	Cadmium, total	mg/L	11/09/15 - 10/29/24	21	85	CI around median	0.00100	0.005	MCL/HBL	No Exceedance
AW-11	UA	A7	Chromium, total	mg/L	11/09/15 - 02/08/24	23	52	CB around T-S line	-0.0197	0.1	MCL/HBL	No Exceedance
AW-11	UA	A7R	Chromium, total	mg/L	11/09/15 - 05/01/24	24	54	CB around T-S line	-0.0180	0.1	MCL/HBL	No Exceedance
AW-11	UA	A7D	Chromium, total	mg/L	11/09/15 - 07/17/24	25	56	CB around T-S line	-0.0173	0.1	MCL/HBL	No Exceedance
AW-11	UA	A7DR	Chromium, total	mg/L	11/09/15 - 10/29/24	26	57	CB around T-S line	-0.0184	0.1	MCL/HBL	No Exceedance
AW-11	UA	A7	Cobalt, total	mg/L	11/09/15 - 02/08/24	23	30	CB around T-S line	-0.00666	0.006	MCL/HBL	No Exceedance
AW-11	UA	A7R	Cobalt, total	mg/L	11/09/15 - 05/01/24	24	29	CB around T-S line	-0.00886	0.006	MCL/HBL	No Exceedance
AW-11	UA	A7D	Cobalt, total	mg/L	11/09/15 - 07/17/24	25	32	CB around T-S line	-0.00723	0.006	MCL/HBL	No Exceedance
AW-11	UA	A7DR	Cobalt, total	mg/L	11/09/15 - 10/29/24	26	34	CB around T-S line	-0.00674	0.006	MCL/HBL	No Exceedance
AW-11	UA	A7	Fluoride, total	mg/L	11/09/15 - 02/08/24	24	87	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-11	UA	A7R	Fluoride, total	mg/L	11/09/15 - 05/01/24	25	88	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-11	UA	A7D	Fluoride, total	mg/L	11/09/15 - 07/17/24	26	88	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-11	UA	A7DR	Fluoride, total	mg/L	11/09/15 - 10/29/24	27	88	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-11	UA	A7	Lead, total	mg/L	11/09/15 - 02/08/24	23	39	CB around T-S line	-0.00960	0.015	MCL/HBL	No Exceedance
AW-11	UA	A7R	Lead, total	mg/L	11/09/15 - 05/01/24	24	37	CB around T-S line	-0.0111	0.015	MCL/HBL	No Exceedance
AW-11	UA	A7D	Lead, total	mg/L	11/09/15 - 07/17/24	25	40	CB around T-S line	-0.0102	0.015	MCL/HBL	No Exceedance
AW-11	UA	A7DR	Lead, total	mg/L	11/09/15 - 10/29/24	26	42	CB around T-S line	-0.00979	0.015	MCL/HBL	No Exceedance
AW-11	UA	A7	Lithium, total	mg/L	11/09/15 - 02/08/24	23	17	CB around T-S line	-0.0107	0.0541	Background	No Exceedance
AW-11	UA	A7R	Lithium, total	mg/L	11/09/15 - 05/01/24	24	16	CB around T-S line	-0.0136	0.0541	Background	No Exceedance
AW-11	UA	A7D	Lithium, total	mg/L	11/09/15 - 07/17/24	25	20	CB around T-S line	-0.0103	0.0541	Background	No Exceedance
AW-11	UA	A7DR	Lithium, total	mg/L	11/09/15 - 10/29/24	26	19	CB around T-S line	-0.0114	0.0541	Background	No Exceedance
AW-11	UA	A7	Mercury, total	mg/L	11/09/15 - 02/08/24	18	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-11	UA	A7R	Mercury, total	mg/L	11/09/15 - 05/01/24	19	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-11	UA	A7D	Mercury, total	mg/L	11/09/15 - 07/17/24	20	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-11	UA	A7DR	Mercury, total	mg/L	11/09/15 - 10/29/24	21	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-11	UA	A7	Molybdenum, total	mg/L	11/09/15 - 02/08/24	23	8	CB around linear reg	-0.00135	0.1	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-11	UA	A7R	Molybdenum, total	mg/L	11/09/15 - 05/01/24	24	8	CB around linear reg	-0.00126	0.1	MCL/HBL	No Exceedance
AW-11	UA	A7D	Molybdenum, total	mg/L	11/09/15 - 07/17/24	25	8	CB around linear reg	-0.00121	0.1	MCL/HBL	No Exceedance
AW-11	UA	A7DR	Molybdenum, total	mg/L	11/09/15 - 10/29/24	26	11	CB around linear reg	-0.00134	0.1	MCL/HBL	No Exceedance
AW-11	UA	A7	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 02/08/24	23	0	CI around geomean	1.56	5	MCL/HBL	No Exceedance
AW-11	UA	A7R	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 05/01/24	24	0	CI around geomean	1.57	5	MCL/HBL	No Exceedance
AW-11	UA	A7D	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 07/17/24	25	0	CI around geomean	1.60	5	MCL/HBL	No Exceedance
AW-11	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	11/09/15 - 10/29/24	26	0	CI around geomean	1.60	5	MCL/HBL	No Exceedance
AW-11	UA	A7	Selenium, total	mg/L	11/09/15 - 02/08/24	23	69	CB around T-S line	0.000228	0.05	MCL/HBL	No Exceedance
AW-11	UA	A7R	Selenium, total	mg/L	11/09/15 - 05/01/24	24	70	CB around T-S line	0.000173	0.05	MCL/HBL	No Exceedance
AW-11	UA	A7D	Selenium, total	mg/L	11/09/15 - 07/17/24	25	72	CB around T-S line	0.000262	0.05	MCL/HBL	No Exceedance
AW-11	UA	A7DR	Selenium, total	mg/L	11/09/15 - 10/29/24	26	73	CB around T-S line	0.000241	0.05	MCL/HBL	No Exceedance
AW-11	UA	A7	Thallium, total	mg/L	11/09/15 - 02/08/24	18	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-11	UA	A7R	Thallium, total	mg/L	11/09/15 - 05/01/24	19	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-11	UA	A7D	Thallium, total	mg/L	11/09/15 - 07/17/24	20	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-11	UA	A7DR	Thallium, total	mg/L	11/09/15 - 10/29/24	21	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-14	UA	A7	Antimony, total	mg/L	02/11/21 - 02/08/24	12	91	CI around median	0.00300	0.006	MCL/HBL	No Exceedance
AW-14	UA	A7R	Antimony, total	mg/L	02/11/21 - 05/01/24	13	92	CI around median	0.00300	0.006	MCL/HBL	No Exceedance
AW-14	UA	A7D	Antimony, total	mg/L	02/11/21 - 07/17/24	14	92	CI around median	0.00300	0.006	MCL/HBL	No Exceedance
AW-14	UA	A7DR	Antimony, total	mg/L	02/11/21 - 10/29/24	15	93	CI around median	0.00300	0.006	MCL/HBL	No Exceedance
AW-14	UA	A7	Arsenic, total	mg/L	02/11/21 - 02/08/24	12	0	CB around linear reg	0.000370	0.0187	Background	No Exceedance
AW-14	UA	A7R	Arsenic, total	mg/L	02/11/21 - 05/01/24	13	0	CB around linear reg	-0.000327	0.0187	Background	No Exceedance
AW-14	UA	A7D	Arsenic, total	mg/L	02/11/21 - 07/17/24	14	0	CB around T-S line	-0.00443	0.0187	Background	No Exceedance
AW-14	UA	A7DR	Arsenic, total	mg/L	02/11/21 - 10/29/24	15	0	CB around T-S line	-0.00232	0.0187	Background	No Exceedance
AW-14	UA	A7	Barium, total	mg/L	02/11/21 - 02/08/24	12	0	CI around mean	0.630	2.0	MCL/HBL	No Exceedance
AW-14	UA	A7R	Barium, total	mg/L	02/11/21 - 05/01/24	13	0	CI around mean	0.625	2.0	MCL/HBL	No Exceedance
AW-14	UA	A7D	Barium, total	mg/L	02/11/21 - 07/17/24	14	0	CI around mean	0.637	2.0	MCL/HBL	No Exceedance
AW-14	UA	A7DR	Barium, total	mg/L	02/11/21 - 10/29/24	15	0	CI around mean	0.642	2.0	MCL/HBL	No Exceedance

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DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-14	UA	A7	Beryllium, total	mg/L	02/11/21 - 02/08/24	12	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-14	UA	A7R	Beryllium, total	mg/L	02/11/21 - 05/01/24	13	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-14	UA	A7D	Beryllium, total	mg/L	02/11/21 - 07/17/24	14	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-14	UA	A7DR	Beryllium, total	mg/L	02/11/21 - 10/29/24	15	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-14	UA	A7	Cadmium, total	mg/L	02/11/21 - 02/08/24	12	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-14	UA	A7R	Cadmium, total	mg/L	02/11/21 - 05/01/24	13	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-14	UA	A7D	Cadmium, total	mg/L	02/11/21 - 07/17/24	14	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-14	UA	A7DR	Cadmium, total	mg/L	02/11/21 - 10/29/24	15	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-14	UA	A7	Chromium, total	mg/L	02/11/21 - 02/08/24	12	91	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-14	UA	A7R	Chromium, total	mg/L	02/11/21 - 05/01/24	13	92	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-14	UA	A7D	Chromium, total	mg/L	02/11/21 - 07/17/24	14	92	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-14	UA	A7DR	Chromium, total	mg/L	02/11/21 - 10/29/24	15	93	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-14	UA	A7	Cobalt, total	mg/L	02/11/21 - 02/08/24	12	16	CB around linear reg	-0.00202	0.006	MCL/HBL	No Exceedance
AW-14	UA	A7R	Cobalt, total	mg/L	02/11/21 - 05/01/24	13	23	CB around linear reg	-0.00171	0.006	MCL/HBL	No Exceedance
AW-14	UA	A7D	Cobalt, total	mg/L	02/11/21 - 07/17/24	14	28	CB around T-S line	-0.0275	0.006	MCL/HBL	No Exceedance
AW-14	UA	A7DR	Cobalt, total	mg/L	02/11/21 - 10/29/24	15	33	CB around T-S line	-0.0164	0.006	MCL/HBL	No Exceedance
AW-14	UA	A7	Fluoride, total	mg/L	02/11/21 - 02/08/24	12	83	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-14	UA	A7R	Fluoride, total	mg/L	02/11/21 - 05/01/24	13	84	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-14	UA	A7D	Fluoride, total	mg/L	02/11/21 - 07/17/24	14	85	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-14	UA	A7DR	Fluoride, total	mg/L	02/11/21 - 10/29/24	15	80	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-14	UA	A7	Lead, total	mg/L	02/11/21 - 02/08/24	12	66	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-14	UA	A7R	Lead, total	mg/L	02/11/21 - 05/01/24	13	69	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-14	UA	A7D	Lead, total	mg/L	02/11/21 - 07/17/24	14	71	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-14	UA	A7DR	Lead, total	mg/L	02/11/21 - 10/29/24	15	73	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-14	UA	A7	Lithium, total	mg/L	02/11/21 - 02/08/24	12	58	CI around median	0.0200	0.0541	Background	No Exceedance
AW-14	UA	A7R	Lithium, total	mg/L	02/11/21 - 05/01/24	13	61	CI around median	0.0200	0.0541	Background	No Exceedance
AW-14	UA	A7D	Lithium, total	mg/L	02/11/21 - 07/17/24	14	64	CI around median	0.0200	0.0541	Background	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-14	UA	A7DR	Lithium, total	mg/L	02/11/21 - 10/29/24	15	66	CI around median	0.0200	0.0541	Background	No Exceedance
AW-14	UA	A7	Mercury, total	mg/L	02/11/21 - 02/08/24	12	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-14	UA	A7R	Mercury, total	mg/L	02/11/21 - 05/01/24	13	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-14	UA	A7D	Mercury, total	mg/L	02/11/21 - 07/17/24	14	92	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-14	UA	A7DR	Mercury, total	mg/L	02/11/21 - 10/29/24	15	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-14	UA	A7	Molybdenum, total	mg/L	02/11/21 - 02/08/24	12	25	CI around geomean	0.00150	0.1	MCL/HBL	No Exceedance
AW-14	UA	A7R	Molybdenum, total	mg/L	02/11/21 - 05/01/24	13	23	CI around geomean	0.00151	0.1	MCL/HBL	No Exceedance
AW-14	UA	A7D	Molybdenum, total	mg/L	02/11/21 - 07/17/24	14	28	CI around geomean	0.00143	0.1	MCL/HBL	No Exceedance
AW-14	UA	A7DR	Molybdenum, total	mg/L	02/11/21 - 10/29/24	15	33	CI around geomean	0.00137	0.1	MCL/HBL	No Exceedance
AW-14	UA	A7	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 02/08/24	12	0	CI around mean	1.87	5	MCL/HBL	No Exceedance
AW-14	UA	A7R	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 05/01/24	13	0	CI around mean	1.94	5	MCL/HBL	No Exceedance
AW-14	UA	A7D	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 07/17/24	14	0	CI around mean	1.99	5	MCL/HBL	No Exceedance
AW-14	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 10/29/24	15	0	CI around mean	2.03	5	MCL/HBL	No Exceedance
AW-14	UA	A7	Selenium, total	mg/L	02/11/21 - 02/08/24	12	83	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-14	UA	A7R	Selenium, total	mg/L	02/11/21 - 05/01/24	13	84	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-14	UA	A7D	Selenium, total	mg/L	02/11/21 - 07/17/24	14	85	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-14	UA	A7DR	Selenium, total	mg/L	02/11/21 - 10/29/24	15	86	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-14	UA	A7	Thallium, total	mg/L	02/11/21 - 02/08/24	12	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-14	UA	A7R	Thallium, total	mg/L	02/11/21 - 05/01/24	13	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-14	UA	A7D	Thallium, total	mg/L	02/11/21 - 07/17/24	14	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-14	UA	A7DR	Thallium, total	mg/L	02/11/21 - 10/29/24	15	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-15	UA	A7	Antimony, total	mg/L	02/12/21 - 02/08/24	10	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-15	UA	A7R	Antimony, total	mg/L	02/12/21 - 05/01/24	11	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-15	UA	A7D	Antimony, total	mg/L	02/12/21 - 07/17/24	12	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-15	UA	A7DR	Antimony, total	mg/L	02/12/21 - 10/29/24	13	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-15	UA	A7	Arsenic, total	mg/L	02/12/21 - 02/08/24	10	0	CI around mean	0.00171	0.0187	Background	No Exceedance
AW-15	UA	A7R	Arsenic, total	mg/L	02/12/21 - 05/01/24	11	9	CI around mean	0.00147	0.0187	Background	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-15	UA	A7D	Arsenic, total	mg/L	02/12/21 - 07/17/24	12	8	CB around linear reg	-0.000750	0.0187	Background	No Exceedance
AW-15	UA	A7DR	Arsenic, total	mg/L	02/12/21 - 10/29/24	13	7	CB around linear reg	-0.000747	0.0187	Background	No Exceedance
AW-15	UA	A7	Barium, total	mg/L	02/12/21 - 02/08/24	10	0	CI around mean	1.64	2.0	MCL/HBL	No Exceedance
AW-15	UA	A7R	Barium, total	mg/L	02/12/21 - 05/01/24	11	0	CI around mean	1.65	2.0	MCL/HBL	No Exceedance
AW-15	UA	A7D	Barium, total	mg/L	02/12/21 - 07/17/24	12	0	CI around mean	1.65	2.0	MCL/HBL	No Exceedance
AW-15	UA	A7DR	Barium, total	mg/L	02/12/21 - 10/29/24	13	0	CI around mean	1.64	2.0	MCL/HBL	No Exceedance
AW-15	UA	A7	Beryllium, total	mg/L	02/12/21 - 02/08/24	10	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-15	UA	A7R	Beryllium, total	mg/L	02/12/21 - 05/01/24	11	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-15	UA	A7D	Beryllium, total	mg/L	02/12/21 - 07/17/24	12	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-15	UA	A7DR	Beryllium, total	mg/L	02/12/21 - 10/29/24	13	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-15	UA	A7	Cadmium, total	mg/L	02/12/21 - 02/08/24	10	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-15	UA	A7R	Cadmium, total	mg/L	02/12/21 - 05/01/24	11	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-15	UA	A7D	Cadmium, total	mg/L	02/12/21 - 07/17/24	12	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-15	UA	A7DR	Cadmium, total	mg/L	02/12/21 - 10/29/24	13	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-15	UA	A7	Chromium, total	mg/L	02/12/21 - 02/08/24	10	100	All ND - Last	0.004	0.1	MCL/HBL	No Exceedance
AW-15	UA	A7R	Chromium, total	mg/L	02/12/21 - 05/01/24	11	100	All ND - Last	0.004	0.1	MCL/HBL	No Exceedance
AW-15	UA	A7D	Chromium, total	mg/L	02/12/21 - 07/17/24	12	100	All ND - Last	0.004	0.1	MCL/HBL	No Exceedance
AW-15	UA	A7DR	Chromium, total	mg/L	02/12/21 - 10/29/24	13	100	All ND - Last	0.004	0.1	MCL/HBL	No Exceedance
AW-15	UA	A7	Cobalt, total	mg/L	02/12/21 - 02/08/24	10	90	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-15	UA	A7R	Cobalt, total	mg/L	02/12/21 - 05/01/24	11	90	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-15	UA	A7D	Cobalt, total	mg/L	02/12/21 - 07/17/24	12	91	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-15	UA	A7DR	Cobalt, total	mg/L	02/12/21 - 10/29/24	13	92	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-15	UA	A7	Fluoride, total	mg/L	02/12/21 - 02/08/24	10	80	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-15	UA	A7R	Fluoride, total	mg/L	02/12/21 - 05/01/24	11	81	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-15	UA	A7D	Fluoride, total	mg/L	02/12/21 - 07/17/24	12	83	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-15	UA	A7DR	Fluoride, total	mg/L	02/12/21 - 10/29/24	13	84	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-15	UA	A7	Lead, total	mg/L	02/12/21 - 02/08/24	10	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-15	UA	A7R	Lead, total	mg/L	02/12/21 - 05/01/24	11	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
AW-15	UA	A7D	Lead, total	mg/L	02/12/21 - 07/17/24	12	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
AW-15	UA	A7DR	Lead, total	mg/L	02/12/21 - 10/29/24	13	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
AW-15	UA	A7	Lithium, total	mg/L	02/12/21 - 02/08/24	10	0	CI around mean	0.0286	0.0541	Background	No Exceedance
AW-15	UA	A7R	Lithium, total	mg/L	02/12/21 - 05/01/24	11	0	CI around mean	0.0286	0.0541	Background	No Exceedance
AW-15	UA	A7D	Lithium, total	mg/L	02/12/21 - 07/17/24	12	0	CB around linear reg	0.0203	0.0541	Background	No Exceedance
AW-15	UA	A7DR	Lithium, total	mg/L	02/12/21 - 10/29/24	13	0	CI around mean	0.0288	0.0541	Background	No Exceedance
AW-15	UA	A7	Mercury, total	mg/L	02/12/21 - 02/08/24	10	90	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-15	UA	A7R	Mercury, total	mg/L	02/12/21 - 05/01/24	11	90	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-15	UA	A7D	Mercury, total	mg/L	02/12/21 - 07/17/24	12	91	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-15	UA	A7DR	Mercury, total	mg/L	02/12/21 - 10/29/24	13	92	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-15	UA	A7	Molybdenum, total	mg/L	02/12/21 - 02/08/24	10	80	CI around median	0.00100	0.1	MCL/HBL	No Exceedance
AW-15	UA	A7R	Molybdenum, total	mg/L	02/12/21 - 05/01/24	11	81	CI around median	0.00100	0.1	MCL/HBL	No Exceedance
AW-15	UA	A7D	Molybdenum, total	mg/L	02/12/21 - 07/17/24	12	83	CI around median	0.00100	0.1	MCL/HBL	No Exceedance
AW-15	UA	A7DR	Molybdenum, total	mg/L	02/12/21 - 10/29/24	13	84	CI around median	0.00100	0.1	MCL/HBL	No Exceedance
AW-15	UA	A7	Radium 226 + Radium 228, total	pCi/L	02/12/21 - 02/08/24	10	0	CI around mean	3.25	5	MCL/HBL	No Exceedance
AW-15	UA	A7R	Radium 226 + Radium 228, total	pCi/L	02/12/21 - 05/01/24	11	0	CI around mean	3.54	5	MCL/HBL	No Exceedance
AW-15	UA	A7D	Radium 226 + Radium 228, total	pCi/L	02/12/21 - 07/17/24	12	0	CI around mean	3.63	5	MCL/HBL	No Exceedance
AW-15	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	02/12/21 - 10/29/24	13	0	CI around mean	3.77	5	MCL/HBL	No Exceedance
AW-15	UA	A7	Selenium, total	mg/L	02/12/21 - 02/08/24	10	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AW-15	UA	A7R	Selenium, total	mg/L	02/12/21 - 05/01/24	11	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AW-15	UA	A7D	Selenium, total	mg/L	02/12/21 - 07/17/24	12	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AW-15	UA	A7DR	Selenium, total	mg/L	02/12/21 - 10/29/24	13	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AW-15	UA	A7	Thallium, total	mg/L	02/12/21 - 02/08/24	10	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-15	UA	A7R	Thallium, total	mg/L	02/12/21 - 05/01/24	11	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-15	UA	A7D	Thallium, total	mg/L	02/12/21 - 07/17/24	12	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-15	UA	A7DR	Thallium, total	mg/L	02/12/21 - 10/29/24	13	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-15S	PMP	A7	Antimony, total	mg/L	02/12/21 - 02/08/24	13	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-15S	PMP	A7R	Antimony, total	mg/L	02/12/21 - 05/01/24	14	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-15S	PMP	A7D	Antimony, total	mg/L	02/12/21 - 07/17/24	15	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-15S	PMP	A7DR	Antimony, total	mg/L	02/12/21 - 10/29/24	16	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-15S	PMP	A7	Arsenic, total	mg/L	02/12/21 - 02/08/24	13	61	CI around median	0.00100	0.0187	Background	No Exceedance
AW-15S	PMP	A7R	Arsenic, total	mg/L	02/12/21 - 05/01/24	14	64	CI around median	0.00100	0.0187	Background	No Exceedance
AW-15S	PMP	A7D	Arsenic, total	mg/L	02/12/21 - 07/17/24	15	66	CI around median	0.00100	0.0187	Background	No Exceedance
AW-15S	PMP	A7DR	Arsenic, total	mg/L	02/12/21 - 10/29/24	16	68	CI around median	0.00100	0.0187	Background	No Exceedance
AW-15S	PMP	A7	Barium, total	mg/L	02/12/21 - 02/08/24	13	0	CB around T-S line	-0.0712	2.0	MCL/HBL	No Exceedance
AW-15S	PMP	A7R	Barium, total	mg/L	02/12/21 - 05/01/24	14	0	CB around T-S line	-0.0690	2.0	MCL/HBL	No Exceedance
AW-15S	PMP	A7D	Barium, total	mg/L	02/12/21 - 07/17/24	15	0	CB around T-S line	-0.0505	2.0	MCL/HBL	No Exceedance
AW-15S	PMP	A7DR	Barium, total	mg/L	02/12/21 - 10/29/24	16	0	CB around T-S line	0.00875	2.0	MCL/HBL	No Exceedance
AW-15S	PMP	A7	Beryllium, total	mg/L	02/12/21 - 02/08/24	13	92	CI around median	0.00100	0.0140	Background	No Exceedance
AW-15S	PMP	A7R	Beryllium, total	mg/L	02/12/21 - 05/01/24	14	92	CI around median	0.00100	0.0140	Background	No Exceedance
AW-15S	PMP	A7D	Beryllium, total	mg/L	02/12/21 - 07/17/24	15	93	CI around median	0.00100	0.0140	Background	No Exceedance
AW-15S	PMP	A7DR	Beryllium, total	mg/L	02/12/21 - 10/29/24	16	93	CI around median	0.00100	0.0140	Background	No Exceedance
AW-15S	PMP	A7	Cadmium, total	mg/L	02/12/21 - 02/08/24	13	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-15S	PMP	A7R	Cadmium, total	mg/L	02/12/21 - 05/01/24	14	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-15S	PMP	A7D	Cadmium, total	mg/L	02/12/21 - 07/17/24	15	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-15S	PMP	A7DR	Cadmium, total	mg/L	02/12/21 - 10/29/24	16	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-15S	PMP	A7	Chromium, total	mg/L	02/12/21 - 02/08/24	13	92	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-15S	PMP	A7R	Chromium, total	mg/L	02/12/21 - 05/01/24	14	92	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-15S	PMP	A7D	Chromium, total	mg/L	02/12/21 - 07/17/24	15	93	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-15S	PMP	A7DR	Chromium, total	mg/L	02/12/21 - 10/29/24	16	93	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-15S	PMP	A7	Cobalt, total	mg/L	02/12/21 - 02/08/24	13	92	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-15S	PMP	A7R	Cobalt, total	mg/L	02/12/21 - 05/01/24	14	92	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-15S	PMP	A7D	Cobalt, total	mg/L	02/12/21 - 07/17/24	15	93	CI around median	0.00200	0.006	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-15S	PMP	A7DR	Cobalt, total	mg/L	02/12/21 - 10/29/24	16	93	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-15S	PMP	A7	Fluoride, total	mg/L	02/12/21 - 02/08/24	13	30	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-15S	PMP	A7R	Fluoride, total	mg/L	02/12/21 - 05/01/24	14	35	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-15S	PMP	A7D	Fluoride, total	mg/L	02/12/21 - 07/17/24	15	33	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-15S	PMP	A7DR	Fluoride, total	mg/L	02/12/21 - 10/29/24	16	37	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-15S	PMP	A7	Lead, total	mg/L	02/12/21 - 02/08/24	13	84	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-15S	PMP	A7R	Lead, total	mg/L	02/12/21 - 05/01/24	14	85	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-15S	PMP	A7D	Lead, total	mg/L	02/12/21 - 07/17/24	15	86	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-15S	PMP	A7DR	Lead, total	mg/L	02/12/21 - 10/29/24	16	87	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-15S	PMP	A7	Lithium, total	mg/L	02/12/21 - 02/08/24	13	84	CI around median	0.0200	0.0541	Background	No Exceedance
AW-15S	PMP	A7R	Lithium, total	mg/L	02/12/21 - 05/01/24	14	85	CI around median	0.0200	0.0541	Background	No Exceedance
AW-15S	PMP	A7D	Lithium, total	mg/L	02/12/21 - 07/17/24	15	86	CI around median	0.0200	0.0541	Background	No Exceedance
AW-15S	PMP	A7DR	Lithium, total	mg/L	02/12/21 - 10/29/24	16	87	CI around median	0.0200	0.0541	Background	No Exceedance
AW-15S	PMP	A7	Mercury, total	mg/L	02/12/21 - 02/08/24	13	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-15S	PMP	A7R	Mercury, total	mg/L	02/12/21 - 05/01/24	14	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-15S	PMP	A7D	Mercury, total	mg/L	02/12/21 - 07/17/24	15	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-15S	PMP	A7DR	Mercury, total	mg/L	02/12/21 - 10/29/24	16	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-15S	PMP	A7	Molybdenum, total	mg/L	02/12/21 - 02/08/24	13	0	CB around linear reg	0.00218	0.1	MCL/HBL	No Exceedance
AW-15S	PMP	A7R	Molybdenum, total	mg/L	02/12/21 - 05/01/24	14	0	CB around linear reg	0.00212	0.1	MCL/HBL	No Exceedance
AW-15S	PMP	A7D	Molybdenum, total	mg/L	02/12/21 - 07/17/24	15	0	CB around linear reg	0.00208	0.1	MCL/HBL	No Exceedance
AW-15S	PMP	A7DR	Molybdenum, total	mg/L	02/12/21 - 10/29/24	16	0	CB around linear reg	0.00210	0.1	MCL/HBL	No Exceedance
AW-15S	PMP	A7	Radium 226 + Radium 228, total	pCi/L	02/12/21 - 02/08/24	12	0	CI around mean	0.376	5	MCL/HBL	No Exceedance
AW-15S	PMP	A7R	Radium 226 + Radium 228, total	pCi/L	02/12/21 - 05/01/24	13	0	CI around mean	0.420	5	MCL/HBL	No Exceedance
AW-15S	PMP	A7D	Radium 226 + Radium 228, total	pCi/L	02/12/21 - 07/17/24	14	0	CI around mean	0.451	5	MCL/HBL	No Exceedance
AW-15S	PMP	A7DR	Radium 226 + Radium 228, total	pCi/L	02/12/21 - 10/29/24	15	0	CI around mean	0.453	5	MCL/HBL	No Exceedance
AW-15S	PMP	A7	Selenium, total	mg/L	02/12/21 - 02/08/24	13	38	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-15S	PMP	A7R	Selenium, total	mg/L	02/12/21 - 05/01/24	14	42	CI around median	0.00100	0.05	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-15S	PMP	A7D	Selenium, total	mg/L	02/12/21 - 07/17/24	15	46	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-15S	PMP	A7DR	Selenium, total	mg/L	02/12/21 - 10/29/24	16	50	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-15S	PMP	A7	Thallium, total	mg/L	02/12/21 - 02/08/24	13	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-15S	PMP	A7R	Thallium, total	mg/L	02/12/21 - 05/01/24	14	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-15S	PMP	A7D	Thallium, total	mg/L	02/12/21 - 07/17/24	15	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-15S	PMP	A7DR	Thallium, total	mg/L	02/12/21 - 10/29/24	16	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-16	UA	A7	Antimony, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-16	UA	A7R	Antimony, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-16	UA	A7D	Antimony, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-16	UA	A7DR	Antimony, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-16	UA	A7	Arsenic, total	mg/L	02/11/21 - 02/08/24	13	23	CI around mean	0.00116	0.0187	Background	No Exceedance
AW-16	UA	A7R	Arsenic, total	mg/L	02/11/21 - 04/30/24	14	21	CI around mean	0.00113	0.0187	Background	No Exceedance
AW-16	UA	A7D	Arsenic, total	mg/L	02/11/21 - 07/16/24	15	20	CI around mean	0.00111	0.0187	Background	No Exceedance
AW-16	UA	A7DR	Arsenic, total	mg/L	02/11/21 - 10/30/24	16	18	CI around mean	0.00110	0.0187	Background	No Exceedance
AW-16	UA	A7	Barium, total	mg/L	02/11/21 - 02/08/24	13	0	CB around linear reg	0.975	2.0	MCL/HBL	No Exceedance
AW-16	UA	A7R	Barium, total	mg/L	02/11/21 - 04/30/24	14	0	CB around linear reg	0.999	2.0	MCL/HBL	No Exceedance
AW-16	UA	A7D	Barium, total	mg/L	02/11/21 - 07/16/24	15	0	CB around linear reg	0.996	2.0	MCL/HBL	No Exceedance
AW-16	UA	A7DR	Barium, total	mg/L	02/11/21 - 10/30/24	16	0	CB around linear reg	0.961	2.0	MCL/HBL	No Exceedance
AW-16	UA	A7	Beryllium, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-16	UA	A7R	Beryllium, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-16	UA	A7D	Beryllium, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-16	UA	A7DR	Beryllium, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-16	UA	A7	Cadmium, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-16	UA	A7R	Cadmium, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-16	UA	A7D	Cadmium, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-16	UA	A7DR	Cadmium, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-16	UA	A7	Chromium, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.004	0.1	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-16	UA	A7R	Chromium, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.004	0.1	MCL/HBL	No Exceedance
AW-16	UA	A7D	Chromium, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.004	0.1	MCL/HBL	No Exceedance
AW-16	UA	A7DR	Chromium, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.004	0.1	MCL/HBL	No Exceedance
AW-16	UA	A7	Cobalt, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.002	0.006	MCL/HBL	No Exceedance
AW-16	UA	A7R	Cobalt, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.002	0.006	MCL/HBL	No Exceedance
AW-16	UA	A7D	Cobalt, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.002	0.006	MCL/HBL	No Exceedance
AW-16	UA	A7DR	Cobalt, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.002	0.006	MCL/HBL	No Exceedance
AW-16	UA	A7	Fluoride, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.25	4.0	MCL/HBL	No Exceedance
AW-16	UA	A7R	Fluoride, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.25	4.0	MCL/HBL	No Exceedance
AW-16	UA	A7D	Fluoride, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.25	4.0	MCL/HBL	No Exceedance
AW-16	UA	A7DR	Fluoride, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.25	4.0	MCL/HBL	No Exceedance
AW-16	UA	A7	Lead, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
AW-16	UA	A7R	Lead, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
AW-16	UA	A7D	Lead, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
AW-16	UA	A7DR	Lead, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.001	0.015	MCL/HBL	No Exceedance
AW-16	UA	A7	Lithium, total	mg/L	02/11/21 - 02/08/24	13	0	CI around median	0.0320	0.0541	Background	No Exceedance
AW-16	UA	A7R	Lithium, total	mg/L	02/11/21 - 04/30/24	14	0	CB around T-S line	0.0190	0.0541	Background	No Exceedance
AW-16	UA	A7D	Lithium, total	mg/L	02/11/21 - 07/16/24	15	0	CB around T-S line	0.0182	0.0541	Background	No Exceedance
AW-16	UA	A7DR	Lithium, total	mg/L	02/11/21 - 10/30/24	16	0	CB around T-S line	0.0190	0.0541	Background	No Exceedance
AW-16	UA	A7	Mercury, total	mg/L	02/11/21 - 02/08/24	13	92	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-16	UA	A7R	Mercury, total	mg/L	02/11/21 - 04/30/24	14	92	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-16	UA	A7D	Mercury, total	mg/L	02/11/21 - 07/16/24	15	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-16	UA	A7DR	Mercury, total	mg/L	02/11/21 - 10/30/24	16	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-16	UA	A7	Molybdenum, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.001	0.1	MCL/HBL	No Exceedance
AW-16	UA	A7R	Molybdenum, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.001	0.1	MCL/HBL	No Exceedance
AW-16	UA	A7D	Molybdenum, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.001	0.1	MCL/HBL	No Exceedance
AW-16	UA	A7DR	Molybdenum, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.001	0.1	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-16	UA	A7	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 02/08/24	13	0	CB around linear reg	1.78	5	MCL/HBL	No Exceedance
AW-16	UA	A7R	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 04/30/24	14	0	CB around linear reg	1.57	5	MCL/HBL	No Exceedance
AW-16	UA	A7D	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 07/16/24	15	0	CB around linear reg	1.79	5	MCL/HBL	No Exceedance
AW-16	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 10/30/24	16	0	CB around linear reg	1.61	5	MCL/HBL	No Exceedance
AW-16	UA	A7	Selenium, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AW-16	UA	A7R	Selenium, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AW-16	UA	A7D	Selenium, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AW-16	UA	A7DR	Selenium, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AW-16	UA	A7	Thallium, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-16	UA	A7R	Thallium, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-16	UA	A7D	Thallium, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-16	UA	A7DR	Thallium, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-17	UA	A7	Antimony, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-17	UA	A7R	Antimony, total	mg/L	02/11/21 - 05/01/24	14	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-17	UA	A7D	Antimony, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-17	UA	A7DR	Antimony, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-17	UA	A7	Arsenic, total	mg/L	02/11/21 - 02/08/24	13	0	CB around linear reg	0.00227	0.0187	Background	No Exceedance
AW-17	UA	A7R	Arsenic, total	mg/L	02/11/21 - 05/01/24	14	0	CI around mean	0.00436	0.0187	Background	No Exceedance
AW-17	UA	A7D	Arsenic, total	mg/L	02/11/21 - 07/16/24	15	0	CB around linear reg	0.00248	0.0187	Background	No Exceedance
AW-17	UA	A7DR	Arsenic, total	mg/L	02/11/21 - 10/30/24	16	0	CB around linear reg	0.00243	0.0187	Background	No Exceedance
AW-17	UA	A7	Barium, total	mg/L	02/11/21 - 02/08/24	13	0	CI around mean	1.02	2.0	MCL/HBL	No Exceedance
AW-17	UA	A7R	Barium, total	mg/L	02/11/21 - 05/01/24	14	0	CI around mean	1.03	2.0	MCL/HBL	No Exceedance
AW-17	UA	A7D	Barium, total	mg/L	02/11/21 - 07/16/24	15	0	CI around mean	1.03	2.0	MCL/HBL	No Exceedance
AW-17	UA	A7DR	Barium, total	mg/L	02/11/21 - 10/30/24	16	0	CI around mean	1.02	2.0	MCL/HBL	No Exceedance
AW-17	UA	A7	Beryllium, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-17	UA	A7R	Beryllium, total	mg/L	02/11/21 - 05/01/24	14	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-17	UA	A7D	Beryllium, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.001	0.0140	Background	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-17	UA	A7DR	Beryllium, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-17	UA	A7	Cadmium, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-17	UA	A7R	Cadmium, total	mg/L	02/11/21 - 05/01/24	14	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-17	UA	A7D	Cadmium, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-17	UA	A7DR	Cadmium, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-17	UA	A7	Chromium, total	mg/L	02/11/21 - 02/08/24	13	69	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-17	UA	A7R	Chromium, total	mg/L	02/11/21 - 05/01/24	14	71	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-17	UA	A7D	Chromium, total	mg/L	02/11/21 - 07/16/24	15	73	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-17	UA	A7DR	Chromium, total	mg/L	02/11/21 - 10/30/24	16	75	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-17	UA	A7	Cobalt, total	mg/L	02/11/21 - 02/08/24	13	0	CI around median	0.00220	0.006	MCL/HBL	No Exceedance
AW-17	UA	A7R	Cobalt, total	mg/L	02/11/21 - 05/01/24	14	0	CI around median	0.00220	0.006	MCL/HBL	No Exceedance
AW-17	UA	A7D	Cobalt, total	mg/L	02/11/21 - 07/16/24	15	6	CI around geomean	0.00193	0.006	MCL/HBL	No Exceedance
AW-17	UA	A7DR	Cobalt, total	mg/L	02/11/21 - 10/30/24	16	12	CB around linear reg	-0.000189	0.006	MCL/HBL	No Exceedance
AW-17	UA	A7	Fluoride, total	mg/L	02/11/21 - 02/08/24	13	92	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-17	UA	A7R	Fluoride, total	mg/L	02/11/21 - 05/01/24	14	92	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-17	UA	A7D	Fluoride, total	mg/L	02/11/21 - 07/16/24	15	93	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-17	UA	A7DR	Fluoride, total	mg/L	02/11/21 - 10/30/24	16	93	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-17	UA	A7	Lead, total	mg/L	02/11/21 - 02/08/24	13	69	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-17	UA	A7R	Lead, total	mg/L	02/11/21 - 05/01/24	14	71	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-17	UA	A7D	Lead, total	mg/L	02/11/21 - 07/16/24	15	73	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-17	UA	A7DR	Lead, total	mg/L	02/11/21 - 10/30/24	16	75	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-17	UA	A7	Lithium, total	mg/L	02/11/21 - 02/08/24	13	0	CB around linear reg	0.00358	0.0541	Background	No Exceedance
AW-17	UA	A7R	Lithium, total	mg/L	02/11/21 - 05/01/24	14	0	CB around linear reg	0.00612	0.0541	Background	No Exceedance
AW-17	UA	A7D	Lithium, total	mg/L	02/11/21 - 07/16/24	15	0	CB around linear reg	0.00783	0.0541	Background	No Exceedance
AW-17	UA	A7DR	Lithium, total	mg/L	02/11/21 - 10/30/24	16	0	CB around linear reg	0.00820	0.0541	Background	No Exceedance
AW-17	UA	A7	Mercury, total	mg/L	02/11/21 - 02/08/24	13	92	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-17	UA	A7R	Mercury, total	mg/L	02/11/21 - 05/01/24	14	92	CI around median	0.000200	0.002	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-17	UA	A7D	Mercury, total	mg/L	02/11/21 - 07/16/24	15	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-17	UA	A7DR	Mercury, total	mg/L	02/11/21 - 10/30/24	16	93	CI around median	0.000200	0.002	MCL/HBL	No Exceedance
AW-17	UA	A7	Molybdenum, total	mg/L	02/11/21 - 02/08/24	13	46	CB around linear reg	-0.0000169	0.1	MCL/HBL	No Exceedance
AW-17	UA	A7R	Molybdenum, total	mg/L	02/11/21 - 05/01/24	14	50	CB around linear reg	0.0000610	0.1	MCL/HBL	No Exceedance
AW-17	UA	A7D	Molybdenum, total	mg/L	02/11/21 - 07/16/24	15	53	CB around T-S line	-0.00302	0.1	MCL/HBL	No Exceedance
AW-17	UA	A7DR	Molybdenum, total	mg/L	02/11/21 - 10/30/24	16	56	CB around T-S line	-0.000839	0.1	MCL/HBL	No Exceedance
AW-17	UA	A7	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 02/08/24	13	0	CI around mean	2.56	5	MCL/HBL	No Exceedance
AW-17	UA	A7R	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 05/01/24	14	0	CI around mean	2.43	5	MCL/HBL	No Exceedance
AW-17	UA	A7D	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 07/16/24	15	0	CI around mean	2.45	5	MCL/HBL	No Exceedance
AW-17	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 10/30/24	16	0	CI around mean	2.49	5	MCL/HBL	No Exceedance
AW-17	UA	A7	Selenium, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AW-17	UA	A7R	Selenium, total	mg/L	02/11/21 - 05/01/24	14	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AW-17	UA	A7D	Selenium, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AW-17	UA	A7DR	Selenium, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AW-17	UA	A7	Thallium, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-17	UA	A7R	Thallium, total	mg/L	02/11/21 - 05/01/24	14	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-17	UA	A7D	Thallium, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-17	UA	A7DR	Thallium, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-18	UA	A7	Antimony, total	mg/L	02/11/21 - 02/07/24	13	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-18	UA	A7R	Antimony, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-18	UA	A7D	Antimony, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-18	UA	A7DR	Antimony, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-18	UA	A7	Arsenic, total	mg/L	02/11/21 - 02/07/24	13	0	CI around mean	0.00333	0.0187	Background	No Exceedance
AW-18	UA	A7R	Arsenic, total	mg/L	02/11/21 - 04/30/24	14	0	CI around mean	0.00332	0.0187	Background	No Exceedance
AW-18	UA	A7D	Arsenic, total	mg/L	02/11/21 - 07/16/24	15	0	CI around mean	0.00338	0.0187	Background	No Exceedance
AW-18	UA	A7DR	Arsenic, total	mg/L	02/11/21 - 10/30/24	16	0	CI around mean	0.00328	0.0187	Background	No Exceedance
AW-18	UA	A7	Barium, total	mg/L	02/11/21 - 02/07/24	13	0	CB around linear reg	1.21	2.0	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-18	UA	A7R	Barium, total	mg/L	02/11/21 - 04/30/24	14	0	CB around linear reg	1.23	2.0	MCL/HBL	No Exceedance
AW-18	UA	A7D	Barium, total	mg/L	02/11/21 - 07/16/24	15	0	CB around linear reg	1.28	2.0	MCL/HBL	No Exceedance
AW-18	UA	A7DR	Barium, total	mg/L	02/11/21 - 10/30/24	16	0	CB around linear reg	1.19	2.0	MCL/HBL	No Exceedance
AW-18	UA	A7	Beryllium, total	mg/L	02/11/21 - 02/07/24	13	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-18	UA	A7R	Beryllium, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-18	UA	A7D	Beryllium, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-18	UA	A7DR	Beryllium, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-18	UA	A7	Cadmium, total	mg/L	02/11/21 - 02/07/24	13	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-18	UA	A7R	Cadmium, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-18	UA	A7D	Cadmium, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-18	UA	A7DR	Cadmium, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-18	UA	A7	Chromium, total	mg/L	02/11/21 - 02/07/24	13	92	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-18	UA	A7R	Chromium, total	mg/L	02/11/21 - 04/30/24	14	92	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-18	UA	A7D	Chromium, total	mg/L	02/11/21 - 07/16/24	15	93	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-18	UA	A7DR	Chromium, total	mg/L	02/11/21 - 10/30/24	16	87	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-18	UA	A7	Cobalt, total	mg/L	02/11/21 - 02/07/24	13	76	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-18	UA	A7R	Cobalt, total	mg/L	02/11/21 - 04/30/24	14	78	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-18	UA	A7D	Cobalt, total	mg/L	02/11/21 - 07/16/24	15	80	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-18	UA	A7DR	Cobalt, total	mg/L	02/11/21 - 10/30/24	16	81	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-18	UA	A7	Fluoride, total	mg/L	02/11/21 - 02/07/24	13	53	CI around median	0.250	4.0	MCL/HBL	No Exceedance
AW-18	UA	A7R	Fluoride, total	mg/L	02/11/21 - 04/30/24	14	57	CB around T-S line	-4.17	4.0	MCL/HBL	No Exceedance
AW-18	UA	A7D	Fluoride, total	mg/L	02/11/21 - 07/16/24	15	60	CB around T-S line	-4.11	4.0	MCL/HBL	No Exceedance
AW-18	UA	A7DR	Fluoride, total	mg/L	02/11/21 - 10/30/24	16	62	CB around T-S line	-3.72	4.0	MCL/HBL	No Exceedance
AW-18	UA	A7	Lead, total	mg/L	02/11/21 - 02/07/24	13	76	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-18	UA	A7R	Lead, total	mg/L	02/11/21 - 04/30/24	14	78	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-18	UA	A7D	Lead, total	mg/L	02/11/21 - 07/16/24	15	80	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-18	UA	A7DR	Lead, total	mg/L	02/11/21 - 10/30/24	16	81	CI around median	0.00100	0.015	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-18	UA	A7	Lithium, total	mg/L	02/11/21 - 02/07/24	13	0	CB around linear reg	-0.0217	0.0541	Background	No Exceedance
AW-18	UA	A7R	Lithium, total	mg/L	02/11/21 - 04/30/24	14	0	CB around linear reg	-0.0197	0.0541	Background	No Exceedance
AW-18	UA	A7D	Lithium, total	mg/L	02/11/21 - 07/16/24	15	6	CB around linear reg	-0.0207	0.0541	Background	No Exceedance
AW-18	UA	A7DR	Lithium, total	mg/L	02/11/21 - 10/30/24	16	6	CB around linear reg	-0.0211	0.0541	Background	No Exceedance
AW-18	UA	A7	Mercury, total	mg/L	02/11/21 - 02/07/24	13	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-18	UA	A7R	Mercury, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-18	UA	A7D	Mercury, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-18	UA	A7DR	Mercury, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-18	UA	A7	Molybdenum, total	mg/L	02/11/21 - 02/07/24	13	0	CB around linear reg	-0.0118	0.1	MCL/HBL	No Exceedance
AW-18	UA	A7R	Molybdenum, total	mg/L	02/11/21 - 04/30/24	14	0	CB around linear reg	-0.0109	0.1	MCL/HBL	No Exceedance
AW-18	UA	A7D	Molybdenum, total	mg/L	02/11/21 - 07/16/24	15	0	CB around linear reg	-0.0103	0.1	MCL/HBL	No Exceedance
AW-18	UA	A7DR	Molybdenum, total	mg/L	02/11/21 - 10/30/24	16	0	CB around linear reg	-0.00966	0.1	MCL/HBL	No Exceedance
AW-18	UA	A7	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 02/07/24	13	0	CI around mean	2.38	5	MCL/HBL	No Exceedance
AW-18	UA	A7R	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 04/30/24	14	0	CI around mean	2.45	5	MCL/HBL	No Exceedance
AW-18	UA	A7D	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 07/16/24	15	0	CI around mean	2.48	5	MCL/HBL	No Exceedance
AW-18	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 10/30/24	16	0	CI around mean	2.47	5	MCL/HBL	No Exceedance
AW-18	UA	A7	Selenium, total	mg/L	02/11/21 - 02/07/24	13	92	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-18	UA	A7R	Selenium, total	mg/L	02/11/21 - 04/30/24	14	92	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-18	UA	A7D	Selenium, total	mg/L	02/11/21 - 07/16/24	15	93	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-18	UA	A7DR	Selenium, total	mg/L	02/11/21 - 10/30/24	16	93	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-18	UA	A7	Thallium, total	mg/L	02/11/21 - 02/07/24	13	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-18	UA	A7R	Thallium, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-18	UA	A7D	Thallium, total	mg/L	02/11/21 - 07/16/24	15	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-18	UA	A7DR	Thallium, total	mg/L	02/11/21 - 10/30/24	16	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-19	UA	A7	Antimony, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-19	UA	A7R	Antimony, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-19	UA	A7D	Antimony, total	mg/L	02/11/21 - 07/15/24	15	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-19	UA	A7DR	Antimony, total	mg/L	02/11/21 - 10/31/24	16	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-19	UA	A7	Arsenic, total	mg/L	02/11/21 - 02/08/24	13	0	CI around mean	0.0114	0.0187	Background	No Exceedance
AW-19	UA	A7R	Arsenic, total	mg/L	02/11/21 - 04/30/24	14	0	CI around mean	0.0116	0.0187	Background	No Exceedance
AW-19	UA	A7D	Arsenic, total	mg/L	02/11/21 - 07/15/24	15	0	CI around mean	0.0117	0.0187	Background	No Exceedance
AW-19	UA	A7DR	Arsenic, total	mg/L	02/11/21 - 10/31/24	16	0	CI around mean	0.0115	0.0187	Background	No Exceedance
AW-19	UA	A7	Barium, total	mg/L	02/11/21 - 02/08/24	13	0	CI around median	0.180	2.0	MCL/HBL	No Exceedance
AW-19	UA	A7R	Barium, total	mg/L	02/11/21 - 04/30/24	14	0	CI around median	0.180	2.0	MCL/HBL	No Exceedance
AW-19	UA	A7D	Barium, total	mg/L	02/11/21 - 07/15/24	15	0	CI around median	0.180	2.0	MCL/HBL	No Exceedance
AW-19	UA	A7DR	Barium, total	mg/L	02/11/21 - 10/31/24	16	0	CI around median	0.180	2.0	MCL/HBL	No Exceedance
AW-19	UA	A7	Beryllium, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-19	UA	A7R	Beryllium, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-19	UA	A7D	Beryllium, total	mg/L	02/11/21 - 07/15/24	15	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-19	UA	A7DR	Beryllium, total	mg/L	02/11/21 - 10/31/24	16	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-19	UA	A7	Cadmium, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-19	UA	A7R	Cadmium, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-19	UA	A7D	Cadmium, total	mg/L	02/11/21 - 07/15/24	15	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-19	UA	A7DR	Cadmium, total	mg/L	02/11/21 - 10/31/24	16	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-19	UA	A7	Chromium, total	mg/L	02/11/21 - 02/08/24	13	69	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-19	UA	A7R	Chromium, total	mg/L	02/11/21 - 04/30/24	14	71	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-19	UA	A7D	Chromium, total	mg/L	02/11/21 - 07/15/24	15	73	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-19	UA	A7DR	Chromium, total	mg/L	02/11/21 - 10/31/24	16	75	CI around median	0.00400	0.1	MCL/HBL	No Exceedance
AW-19	UA	A7	Cobalt, total	mg/L	02/11/21 - 02/08/24	13	69	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-19	UA	A7R	Cobalt, total	mg/L	02/11/21 - 04/30/24	14	71	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-19	UA	A7D	Cobalt, total	mg/L	02/11/21 - 07/15/24	15	73	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-19	UA	A7DR	Cobalt, total	mg/L	02/11/21 - 10/31/24	16	75	CI around median	0.00200	0.006	MCL/HBL	No Exceedance
AW-19	UA	A7	Fluoride, total	mg/L	02/11/21 - 02/08/24	13	7	CB around linear reg	0.130	4.0	MCL/HBL	No Exceedance
AW-19	UA	A7R	Fluoride, total	mg/L	02/11/21 - 04/30/24	14	14	CB around linear reg	0.0989	4.0	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-19	UA	A7D	Fluoride, total	mg/L	02/11/21 - 07/15/24	15	20	CB around linear reg	0.186	4.0	MCL/HBL	No Exceedance
AW-19	UA	A7DR	Fluoride, total	mg/L	02/11/21 - 10/31/24	16	25	CB around linear reg	0.183	4.0	MCL/HBL	No Exceedance
AW-19	UA	A7	Lead, total	mg/L	02/11/21 - 02/08/24	13	46	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-19	UA	A7R	Lead, total	mg/L	02/11/21 - 04/30/24	14	50	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-19	UA	A7D	Lead, total	mg/L	02/11/21 - 07/15/24	15	53	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-19	UA	A7DR	Lead, total	mg/L	02/11/21 - 10/31/24	16	56	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-19	UA	A7	Lithium, total	mg/L	02/11/21 - 02/08/24	13	69	CI around median	0.0200	0.0541	Background	No Exceedance
AW-19	UA	A7R	Lithium, total	mg/L	02/11/21 - 04/30/24	14	71	CI around median	0.0200	0.0541	Background	No Exceedance
AW-19	UA	A7D	Lithium, total	mg/L	02/11/21 - 07/15/24	15	73	CB around T-S line	-0.00696	0.0541	Background	No Exceedance
AW-19	UA	A7DR	Lithium, total	mg/L	02/11/21 - 10/31/24	16	75	CB around T-S line	0.00692	0.0541	Background	No Exceedance
AW-19	UA	A7	Mercury, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-19	UA	A7R	Mercury, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-19	UA	A7D	Mercury, total	mg/L	02/11/21 - 07/15/24	15	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-19	UA	A7DR	Mercury, total	mg/L	02/11/21 - 10/31/24	16	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-19	UA	A7	Molybdenum, total	mg/L	02/11/21 - 02/08/24	13	0	CI around median	0.00350	0.1	MCL/HBL	No Exceedance
AW-19	UA	A7R	Molybdenum, total	mg/L	02/11/21 - 04/30/24	14	0	CI around median	0.00350	0.1	MCL/HBL	No Exceedance
AW-19	UA	A7D	Molybdenum, total	mg/L	02/11/21 - 07/15/24	15	0	CI around median	0.00350	0.1	MCL/HBL	No Exceedance
AW-19	UA	A7DR	Molybdenum, total	mg/L	02/11/21 - 10/31/24	16	0	CI around median	0.00360	0.1	MCL/HBL	No Exceedance
AW-19	UA	A7	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 02/08/24	13	0	CI around mean	0.483	5	MCL/HBL	No Exceedance
AW-19	UA	A7R	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 04/30/24	14	0	CI around mean	0.443	5	MCL/HBL	No Exceedance
AW-19	UA	A7D	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 07/15/24	15	0	CI around mean	0.488	5	MCL/HBL	No Exceedance
AW-19	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 10/31/24	16	0	CI around mean	0.529	5	MCL/HBL	No Exceedance
AW-19	UA	A7	Selenium, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AW-19	UA	A7R	Selenium, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AW-19	UA	A7D	Selenium, total	mg/L	02/11/21 - 07/15/24	15	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AW-19	UA	A7DR	Selenium, total	mg/L	02/11/21 - 10/31/24	16	100	All ND - Last	0.001	0.05	MCL/HBL	No Exceedance
AW-19	UA	A7	Thallium, total	mg/L	02/11/21 - 02/08/24	13	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-19	UA	A7R	Thallium, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-19	UA	A7D	Thallium, total	mg/L	02/11/21 - 07/15/24	15	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-19	UA	A7DR	Thallium, total	mg/L	02/11/21 - 10/31/24	16	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-21	UA	A7	Antimony, total	mg/L	02/11/21 - 02/07/24	13	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-21	UA	A7R	Antimony, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-21	UA	A7D	Antimony, total	mg/L	02/11/21 - 07/15/24	15	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-21	UA	A7DR	Antimony, total	mg/L	02/11/21 - 10/31/24	16	100	All ND - Last	0.003	0.006	MCL/HBL	No Exceedance
AW-21	UA	A7	Arsenic, total	mg/L	02/11/21 - 02/07/24	13	23	CI around mean	0.00108	0.0187	Background	No Exceedance
AW-21	UA	A7R	Arsenic, total	mg/L	02/11/21 - 04/30/24	14	21	CI around geomean	0.00112	0.0187	Background	No Exceedance
AW-21	UA	A7D	Arsenic, total	mg/L	02/11/21 - 07/15/24	15	20	CI around geomean	0.00111	0.0187	Background	No Exceedance
AW-21	UA	A7DR	Arsenic, total	mg/L	02/11/21 - 10/31/24	16	18	CI around geomean	0.00114	0.0187	Background	No Exceedance
AW-21	UA	A7	Barium, total	mg/L	02/11/21 - 02/07/24	13	0	CI around mean	0.0599	2.0	MCL/HBL	No Exceedance
AW-21	UA	A7R	Barium, total	mg/L	02/11/21 - 04/30/24	14	0	CI around mean	0.0611	2.0	MCL/HBL	No Exceedance
AW-21	UA	A7D	Barium, total	mg/L	02/11/21 - 07/15/24	15	0	CI around mean	0.0608	2.0	MCL/HBL	No Exceedance
AW-21	UA	A7DR	Barium, total	mg/L	02/11/21 - 10/31/24	16	0	CI around mean	0.0606	2.0	MCL/HBL	No Exceedance
AW-21	UA	A7	Beryllium, total	mg/L	02/11/21 - 02/07/24	13	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-21	UA	A7R	Beryllium, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-21	UA	A7D	Beryllium, total	mg/L	02/11/21 - 07/15/24	15	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-21	UA	A7DR	Beryllium, total	mg/L	02/11/21 - 10/31/24	16	100	All ND - Last	0.001	0.0140	Background	No Exceedance
AW-21	UA	A7	Cadmium, total	mg/L	02/11/21 - 02/07/24	13	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-21	UA	A7R	Cadmium, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-21	UA	A7D	Cadmium, total	mg/L	02/11/21 - 07/15/24	15	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-21	UA	A7DR	Cadmium, total	mg/L	02/11/21 - 10/31/24	16	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
AW-21	UA	A7	Chromium, total	mg/L	02/11/21 - 02/07/24	13	100	All ND - Last	0.004	0.1	MCL/HBL	No Exceedance
AW-21	UA	A7R	Chromium, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.004	0.1	MCL/HBL	No Exceedance
AW-21	UA	A7D	Chromium, total	mg/L	02/11/21 - 07/15/24	15	100	All ND - Last	0.004	0.1	MCL/HBL	No Exceedance
AW-21	UA	A7DR	Chromium, total	mg/L	02/11/21 - 10/31/24	16	100	All ND - Last	0.004	0.1	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-21	UA	A7	Cobalt, total	mg/L	02/11/21 - 02/07/24	13	100	All ND - Last	0.002	0.006	MCL/HBL	No Exceedance
AW-21	UA	A7R	Cobalt, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.002	0.006	MCL/HBL	No Exceedance
AW-21	UA	A7D	Cobalt, total	mg/L	02/11/21 - 07/15/24	15	100	All ND - Last	0.002	0.006	MCL/HBL	No Exceedance
AW-21	UA	A7DR	Cobalt, total	mg/L	02/11/21 - 10/31/24	16	100	All ND - Last	0.002	0.006	MCL/HBL	No Exceedance
AW-21	UA	A7	Fluoride, total	mg/L	02/11/21 - 02/07/24	13	7	CB around linear reg	0.0908	4.0	MCL/HBL	No Exceedance
AW-21	UA	A7R	Fluoride, total	mg/L	02/11/21 - 04/30/24	14	7	CB around linear reg	0.103	4.0	MCL/HBL	No Exceedance
AW-21	UA	A7D	Fluoride, total	mg/L	02/11/21 - 07/15/24	15	6	CB around linear reg	0.120	4.0	MCL/HBL	No Exceedance
AW-21	UA	A7DR	Fluoride, total	mg/L	02/11/21 - 10/31/24	16	6	CB around linear reg	0.123	4.0	MCL/HBL	No Exceedance
AW-21	UA	A7	Lead, total	mg/L	02/11/21 - 02/07/24	13	92	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-21	UA	A7R	Lead, total	mg/L	02/11/21 - 04/30/24	14	92	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-21	UA	A7D	Lead, total	mg/L	02/11/21 - 07/15/24	15	93	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-21	UA	A7DR	Lead, total	mg/L	02/11/21 - 10/31/24	16	93	CI around median	0.00100	0.015	MCL/HBL	No Exceedance
AW-21	UA	A7	Lithium, total	mg/L	02/11/21 - 02/07/24	13	100	All ND - Last	0.02	0.0541	Background	No Exceedance
AW-21	UA	A7R	Lithium, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.02	0.0541	Background	No Exceedance
AW-21	UA	A7D	Lithium, total	mg/L	02/11/21 - 07/15/24	15	100	All ND - Last	0.02	0.0541	Background	No Exceedance
AW-21	UA	A7DR	Lithium, total	mg/L	02/11/21 - 10/31/24	16	100	All ND - Last	0.02	0.0541	Background	No Exceedance
AW-21	UA	A7	Mercury, total	mg/L	02/11/21 - 02/07/24	13	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-21	UA	A7R	Mercury, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-21	UA	A7D	Mercury, total	mg/L	02/11/21 - 07/15/24	15	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-21	UA	A7DR	Mercury, total	mg/L	02/11/21 - 10/31/24	16	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
AW-21	UA	A7	Molybdenum, total	mg/L	02/11/21 - 02/07/24	13	0	CI around mean	0.0173	0.1	MCL/HBL	No Exceedance
AW-21	UA	A7R	Molybdenum, total	mg/L	02/11/21 - 04/30/24	14	0	CI around mean	0.0177	0.1	MCL/HBL	No Exceedance
AW-21	UA	A7D	Molybdenum, total	mg/L	02/11/21 - 07/15/24	15	0	CI around mean	0.0171	0.1	MCL/HBL	No Exceedance
AW-21	UA	A7DR	Molybdenum, total	mg/L	02/11/21 - 10/31/24	16	0	CI around mean	0.0173	0.1	MCL/HBL	No Exceedance
AW-21	UA	A7	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 02/07/24	13	0	CI around mean	0.469	5	MCL/HBL	No Exceedance
AW-21	UA	A7R	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 04/30/24	14	0	CI around mean	0.495	5	MCL/HBL	No Exceedance
AW-21	UA	A7D	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 07/15/24	15	0	CI around mean	0.527	5	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2024 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT
ASH POND
BARTONVILLE, IL

Well ID	HSU	Event ID	Parameter	Unit	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
AW-21	UA	A7DR	Radium 226 + Radium 228, total	pCi/L	02/11/21 - 10/31/24	16	0	CI around mean	0.539	5	MCL/HBL	No Exceedance
AW-21	UA	A7	Selenium, total	mg/L	02/11/21 - 02/07/24	13	69	CB around T-S line	0.00100	0.05	MCL/HBL	No Exceedance
AW-21	UA	A7R	Selenium, total	mg/L	02/11/21 - 04/30/24	14	64	CB around T-S line	0.00100	0.05	MCL/HBL	No Exceedance
AW-21	UA	A7D	Selenium, total	mg/L	02/11/21 - 07/15/24	15	66	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-21	UA	A7DR	Selenium, total	mg/L	02/11/21 - 10/31/24	16	62	CI around median	0.00100	0.05	MCL/HBL	No Exceedance
AW-21	UA	A7	Thallium, total	mg/L	02/11/21 - 02/07/24	13	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-21	UA	A7R	Thallium, total	mg/L	02/11/21 - 04/30/24	14	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-21	UA	A7D	Thallium, total	mg/L	02/11/21 - 07/15/24	15	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance
AW-21	UA	A7DR	Thallium, total	mg/L	02/11/21 - 10/31/24	16	100	All ND - Last	0.001	0.002	MCL/HBL	No Exceedance

Notes:
Event IDs:
A7 = Quarter 1, 2024 Assessment Monitoring sampling event
A7R = Quarter 2, 2024 Assessment Monitoring resampling event
A7D = Quarter 3, 2024 Assessment Monitoring sampling event
A7DR = Quarter 4, 2024 Assessment Monitoring resampling event
HSU = hydrostratigraphic unit:
PMP = Potential Migration Pathway
UA = Uppermost Aquifer
ID = identification
ND = non-detect
mg/L = milligrams per liter
pCi/L = picocuries per liter
Statistically Significant Level (SSL) Type:
No Exceedance: No exceedance of the GWPS.
GWPS = Groundwater Protection Standard
GWPS Source:
Background = background concentration
MCL/HBL = maximum contaminant level/health-based level
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
CB around T-S line = Confidence band around Thiel-Sen line
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

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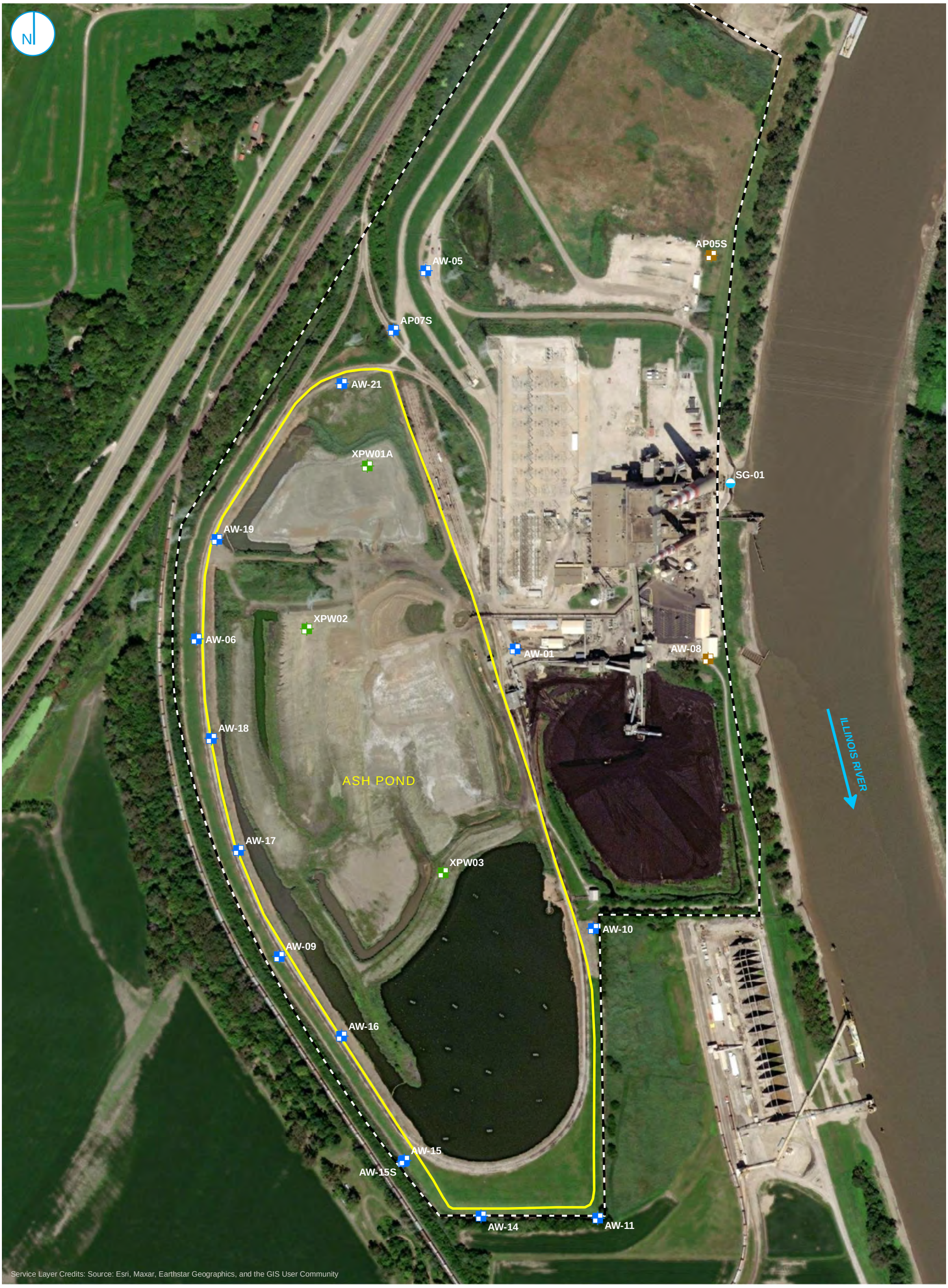
FIGURES



COMPLIANCE MONITORING WELL
BACKGROUND MONITORING WELL
PORE WATER WELL
STAFF GAGE, RIVER
REGULATED UNIT (SUBJECT UNIT)
PROPERTY BOUNDARY

0 200 400
Feet

MONITORING WELL LOCATION MAP

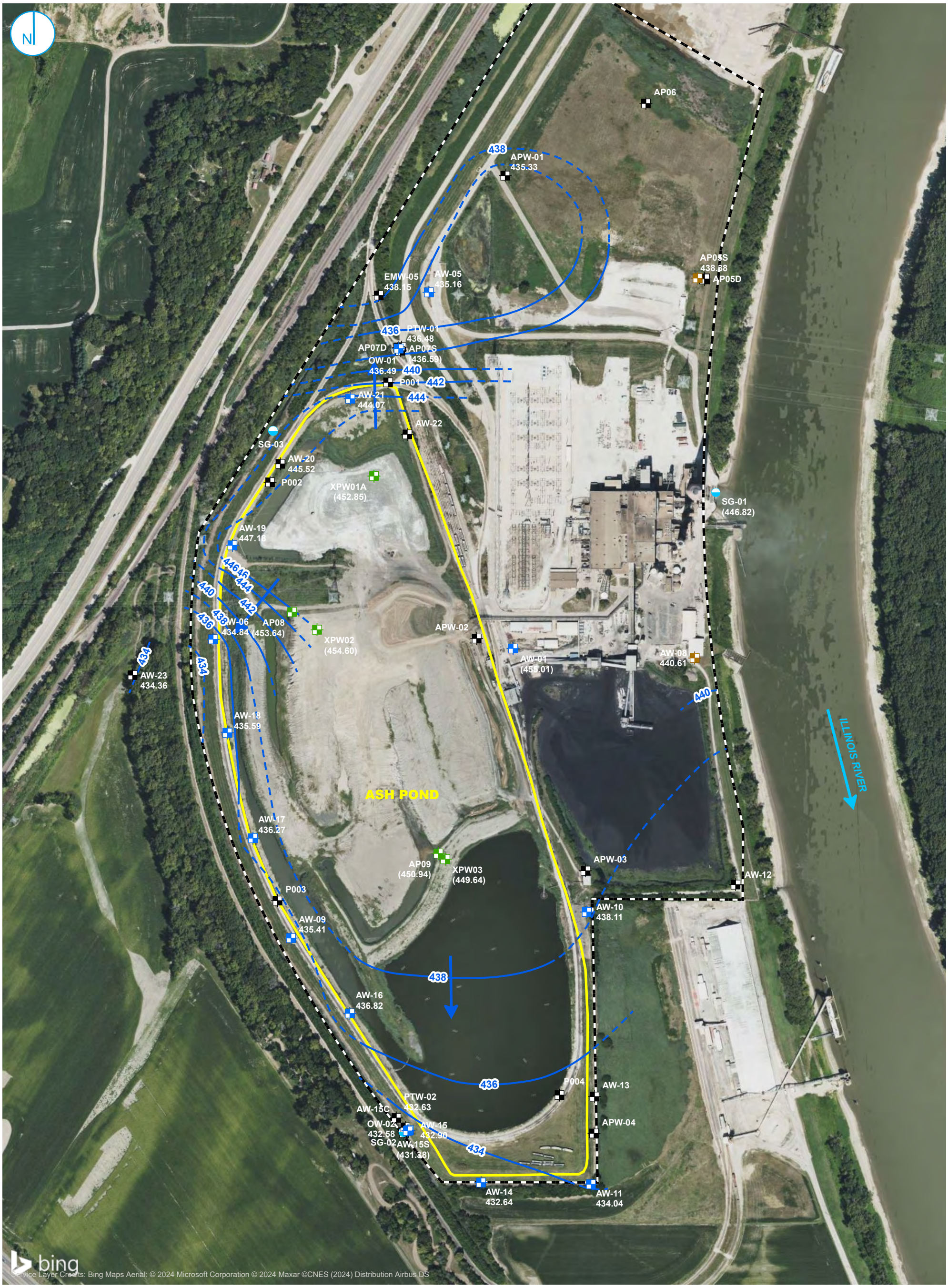
2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT ASH POND

EDWARDS POWER PLANT
BARTONVILLE, ILLINOIS

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL



- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- PORE WATER WELL
- STAFF GAGE, RIVER
- MONITORING WELL

- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- PROPERTY BOUNDARY

0 212.5 425 Feet

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

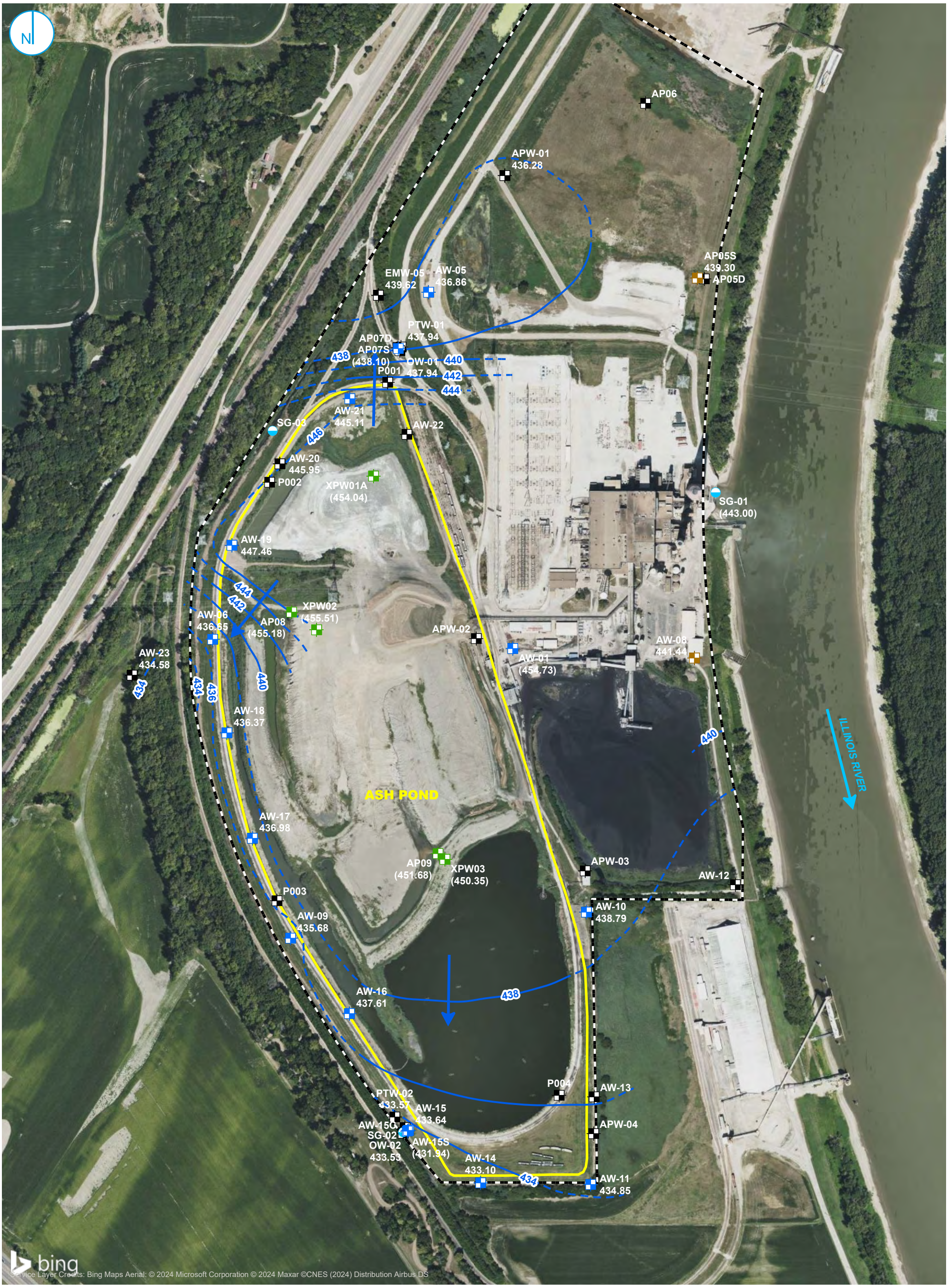
POTENTIOMETRIC SURFACE MAP FEBRUARY 6, 2024

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT ASH POND

EDWARDS POWER PLANT
BARTONVILLE, ILLINOIS

FIGURE 2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



COMPLIANCE MONITORING WELL
BACKGROUND MONITORING WELL
MONITORING WELL
PORE WATER WELL
STAFF GAGE, RIVER

GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
INFERRED GROUNDWATER ELEVATION CONTOUR
GROUNDWATER FLOW DIRECTION
REGULATED UNIT (SUBJECT UNIT)
PROPERTY BOUNDARY

0 212.5 425 Feet

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 APRIL 29, 2024

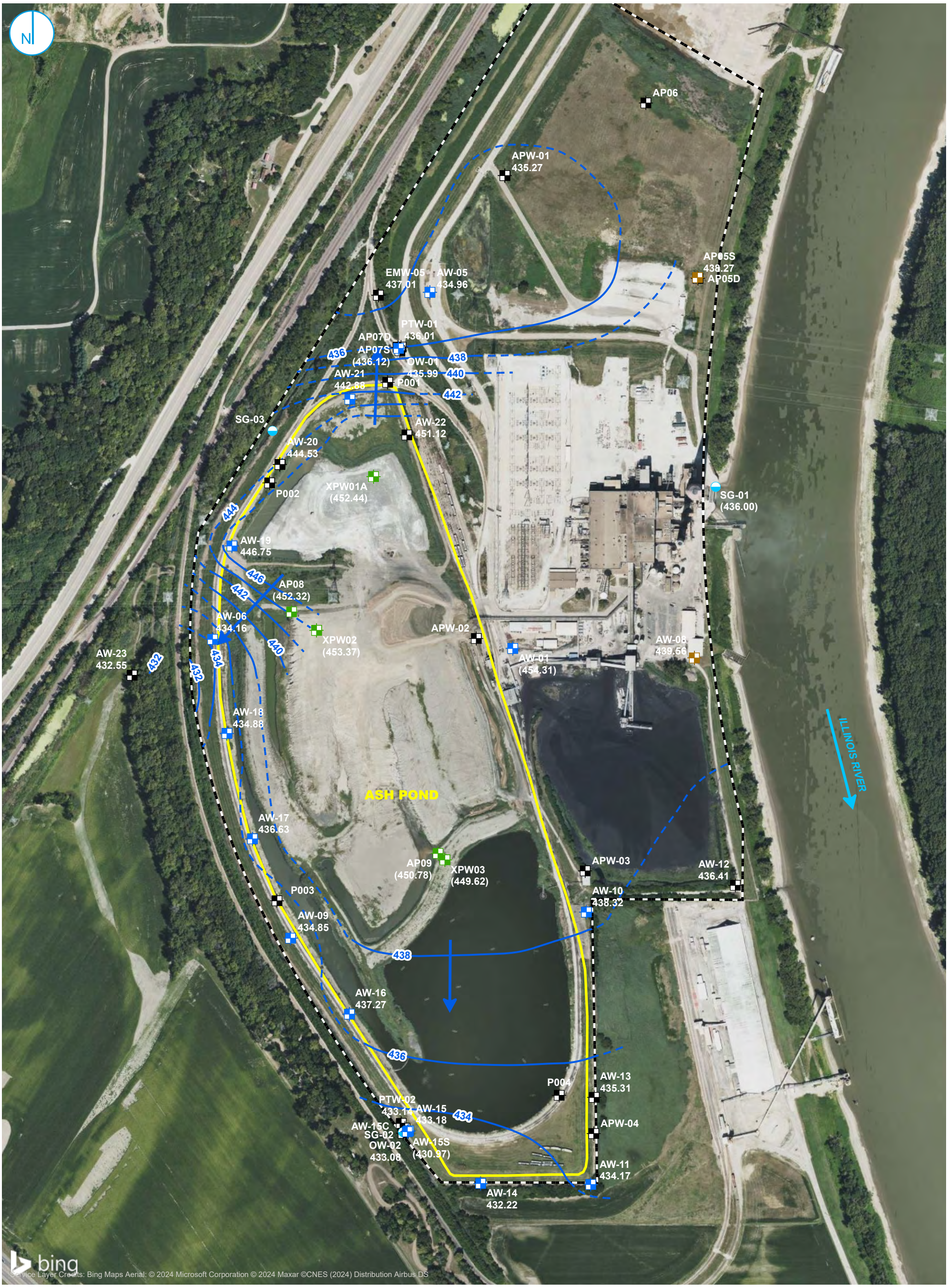
2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT ASH POND

EDWARDS POWER PLANT
BARTONVILLE, ILLINOIS

FIGURE 3

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL



- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- MONITORING WELL
- PORE WATER WELL
- STAFF GAGE, RIVER
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- PROPERTY BOUNDARY

0 212.5 425 Feet

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 JULY 15, 2024

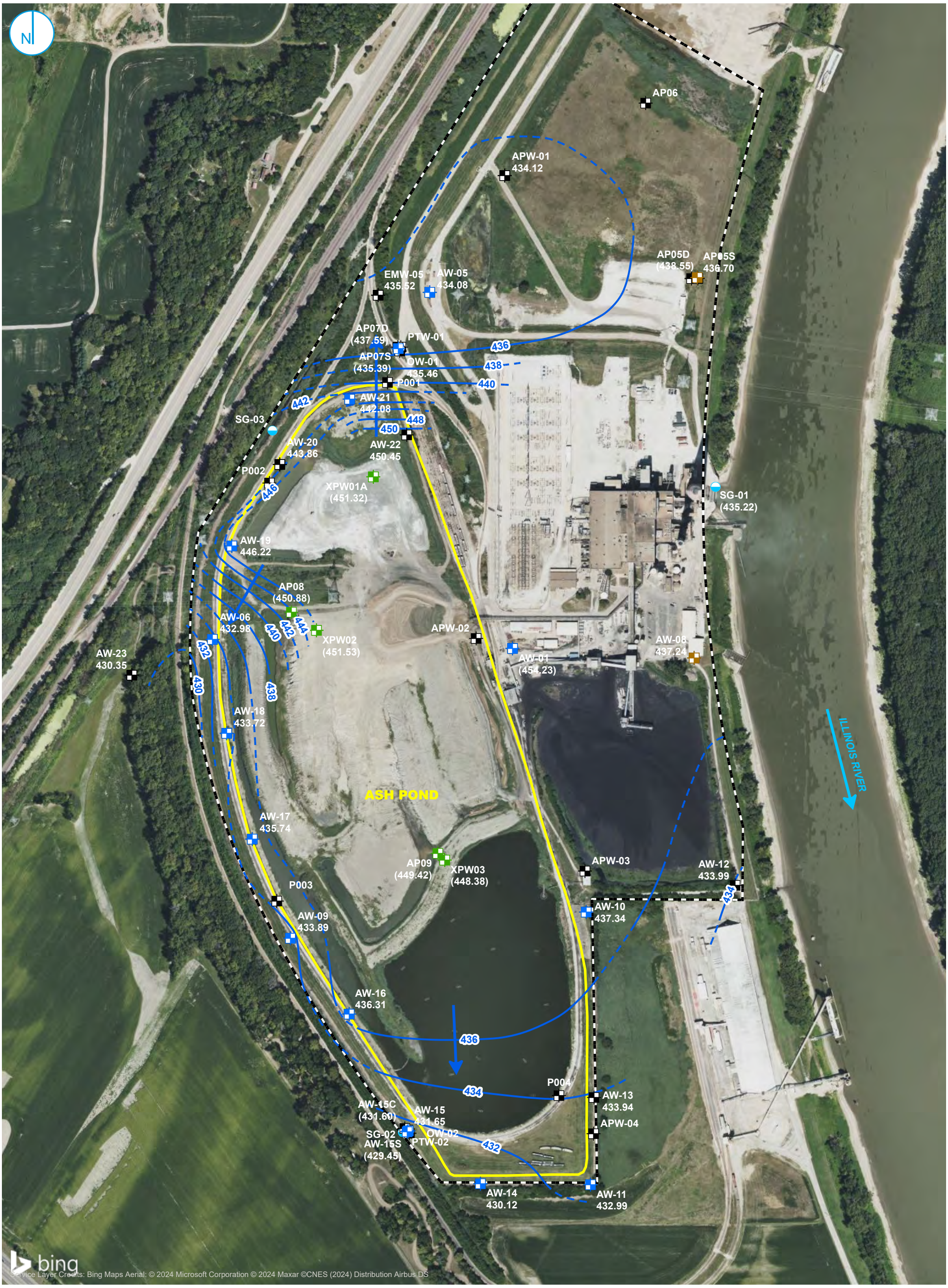
2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT ASH POND

EDWARDS POWER PLANT
BARTONVILLE, ILLINOIS

FIGURE 4

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL



COMPLIANCE MONITORING WELL
BACKGROUND MONITORING WELL
PORE WATER WELL
MONITORING WELL
STAFF GAGE, RIVER

GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL, NAVD88)
INFERRED GROUNDWATER ELEVATION CONTOUR
GROUNDWATER FLOW DIRECTION
REGULATED UNIT (SUBJECT UNIT)
PROPERTY BOUNDARY

0 212.5 425
Feet

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 OCTOBER 28, 2024

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT ASH POND

EDWARDS POWER PLANT
BARTONVILLE, ILLINOIS

FIGURE 5

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

APPENDICES

APPENDIX A
LABORATORY REPORTS AND FIELD DATA SHEETS

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

February 26, 2024

Brian Voelker
Vistra - Edwards
604 Pierce Boulevard
O'Fallon, IL 62269

Dear Brian Voelker:

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 General Manager, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Sincerely,

Diane Billings
Project Manager

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

SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order HB01318

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
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided

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

Work Order HB01601

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

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

ANALYTICAL RESULTS

Sample: HB01318-01
Name: AW-06
Matrix: Ground Water - Grab

Sampled: 02/07/24 14:19
Received: 02/07/24 16:25

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	35	mg/L	Q4	02/13/24 16:16	10	10	02/13/24 16:16	KCS1	EPA 300.0 REV 2.1
Fluoride	0.263	mg/L		02/13/24 15:16	1	0.250	02/13/24 15:16	KCS1	EPA 300.0 REV 2.1
Sulfate	22	mg/L	Q4	02/13/24 16:16	10	10	02/13/24 16:16	KCS1	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	26.71	Feet		02/07/24 14:19	1		02/07/24 14:19	FIELD	Field*
Dissolved oxygen, Field	0.83	mg/L		02/07/24 14:19	1		02/07/24 14:19	FIELD	Field*
Oxidation Reduction Potential	-100	mV		02/07/24 14:19	1	-500	02/07/24 14:19	FIELD	Field*
pH, Field Measured	7.31	pH Units		02/07/24 14:19	1		02/07/24 14:19	FIELD	Field*
Specific Conductance, Field Measured	801.0	umhos/cm		02/07/24 14:19	1		02/07/24 14:19	FIELD	Field*
Temperature, Field Measured	12.5	°C		02/07/24 14:19	1		02/07/24 14:19	FIELD	Field*
Turbidity, Field Measured	>1000	NTU		02/07/24 14:19	1	0.00	02/07/24 14:19	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	450	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	550	mg/L		02/13/24 09:55	1	17	02/13/24 11:10	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/08/24 08:01	5	3.0	02/15/24 16:45	TJJ	EPA 6020A
Arsenic	8.4	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:45	TJJ	EPA 6020A
Barium	230	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:45	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:45	TJJ	EPA 6020A
Boron	97	ug/L		02/08/24 08:01	5	10	02/16/24 10:05	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:45	TJJ	EPA 6020A
Calcium	130	mg/L		02/08/24 08:01	5	0.20	02/15/24 16:45	TJJ	EPA 6020A
Chromium	4.6	ug/L		02/08/24 08:01	5	4.0	02/15/24 16:45	TJJ	EPA 6020A
Cobalt	2.7	ug/L		02/08/24 08:01	5	2.0	02/15/24 16:45	TJJ	EPA 6020A
Lead	2.4	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:45	TJJ	EPA 6020A
Magnesium	49	mg/L		02/08/24 08:01	5	0.10	02/15/24 16:45	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/08/24 08:01	5	0.20	02/16/24 10:05	TJJ	EPA 6020A
Molybdenum	6.4	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:45	TJJ	EPA 6020A
Potassium	1.1	mg/L		02/08/24 08:01	5	0.10	02/15/24 16:45	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:45	TJJ	EPA 6020A
Sodium	43	mg/L		02/08/24 08:01	5	0.10	02/15/24 16:45	TJJ	EPA 6020A

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

ANALYTICAL RESULTS

Sample: HB01318-01
Name: AW-06
Matrix: Ground Water - Grab

Sampled: 02/07/24 14:19
Received: 02/07/24 16:25

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:45	TJJ	EPA 6020A
Lithium	< 20	ug/L		02/08/24 08:01	1	20	02/09/24 13:04	BRS	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01318-02
Name: AW-06 DUP
Matrix: Ground Water - Grab

Sampled: 02/07/24 14:19
Received: 02/07/24 16:25

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	32	mg/L	Q4	02/13/24 18:17	10	10	02/13/24 18:17	KCS1	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		02/13/24 17:16	1	0.250	02/13/24 17:16	KCS1	EPA 300.0 REV 2.1
Sulfate	29	mg/L	Q4	02/13/24 18:17	10	10	02/13/24 18:17	KCS1	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	26.71	Feet		02/07/24 14:19	1		02/07/24 14:19	FIELD	Field*
Dissolved oxygen, Field	0.83	mg/L		02/07/24 14:19	1		02/07/24 14:19	FIELD	Field*
Oxidation Reduction Potential	-100	mV		02/07/24 14:19	1	-500	02/07/24 14:19	FIELD	Field*
pH, Field Measured	7.31	pH Units		02/07/24 14:19	1		02/07/24 14:19	FIELD	Field*
Specific Conductance, Field Measured	801.0	umhos/cm		02/07/24 14:19	1		02/07/24 14:19	FIELD	Field*
Temperature, Field Measured	12.5	°C		02/07/24 14:19	1		02/07/24 14:19	FIELD	Field*
Turbidity, Field Measured	>1000	NTU		02/07/24 14:19	1	0.00	02/07/24 14:19	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	480	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	570	mg/L		02/13/24 09:55	1	17	02/13/24 11:10	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/08/24 08:01	5	3.0	02/15/24 16:49	TJJ	EPA 6020A
Arsenic	6.7	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:49	TJJ	EPA 6020A
Barium	210	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:49	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:49	TJJ	EPA 6020A
Boron	97	ug/L		02/08/24 08:01	5	10	02/16/24 10:09	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:49	TJJ	EPA 6020A
Calcium	120	mg/L		02/08/24 08:01	5	0.20	02/15/24 16:49	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/08/24 08:01	5	4.0	02/15/24 16:49	TJJ	EPA 6020A
Cobalt	2.0	ug/L		02/08/24 08:01	5	2.0	02/15/24 16:49	TJJ	EPA 6020A
Lead	1.7	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:49	TJJ	EPA 6020A
Magnesium	48	mg/L		02/08/24 08:01	5	0.10	02/15/24 16:49	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/08/24 08:01	5	0.20	02/15/24 16:49	TJJ	EPA 6020A
Molybdenum	6.4	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:49	TJJ	EPA 6020A
Potassium	0.88	mg/L		02/08/24 08:01	5	0.10	02/15/24 16:49	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:49	TJJ	EPA 6020A
Sodium	42	mg/L		02/08/24 08:01	5	0.10	02/15/24 16:49	TJJ	EPA 6020A

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

ANALYTICAL RESULTS

Sample: HB01318-02
Name: AW-06 DUP
Matrix: Ground Water - Grab

Sampled: 02/07/24 14:19
Received: 02/07/24 16:25

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:49	TJJ	EPA 6020A
Lithium	< 20	ug/L		02/08/24 08:01	1	20	02/09/24 13:06	BRS	EPA 6010B

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Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: HB01318-03
Name: AW-09
Matrix: Ground Water - Grab

Sampled: 02/07/24 12:17
Received: 02/07/24 16:25

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	27	mg/L		02/13/24 18:57	10	10	02/13/24 18:57	KCS1	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		02/13/24 18:37	1	0.250	02/13/24 18:37	KCS1	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		02/13/24 18:37	1	1.0	02/13/24 18:37	KCS1	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	26.01	Feet		02/07/24 12:17	1		02/07/24 12:17	FIELD	Field*
Dissolved oxygen, Field	1.4	mg/L		02/07/24 12:17	1		02/07/24 12:17	FIELD	Field*
Oxidation Reduction Potential	-141	mV		02/07/24 12:17	1	-500	02/07/24 12:17	FIELD	Field*
pH, Field Measured	7.10	pH Units		02/07/24 12:17	1		02/07/24 12:17	FIELD	Field*
Specific Conductance, Field Measured	1140	umhos/cm		02/07/24 12:17	1		02/07/24 12:17	FIELD	Field*
Temperature, Field Measured	12.7	°C		02/07/24 12:17	1		02/07/24 12:17	FIELD	Field*
Turbidity, Field Measured	34.6	NTU		02/07/24 12:17	1	0.00	02/07/24 12:17	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	750	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	760	mg/L		02/13/24 09:55	1	17	02/13/24 11:10	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/08/24 08:01	5	3.0	02/15/24 16:53	TJJ	EPA 6020A
Arsenic	27	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:53	TJJ	EPA 6020A
Barium	460	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:53	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:53	TJJ	EPA 6020A
Boron	280	ug/L		02/08/24 08:01	5	10	02/16/24 10:13	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:53	TJJ	EPA 6020A
Calcium	120	mg/L		02/08/24 08:01	5	0.20	02/15/24 16:53	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/08/24 08:01	5	4.0	02/15/24 16:53	TJJ	EPA 6020A
Cobalt	2.1	ug/L		02/08/24 08:01	5	2.0	02/15/24 16:53	TJJ	EPA 6020A
Lead	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:53	TJJ	EPA 6020A
Magnesium	49	mg/L		02/08/24 08:01	5	0.10	02/15/24 16:53	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/08/24 08:01	5	0.20	02/15/24 16:53	TJJ	EPA 6020A
Molybdenum	18	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:53	TJJ	EPA 6020A
Potassium	2.0	mg/L		02/08/24 08:01	5	0.10	02/15/24 16:53	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:53	TJJ	EPA 6020A
Sodium	130	mg/L		02/08/24 08:01	5	0.10	02/15/24 16:53	TJJ	EPA 6020A

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

ANALYTICAL RESULTS

Sample: HB01318-03
Name: AW-09
Matrix: Ground Water - Grab

Sampled: 02/07/24 12:17
Received: 02/07/24 16:25

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:53	TJJ	EPA 6020A
Lithium	< 20	ug/L		02/08/24 08:01	1	20	02/09/24 13:08	BRS	EPA 6010B

Pace Analytical Services, LLC
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Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: HB01318-04
Name: AW-18
Matrix: Ground Water - Grab

Sampled: 02/07/24 15:33
Received: 02/07/24 16:25

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	98	mg/L		02/16/24 21:30	25	25	02/16/24 21:30	CRD	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		02/13/24 19:17	1	0.250	02/13/24 19:17	KCS1	EPA 300.0 REV 2.1
Sulfate	2.3	mg/L		02/13/24 19:17	1	1.0	02/13/24 19:17	KCS1	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	27.14	Feet		02/07/24 15:33	1		02/07/24 15:33	FIELD	Field*
Dissolved oxygen, Field	0.69	mg/L		02/07/24 15:33	1		02/07/24 15:33	FIELD	Field*
Oxidation Reduction Potential	-106	mV		02/07/24 15:33	1	-500	02/07/24 15:33	FIELD	Field*
pH, Field Measured	7.05	pH Units		02/07/24 15:33	1		02/07/24 15:33	FIELD	Field*
Specific Conductance, Field Measured	1490	umhos/cm		02/07/24 15:33	1		02/07/24 15:33	FIELD	Field*
Temperature, Field Measured	12.7	°C		02/07/24 15:33	1		02/07/24 15:33	FIELD	Field*
Turbidity, Field Measured	62.0	NTU		02/07/24 15:33	1	0.00	02/07/24 15:33	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	800	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	880	mg/L		02/13/24 09:55	1	17	02/13/24 11:10	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/08/24 08:01	5	3.0	02/15/24 16:57	TJJ	EPA 6020A
Arsenic	3.7	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:57	TJJ	EPA 6020A
Barium	1600	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:57	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:57	TJJ	EPA 6020A
Boron	430	ug/L		02/08/24 08:01	5	10	02/16/24 10:38	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:57	TJJ	EPA 6020A
Calcium	130	mg/L		02/08/24 08:01	5	0.20	02/15/24 16:57	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/08/24 08:01	5	4.0	02/15/24 16:57	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		02/08/24 08:01	5	2.0	02/15/24 16:57	TJJ	EPA 6020A
Lead	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:57	TJJ	EPA 6020A
Magnesium	54	mg/L		02/08/24 08:01	5	0.10	02/15/24 16:57	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/08/24 08:01	5	0.20	02/15/24 16:57	TJJ	EPA 6020A
Molybdenum	1.6	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:57	TJJ	EPA 6020A
Potassium	4.1	mg/L		02/08/24 08:01	5	0.10	02/15/24 16:57	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:57	TJJ	EPA 6020A
Sodium	190	mg/L		02/08/24 08:01	5	0.10	02/15/24 16:57	TJJ	EPA 6020A

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Sample: HB01318-04
Name: AW-18
Matrix: Ground Water - Grab

Sampled: 02/07/24 15:33
Received: 02/07/24 16:25

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 16:57	TJJ	EPA 6020A
Lithium	29	ug/L		02/08/24 08:01	1	20	02/09/24 13:15	BRS	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01318-05
Name: AW-21
Matrix: Ground Water - Grab

Sampled: 02/07/24 15:19
Received: 02/07/24 16:25

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	74	mg/L		02/13/24 20:17	50	50	02/13/24 20:17	KCS1	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		02/13/24 19:57	1	0.250	02/13/24 19:57	KCS1	EPA 300.0 REV 2.1
Sulfate	220	mg/L		02/13/24 20:17	50	50	02/13/24 20:17	KCS1	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	16.79	Feet		02/07/24 15:19	1		02/07/24 15:19	FIELD	Field*
Dissolved oxygen, Field	2.8	mg/L		02/07/24 15:19	1		02/07/24 15:19	FIELD	Field*
Oxidation Reduction Potential	-39.0	mV		02/07/24 15:19	1	-500	02/07/24 15:19	FIELD	Field*
pH, Field Measured	8.94	pH Units		02/07/24 15:19	1		02/07/24 15:19	FIELD	Field*
Specific Conductance, Field Measured	842.0	umhos/cm		02/07/24 15:19	1		02/07/24 15:19	FIELD	Field*
Temperature, Field Measured	12.4	°C		02/07/24 15:19	1		02/07/24 15:19	FIELD	Field*
Turbidity, Field Measured	11.4	NTU		02/07/24 15:19	1	0.00	02/07/24 15:19	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	160	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	580	mg/L		02/13/24 09:55	1	17	02/13/24 11:10	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/08/24 08:01	5	3.0	02/15/24 17:01	TJJ	EPA 6020A
Arsenic	2.6	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:01	TJJ	EPA 6020A
Barium	67	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:01	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:01	TJJ	EPA 6020A
Boron	9300	ug/L		02/08/24 08:01	5	10	02/16/24 10:42	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:01	TJJ	EPA 6020A
Calcium	100	mg/L		02/08/24 08:01	5	0.20	02/15/24 17:01	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/08/24 08:01	5	4.0	02/15/24 17:01	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		02/08/24 08:01	5	2.0	02/15/24 17:01	TJJ	EPA 6020A
Lead	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:01	TJJ	EPA 6020A
Magnesium	33	mg/L		02/08/24 08:01	5	0.10	02/15/24 17:01	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/08/24 08:01	5	0.20	02/15/24 17:01	TJJ	EPA 6020A
Molybdenum	22	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:01	TJJ	EPA 6020A
Potassium	2.5	mg/L		02/08/24 08:01	5	0.10	02/15/24 17:01	TJJ	EPA 6020A
Selenium	1.1	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:01	TJJ	EPA 6020A
Sodium	47	mg/L		02/08/24 08:01	5	0.10	02/15/24 17:01	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01318-05
Name: AW-21
Matrix: Ground Water - Grab

Sampled: 02/07/24 15:19
Received: 02/07/24 16:25

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:01	TJJ	EPA 6020A
Lithium	< 20	ug/L		02/08/24 08:01	1	20	02/09/24 13:18	BRS	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01318-06
Name: XPW01A
Matrix: Ground Water - Grab

Sampled: 02/07/24 11:32
Received: 02/07/24 16:25

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	96	mg/L		02/13/24 21:38	25	25	02/13/24 21:38	KCS1	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		02/13/24 21:17	1	0.250	02/13/24 21:17	KCS1	EPA 300.0 REV 2.1
Sulfate	240	mg/L		02/14/24 17:54	50	50	02/14/24 17:54	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	11.52	Feet		02/07/24 11:32	1		02/07/24 11:32	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		02/07/24 11:32	1		02/07/24 11:32	FIELD	Field*
Oxidation Reduction Potential	-35.0	mV		02/07/24 11:32	1	-500	02/07/24 11:32	FIELD	Field*
pH, Field Measured	12.4	pH Units		02/07/24 11:32	1		02/07/24 11:32	FIELD	Field*
Specific Conductance, Field Measured	1930	umhos/cm		02/07/24 11:32	1		02/07/24 11:32	FIELD	Field*
Temperature, Field Measured	12.5	°C		02/07/24 11:32	1		02/07/24 11:32	FIELD	Field*
Turbidity, Field Measured	8.10	NTU		02/07/24 11:32	1	0.00	02/07/24 11:32	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	75	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Solids - total dissolved solids (TDS)	900	mg/L		02/13/24 09:55	1	17	02/13/24 11:10	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/08/24 08:01	5	3.0	02/15/24 17:05	TJJ	EPA 6020A
Arsenic	120	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:05	TJJ	EPA 6020A
Barium	29	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:05	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:05	TJJ	EPA 6020A
Boron	17000	ug/L		02/08/24 08:01	100	200	02/16/24 12:01	TJJ	EPA 6020A
Cadmium	1.3	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:05	TJJ	EPA 6020A
Calcium	58	mg/L		02/08/24 08:01	5	0.20	02/15/24 17:05	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/08/24 08:01	5	4.0	02/15/24 17:05	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		02/08/24 08:01	5	2.0	02/15/24 17:05	TJJ	EPA 6020A
Lead	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:05	TJJ	EPA 6020A
Magnesium	< 0.10	mg/L		02/08/24 08:01	5	0.10	02/15/24 17:05	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/08/24 08:01	5	0.20	02/15/24 17:05	TJJ	EPA 6020A
Molybdenum	3000	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:05	TJJ	EPA 6020A
Potassium	240	mg/L		02/08/24 08:01	5	0.10	02/15/24 17:05	TJJ	EPA 6020A
Selenium	7.6	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:05	TJJ	EPA 6020A
Sodium	110	mg/L		02/08/24 08:01	5	0.10	02/15/24 17:05	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01318-06
Name: XPW01A
Matrix: Ground Water - Grab

Sampled: 02/07/24 11:32
Received: 02/07/24 16:25

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:05	TJJ	EPA 6020A
Lithium	710	ug/L		02/08/24 08:01	1	20	02/09/24 13:20	BRS	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01318-07
Name: XPW02
Matrix: Ground Water - Grab

Sampled: 02/07/24 12:27
Received: 02/07/24 16:25

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	130	mg/L		02/13/24 21:58	100	100	02/13/24 21:58	KCS1	EPA 300.0 REV 2.1
Sulfate	1200	mg/L		02/14/24 18:14	250	250	02/14/24 18:14	CRD	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	19.32	Feet		02/07/24 12:27	1		02/07/24 12:27	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		02/07/24 12:27	1		02/07/24 12:27	FIELD	Field*
Oxidation Reduction Potential	-68.0	mV		02/07/24 12:27	1	-500	02/07/24 12:27	FIELD	Field*
pH, Field Measured	12.9	pH Units		02/07/24 12:27	1		02/07/24 12:27	FIELD	Field*
Specific Conductance, Field Measured	4510	umhos/cm		02/07/24 12:27	1		02/07/24 12:27	FIELD	Field*
Temperature, Field Measured	13.5	°C		02/07/24 12:27	1		02/07/24 12:27	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		02/07/24 12:27	1	0.00	02/07/24 12:27	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	120	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Fluoride	0.363	mg/L		02/16/24 16:38	1	0.250	02/16/24 16:38	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	2400	mg/L		02/13/24 09:55	1	17	02/13/24 11:10	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/08/24 08:01	5	3.0	02/15/24 17:16	TJJ	EPA 6020A
Arsenic	180	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:16	TJJ	EPA 6020A
Barium	15	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:16	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:16	TJJ	EPA 6020A
Boron	14000	ug/L		02/08/24 08:01	100	200	02/16/24 12:05	TJJ	EPA 6020A
Cadmium	1.2	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:16	TJJ	EPA 6020A
Calcium	32	mg/L		02/08/24 08:01	5	0.20	02/15/24 17:16	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/08/24 08:01	5	4.0	02/15/24 17:16	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		02/08/24 08:01	5	2.0	02/15/24 17:16	TJJ	EPA 6020A
Lead	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:16	TJJ	EPA 6020A
Magnesium	< 0.10	mg/L		02/08/24 08:01	5	0.10	02/15/24 17:16	TJJ	EPA 6020A
Mercury	0.29	ug/L		02/08/24 08:01	5	0.20	02/21/24 11:22	wjm	EPA 6020A
Molybdenum	2900	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:16	TJJ	EPA 6020A
Potassium	110	mg/L		02/08/24 08:01	5	0.10	02/15/24 17:16	TJJ	EPA 6020A
Selenium	190	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:16	TJJ	EPA 6020A
Sodium	790	mg/L		02/08/24 08:01	100	2.0	02/16/24 12:05	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01318-07
Name: XPW02
Matrix: Ground Water - Grab

Sampled: 02/07/24 12:27
Received: 02/07/24 16:25

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:16	TJJ	EPA 6020A
Lithium	300	ug/L		02/08/24 08:01	1	20	02/09/24 13:23	BRS	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01318-08
Name: XPW03
Matrix: Ground Water - Grab

Sampled: 02/07/24 13:52
Received: 02/07/24 16:25

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	100	mg/L		02/13/24 22:18	50	50	02/13/24 22:18	KCS1	EPA 300.0 REV 2.1
Sulfate	350	mg/L		02/13/24 22:18	50	50	02/13/24 22:18	KCS1	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	16.54	Feet		02/07/24 13:52	1		02/07/24 13:52	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		02/07/24 13:52	1		02/07/24 13:52	FIELD	Field*
Oxidation Reduction Potential	-149	mV		02/07/24 13:52	1	-500	02/07/24 13:52	FIELD	Field*
pH, Field Measured	12.6	pH Units		02/07/24 13:52	1		02/07/24 13:52	FIELD	Field*
Specific Conductance, Field Measured	1960	umhos/cm		02/07/24 13:52	1		02/07/24 13:52	FIELD	Field*
Temperature, Field Measured	12.6	°C		02/07/24 13:52	1		02/07/24 13:52	FIELD	Field*
Turbidity, Field Measured	27.1	NTU		02/07/24 13:52	1	0.00	02/07/24 13:52	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	75	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Fluoride	< 0.250	mg/L		02/16/24 16:39	1	0.250	02/16/24 16:39	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	930	mg/L		02/13/24 09:55	1	17	02/13/24 11:10	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/08/24 08:01	5	3.0	02/15/24 17:20	TJJ	EPA 6020A
Arsenic	21	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:20	TJJ	EPA 6020A
Barium	82	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:20	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:20	TJJ	EPA 6020A
Boron	6300	ug/L		02/08/24 08:01	100	200	02/16/24 12:09	TJJ	EPA 6020A
Cadmium	1.4	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:20	TJJ	EPA 6020A
Calcium	63	mg/L		02/08/24 08:01	5	0.20	02/15/24 17:20	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/08/24 08:01	5	4.0	02/15/24 17:20	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		02/08/24 08:01	5	2.0	02/15/24 17:20	TJJ	EPA 6020A
Lead	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:20	TJJ	EPA 6020A
Magnesium	< 0.10	mg/L		02/08/24 08:01	5	0.10	02/15/24 17:20	TJJ	EPA 6020A
Mercury	0.20	ug/L		02/08/24 08:01	5	0.20	02/21/24 11:25	wjm	EPA 6020A
Molybdenum	3400	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:20	TJJ	EPA 6020A
Potassium	66	mg/L		02/08/24 08:01	5	0.10	02/15/24 17:20	TJJ	EPA 6020A
Selenium	23	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:20	TJJ	EPA 6020A
Sodium	240	mg/L		02/08/24 08:01	5	0.10	02/15/24 17:20	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01318-08
Name: XPW03
Matrix: Ground Water - Grab

Sampled: 02/07/24 13:52
Received: 02/07/24 16:25

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		02/08/24 08:01	5	1.0	02/15/24 17:20	TJJ	EPA 6020A
Lithium	120	ug/L		02/08/24 08:01	1	20	02/09/24 13:25	BRS	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01601-01
Name: AP05S
Matrix: Ground Water - Grab

Sampled: 02/08/24 15:31
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	39	mg/L	Q4	02/15/24 10:50	10	10	02/15/24 10:50	TMS	EPA 300.0 REV 2.1
Sulfate	58	mg/L	Q4	02/15/24 10:50	10	10	02/15/24 10:50	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	4.15	Feet		02/08/24 15:31	1		02/08/24 15:31	FIELD	Field*
Dissolved oxygen, Field	0.37	mg/L		02/08/24 15:31	1		02/08/24 15:31	FIELD	Field*
Oxidation Reduction Potential	-71.0	mV		02/08/24 15:31	1	-500	02/08/24 15:31	FIELD	Field*
pH, Field Measured	7.07	pH Units		02/08/24 15:31	1		02/08/24 15:31	FIELD	Field*
Specific Conductance, Field Measured	1730	umhos/cm		02/08/24 15:31	1		02/08/24 15:31	FIELD	Field*
Temperature, Field Measured	12.9	°C		02/08/24 15:31	1		02/08/24 15:31	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		02/08/24 15:31	1	0.00	02/08/24 15:31	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	740	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Fluoride	< 0.250	mg/L		02/20/24 11:51	1	0.250	02/20/24 11:51	TTH/KCS 1	SM 4500F C 1997
Solids - total dissolved solids (TDS)	820	mg/L		02/14/24 09:34	1	17	02/14/24 11:13	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/13/24 08:23	5	3.0	02/16/24 15:17	TJJ	EPA 6020A
Arsenic	1.2	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:17	TJJ	EPA 6020A
Barium	650	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:17	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:17	TJJ	EPA 6020A
Boron	280	ug/L		02/13/24 08:23	5	10	02/16/24 15:17	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:17	TJJ	EPA 6020A
Calcium	100	mg/L	Q4	02/13/24 08:23	5	0.20	02/16/24 15:17	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/13/24 08:23	5	4.0	02/16/24 15:17	TJJ	EPA 6020A
Cobalt	2.0	ug/L		02/13/24 08:23	5	2.0	02/16/24 15:17	TJJ	EPA 6020A
Lead	2.1	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:17	TJJ	EPA 6020A
Magnesium	43	mg/L		02/13/24 08:23	5	0.10	02/16/24 15:17	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/13/24 08:23	5	0.20	02/19/24 12:20	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:17	TJJ	EPA 6020A
Potassium	3.6	mg/L		02/13/24 08:23	5	0.10	02/16/24 15:17	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:17	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01601-01
Name: AP05S
Matrix: Ground Water - Grab

Sampled: 02/08/24 15:31
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Sodium	160	mg/L	Q4	02/13/24 08:23	5	0.10	02/16/24 15:17	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:17	TJJ	EPA 6020A
Lithium	29	ug/L		02/13/24 08:23	1	20	02/16/24 12:55	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01601-02
Name: AP07S
Matrix: Ground Water - Grab

Sampled: 02/08/24 15:44
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	84	mg/L		02/15/24 11:29	50	50	02/15/24 11:29	TMS	EPA 300.0 REV 2.1
Sulfate	330	mg/L		02/15/24 11:29	50	50	02/15/24 11:29	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	24.14	Feet		02/08/24 15:44	1		02/08/24 15:44	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		02/08/24 15:44	1		02/08/24 15:44	FIELD	Field*
Oxidation Reduction Potential	-27.0	mV		02/08/24 15:44	1	-500	02/08/24 15:44	FIELD	Field*
pH, Field Measured	6.73	pH Units		02/08/24 15:44	1		02/08/24 15:44	FIELD	Field*
Specific Conductance, Field Measured	1406	umhos/cm		02/08/24 15:44	1		02/08/24 15:44	FIELD	Field*
Temperature, Field Measured	14.7	°C		02/08/24 15:44	1		02/08/24 15:44	FIELD	Field*
Turbidity, Field Measured	66.1	NTU		02/08/24 15:44	1	0.00	02/08/24 15:44	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	380	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Fluoride	0.289	mg/L		02/20/24 11:52	1	0.250	02/20/24 11:52	TTH/KCS 1	SM 4500F C 1997
Solids - total dissolved solids (TDS)	980	mg/L		02/14/24 09:34	1	17	02/14/24 11:13	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/13/24 08:23	5	3.0	02/16/24 15:21	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:21	TJJ	EPA 6020A
Barium	61	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:21	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:21	TJJ	EPA 6020A
Boron	12000	ug/L		02/13/24 08:23	100	200	02/19/24 13:41	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:21	TJJ	EPA 6020A
Calcium	170	mg/L		02/13/24 08:23	5	0.20	02/16/24 15:21	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/13/24 08:23	5	4.0	02/16/24 15:21	TJJ	EPA 6020A
Cobalt	2.4	ug/L		02/13/24 08:23	5	2.0	02/16/24 15:21	TJJ	EPA 6020A
Lead	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:21	TJJ	EPA 6020A
Magnesium	59	mg/L		02/13/24 08:23	5	0.10	02/16/24 15:21	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/13/24 08:23	5	0.20	02/16/24 15:21	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:21	TJJ	EPA 6020A
Potassium	0.51	mg/L		02/13/24 08:23	5	0.10	02/16/24 15:21	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:21	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01601-02
Name: AP07S
Matrix: Ground Water - Grab

Sampled: 02/08/24 15:44
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Sodium	65	mg/L		02/13/24 08:23	5	0.10	02/16/24 15:21	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:21	TJJ	EPA 6020A
Lithium	< 20	ug/L		02/13/24 08:23	1	20	02/16/24 13:01	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01601-03
Name: AW-01
Matrix: Ground Water - Grab

Sampled: 02/08/24 11:12
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	22	mg/L		02/15/24 12:07	5	5.0	02/15/24 12:07	TMS	EPA 300.0 REV 2.1
Sulfate	67	mg/L		02/15/24 12:27	50	50	02/15/24 12:27	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	9.58	Feet		02/08/24 11:12	1		02/08/24 11:12	FIELD	Field*
Dissolved oxygen, Field	0.97	mg/L		02/08/24 11:12	1		02/08/24 11:12	FIELD	Field*
Oxidation Reduction Potential	-75.0	mV		02/08/24 11:12	1	-500	02/08/24 11:12	FIELD	Field*
pH, Field Measured	6.70	pH Units		02/08/24 11:12	1		02/08/24 11:12	FIELD	Field*
Specific Conductance, Field Measured	1450	umhos/cm		02/08/24 11:12	1		02/08/24 11:12	FIELD	Field*
Temperature, Field Measured	13.6	°C		02/08/24 11:12	1		02/08/24 11:12	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		02/08/24 11:12	1	0.00	02/08/24 11:12	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	600	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Fluoride	0.254	mg/L		02/20/24 11:53	1	0.250	02/20/24 11:53	TTH/KCS 1	SM 4500F C 1997
Solids - total dissolved solids (TDS)	740	mg/L		02/14/24 09:34	1	17	02/14/24 11:13	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/13/24 08:23	5	3.0	02/16/24 15:25	TJJ	EPA 6020A
Arsenic	3.9	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:25	TJJ	EPA 6020A
Barium	88	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:25	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:25	TJJ	EPA 6020A
Boron	130	ug/L		02/13/24 08:23	5	10	02/19/24 12:24	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:25	TJJ	EPA 6020A
Calcium	140	mg/L		02/13/24 08:23	5	0.20	02/16/24 15:25	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/13/24 08:23	5	4.0	02/16/24 15:25	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		02/13/24 08:23	5	2.0	02/16/24 15:25	TJJ	EPA 6020A
Lead	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:25	TJJ	EPA 6020A
Magnesium	63	mg/L		02/13/24 08:23	5	0.10	02/16/24 15:25	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/13/24 08:23	5	0.20	02/16/24 15:25	TJJ	EPA 6020A
Molybdenum	4.8	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:25	TJJ	EPA 6020A
Potassium	1.4	mg/L		02/13/24 08:23	5	0.10	02/16/24 15:25	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:25	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01601-03
Name: AW-01
Matrix: Ground Water - Grab

Sampled: 02/08/24 11:12
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Sodium	46	mg/L		02/13/24 08:23	5	0.10	02/16/24 15:25	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:25	TJJ	EPA 6020A
Lithium	< 20	ug/L		02/13/24 08:23	1	20	02/16/24 13:02	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01601-04
Name: AW-01 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 02/08/24 11:12
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	22	mg/L		02/15/24 13:44	5	5.0	02/15/24 13:44	TMS	EPA 300.0 REV 2.1
Sulfate	63	mg/L		02/15/24 14:03	50	50	02/15/24 14:03	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	9.58	Feet		02/08/24 11:12	1		02/08/24 11:12	FIELD	Field*
Dissolved oxygen, Field	0.97	mg/L		02/08/24 11:12	1		02/08/24 11:12	FIELD	Field*
Oxidation Reduction Potential	-75.0	mV		02/08/24 11:12	1	-500	02/08/24 11:12	FIELD	Field*
pH, Field Measured	6.70	pH Units		02/08/24 11:12	1		02/08/24 11:12	FIELD	Field*
Specific Conductance, Field Measured	1450	umhos/cm		02/08/24 11:12	1		02/08/24 11:12	FIELD	Field*
Temperature, Field Measured	13.6	°C		02/08/24 11:12	1		02/08/24 11:12	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		02/08/24 11:12	1	0.00	02/08/24 11:12	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	600	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Fluoride	0.256	mg/L		02/20/24 11:54	1	0.250	02/20/24 11:54	TTH/KCS 1	SM 4500F C 1997
Solids - total dissolved solids (TDS)	700	mg/L		02/14/24 09:34	1	17	02/14/24 11:13	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/13/24 08:23	5	3.0	02/16/24 15:28	TJJ	EPA 6020A
Arsenic	3.8	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:28	TJJ	EPA 6020A
Barium	86	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:28	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:28	TJJ	EPA 6020A
Boron	130	ug/L		02/13/24 08:23	5	10	02/19/24 12:28	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:28	TJJ	EPA 6020A
Calcium	140	mg/L		02/13/24 08:23	5	0.20	02/16/24 15:28	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/13/24 08:23	5	4.0	02/16/24 15:28	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		02/13/24 08:23	5	2.0	02/16/24 15:28	TJJ	EPA 6020A
Lead	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:28	TJJ	EPA 6020A
Magnesium	62	mg/L		02/13/24 08:23	5	0.10	02/16/24 15:28	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/13/24 08:23	5	0.20	02/16/24 15:28	TJJ	EPA 6020A
Molybdenum	4.8	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:28	TJJ	EPA 6020A
Potassium	1.4	mg/L		02/13/24 08:23	5	0.10	02/16/24 15:28	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:28	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01601-04
Name: AW-01 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 02/08/24 11:12
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Sodium	46	mg/L		02/13/24 08:23	5	0.10	02/16/24 15:28	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:28	TJJ	EPA 6020A
Lithium	< 20	ug/L		02/13/24 08:23	1	20	02/16/24 13:03	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01601-05
Name: AW-05
Matrix: Ground Water - Grab

Sampled: 02/08/24 14:35
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	75	mg/L		02/15/24 14:42	50	50	02/15/24 14:42	TMS	EPA 300.0 REV 2.1
Sulfate	400	mg/L		02/15/24 14:42	50	50	02/15/24 14:42	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	8.12	Feet		02/08/24 14:35	1		02/08/24 14:35	DAB	Field*
Dissolved oxygen, Field	0.96	mg/L		02/08/24 14:35	1		02/08/24 14:35	DAB	Field*
Oxidation Reduction Potential	29.0	mV		02/08/24 14:35	1	-500	02/08/24 14:35	DAB	Field*
pH, Field Measured	6.92	pH Units		02/08/24 14:35	1		02/08/24 14:35	DAB	Field*
Specific Conductance, Field Measured	1770	umhos/cm		02/08/24 14:35	1		02/08/24 14:35	DAB	Field*
Temperature, Field Measured	14.5	°C		02/08/24 14:35	1		02/08/24 14:35	DAB	Field*
Turbidity, Field Measured	< 0.00	NTU		02/08/24 14:35	1	0.00	02/08/24 14:35	DAB	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	380	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Fluoride	< 0.250	mg/L		02/20/24 11:55	1	0.250	02/20/24 11:55	TTH/KCS 1	SM 4500F C 1997
Solids - total dissolved solids (TDS)	1000	mg/L		02/14/24 09:34	1	17	02/14/24 11:13	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/13/24 08:23	5	3.0	02/16/24 15:32	TJJ	EPA 6020A
Arsenic	5.1	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:32	TJJ	EPA 6020A
Barium	150	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:32	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:32	TJJ	EPA 6020A
Boron	6200	ug/L		02/13/24 08:23	5	10	02/16/24 15:32	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:32	TJJ	EPA 6020A
Calcium	170	mg/L		02/13/24 08:23	5	0.20	02/16/24 15:32	TJJ	EPA 6020A
Chromium	8.9	ug/L		02/13/24 08:23	5	4.0	02/16/24 15:32	TJJ	EPA 6020A
Cobalt	6.0	ug/L		02/13/24 08:23	5	2.0	02/16/24 15:32	TJJ	EPA 6020A
Lead	4.5	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:32	TJJ	EPA 6020A
Magnesium	77	mg/L		02/13/24 08:23	5	0.10	02/16/24 15:32	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/13/24 08:23	5	0.20	02/16/24 15:32	TJJ	EPA 6020A
Molybdenum	2.2	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:32	TJJ	EPA 6020A
Potassium	2.1	mg/L		02/13/24 08:23	5	0.10	02/16/24 15:32	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:32	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01601-05
Name: AW-05
Matrix: Ground Water - Grab

Sampled: 02/08/24 14:35
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Sodium	73	mg/L		02/13/24 08:23	5	0.10	02/16/24 15:32	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 15:32	TJJ	EPA 6020A
Lithium	< 20	ug/L		02/13/24 08:23	1	20	02/16/24 13:04	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01601-06
Name: AW-08
Matrix: Ground Water - Grab

Sampled: 02/08/24 13:15
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	18	mg/L		02/15/24 15:21	5	5.0	02/15/24 15:21	TMS	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		02/15/24 15:01	1	1.0	02/15/24 15:01	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	21.5	Feet		02/08/24 13:15	1		02/08/24 13:15	FIELD	Field*
Dissolved oxygen, Field	1.4	mg/L		02/08/24 13:15	1		02/08/24 13:15	FIELD	Field*
Oxidation Reduction Potential	-99.0	mV		02/08/24 13:15	1	-500	02/08/24 13:15	FIELD	Field*
pH, Field Measured	6.75	pH Units		02/08/24 13:15	1		02/08/24 13:15	FIELD	Field*
Specific Conductance, Field Measured	1490	umhos/cm		02/08/24 13:15	1		02/08/24 13:15	FIELD	Field*
Temperature, Field Measured	14.9	°C		02/08/24 13:15	1		02/08/24 13:15	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		02/08/24 13:15	1	0.00	02/08/24 13:15	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	700	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Fluoride	0.256	mg/L		02/20/24 11:57	1	0.250	02/20/24 11:57	TTH/KCS 1	SM 4500F C 1997
Solids - total dissolved solids (TDS)	710	mg/L		02/14/24 09:34	1	17	02/14/24 11:13	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/13/24 08:23	5	3.0	02/16/24 16:24	TJJ	EPA 6020A
Arsenic	12	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:24	TJJ	EPA 6020A
Barium	300	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:24	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:24	TJJ	EPA 6020A
Boron	140	ug/L		02/13/24 08:23	5	10	02/19/24 12:31	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:24	TJJ	EPA 6020A
Calcium	140	mg/L		02/13/24 08:23	5	0.20	02/16/24 16:24	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/13/24 08:23	5	4.0	02/16/24 16:24	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		02/13/24 08:23	5	2.0	02/16/24 16:24	TJJ	EPA 6020A
Lead	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:24	TJJ	EPA 6020A
Magnesium	54	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:24	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/13/24 08:23	5	0.20	02/16/24 16:24	TJJ	EPA 6020A
Molybdenum	1.8	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:24	TJJ	EPA 6020A
Potassium	2.2	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:24	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:24	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01601-06
Name: AW-08
Matrix: Ground Water - Grab

Sampled: 02/08/24 13:15
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Sodium	64	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:24	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:24	TJJ	EPA 6020A
Lithium	< 20	ug/L		02/13/24 08:23	1	20	02/16/24 13:06	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01601-07
Name: AW-10
Matrix: Ground Water - Grab

Sampled: 02/08/24 15:06
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	89	mg/L		02/15/24 15:59	10	10	02/15/24 15:59	TMS	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		02/15/24 15:40	1	1.0	02/15/24 15:40	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	0.8	Feet		02/08/24 15:06	1		02/08/24 15:06	FIELD	Field*
Dissolved oxygen, Field	1.7	mg/L		02/08/24 15:06	1		02/08/24 15:06	FIELD	Field*
Oxidation Reduction Potential	-119	mV		02/08/24 15:06	1	-500	02/08/24 15:06	FIELD	Field*
pH, Field Measured	7.05	pH Units		02/08/24 15:06	1		02/08/24 15:06	FIELD	Field*
Specific Conductance, Field Measured	1700	umhos/cm		02/08/24 15:06	1		02/08/24 15:06	FIELD	Field*
Temperature, Field Measured	13.4	°C		02/08/24 15:06	1		02/08/24 15:06	FIELD	Field*
Turbidity, Field Measured	310	NTU		02/08/24 15:06	1	0.00	02/08/24 15:06	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	1000	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Fluoride	< 0.250	mg/L		02/20/24 11:58	1	0.250	02/20/24 11:58	TTH/KCS 1	SM 4500F C 1997
Solids - total dissolved solids (TDS)	1200	mg/L		02/14/24 09:34	1	17	02/14/24 11:13	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/13/24 08:23	5	3.0	02/16/24 16:28	TJJ	EPA 6020A
Arsenic	11	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:28	TJJ	EPA 6020A
Barium	870	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:28	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:28	TJJ	EPA 6020A
Boron	490	ug/L		02/13/24 08:23	5	10	02/19/24 12:35	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:28	TJJ	EPA 6020A
Calcium	130	mg/L		02/13/24 08:23	5	0.20	02/16/24 16:28	TJJ	EPA 6020A
Chromium	4.7	ug/L		02/13/24 08:23	5	4.0	02/16/24 16:28	TJJ	EPA 6020A
Cobalt	4.3	ug/L		02/13/24 08:23	5	2.0	02/16/24 16:28	TJJ	EPA 6020A
Lead	2.2	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:28	TJJ	EPA 6020A
Magnesium	61	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:28	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/13/24 08:23	5	0.20	02/16/24 16:28	TJJ	EPA 6020A
Molybdenum	1.5	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:28	TJJ	EPA 6020A
Potassium	3.6	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:28	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:28	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01601-07
Name: AW-10
Matrix: Ground Water - Grab

Sampled: 02/08/24 15:06
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Sodium	250	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:28	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:28	TJJ	EPA 6020A
Lithium	43	ug/L		02/13/24 08:23	1	20	02/16/24 13:07	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01601-08
Name: AW-11
Matrix: Ground Water - Grab

Sampled: 02/08/24 13:28
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	35	mg/L		02/15/24 16:38	10	10	02/15/24 16:38	TMS	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		02/15/24 16:19	1	1.0	02/15/24 16:19	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	5.54	Feet		02/08/24 13:28	1		02/08/24 13:28	FIELD	Field*
Dissolved oxygen, Field	1.1	mg/L		02/08/24 13:28	1		02/08/24 13:28	FIELD	Field*
Oxidation Reduction Potential	-137	mV		02/08/24 13:28	1	-500	02/08/24 13:28	FIELD	Field*
pH, Field Measured	7.05	pH Units		02/08/24 13:28	1		02/08/24 13:28	FIELD	Field*
Specific Conductance, Field Measured	1460	umhos/cm		02/08/24 13:28	1		02/08/24 13:28	FIELD	Field*
Temperature, Field Measured	11.7	°C		02/08/24 13:28	1		02/08/24 13:28	FIELD	Field*
Turbidity, Field Measured	718	NTU		02/08/24 13:28	1	0.00	02/08/24 13:28	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	910	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Fluoride	< 0.250	mg/L		02/20/24 11:59	1	0.250	02/20/24 11:59	TTH/KCS 1	SM 4500F C 1997
Solids - total dissolved solids (TDS)	950	mg/L		02/14/24 09:34	1	17	02/14/24 11:13	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/13/24 08:23	5	3.0	02/16/24 16:32	TJJ	EPA 6020A
Arsenic	9.2	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:32	TJJ	EPA 6020A
Barium	1000	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:32	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:32	TJJ	EPA 6020A
Boron	260	ug/L		02/13/24 08:23	5	10	02/19/24 12:39	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:32	TJJ	EPA 6020A
Calcium	150	mg/L		02/13/24 08:23	5	0.20	02/16/24 16:32	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/13/24 08:23	5	4.0	02/16/24 16:32	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		02/13/24 08:23	5	2.0	02/16/24 16:32	TJJ	EPA 6020A
Lead	1.1	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:32	TJJ	EPA 6020A
Magnesium	64	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:32	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/13/24 08:23	5	0.20	02/16/24 16:32	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:32	TJJ	EPA 6020A
Potassium	2.6	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:32	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:32	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01601-08
Name: AW-11
Matrix: Ground Water - Grab

Sampled: 02/08/24 13:28
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Sodium	150	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:32	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:32	TJJ	EPA 6020A
Lithium	23	ug/L		02/13/24 08:23	1	20	02/16/24 13:08	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01601-09
Name: AW-14
Matrix: Ground Water - Grab

Sampled: 02/08/24 12:38
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	42	mg/L		02/15/24 17:56	5	5.0	02/15/24 17:56	TMS	EPA 300.0 REV 2.1
Sulfate	28	mg/L		02/15/24 17:56	5	5.0	02/15/24 17:56	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	6.65	Feet		02/08/24 12:38	1		02/08/24 12:38	FIELD	Field*
Dissolved oxygen, Field	0.46	mg/L		02/08/24 12:38	1		02/08/24 12:38	FIELD	Field*
Oxidation Reduction Potential	-123	mV		02/08/24 12:38	1	-500	02/08/24 12:38	FIELD	Field*
pH, Field Measured	7.05	pH Units		02/08/24 12:38	1		02/08/24 12:38	FIELD	Field*
Specific Conductance, Field Measured	1430	umhos/cm		02/08/24 12:38	1		02/08/24 12:38	FIELD	Field*
Temperature, Field Measured	11.5	°C		02/08/24 12:38	1		02/08/24 12:38	FIELD	Field*
Turbidity, Field Measured	156	NTU		02/08/24 12:38	1	0.00	02/08/24 12:38	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	940	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Fluoride	< 0.250	mg/L		02/20/24 12:04	1	0.250	02/20/24 12:04	TTH/KCS 1	SM 4500F C 1997
Solids - total dissolved solids (TDS)	940	mg/L		02/14/24 09:34	1	17	02/14/24 11:13	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/13/24 08:23	5	3.0	02/16/24 16:36	TJJ	EPA 6020A
Arsenic	2.2	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:36	TJJ	EPA 6020A
Barium	510	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:36	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:36	TJJ	EPA 6020A
Boron	380	ug/L		02/13/24 08:23	5	10	02/19/24 12:43	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:36	TJJ	EPA 6020A
Calcium	160	mg/L		02/13/24 08:23	5	0.20	02/16/24 16:36	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/13/24 08:23	5	4.0	02/16/24 16:36	TJJ	EPA 6020A
Cobalt	2.2	ug/L		02/13/24 08:23	5	2.0	02/16/24 16:36	TJJ	EPA 6020A
Lead	1.4	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:36	TJJ	EPA 6020A
Magnesium	63	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:36	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/13/24 08:23	5	0.20	02/16/24 16:36	TJJ	EPA 6020A
Molybdenum	5.9	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:36	TJJ	EPA 6020A
Potassium	4.9	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:36	TJJ	EPA 6020A
Selenium	1.4	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:36	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01601-09
Name: AW-14
Matrix: Ground Water - Grab

Sampled: 02/08/24 12:38
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Sodium	140	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:36	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:36	TJJ	EPA 6020A
Lithium	< 20	ug/L		02/13/24 08:23	1	20	02/16/24 13:09	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01601-10
Name: AW-15
Matrix: Ground Water - Grab

Sampled: 02/08/24 10:14
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	36	mg/L		02/15/24 18:34	10	10	02/15/24 18:34	TMS	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		02/15/24 18:15	1	1.0	02/15/24 18:15	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	8.8	Feet		02/08/24 10:14	1		02/08/24 10:14	FIELD	Field*
Dissolved oxygen, Field	0.67	mg/L		02/08/24 10:14	1		02/08/24 10:14	FIELD	Field*
Oxidation Reduction Potential	-102	mV		02/08/24 10:14	1	-500	02/08/24 10:14	FIELD	Field*
pH, Field Measured	6.83	pH Units		02/08/24 10:14	1		02/08/24 10:14	FIELD	Field*
Specific Conductance, Field Measured	1560	umhos/cm		02/08/24 10:14	1		02/08/24 10:14	FIELD	Field*
Temperature, Field Measured	13.1	°C		02/08/24 10:14	1		02/08/24 10:14	FIELD	Field*
Turbidity, Field Measured	34.5	NTU		02/08/24 10:14	1	0.00	02/08/24 10:14	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	1000	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Fluoride	< 0.250	mg/L		02/20/24 12:05	1	0.250	02/20/24 12:05	TTH/KCS 1	SM 4500F C 1997
Solids - total dissolved solids (TDS)	1100	mg/L		02/14/24 09:34	1	17	02/14/24 11:13	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/13/24 08:23	5	3.0	02/16/24 16:40	TJJ	EPA 6020A
Arsenic	1.8	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:40	TJJ	EPA 6020A
Barium	1700	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:40	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:40	TJJ	EPA 6020A
Boron	410	ug/L		02/13/24 08:23	5	10	02/19/24 12:47	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:40	TJJ	EPA 6020A
Calcium	140	mg/L		02/13/24 08:23	5	0.20	02/16/24 16:40	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/13/24 08:23	5	4.0	02/16/24 16:40	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		02/13/24 08:23	5	2.0	02/16/24 16:40	TJJ	EPA 6020A
Lead	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:40	TJJ	EPA 6020A
Magnesium	54	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:40	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/13/24 08:23	5	0.20	02/16/24 16:40	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:40	TJJ	EPA 6020A
Potassium	4.0	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:40	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:40	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01601-10
Name: AW-15
Matrix: Ground Water - Grab

Sampled: 02/08/24 10:14
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Sodium	200	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:40	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:40	TJJ	EPA 6020A
Lithium	33	ug/L		02/13/24 08:23	1	20	02/16/24 13:10	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01601-11
Name: AW-15S
Matrix: Ground Water - Grab

Sampled: 02/08/24 11:26
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	30	mg/L	Q4	02/15/24 19:52	10	10	02/15/24 19:52	TMS	EPA 300.0 REV 2.1
Sulfate	550	mg/L	Q4	02/15/24 20:11	100	100	02/15/24 20:11	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	9.34	Feet		02/08/24 11:26	1		02/08/24 11:26	FIELD	Field*
Dissolved oxygen, Field	0.59	mg/L		02/08/24 11:26	1		02/08/24 11:26	FIELD	Field*
Oxidation Reduction Potential	19.0	mV		02/08/24 11:26	1	-500	02/08/24 11:26	FIELD	Field*
pH, Field Measured	7.03	pH Units		02/08/24 11:26	1		02/08/24 11:26	FIELD	Field*
Specific Conductance, Field Measured	1420	umhos/cm		02/08/24 11:26	1		02/08/24 11:26	FIELD	Field*
Temperature, Field Measured	12.6	°C		02/08/24 11:26	1		02/08/24 11:26	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		02/08/24 11:26	1	0.00	02/08/24 11:26	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	480	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Fluoride	0.260	mg/L		02/20/24 12:08	1	0.250	02/20/24 12:08	TTH/KCS 1	SM 4500F C 1997
Solids - total dissolved solids (TDS)	1300	mg/L		02/14/24 09:34	1	17	02/14/24 11:13	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/13/24 08:23	5	3.0	02/16/24 16:44	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:44	TJJ	EPA 6020A
Barium	73	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:44	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:44	TJJ	EPA 6020A
Boron	6800	ug/L		02/13/24 08:23	100	200	02/19/24 13:45	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:44	TJJ	EPA 6020A
Calcium	250	mg/L		02/13/24 08:23	5	0.20	02/16/24 16:44	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/13/24 08:23	5	4.0	02/16/24 16:44	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		02/13/24 08:23	5	2.0	02/16/24 16:44	TJJ	EPA 6020A
Lead	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:44	TJJ	EPA 6020A
Magnesium	77	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:44	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/13/24 08:23	5	0.20	02/16/24 16:44	TJJ	EPA 6020A
Molybdenum	2.8	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:44	TJJ	EPA 6020A
Potassium	0.60	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:44	TJJ	EPA 6020A
Selenium	4.9	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:44	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01601-11
Name: AW-15S
Matrix: Ground Water - Grab

Sampled: 02/08/24 11:26
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Sodium	52	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:44	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:44	TJJ	EPA 6020A
Lithium	< 20	ug/L		02/13/24 08:23	1	20	02/16/24 13:12	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01601-12
Name: AW-16
Matrix: Ground Water - Grab

Sampled: 02/08/24 14:07
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	50	mg/L		02/15/24 21:29	10	10	02/15/24 21:29	TMS	EPA 300.0 REV 2.1
Sulfate	6.1	mg/L		02/15/24 20:30	1	1.0	02/15/24 20:30	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	24.92	Feet		02/08/24 14:07	1		02/08/24 14:07	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		02/08/24 14:07	1		02/08/24 14:07	FIELD	Field*
Oxidation Reduction Potential	-121	mV		02/08/24 14:07	1	-500	02/08/24 14:07	FIELD	Field*
pH, Field Measured	6.52	pH Units		02/08/24 14:07	1		02/08/24 14:07	FIELD	Field*
Specific Conductance, Field Measured	2120	umhos/cm		02/08/24 14:07	1		02/08/24 14:07	FIELD	Field*
Temperature, Field Measured	14.7	°C		02/08/24 14:07	1		02/08/24 14:07	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		02/08/24 14:07	1	0.00	02/08/24 14:07	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	1100	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Fluoride	< 0.250	mg/L		02/20/24 12:09	1	0.250	02/20/24 12:09	TTH/KCS 1	SM 4500F C 1997
Solids - total dissolved solids (TDS)	1100	mg/L		02/14/24 09:34	1	17	02/14/24 11:13	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/13/24 08:23	5	3.0	02/16/24 16:48	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:48	TJJ	EPA 6020A
Barium	1100	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:48	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:48	TJJ	EPA 6020A
Boron	490	ug/L		02/13/24 08:23	5	10	02/19/24 12:51	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:48	TJJ	EPA 6020A
Calcium	140	mg/L		02/13/24 08:23	5	0.20	02/16/24 16:48	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/13/24 08:23	5	4.0	02/16/24 16:48	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		02/13/24 08:23	5	2.0	02/16/24 16:48	TJJ	EPA 6020A
Lead	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:48	TJJ	EPA 6020A
Magnesium	55	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:48	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/13/24 08:23	5	0.20	02/16/24 16:48	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:48	TJJ	EPA 6020A
Potassium	4.6	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:48	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:48	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01601-12
Name: AW-16
Matrix: Ground Water - Grab

Sampled: 02/08/24 14:07
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Sodium	240	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:48	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:48	TJJ	EPA 6020A
Lithium	38	ug/L		02/13/24 08:23	1	20	02/16/24 13:15	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01601-13
Name: AW-16 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 02/08/24 14:07
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	51	mg/L		02/15/24 22:07	10	10	02/15/24 22:07	TMS	EPA 300.0 REV 2.1
Sulfate	5.5	mg/L		02/15/24 21:48	1	1.0	02/15/24 21:48	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	24.92	Feet		02/08/24 14:07	1		02/08/24 14:07	DAB	Field*
Dissolved oxygen, Field	0.0	mg/L		02/08/24 14:07	1		02/08/24 14:07	DAB	Field*
Oxidation Reduction Potential	-121	mV		02/08/24 14:07	1	-500	02/08/24 14:07	DAB	Field*
pH, Field Measured	6.52	pH Units		02/08/24 14:07	1		02/08/24 14:07	DAB	Field*
Specific Conductance, Field Measured	2120	umhos/cm		02/08/24 14:07	1		02/08/24 14:07	DAB	Field*
Temperature, Field Measured	14.7	°C		02/08/24 14:07	1		02/08/24 14:07	DAB	Field*
Turbidity, Field Measured	< 0.00	NTU		02/08/24 14:07	1	0.00	02/08/24 14:07	DAB	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	1100	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Fluoride	< 0.250	mg/L		02/20/24 12:10	1	0.250	02/20/24 12:10	TTH/KCS 1	SM 4500F C 1997
Solids - total dissolved solids (TDS)	1100	mg/L		02/14/24 09:34	1	17	02/14/24 11:13	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/13/24 08:23	5	3.0	02/16/24 16:52	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:52	TJJ	EPA 6020A
Barium	1100	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:52	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:52	TJJ	EPA 6020A
Boron	490	ug/L		02/13/24 08:23	5	10	02/19/24 13:14	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:52	TJJ	EPA 6020A
Calcium	140	mg/L		02/13/24 08:23	5	0.20	02/16/24 16:52	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/13/24 08:23	5	4.0	02/16/24 16:52	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		02/13/24 08:23	5	2.0	02/16/24 16:52	TJJ	EPA 6020A
Lead	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:52	TJJ	EPA 6020A
Magnesium	56	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:52	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/13/24 08:23	5	0.20	02/16/24 16:52	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:52	TJJ	EPA 6020A
Potassium	4.7	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:52	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:52	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01601-13
Name: AW-16 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 02/08/24 14:07
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Sodium	240	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:52	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:52	TJJ	EPA 6020A
Lithium	38	ug/L		02/13/24 08:23	1	20	02/16/24 13:16	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01601-14
Name: AW-17
Matrix: Ground Water - Grab

Sampled: 02/08/24 12:05
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	52	mg/L		02/15/24 22:46	10	10	02/15/24 22:46	TMS	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		02/15/24 22:27	1	1.0	02/15/24 22:27	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	25.56	Feet		02/08/24 12:05	1		02/08/24 12:05	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		02/08/24 12:05	1		02/08/24 12:05	FIELD	Field*
Oxidation Reduction Potential	-132	mV		02/08/24 12:05	1	-500	02/08/24 12:05	FIELD	Field*
pH, Field Measured	6.51	pH Units		02/08/24 12:05	1		02/08/24 12:05	FIELD	Field*
Specific Conductance, Field Measured	1776	umhos/cm		02/08/24 12:05	1		02/08/24 12:05	FIELD	Field*
Temperature, Field Measured	13.4	°C		02/08/24 12:05	1		02/08/24 12:05	FIELD	Field*
Turbidity, Field Measured	91.9	NTU		02/08/24 12:05	1	0.00	02/08/24 12:05	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	880	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Fluoride	< 0.250	mg/L		02/20/24 12:11	1	0.250	02/20/24 12:11	TTH/KCS 1	SM 4500F C 1997
Solids - total dissolved solids (TDS)	900	mg/L		02/14/24 09:34	1	17	02/14/24 11:13	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/13/24 08:23	5	3.0	02/16/24 16:55	TJJ	EPA 6020A
Arsenic	3.9	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:55	TJJ	EPA 6020A
Barium	1000	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:55	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:55	TJJ	EPA 6020A
Boron	460	ug/L		02/13/24 08:23	5	10	02/19/24 13:18	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:55	TJJ	EPA 6020A
Calcium	100	mg/L		02/13/24 08:23	5	0.20	02/16/24 16:55	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		02/13/24 08:23	5	4.0	02/16/24 16:55	TJJ	EPA 6020A
Cobalt	2.4	ug/L		02/13/24 08:23	5	2.0	02/16/24 16:55	TJJ	EPA 6020A
Lead	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:55	TJJ	EPA 6020A
Magnesium	42	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:55	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/13/24 08:23	5	0.20	02/16/24 16:55	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:55	TJJ	EPA 6020A
Potassium	4.2	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:55	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:55	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01601-14
Name: AW-17
Matrix: Ground Water - Grab

Sampled: 02/08/24 12:05
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Sodium	210	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:55	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:55	TJJ	EPA 6020A
Lithium	36	ug/L		02/13/24 08:23	1	20	02/16/24 13:18	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HB01601-15
Name: AW-19
Matrix: Ground Water - Grab

Sampled: 02/08/24 10:35
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	76	mg/L		02/15/24 23:25	10	10	02/15/24 23:25	TMS	EPA 300.0 REV 2.1
Sulfate	54	mg/L		02/15/24 23:25	10	10	02/15/24 23:25	TMS	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	13.67	Feet		02/08/24 10:35	1		02/08/24 10:35	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		02/08/24 10:35	1		02/08/24 10:35	FIELD	Field*
Oxidation Reduction Potential	-85.0	mV		02/08/24 10:35	1	-500	02/08/24 10:35	FIELD	Field*
pH, Field Measured	6.75	pH Units		02/08/24 10:35	1		02/08/24 10:35	FIELD	Field*
Specific Conductance, Field Measured	1185	umhos/cm		02/08/24 10:35	1		02/08/24 10:35	FIELD	Field*
Temperature, Field Measured	13.4	°C		02/08/24 10:35	1		02/08/24 10:35	FIELD	Field*
Turbidity, Field Measured	60.6	NTU		02/08/24 10:35	1	0.00	02/08/24 10:35	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	460	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Alkalinity - carbonate as CaCO3	< 10	mg/L		02/20/24 09:12	1	10	02/20/24 09:12	TMS	SM 2320B 1997*
Fluoride	0.271	mg/L		02/20/24 12:12	1	0.250	02/20/24 12:12	TTH/KCS 1	SM 4500F C 1997
Solids - total dissolved solids (TDS)	630	mg/L		02/14/24 13:49	1	17	02/14/24 15:26	OGS	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		02/13/24 08:23	5	3.0	02/16/24 16:59	TJJ	EPA 6020A
Arsenic	15	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:59	TJJ	EPA 6020A
Barium	200	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:59	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:59	TJJ	EPA 6020A
Boron	3200	ug/L		02/13/24 08:23	20	40	02/19/24 13:49	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:59	TJJ	EPA 6020A
Calcium	130	mg/L		02/13/24 08:23	5	0.20	02/16/24 16:59	TJJ	EPA 6020A
Chromium	4.7	ug/L		02/13/24 08:23	5	4.0	02/16/24 16:59	TJJ	EPA 6020A
Cobalt	2.4	ug/L		02/13/24 08:23	5	2.0	02/16/24 16:59	TJJ	EPA 6020A
Lead	2.9	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:59	TJJ	EPA 6020A
Magnesium	55	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:59	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		02/13/24 08:23	5	0.20	02/16/24 16:59	TJJ	EPA 6020A
Molybdenum	3.9	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:59	TJJ	EPA 6020A
Potassium	1.6	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:59	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:59	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HB01601-15
Name: AW-19
Matrix: Ground Water - Grab

Sampled: 02/08/24 10:35
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Sodium	54	mg/L		02/13/24 08:23	5	0.10	02/16/24 16:59	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		02/13/24 08:23	5	1.0	02/16/24 16:59	TJJ	EPA 6020A
Lithium	< 20	ug/L		02/13/24 08:23	1	20	02/16/24 13:19	LAM	EPA 6010B

Sample: HB01601-18
Name: SG-01
Matrix: Ground Water

Sampled: 02/20/24 12:30
Received: 02/08/24 16:36

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - PIA									
Depth, From Measuring Point	447	Feet		02/20/24 12:30	1		02/20/24 12:30	DAB	Field*

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B424971 - SW 3015 - EPA 6010B									
Blank (B424971-BLK1)				Prepared: 02/08/24 Analyzed: 02/09/24					
Lithium	< 20	ug/L							
LCS (B424971-BS1)				Prepared: 02/08/24 Analyzed: 02/09/24					
Lithium	525	ug/L		555.6		94	80-120		
Batch B424971 - SW 3015 - EPA 6020A									
Blank (B424971-BLK1)				Prepared: 02/08/24 Analyzed: 02/15/24					
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							
LCS (B424971-BS1)				Prepared: 02/08/24 Analyzed: 02/15/24					
Antimony	518	ug/L		555.6		93	80-120		
Arsenic	546	ug/L		555.6		98	80-120		
Barium	538	ug/L		555.6		97	80-120		
Beryllium	562	ug/L		555.6		101	80-120		
Boron	502	ug/L		555.6		90	80-120		
Cadmium	549	ug/L		555.6		99	80-120		
Calcium	5.64	mg/L		5.556		102	80-120		
Chromium	551	ug/L		555.6		99	80-120		
Cobalt	538	ug/L		555.6		97	80-120		
Lead	551	ug/L		555.6		99	80-120		
Magnesium	5.74	mg/L		5.556		103	80-120		
Mercury	54.0	ug/L		55.56		97	80-120		
Molybdenum	526	ug/L		555.6		95	80-120		
Potassium	5.47	mg/L		5.556		98	80-120		
Selenium	537	ug/L		555.6		97	80-120		
Sodium	5.69	mg/L		5.556		102	80-120		
Thallium	521	ug/L		555.6		94	80-120		
Batch B425391 - SW 3015 - EPA 6010B									
Blank (B425391-BLK1)				Prepared: 02/13/24 Analyzed: 02/16/24					

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (B425391-BLK1)				Prepared: 02/13/24 Analyzed: 02/16/24					
Lithium	< 20	ug/L							
LCS (B425391-BS1)				Prepared: 02/13/24 Analyzed: 02/16/24					
Lithium	551	ug/L		555.6		99	80-120		
Matrix Spike (B425391-MS1)	**Sample: HB01601-01**			Prepared: 02/13/24 Analyzed: 02/16/24					
Lithium	558	ug/L		555.6	29.0	95	75-125		
Matrix Spike Dup (B425391-MSD1)	**Sample: HB01601-01**			Prepared: 02/13/24 Analyzed: 02/16/24					
Lithium	565	ug/L		555.6	29.0	97	75-125	1	20
Batch B425391 - SW 3015 - EPA 6020A									
Blank (B425391-BLK1)				Prepared: 02/13/24 Analyzed: 02/16/24					
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							
LCS (B425391-BS1)				Prepared: 02/13/24 Analyzed: 02/16/24					
Antimony	497	ug/L		555.6		89	80-120		
Arsenic	508	ug/L		555.6		91	80-120		
Barium	502	ug/L		555.6		90	80-120		
Beryllium	511	ug/L		555.6		92	80-120		
Boron	506	ug/L		555.6		91	80-120		
Cadmium	514	ug/L		555.6		93	80-120		
Calcium	5.14	mg/L		5.556		93	80-120		
Chromium	512	ug/L		555.6		92	80-120		
Cobalt	514	ug/L		555.6		92	80-120		
Lead	538	ug/L		555.6		97	80-120		
Magnesium	5.22	mg/L		5.556		94	80-120		
Mercury	51.1	ug/L		55.56		92	80-120		
Molybdenum	493	ug/L		555.6		89	80-120		
Potassium	5.09	mg/L		5.556		92	80-120		
Selenium	516	ug/L		555.6		93	80-120		
Sodium	5.26	mg/L		5.556		95	80-120		
Thallium	525	ug/L		555.6		95	80-120		
Matrix Spike (B425391-MS1)	**Sample: HB01601-01**			Prepared: 02/13/24 Analyzed: 02/16/24					
Antimony	493	ug/L		555.6	ND	89	75-125		

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike (B425391-MS1)	**Sample: HB01601-01**			Prepared: 02/13/24 Analyzed: 02/16/24					
Arsenic	512	ug/L		555.6	1.25	92	75-125		
Barium	1160	ug/L		555.6	650	92	75-125		
Beryllium	515	ug/L		555.6	ND	93	75-125		
Boron	784	ug/L		555.6	280	91	75-125		
Cadmium	509	ug/L		555.6	ND	92	75-125		
Calcium	106	mg/L	Q4	5.556	102	71	75-125		
Chromium	513	ug/L		555.6	3.89	92	75-125		
Cobalt	509	ug/L		555.6	2.04	91	75-125		
Lead	533	ug/L		555.6	2.10	96	75-125		
Magnesium	47.6	mg/L		5.556	43.2	80	75-125		
Mercury	53.7	ug/L		55.56	ND	97	75-125		
Molybdenum	500	ug/L		555.6	ND	90	75-125		
Potassium	8.77	mg/L		5.556	3.63	92	75-125		
Selenium	513	ug/L		555.6	ND	92	75-125		
Sodium	158	mg/L	Q4	5.556	156	39	75-125		
Thallium	520	ug/L		555.6	ND	94	75-125		
Matrix Spike Dup (B425391-MSD1)	**Sample: HB01601-01**			Prepared: 02/13/24 Analyzed: 02/16/24					
Antimony	491	ug/L		555.6	ND	88	75-125	0.5	20
Arsenic	510	ug/L		555.6	1.25	92	75-125	0.4	20
Barium	1150	ug/L		555.6	650	90	75-125	0.9	20
Beryllium	513	ug/L		555.6	ND	92	75-125	0.3	20
Boron	790	ug/L		555.6	280	92	75-125	0.9	20
Cadmium	509	ug/L		555.6	ND	92	75-125	0.1	20
Calcium	106	mg/L	Q4	5.556	102	72	75-125	0.004	20
Chromium	512	ug/L		555.6	3.89	91	75-125	0.3	20
Cobalt	507	ug/L		555.6	2.04	91	75-125	0.5	20
Lead	528	ug/L		555.6	2.10	95	75-125	1	20
Magnesium	47.3	mg/L		5.556	43.2	76	75-125	0.5	20
Mercury	53.6	ug/L		55.56	ND	96	75-125	0.2	20
Molybdenum	499	ug/L		555.6	ND	90	75-125	0.2	20
Potassium	8.82	mg/L		5.556	3.63	93	75-125	0.6	20
Selenium	511	ug/L		555.6	ND	92	75-125	0.5	20
Sodium	157	mg/L	Q4	5.556	156	17	75-125	0.8	20
Thallium	514	ug/L		555.6	ND	92	75-125	1	20
Batch B425404 - No Prep - SM 2540C									
Blank (B425404-BLK1)				Prepared & Analyzed: 02/13/24					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B425404-BS1)				Prepared & Analyzed: 02/13/24					
Solids - total dissolved solids (TDS)	990	mg/L		1000		99	84.9-109		
Duplicate (B425404-DUP1)	**Sample: HB01318-03**			Prepared & Analyzed: 02/13/24					
Solids - total dissolved solids (TDS)	735	mg/L			760			3	5
Duplicate (B425404-DUP2)	**Sample: HB01318-04**			Prepared & Analyzed: 02/13/24					
Solids - total dissolved solids (TDS)	845	mg/L			880			4	5
Batch B425541 - No Prep - SM 2540C									
Blank (B425541-BLK1)				Prepared & Analyzed: 02/14/24					

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (B425541-BLK1)				Prepared & Analyzed: 02/14/24					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B425541-BS1)				Prepared & Analyzed: 02/14/24					
Solids - total dissolved solids (TDS)	963	mg/L		1000		96	84.9-109		
Duplicate (B425541-DUP1)	**Sample: HB01601-08**			Prepared & Analyzed: 02/14/24					
Solids - total dissolved solids (TDS)	935	mg/L			950			2	5
Duplicate (B425541-DUP2)	**Sample: HB01601-14**			Prepared & Analyzed: 02/14/24					
Solids - total dissolved solids (TDS)	865	mg/L			895			3	5
Batch B425557 - IC No Prep - EPA 300.0 REV 2.1									
Calibration Blank (B425557-CCB1)				Prepared & Analyzed: 02/13/24					
Fluoride	0.00	mg/L							
Sulfate	0.00	mg/L							
Chloride	0.0534	mg/L							
Calibration Check (B425557-CCV1)				Prepared & Analyzed: 02/13/24					
Chloride	4.93	mg/L		5.000		99	90-110		
Sulfate	5.01	mg/L		5.000		100	90-110		
Fluoride	4.93	mg/L		5.000		99	90-110		
Matrix Spike (B425557-MS1)	**Sample: HB01318-01**			Prepared & Analyzed: 02/13/24					
Fluoride	1.58	mg/L		1.500	0.263	88	80-120		
Chloride	1.0E9	mg/L	Q4	1.500	35	NR	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	22.0	NR	80-120		
Matrix Spike (B425557-MS2)	**Sample: HB01318-02**			Prepared & Analyzed: 02/13/24					
Sulfate	1.00E9	mg/L	Q4	1.500	28.8	NR	80-120		
Chloride	1.0E9	mg/L	Q4	1.500	32	NR	80-120		
Fluoride	1.58	mg/L		1.500	0.234	90	80-120		
Matrix Spike Dup (B425557-MSD1)	**Sample: HB01318-01**			Prepared & Analyzed: 02/13/24					
Chloride	1.0E9	mg/L	Q4	1.500	35	NR	80-120	0	20
Sulfate	1.00E9	mg/L	Q4	1.500	22.0	NR	80-120	0	20
Fluoride	1.59	mg/L		1.500	0.263	89	80-120	0.5	20
Matrix Spike Dup (B425557-MSD2)	**Sample: HB01318-02**			Prepared & Analyzed: 02/13/24					
Chloride	1.0E9	mg/L	Q4	1.500	32	NR	80-120	0	20
Fluoride	1.59	mg/L		1.500	0.234	90	80-120	0.5	20
Sulfate	1.00E9	mg/L	Q4	1.500	28.8	NR	80-120	0	20
Batch B425588 - No Prep - SM 2540C									
Blank (B425588-BLK1)				Prepared & Analyzed: 02/14/24					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B425588-BS1)				Prepared & Analyzed: 02/14/24					
Solids - total dissolved solids (TDS)	937	mg/L		1000		94	84.9-109		
Duplicate (B425588-DUP1)	**Sample: HB01601-15**			Prepared & Analyzed: 02/14/24					
Solids - total dissolved solids (TDS)	600	mg/L			630			5	5
Batch B425682 - IC No Prep - EPA 300.0 REV 2.1									
Calibration Blank (B425682-CCB1)				Prepared & Analyzed: 02/14/24					
Sulfate	0.00	mg/L							
Calibration Check (B425682-CCV1)				Prepared & Analyzed: 02/14/24					
Sulfate	5.30	mg/L		5.000		106	90-110		

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B425823 - No Prep - SM 4500F C 1997									
Calibration Blank (B425823-CCB1)				Prepared & Analyzed: 02/16/24					
Fluoride	0.0180	mg/L							
Calibration Blank (B425823-CCB2)				Prepared & Analyzed: 02/16/24					
Fluoride	0.0180	mg/L							
Calibration Check (B425823-CCV1)				Prepared & Analyzed: 02/16/24					
Fluoride	0.679	mg/L		0.7000		97	90-110		
Calibration Check (B425823-CCV2)				Prepared & Analyzed: 02/16/24					
Fluoride	0.694	mg/L		0.7000		99	90-110		
Batch B425853 - IC No Prep - EPA 300.0 REV 2.1									
Calibration Blank (B425853-CCB1)				Prepared & Analyzed: 02/15/24					
Sulfate	0.00	mg/L							
Chloride	0.0681	mg/L							
Calibration Check (B425853-CCV1)				Prepared & Analyzed: 02/15/24					
Chloride	4.67	mg/L		5.000		93	90-110		
Sulfate	4.88	mg/L		5.000		98	90-110		
Matrix Spike (B425853-MS2)	**Sample: HB01601-01**			Prepared & Analyzed: 02/15/24					
Chloride	< 1.0	mg/L	Q4	1.500	39	NR	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	58.1	NR	80-120		
Matrix Spike (B425853-MS3)	**Sample: HB01601-11**			Prepared & Analyzed: 02/15/24					
Chloride	< 1.0	mg/L	Q4	1.500	30	NR	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	548	NR	80-120		
Matrix Spike Dup (B425853-MSD2)	**Sample: HB01601-01**			Prepared & Analyzed: 02/15/24					
Chloride	< 1.0	mg/L	Q4	1.500	39	NR	80-120		20
Sulfate	1.00E9	mg/L	Q4	1.500	58.1	NR	80-120	0	20
Matrix Spike Dup (B425853-MSD3)	**Sample: HB01601-11**			Prepared & Analyzed: 02/15/24					
Sulfate	1.00E9	mg/L	Q4	1.500	548	NR	80-120	0	20
Chloride	< 1.0	mg/L	Q4	1.500	30	NR	80-120		20
Batch B425981 - IC No Prep - EPA 300.0 REV 2.1									
Calibration Blank (B425981-CCB1)				Prepared & Analyzed: 02/16/24					
Chloride	0.589	mg/L							
Calibration Check (B425981-CCV1)				Prepared & Analyzed: 02/16/24					
Chloride	4.80	mg/L		5.000		96	90-110		
Batch B426022 - No Prep - SM 4500F C 1997									
Calibration Blank (B426022-CCB1)				Prepared & Analyzed: 02/20/24					
Fluoride	0.0120	mg/L							
Calibration Check (B426022-CCV1)				Prepared & Analyzed: 02/20/24					
Fluoride	0.681	mg/L		0.7000		97	90-110		
Matrix Spike (B426022-MS6)	**Sample: HB01601-10**			Prepared & Analyzed: 02/20/24					
Fluoride	1.03	mg/L		1.000	0.0630	97	80-120		
Matrix Spike Dup (B426022-MSD6)	**Sample: HB01601-10**			Prepared & Analyzed: 02/20/24					
Fluoride	1.06	mg/L		1.000	0.0630	99	80-120	2	20
Batch B426036 - No Prep - SM 2320B 1997									

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Duplicate (B426036-DUP1)	**Sample: HB01318-01**			Prepared & Analyzed: 02/20/24					
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO3	475	mg/L			450			5	10
Duplicate (B426036-DUP2)	**Sample: HB01601-01**			Prepared & Analyzed: 02/20/24					
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO3	762	mg/L			738			3	10
Duplicate (B426036-DUP3)	**Sample: HB01601-11**			Prepared & Analyzed: 02/20/24					
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO3	500	mg/L			475			5	10

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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

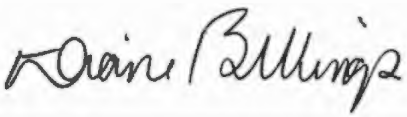
PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615
TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 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

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.



Certified by: Diane Billings, Project Manager

HB001318 TDSL

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: of

Section A Required Client Information		Section B Required Project Information		Section C Invoice Information	
Company:	Vistra Corp-Edwards	Report To:	Brian Voelker	Attention:	Mark Davis
Address:	7800 Cilco Lane	Copy To:	Sam Davies-samantha.davies@vistracorp.com	Company Name:	Vistra Corp-Edwards
	Peoria, IL 61607		Mark Davis-Mark.Davis1@vistracorp.com	Address:	see Section A
Email To:	Brian.Voelker@VistraCorp.com	Purchase Order No.:		Quote Reference:	
Phone:	(217) 753-8911 Fax:	Project Name:		Project Manager:	
Requested Due Date/TAT:	10 day	Project Number:	2285	Profile #:	

REGULATORY AGENCY

NPDES | GROUND WATER | DRINKING WATER
UST | RCRA | OTHER

Site Location STATE: IL

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AW-06	WT	G	2/7/24	1419		4	X		X									
2	AW-06 Dup	WT	G	2/7/24	1419		4	X		X									
4	AW-09	WT	G	2/7/24	1217		4	X		X									
5	AW-18	WT	G	2/7/24	1533		4	X		X									
6	AW-21	WT	G	2/7/24	1519		4	X		X									
7	XPW01A	WT	G	2/7/24	1132		3	X		X									
8	XPW02	WT	G	2/7/24	1227		3	X		X									
9	XPW03	WT	G	2/7/24	1352		3	X		X									
10																			
11																			
12																			
13																			
14																			
15																			
16																			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q1-Rev 0	JBohannan	2/7/24	16:25							
					2/7/24	1625	5.2	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: AP, AW, JB

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 02/07/24

COURIER

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: of

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Vistra Corp-Edwards	Report To:	Brian Voelker	Attention:	Mark Davis
Address:	7800 Cilco Lane	Copy To:	Sam Davies-samantha.davies@vistracorp.com	Company Name:	Vistra Corp-Edwards
	Peoria, IL 61607		Mark Davis-Mark.Davis1@vistracorp.com	Address:	see Section A
Email To:	Brian.Voelker@VistraCorp.com	Purchase Order No.:		Quote Reference	
Phone:	(217) 753-8911 Fax:	Project Name:		Project Manager	
Requested Due Date/TAT:	10 day	Project Number:	2285	Profile #	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	APOSS	WT	G	2/8/24	1531		4	X		X							X			
2	AP07S	WT	G	2/8/24	1544		4	X		X							X			
4	AW01	WT	G	2/8/24	1112		4	X		X							X			
5	AW01 DUP	WT	G	2/8/24	1112		4	X		X							X			
6	AW05	WT	G	2/8/24	1435		4	X		X							X			
7	AW08	WT	G	2/8/24	1315		4	X		X							X			
8	AW10	WT	G	2/8/24	1506		4	X		X							X			
9	AW11	WT	G	2/8/24	1328		4	X		X							X			
10	AW14	WT	G	2/8/24	1238		4	X		X							X			
11	AW15	WT	G	2/8/24	1014		4	X		X							X			
12	AW15S	WT	G	2/8/24	1126		4	X		X							X			
13	AW16	WT	G	2/8/24	1407		4	X		X							X			
14	AW16 DUP	WT	G	2/8/24	1407		4	X		X							X			
15	AW17	WT	G	2/8/24	1205		4	X		X							X			
16	AW19	WT	G	2/8/24	1035		4	X		X							X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q1-Rev 0		2/8/24	1636							
					2/8/24	1636	9.4	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: AF, SD, AW, AM, LK

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 02/08/24

BD01601

BD01605-RAD

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: of

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Vistra Corp-Edwards	Report To:	Brian Voelker	Attention:	Mark Davis
Address:	7800 Cilco Lane	Copy To:	Sam Davies-samantha.davies@vistracorp.com	Company Name:	Vistra Corp-Edwards
	Peoria, IL 61607		Mark Davis-Mark.Davis1@vistracorp.com	Address:	see Section A
Email To:	Brian.Voelker@VistraCorp.com	Purchase Order No.:		Quote Reference:	
Phone:	(217) 753-8911 Fax:	Project Name:		Project Manager:	
Requested Due Date/TAT:	10 day	Project Number:	2285	Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	Equipment Blank 1	WT	G	2/8/24	1530		4	X		X									
2	Field Blank	WT	G	2/8/24	1545		4	X		X									
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q1-Rev 0		2/8/24	1636							
					2/9/24	1636	9.2	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: AH, JB, AW, AM, LR

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 02/08/24

SAR-4: Depth to Groundwater Measurements - On-site Transducer Downloads

All episodic water levels on SAR-3 and SAR-4 must be collected within a 24 hour period.
Transducer data on SAR-4 form may be collected at anytime during the sampling event.

Plant: EDW
Event: EDW-24Q1

Well	Unique ID	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	On-site Transducer Data					Comments	Initials
						Data Logger Serial No.	Does Data Logger Serial No. Match?	WL Reading on Transducer (ft)	Data down-loaded?	Batt (H/M/L/R)		
AP05S	EDW_AP05#S		2/6/24	1442	4.63	21629301	Y	438.74	Y	H		AM
AP07S	EDW_AP07#S		"	1228	24.43	21615552	Y	436.21	Y	H		AM
AW-01	EDW_AW-01		"	0924	9.59	21615144	Y	455.05	Y	H		AM
AW-05	EDW_AW-05		"	1411	8.15	21615132	Y	435.31	Y	H		AM
AW-06	EDW_AW-06		"	1019	26.73	21615127	Y	435.09	Y	H		AM
AW-08	EDW_AW-08		"	1243	21.93	21615722	Y	440.78	Y	H		AM
AW-09	EDW_AW-09		"	0949	26.04	21615130	Y	435.66	Y	H		AM
AW-10	EDW_AW-10		"	1355	1.99	21615754	Y	438.19	Y	H		AM
AW-11	EDW_AW-11		"	1108	6.00	21615129	Y	434.12	Y	H		AM
AW-15	EDW_AW-15		"	1213	8.78	21615761	Y	433.10	Y	H		AM
AW-15S	EDW_AW-15#S		"	1214	9.50	21629298	Y	431.17	Y	H		AM
AW-16	EDW_AW-16		"	0940	25.14	21615714	Y	436.87	Y	H		AM
AW-17	EDW_AW-17		"	0954	26.00	21615756	Y	436.31	Y	H		AM
AW-18	EDW_AW-18		"	0957	27.23	21615763	Y	435.59	Y	H		AM
AW-19	EDW_AW-19		"	1025	13.73	21615718	Y	447.19	Y	H		AM
AW-21	EDW_AW-21		—	1036	16.71	21615514	Y	444.12	Y	H		AM

SAR-4: Depth to Groundwater Measurements - On-site Transducer Downloads
All episodic water levels on SAR-3 and SAR-4 must be collected within a 24 hour period.
Transducer data on SAR-4 form may be collected at anytime during the sampling event.
Plant: EDW
Event: EDW-24Q1

Well	Unique ID	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	On-site Transducer Data					Comments	Initials
						Data Logger Serial No.	Does Data Logger Serial No. Match?	WL Reading on Transducer (ft)	Data down-loaded?	Batt (H/M/L/R)		
EMW-05	EDW_EMW-05		2/6/24	1233	19.96	21615739	Yes	437.85	Y	H		AM
XPW01A	EDW_XPW01A_pore		"	1043	11.48	21615740	Y	452.92	Y	H		AM
XPW02	EDW_XPW02_pore		"	1155	19.36	21615752	Y	454.58	Y	H		AM
XPW03	EDW_XPW03_pore		"	1144	16.57	21629300	Y	449.93	Y	H		AM
SG-01	EDW_yILRIVER		—	1230	~~41.47~~ 447 BG 2/7/24	21768086	Y	37.08	Y	H		AM

U: 6/21/23 GKJ

Notes:
Batt = battery
bmp = below measuring point
ft = feet
H = high
L = low
M = medium
R = replaced

SAR-3: Episodic Depth to Groundwater Measurements
All DTWs on SAR-3 and SAR-4 must be collected within 24 hours.
Plant: EDW
Event: EDW-24Q1

Well	Unique ID	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
AP08	EDW_AP08	2/6/24	1204	6.96		AM
AP09	EDW_AP09		1146	9.28		AM
APW-01	EDW_APW-01		1428	5.74		AM
AW-14	EDW_AW-14		1052	6.76		AM
AW-20	EDW_AW-20		1032	15.96		AM
AW-23	EDW_AW-23		1624	3.38		AM
OW-01	EDW_OW-01		1229	23.43		AM
OW-02	EDW_OW-02		1218	8.29		AM
PTW-01	EDW_PTW-01		1225	25.12		AM
PTW-02	EDW_PTW-02		1216	8.48		AM

U:6/21/23 GKJ

Site: Edwards Ash Pond

WELL/SAMPLE POINT AP05S **Purge Method:** BLADDER

Date: 2/8/24 Start Time: 1438 Finish/Sample Time: 1531

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

Depth to Water From MP: 4.15 ft Total Purge Volume: 3.0 Gal (L)

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: .10 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1447	4.25	200	7.40	1730	13.16	-69	.51	0
2	1449	4.30	200	7.19	1730	13.07	-70	.40	0
3	1451	4.25	200	7.17	1730	12.93	-70	.40	0
4	1453	4.30	200	7.11	1730	12.98	-71	.35	0
5	1455	4.25	200	7.07	1730	12.92	-71	.37	0
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color ☐ None ☐ Slight ☐ Mod. ☒ Strong

Turb: ☐ None ☐ Slight ☐ Mod ☒ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250 mL~~) 1000mL
1	2.5L RADS

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~) 1000mL

~~Ferrous Iron~~ 4.25 mg/L FDTW

Comments

Sampler's Signature: [signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AP07S **Purge Method:** Compressor

Date: 2/8/24 Start Time: 14:38 Finish/Sample Time: 15:44

Well Depth (Bottom) From MP:	33.11 ft	Min. Purge Volume:	____ Gal / L
Depth to Water From MP:	24.14 ft	Total Purge Volume:	2.2 Gal (L)
Water Column Length:	8.97 ft	Max Drawdown:	____ ft
Well Water Volume:	5.43 Gal (L)	Total Drawdown:	1.04 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	14:51	24.42	100	7.32	1489	16.73	-29	0.85	158
2	14:54	24.42	100	7.03	1452	15.74	-32	0.00	133
3	14:57	24.42	100	6.83	1419	14.59	-30	0.00	95.1
4	15:00	24.42	100	6.73	1406	14.72	-27	0.00	66.1
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Oakton/Horiba

Sample Appearance:

Odor: ☐ None ☑ Slight ☐ Mod. ☐ Strong

Color ☑ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☑ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, [redacted] mL) 1000mL
1	(P, 2.5L, HNO_3)

4

Filtered Qty	Filtered Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P [redacted] mL) 1000 mL

Ferrous Iron ____ mg/L

Comments well was recharging at 100mL/min. Final DTW 25.18 ft
So increased to 200mL/min + still Stable

Sampler's Signature: JBohannan

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-01 **Purge Method:** COMPRESSOR

Date: 2/8/24 Start Time: 0912 Finish/Sample Time: 1112

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1 Gal (L)

Depth to Water From MP: 9.58 ft Total Purge Volume: 3.0 Gal (L)

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: 14.13 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	0949	12.94	100	7.01	2010	13.72	-76	0.42	0
2	0952	13.43		6.76	1760	13.63	-78	0.58	0
3	0955	13.94		6.69	1590	13.61	-78	0.74	0
4	0958	14.45		6.70	1530	13.63	-77	0.74	0
5	1001	15.94	↓	6.70	1490	13.62	-75	0.97	0
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250 mL~~) 1L
1	RAD (2.5L, P, HNO3)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~) 1L

Final DTW

~~Ferrous Iron~~ 23.71 ~~mg/L~~

Comments

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-05 **Purge Method:** Compressor

Date: 2/8/24 Start Time: 1328 Finish/Sample Time: 1435

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

Depth to Water From MP: 8.12 ft Total Purge Volume: 3.0 Gal (L)

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: .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	1341	8.43	100	7.32	1780	14.61	51	1.53	0
2	1344	8.40	100	7.12	1780	14.57	51	1.16	0
3	1347	8.36	100	7.00	1770	14.57	44	1.02	0
4	1350	8.36	100	6.94	1770	14.56	36	.94	0
5	1353	8.40	100	6.92	1770	14.46	29	.96	0
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: MORIBA

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☐ None ☐ Slight ☐ Mod. ☒ Strong

Turb: ☐ None ☐ Slight ☐ Mod ☒ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250 mL~~) 1000mL
1	7.5L RADS

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (~~P,500mL~~) 1000mL

EDTW

Ferrous Iron _____ mg/L 8.30

Comments

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-06 **Purge Method:** Bladder

Date: 2/7/2024 Start Time: 1223 Finish/Sample Time: 1419

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1000 Gal / L (mL)

Depth to Water From MP: 26.71 ft Total Purge Volume: 1000 Gal / L (mL)

Water Column Length: _____ ft Max Drawdown: — ft

Well Water Volume: _____ Gal / L Total Drawdown: 11.39 ft

App 2/7/24

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	1238	28.75	100	7.32	817	12.54	-90	1.01	71000
2	1241	29.09	100	7.31	810	12.57	-94	0.97	71000
3	1244	29.73	100	7.31	801	12.53	-100	0.83	71000
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☐ None ☑ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☐ Mod ☑ Strong

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

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250~~ mL) 1000 mL
1	Rad (P, 2-5L, HNO3)

4 + 4

Filtered Qty	Filtered Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500~~mL) 1000 mL

Final DTW 38.10 FL

~~Ferrous Iron~~ ~~mg/L~~

Comments Field Dup Fillet Lenr

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-08 **Purge Method:** Peristaltic

Date: 8-Feb-24 Start Time: 1135 Finish/Sample Time: 1315

Well Depth (Bottom) From MP: 57.85 ft Min. Purge Volume: 1.5 Gal (L)

Depth to Water From MP: 21.50 ft Total Purge Volume: 1.5 Gal (L)

Water Column Length: 36.35 ft Max Drawdown: — ft

Well Water Volume: 22.81 Gal (L) Total Drawdown: 10.15 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1154	24.30	100	6.90	1490	14.81	-100	1.83	1.49
2	1157	25.02	"	6.81	1490	14.86	-99	1.64	0.0
3	1200	25.80	"	6.75	1490	14.91	-99	1.44	0.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☑ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☑ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250 mL~~) 1000 mL
1	Rad, P 2.5 L HNO3

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500~~mL) 1000 mL

Ferrous Iron mg/L FOTW-31.65ft

Comments

Sampler's Signature: Austin M

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-09 **Purge Method:** Bladder

Date: 2/7/2024 Start Time: 1109 Finish/Sample Time: 1217

Well Depth (Bottom) From MP: _____ ft
Depth to Water From MP: 26.01 ft
Water Column Length: _____ ft
Well Water Volume: _____ Gal / L

Min. Purge Volume: 1000 Gal / L (mL)
Total Purge Volume: 1000 Gal / L (mL)
Max Drawdown: — ft
Total Drawdown: 9.65 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	1121	29.90	100	7.03	1140	12.68	-126	1.26	59.6
2	1124	29.48	100	7.08	1130	12.66	-138	1.30	54.8
3	1127	28.95	100	7.10	1140	12.68	-141	1.35	34.6
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

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

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

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250 mL~~) 1000mL
1	Rad (P, 2.5L, HNO3)

(4)

Filtered Qty	Filtered Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~) 1000mL

Ferrous Iron mg/L

Final DTW 35.66 LL

Comments Water level fluctuating w/o L

Sampler's Signature: [signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-10 **Purge Method:** peristaltic

Date: 2/8/2024 Start Time: 1359 Finish/Sample Time: 1506

Well Depth (Bottom) From MP: _____ ft
Depth to Water From MP: 0.80 ft
Water Column Length: _____ ft
Well Water Volume: _____ Gal / L

Min. Purge Volume: 1000 Gal / L
Total Purge Volume: 1000 Gal / L
Max Drawdown: — ft
Total Drawdown: 5.85 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1412	3.54	100	7.05	1710	13.33	-118	1.90	240
2	1415	3.93	100	7.05	1700	13.40	-119	1.80	286
3	1418	4.33	100	7.05	1700	13.42	-119	1.73	310
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

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

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250 mL~~) 1000 mL
1	Rads (P, 2.5L, HNO3)

(4)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~) 1000 mL

Final DTW
~~Ferrous Iron~~ 6.65 AL ~~mg/L~~

Comments

Sampler's Signature: _____

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-11 **Purge Method:** Bladder

Date: 2/8/2024 Start Time: 1240 Finish/Sample Time: 1328

Well Depth (Bottom) From MP: _____ ft
Depth to Water From MP: 5.54 ft
Water Column Length: _____ ft
Well Water Volume: _____ Gal / L

Min. Purge Volume: 1000 Gal / L (mL)
Total Purge Volume: 1000 Gal / L (mL)
Max Drawdown: — ft
Total Drawdown: 0.06 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	1255	5.65	200	7.06	1440	11.81	-134	1.27	779
2	1257	5.65	200	7.05	1460	11.76	-137	1.20	737
3	1259	5.65	200	7.05	1460	11.73	-137	1.14	718
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☐ Mod ☒ Strong

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

AGP 2/8/24

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250mL~~) 1000mL
1	Rad (P, 2.5L, HNO3)

(4)

Filtered Qty	Filtered Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P,~~500mL~~) 1000mL

Final NTU 5.60 FL

~~Ferrous Iron~~ _____ ~~mg/L~~

Comments

Sampler's Signature: _____

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-14 **Purge Method:** Bladder

Date: 2/8/2024 Start Time: 1130 Finish/Sample Time: 1238

Well Depth (Bottom) From MP: _____ ft
Depth to Water From MP: 6.65 ft
Water Column Length: _____ ft
Well Water Volume: _____ Gal / L

Min. Purge Volume: 1000 Gal / L mL
Total Purge Volume: 1000 Gal / L mL
Max Drawdown: — ft
Total Drawdown: 9.43 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	1144	9.48	100	7.06	1440	11.62	-121	0.46	179
2	1147	8.86	100	7.04	1440	11.57	-122	0.42	165
3	1150	10.43	100	7.05	1430	11.49	-123	0.46	156
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

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

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

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250~~mL) 1000mL
1	RadS (P, 2.5L, HNO3)

4

Filtered Qty	Filtered Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~) 1000mL

Final DTW
~~Ferrous Iron~~ 16.08 FL ~~mg/L~~

Comments

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-15 **Purge Method:** Bladder

Date: 2/8/2024 Start Time: 0937 Finish/Sample Time: 1014

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1000 Gal / L (mL)

Depth to Water From MP: 8.80 ft Total Purge Volume: 1000 Gal / L (mL)

Water Column Length: _____ ft Max Drawdown: — ft

Well Water Volume: _____ Gal / L Total Drawdown: 0.10 ft

1580 App 2/8/24

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	0945	8.96	200	6.83	~~12.86~~	12.86	-90	0.80	62.6
2	0947	8.96	200	6.83	1570	12.92	-94	0.74	42.2
3	0949	8.96	200	6.83	1560	13.06	-102	0.67	34.5
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250mL~~) 1000mL
1	Rad (P, 2.5L, HNO3)

(4)

Filtered Qty	Filtered Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P,~~500mL~~) 1000mL

Final DTW 8.90 FL

~~Ferrous Iron~~ ~~mg/L~~

Comments

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-15S **Purge Method:** Bladder

Date: 2/8/2024 Start Time: 1016 Finish/Sample Time: 1126

Well Depth (Bottom) From MP: _____ ft
Min. Purge Volume: 1000 Gal / L (mL)

Depth to Water From MP: 9.34 ft
Total Purge Volume: 1000 Gal / L (mL)

Water Column Length: _____ ft
Max Drawdown: — ft

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

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1025	10.47	100	7.04	1430	12.65	10	0.62	12.0
2	1031	10.62	100	7.03	1430	12.64	15	0.58	2.4
3	1034	10.76	100	7.03	1420	12.65	19	0.59	0.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250mL~~) 1000mL
1	Rad (P, 2.5L, HNO3)

(4)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P,~~500mL~~) 1000mL

Final ATW 13.15 FF
~~Ferrous Iron~~ mg/L

Comments

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-16 **Purge Method:** Compressed

Date: 2/8/2024 Start Time: 12:23 Finish/Sample Time: 2:07

Well Depth (Bottom) From MP: 57.48 ft Min. Purge Volume: _____ Gal / L

Depth to Water From MP: 24.92 ft Total Purge Volume: 2.00 Gal (L)

Water Column Length: 32.56 ft Max Drawdown: _____ ft

Well Water Volume: 19.72 Gal / L Total Drawdown: 0.9 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	12:39	25.63	100	6.85	8110	14.92	-105	0.00	0.0
2	12:42	25.63	100	6.68	8130	14.78	-116	0.00	0.0
3	12:45	26.07	100	6.52	8120	14.67	-121	0.00	0.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba/Oakton

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+1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1+1	General (P, [redacted]) 1000 mL
1+1	(P, 2.5L, HNO3)

4 + 4

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1+1	General (P, [redacted] 1000 mL

Ferrous Iron _____ mg/L

Comments Duplicate Collected Here Final DTW 25.82 ft

Sampler's Signature: J Bohannon

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-17 **Purge Method:** Compressor

Date: 2/8/24 Start Time: 10:56 Finish/Sample Time: 12:05

Well Depth (Bottom) From MP: 56.52 ft Min. Purge Volume: _____ Gal / L

Depth to Water From MP: 25.56 ft Total Purge Volume: 2.100 Gal (L)

Water Column Length: 30.96 ft Max Drawdown: _____ ft

Well Water Volume: 18.75 Gal (L) Total Drawdown: 1.4 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	11:12	26.25	100	6.58	1761	13.52	-117	0.00	95.5
2	11:15	26.25	100	6.53	1751	13.40	-128	0.00	93.7
3	11:18	26.25	100	6.51	1776	13.37	-132	0.00	91.9
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba/Oakton

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	Unfiltered Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, [redacted]) 1000 mL
1	(P, 2.5L, HNO3)

(4)

Filtered Qty	Filtered Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, [redacted]) 1000 mL

Ferrous Iron _____ mg/L

Final DTW 26.96 ft

Comments

Sampler's Signature: J Bohannon

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-18 **Purge Method:** Bladder

Date: 2/7/24 Start Time: 1427 Finish/Sample Time: 1533

Well Depth (Bottom) From MP: _____ ft
Depth to Water From MP: 27.14 ft
Water Column Length: _____ ft
Well Water Volume: _____ Gal / L

Min. Purge Volume: 1000 Gal / L (4)
Total Purge Volume: 1000 Gal / L (mL)
Max Drawdown: — ft
Total Drawdown: 3.82 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1439	28.65	100	7.06	1490	12.52	-91	0.87	71.0
2	1442	28.80	100	7.05	1490	12.56	-97	0.77	65.3
3	1445	29.25	100	7.05	1490	12.67	-106	0.69	62.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

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

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

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250 mL~~) 1000mL
1	Rad (P, 2.5L, HNO3)

(4)

Filtered Qty	Filtered Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~) 1000mL

Final OTV 30.96 LL
~~Ferrous Iron~~ _____ ~~mg/L~~

Comments

Sampler's Signature: [signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-19 **Purge Method:** Compressor

Date: 2/8/2024 Start Time: 09:25 Finish/Sample Time: 10:35

Well Depth (Bottom) From MP: 39.03 ft
Depth to Water From MP: 13.67 ft
Water Column Length: 25.36 ft
Well Water Volume: 15.36 Gal / L

Min. Purge Volume: _____ Gal / L
Total Purge Volume: 2.20 Gal (L)
Max Drawdown: _____ ft
Total Drawdown: 3.69 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	9:41	15.42	100	9.07	1421	13.07	-62	0.00	99.0
2	9:44	15.70	100	7.44	1300	13.31	-81	0.00	83.9
3	9:47	15.92	100	7.08	1249	13.37	-82	0.00	80.3
4	9:50	16.01	100	6.89	1212	13.40	-83	0.00	68.9
5	9:53	16.17	100	6.75	1185	13.42	-85	0.00	60.6
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba/Oakton

Sample Appearance:

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

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, [redacted] 1000 mL
1	(P, 2.5L, HNO3)

4

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P [redacted] 1000 mL

Ferrous Iron _____ mg/L

Final DTW 17.36 Ft

Comments

Sampler's Signature: JBohannon

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-21 **Purge Method:** Compressor

Date: 2/7/2024 Start Time: 14 24 Finish/Sample Time: 15:19

Well Depth (Bottom) From MP: 35.23 ft Min. Purge Volume: _____ Gal / L

Depth to Water From MP: 16.79 ft Total Purge Volume: 2.2 Gal / (C)

Water Column Length: 18.44 ft Max Drawdown: _____ ft

Well Water Volume: 11.17 Gal / L Total Drawdown: 1.81 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	14:45	18.11	100	10.24	712	12.35	25	4.21	23.2
2	14:48	18.11	100	9.65	752	12.39	-14	3.38	17.0
3	14:51	18.11	100	9.23	785	12.41	-31	3.00	12.6
4	14:54	18.11	100	9.05	817	12.43	-37	2.82	12.5
5	14:57	18.11	100	8.94	842	12.45	-39	2.79	11.4
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☐ None ☑ Slight ☐ Mod. ☐ Strong

Color ☑ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☑ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	(P, 2.5L, HNO_3)
1	General (1000 mL, P)

4

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
	General (P,500mL)
1	General (P, 1000 mL)

Ferrous Iron _____ mg/L

Final DTW 18.98 ft

Comments

Sampler's Signature: JBohannon

Site: Edwards Ash Pond

WELL/SAMPLE POINT XPW01A **Purge Method:** Compressor

Date: ~~01~~ 02/07/2024 (10 a/17/24) Start Time: 10:30 Finish/Sample Time: 11:32

Well Depth (Bottom) From MP:	35.90 ft	Min. Purge Volume:	Gal / L
Depth to Water From MP:	11.52 ft	Total Purge Volume:	2.5 Gal (B)
Water Column Length:	24.38 ft	Max Drawdown:	ft
Well Water Volume:	14.76 Gal / L	Total Drawdown:	0.18 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	11:00	11.80	100	11.94	1960	11.50	111	1.35	10.0
2	11:03	11.80	100	12.35	1930	12.15	44	0.00	11.6
3	11:06	11.80	100	12.32	1930	12.35	-34	0.00	9.1
4	11:09	11.80	100	12.34	1930	18.~~84~~	-35	0.00	8.6
5	11:12	11.80	100	12.36	1930	12.53	-35	0.00	8.1
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☑ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☑ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

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

(3)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P,500mL)

Final Depth 11.70 ft

Ferrous Iron mg/L

Comments 10:56, water Hose came off of Horiba, which then drained and needed refilled

Sampler's Signature: JBohannon

Site: Edwards Ash Pond

WELL/SAMPLE POINT XPW02 **Purge Method:** Compressor

Date: 02/07/2024 Start Time: 11:55 Finish/Sample Time: 12:27

Well Depth (Bottom) From MP: 41.23 ft Min. Purge Volume: _____ Gal / L

Depth to Water From MP: 19.32 ft Total Purge Volume: 2.0 Gal / L

Water Column Length: 21.91 ft Max Drawdown: _____ ft

Well Water Volume: 13.27 Gal / L Total Drawdown: 0.02 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	12:10	19.51	200	12.60	4410	13.50	-49	0.00	0.0
2	12:12	19.51	200	12.78	4480	13.45	-60	0.00	0.0
3	12:13	19.51	200	12.88	4510	13.48	-68	0.00	0.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☑ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☑ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

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

(3)

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

Final DTW: 19.34ft

Ferrous Iron _____ mg/L

Comments Well recharging, increased to 800mL/min and still recharging
pH + Spec Con Confirmed with Oakton

Sampler's Signature: JBohannon

Site: Edwards Ash Pond

WELL/SAMPLE POINT XPW03 **Purge Method:** Compressor

Date: 2/7/24 Start Time: 13:20 Finish/Sample Time: 13:52

Well Depth (Bottom) From MP: 31.95 ft Min. Purge Volume: _____ Gal / L

Depth to Water From MP: 16.54 ft Total Purge Volume: 1.9 Gal (L)

Water Column Length: 15.41 ft Max Drawdown: _____ ft

Well Water Volume: 9.33 Gal / L Total Drawdown: 0.5 (ft)

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	13:29	16.92	100	12.64	2030	12.64	-138	0.09	43.3
2	13:32	16.92	100	12.63	1990	12.63	-146	0.00	32.8
3	13:35	16.92	100	12.61	1960	12.64	-149	0.00	27.1
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☑ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☑ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

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

(3)

Filtered Qty	Filtered Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P,500mL)

Final DTW 16.94

Ferrous Iron mg/L

Comments

Sampler's Signature: JBohanran

Multiparameter Meter Field Calibration Checklist

Field Personnel:	Jordan Bohannan	Location:	EDWARDS Power Plant
Weather:	29-52°F, mostly cloudy, 6mph wind	Environment:	Gravel, Muddy, high growing plants

Multiparameter Water Meter	Make: Horiba	Model: U-5000	Serial Number:	AGJTK4XG	
Water Level Meter	Make: Heron	Model: Dipper T	Serial Number:	19FF2111198HB	

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.64	s.u.	±0.1 s.u.	~~F~~	Yes	4.00	MSI	023067-01	3/14/2025
pH 7.00a	7.23	s.u.	±0.1 s.u.	F	Yes	7.00	MSI	023051-02	2/21/2025
pH 10.00a	10.26	s.u.	±0.1 s.u.	F	Yes	10.00	MSI	022361-01	12/27/2024
SC Zero (DI)	0.00	µS/cm	0<25 µS/cm	P	No	N/A	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1997	µS/cm	±5%	P	No	N/A	Geotech	3GF1197	Jun-24
ORP	234	mV	±15 mV	P	No	NA	InSitu	3GI1011	Jun-24
DO (Zero pt)	0.0	mg/L	±0.1	P	No	N/A	Macron	#000228049	8/26/2025
DO (Saturated)	99.3%	%	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: 10:12			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	3.89	s.u.	±0.15 s.u.	P	None	Geotech	3GB1049	Feb-25
pH 7.00b	6.50	s.u.	±0.15 s.u.	F	Calibrated: 7.01	Geotech	2GF113	Jun-24
pH 10.00b	10.11	s.u.	±0.15 s.u.	P	None	Geotech	3GA1134	Jan-25
SC 1000	1002	µS/cm	±5%	P	None	Ricca	4209A12	Aug-24

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 15:05				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.03	s.u.	±0.1 s.u.	P	No	N/A	MSI	023067-01	3/14/2025
pH 7.00a	7.01	s.u.	±0.1 s.u.				MSI	023051-02	2/21/2025
pH 10.00a	9.99	s.u.	±0.1 s.u.				MSI	022361-01	12/27/2024
SC 1000	1001	µS/cm	±5%				Ricca	4209A12	Aug-24
DO (Zero pt)	0.00	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	023067-01	3/14/2025
7.00a		s.u.	±0.1 s.u.				MSI	023051-02	2/21/2025
10.00a		s.u.	±0.1 s.u.				MSI	022361-01	12/27/2024
SC 1000		µS/cm	±5%				Ricca	4209A12	Aug-24
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:	JBohannan	Date:	02/07/2024

Multiparameter Meter Field Calibration Checklist

Field Personnel:	AP, AW	Location:	Edwards
Weather:	Mostly Cloudy, 44°-53°	Environment:	Grass, Gravel, mud
Multiparameter Water Meter	Make: Horiba	Model: U-5000	Serial Number: WUG83C85
Water Level Meter	Make: Heron	Model: Dipper-T	Serial Number: 19FF220213 1ML

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	—	MSI	023067-01	3/14/2025
pH 7.00a	6.98	s.u.	±0.1 s.u.	P	NO	—	MSI	023051-02	2/21/2025
pH 10.00a	9.98	s.u.	±0.1 s.u.	P	NO	—	MSI	022361-01	12/27/2024
SC Zero (DI)	0.00	µS/cm	0<25 µS/cm	P	NO	—	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2020	µS/cm	±5%	P	NO	—	Geotech	3GF1197	Jun-24
ORP	242	mV	±15 mV	P	NO	—	InSitu	3GI1011	Jun-24
DO (Zero pt)	0.00	mg/L	±0.1	P	NO	—	Macron	#000228049	8/26/2025
DO (Saturated)	99.7	%	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: 10:45

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?		Manufacturer	Lot#	Exp.
pH 4.00b	4.05	s.u.	±0.15 s.u.	P	NO		Geotech	3GB1049	Feb-25
pH 7.00b	6.75	s.u.	±0.15 s.u.	F	YES	7.01	Geotech	2GF113	Jun-24
pH 10.00b	10.03	s.u.	±0.15 s.u.	P	NO		Geotech	3GA1134	Jan-25
SC 1000	1010	µS/cm	±5%	P	NO		Ricca	4209A12	Aug-24

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification): — Time: 15:45

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.33	s.u.	±0.1 s.u.	F	YES	4.00	MSI	023067-01	3/14/2025
pH 7.00a	6.83	s.u.	±0.1 s.u.	F	YES	7.00	MSI	023051-02	2/21/2025
pH 10.00a	10.02	s.u.	±0.1 s.u.	P	NO	—	MSI	022361-01	12/27/2024
SC 1000	1010	µS/cm	±5%	P	NO	—	Ricca	4209A12	Aug-24
DO (Zero pt)	0.00	mg/L	±0.1 mg/L	P	NO	—	Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	P	NO	—	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification): — Time:

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	023067-01	3/14/2025
7.00a		s.u.	±0.1 s.u.				MSI	023051-02	2/21/2025
10.00a		s.u.	±0.1 s.u.				MSI	022361-01	12/27/2024
SC 1000		µS/cm	±5%				Ricca	4209A12	Aug-24
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: Andrew Wetherbee — Date: 2/7/24

Multiparameter Meter Field Calibration Checklist

Field Personnel:	Austin Moore/Logan Ross	Location:	Edwards
Weather:	60°-46° cloud)	Environment:	Power Plant, muddy

Multiparameter Water Meter	Make: Hocibn	Model: U-5000	Serial Number:	PW2GYJD3	
Water Level Meter	Make: WT	Model: Heron	Serial Number:	11FF-220930SML	

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.98	s.u.	±0.1 s.u.	P	N	N	MSI	023067-01	3/14/2025
pH 7.00a	7.03	s.u.	±0.1 s.u.	P	|	|	MSI	023051-02	2/21/2025
pH 10.00a	10.05	s.u.	±0.1 s.u.	P	|	|	MSI	022361-01	12/27/2024
SC Zero (DI)	0	µS/cm	0<25 µS/cm	P	|	|	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1990	µS/cm	±5%	P	|	|	Geotech	3GF1197	Jun-24
ORP	237	mV	±15 mV	P	|	|	InSitu	3GI1011	Jun-24
DO (Zero pt)	0.09	mg/L	±0.1	P	|	|	Macron	#000228049	8/26/2025
DO (Saturated)	98.8	%	97-100%	P	|	|	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	P	N	N	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 0715			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.01	s.u.	±0.15 s.u.	P	NA	Geotech	3GB1049	Feb-25
pH 7.00b	7.06	s.u.	±0.15 s.u.	P	|	Geotech	2GF113	Jun-24
pH 10.00b	10.08	s.u.	±0.15 s.u.	P	|	Geotech	3GA1134	Jan-25
SC 1000	986	µS/cm	±5%	P	NA	Ricca	4209A12	Aug-24

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 1455				
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	N	N	MSI	023067-01	3/14/2025
pH 7.00a	6.97	s.u.	±0.1 s.u.	P	N	N	MSI	023051-02	2/21/2025
pH 10.00a	9.99	s.u.	±0.1 s.u.	P	N	N	MSI	022361-01	12/27/2024
SC 1000	977	µS/cm	±5%	P	N	N	Ricca	4209A12	Aug-24
DO (Zero pt)	0.0	mg/L	±0.1 mg/L	P	N	N	Macron	#000228049	8/26/2025
Turbidity (DI)	0	NTU	<2 NTU	P	N	N	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	023067-01	3/14/2025
7.00a		s.u.	±0.1 s.u.				MSI	023051-02	2/21/2025
10.00a		s.u.	±0.1 s.u.				MSI	022361-01	12/27/2024
SC 1000		µS/cm	±5%				Ricca	4209A12	Aug-24
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:	2/8/24

Multiparameter Meter Field Calibration Checklist

Field Personnel:	AW, AP	Location:	Edwards
Weather:	Mostly Clearly 46°-60°, windy	Environment:	Mud, gravel, rocks
Multiparameter Water Meter	Make: Horiba	Model: U-5000	Serial Number: WUG83C85
Water Level Meter	Make: Heron	Model: Dipper-T	Serial Number: 19FF2202131ML

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.13	s.u.	±0.1 s.u.	F	Yes	4.00	MSI	023067-01	3/14/2025
pH 7.00a	6.83	s.u.	±0.1 s.u.	F	Yes	7.01	MSI	023051-02	2/21/2025
pH 10.00a	10.02	s.u.	±0.1 s.u.	P	NO	NA	MSI	022361-01	12/27/2024
SC Zero (DI)	0.0	µS/cm	0<25 µS/cm	P	NO		Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2910	µS/cm	±5%	P	NO		Geotech	3GF1197	Jun-24
ORP	240	mV	±15 mV	P	NO		InSitu	3GI1011	Jun-24
DO (Zero pt)	0.0	mg/L	±0.1	P	NO		Macron	#000228049	8/26/2025
DO (Saturated)	98.2	%	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: 7:15

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.01	s.u.	±0.15 s.u.	P	NO	Geotech	3GB1049	Feb-25
pH 7.00b	6.98	s.u.	±0.15 s.u.	P	NO	Geotech	2GF113	Jun-24
pH 10.00b	10.03	s.u.	±0.15 s.u.	P	NO	Geotech	3GA1134	Jan-25
SC 1000	1020	µS/cm	±5%	P	NO	Ricca	4209A12	Aug-24

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification): Time: 15:15

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.99	s.u.	±0.1 s.u.	P	NO	NA	MSI	023067-01	3/14/2025
pH 7.00a	7.02	s.u.	±0.1 s.u.	P	NO		MSI	023051-02	2/21/2025
pH 10.00a	10.01	s.u.	±0.1 s.u.	P	NO		MSI	022361-01	12/27/2024
SC 1000	1040	µS/cm	±5%	P	NO		Ricca	4209A12	Aug-24
DO (Zero pt)	0.0	mg/L	±0.1 mg/L	P	NO		Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	P	NO		Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification): Time:

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
4.00a		s.u.	±0.1 s.u.				MSI	023067-01	3/14/2025
7.00a		s.u.	±0.1 s.u.				MSI	023051-02	2/21/2025
10.00a		s.u.	±0.1 s.u.				MSI	022361-01	12/27/2024
SC 1000		µS/cm	±5%				Ricca	4209A12	Aug-24
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: 2/8/24

Multiparameter Meter Field Calibration Checklist

Field Personnel:	Jordan Bohannon	Location:	Edwards
Weather:	45°-60°F, Cloudy 13mph wind	Environment:	Muddy, Gravel, Tall growing plants

Multiparameter Water Meter	Make: Horiba	Model: U-5000	Serial Number:	AG JTK4XG	
Water Level Meter	Make: Heron	Model: Dipper T	Serial Number:	19FF21111192HB	

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.68	s.u.	±0.1 s.u.	F	Yes	4.00	MSI	023067-01	3/14/2025
pH 7.00a	7.13	s.u.	±0.1 s.u.	〃	〃	7.00	MSI	023051-02	2/21/2025
pH 10.00a	10.30	s.u.	±0.1 s.u.	〃	〃	10.00	MSI	022361-01	12/27/2024
SC Zero (DI)	0005	µS/cm	0<25 µS/cm	P	No	N/A	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	—	µS/cm	±5%	—	—	—	Geotech	3GF1197	Jun-24
ORP	233	mV	±15 mV	P	No	N/A	InSitu	3GI1011	Jun-24
DO (Zero pt)	0.00	mg/L	±0.1	P	No	N/A	Macron	#000228049	8/26/2025
DO (Saturated)	100%	%	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: 9:14			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	3.94	s.u.	±0.15 s.u.	P	None	Geotech	3GB1049	Feb-25
pH 7.00b	6.83	s.u.	±0.15 s.u.	〃	〃	Geotech	2GF113	Jun-24
pH 10.00b	10.12	s.u.	±0.15 s.u.	〃	〃	Geotech	3GA1134	Jan-25
SC 1000	—	µS/cm	±5%	—	—	Ricca	4209A12	Aug-24

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 1519				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.97	s.u.	±0.1 s.u.	P	No	N/A	MSI	023067-01	3/14/2025
pH 7.00a	7.01	s.u.	±0.1 s.u.	P	No	N/A	MSI	023051-02	2/21/2025
pH 10.00a	9.99	s.u.	±0.1 s.u.	P	No	N/A	MSI	022361-01	12/27/2024
SC 1000	———	µS/cm	±5%	———	———	———	Ricca	4209A12	Aug-24
DO (Zero pt)	0.00	mg/L	±0.1 mg/L	P	No	N/A	Macron	#000228049	8/26/2025
Turbidity (DI)	0.00	NTU	<2 NTU	P	No	N/A	Pace Labs	N/A (DI)	N/A (DI)

JB 2/8/24

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	023067-01	3/14/2025
7.00a		s.u.	±0.1 s.u.				MSI	023051-02	2/21/2025
10.00a		s.u.	±0.1 s.u.				MSI	022361-01	12/27/2024
SC 1000		µS/cm	±5%				Ricca	4209A12	Aug-24
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: Despite calibration, Horiba would not work for specion, so an oakton was used

Signature:	JBohannon	Date:	2/8/2024

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

March 13, 2024

Brian Voelker
Vistra - Edwards
604 Pierce Boulevard
O'Fallon, IL 62269

Dear Brian Voelker:

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 General Manager, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Sincerely,

Diane Billings
Project Manager

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

SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order HB01314

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
YES	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided

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Work Order HB01605

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

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ANALYTICAL RESULTS

Sample: HB01314-01 **Sampled:** 02/07/24 14:19
Name: AW-06 **Received:** 02/07/24 16:25
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.2	pCi/L			1	0.811	02/22/24 16:49	PACE	904.0 903.0

Sample: HB01314-02 **Sampled:** 02/07/24 14:19
Name: AW-06 DUP **Received:** 02/07/24 16:25
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.671 U	pCi/L			1	0.543	02/22/24 16:49	PACE	904.0 903.0

Sample: HB01314-03 **Sampled:** 02/07/24 12:17
Name: AW-09 **Received:** 02/07/24 16:25
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.807	pCi/L			1	0.522	02/22/24 16:49	PACE	904.0 903.0

Sample: HB01314-04 **Sampled:** 02/07/24 15:33
Name: AW-18 **Received:** 02/07/24 16:25
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	3.45	pCi/L			1	0.449	02/22/24 16:49	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HB01314-05 **Sampled:** 02/07/24 15:19
Name: AW-21 **Received:** 02/07/24 16:25
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.03	pCi/L			1	0.432	02/22/24 16:49	PACE	904.0 903.0

Sample: HB01605-01 **Sampled:** 02/08/24 15:31
Name: AP05S **Received:** 02/08/24 16:36
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.58	pCi/L			1	1.22	03/01/24 21:53	PACE	904.0 903.0

Sample: HB01605-02 **Sampled:** 02/08/24 15:44
Name: AP07S **Received:** 02/08/24 16:36
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.487 J	pCi/L			1	0.58	03/01/24 21:53	PACE	904.0 903.0

Sample: HB01605-03 **Sampled:** 02/08/24 11:12
Name: AW-01 **Received:** 02/08/24 16:36
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.444 J	pCi/L			1	0.57	03/01/24 21:53	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HB01605-04 **Sampled:** 02/08/24 11:12
Name: AW-01 DUP **Received:** 02/08/24 16:36
Matrix: Ground Water - Field Duplicate

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.395 J	pCi/L			1	0.599	03/01/24 21:53	PACE	904.0 903.0

Sample: HB01605-05 **Sampled:** 02/08/24 14:35
Name: AW-05 **Received:** 02/08/24 16:36
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.861 J	pCi/L			1	1.01	03/01/24 21:53	PACE	904.0 903.0

Sample: HB01605-06 **Sampled:** 02/08/24 13:15
Name: AW-08 **Received:** 02/08/24 16:36
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.54	pCi/L			1	0.755	03/01/24 21:53	PACE	904.0 903.0

Sample: HB01605-07 **Sampled:** 02/08/24 15:06
Name: AW-10 **Received:** 02/08/24 16:36
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	2.08	pCi/L			1	0.969	03/01/24 21:53	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HB01605-08 **Sampled:** 02/08/24 13:28
Name: AW-11 **Received:** 02/08/24 16:36
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	2.82	pCi/L			1	1.09	03/01/24 21:53	PACE	904.0 903.0

Sample: HB01605-09 **Sampled:** 02/08/24 12:38
Name: AW-14 **Received:** 02/08/24 16:36
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.74	pCi/L			1	0.803	03/01/24 21:53	PACE	904.0 903.0

Sample: HB01605-10 **Sampled:** 02/08/24 10:14
Name: AW-15 **Received:** 02/08/24 16:36
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	5.34	pCi/L			1	0.755	03/01/24 21:53	PACE	904.0 903.0

Sample: HB01605-11 **Sampled:** 02/08/24 11:26
Name: AW-15S **Received:** 02/08/24 16:36
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.522 J	pCi/L			1	0.686	03/01/24 21:53	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HB01605-12 **Sampled:** 02/08/24 14:07
Name: AW-16 **Received:** 02/08/24 16:36
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	3.46	pCi/L			1	0.421	03/01/24 21:53	PACE	904.0 903.0

Sample: HB01605-13 **Sampled:** 02/08/24 14:07
Name: AW-16 DUP **Received:** 02/08/24 16:36
Matrix: Ground Water - Field Duplicate

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	3.76	pCi/L			1	0.492	03/01/24 21:53	PACE	904.0 903.0

Sample: HB01605-14 **Sampled:** 02/08/24 12:05
Name: AW-17 **Received:** 02/08/24 16:36
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	2.26	pCi/L			1	0.469	03/01/24 21:53	PACE	904.0 903.0

Sample: HB01605-15 **Sampled:** 02/08/24 10:35
Name: AW-19 **Received:** 02/08/24 16:36
Matrix: Ground Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.17	pCi/L			1	0.576	03/01/24 21:53	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HB01605-16 **Sampled:** 02/08/24 15:30
Name: EB-01 **Received:** 02/08/24 16:36
Matrix: DI Water - Equipment Blank

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.206 J	pCi/L			1	0.424	03/01/24 21:53	PACE	904.0 903.0

Sample: HB01605-17 **Sampled:** 02/08/24 15:45
Name: FIELD BLANK **Received:** 02/08/24 16:36
Matrix: DI Water - Field Blank

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.68	pCi/L			1	0.53	03/01/24 21:53	PACE	904.0 903.0

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NOTES

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

* Not a TNI accredited analyte

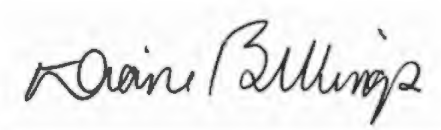
Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050
TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615
TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553
Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)
Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)
Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807
USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050
Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050



Certified by: Diane Billings, Project Manager

ANALYTICAL REPORT

March 13, 2024

Revised Report

Pace IR - Peoria, IL

Sample Delivery Group:	L1704317
Samples Received:	02/09/2024
Project Number:	HB01314
Description:	

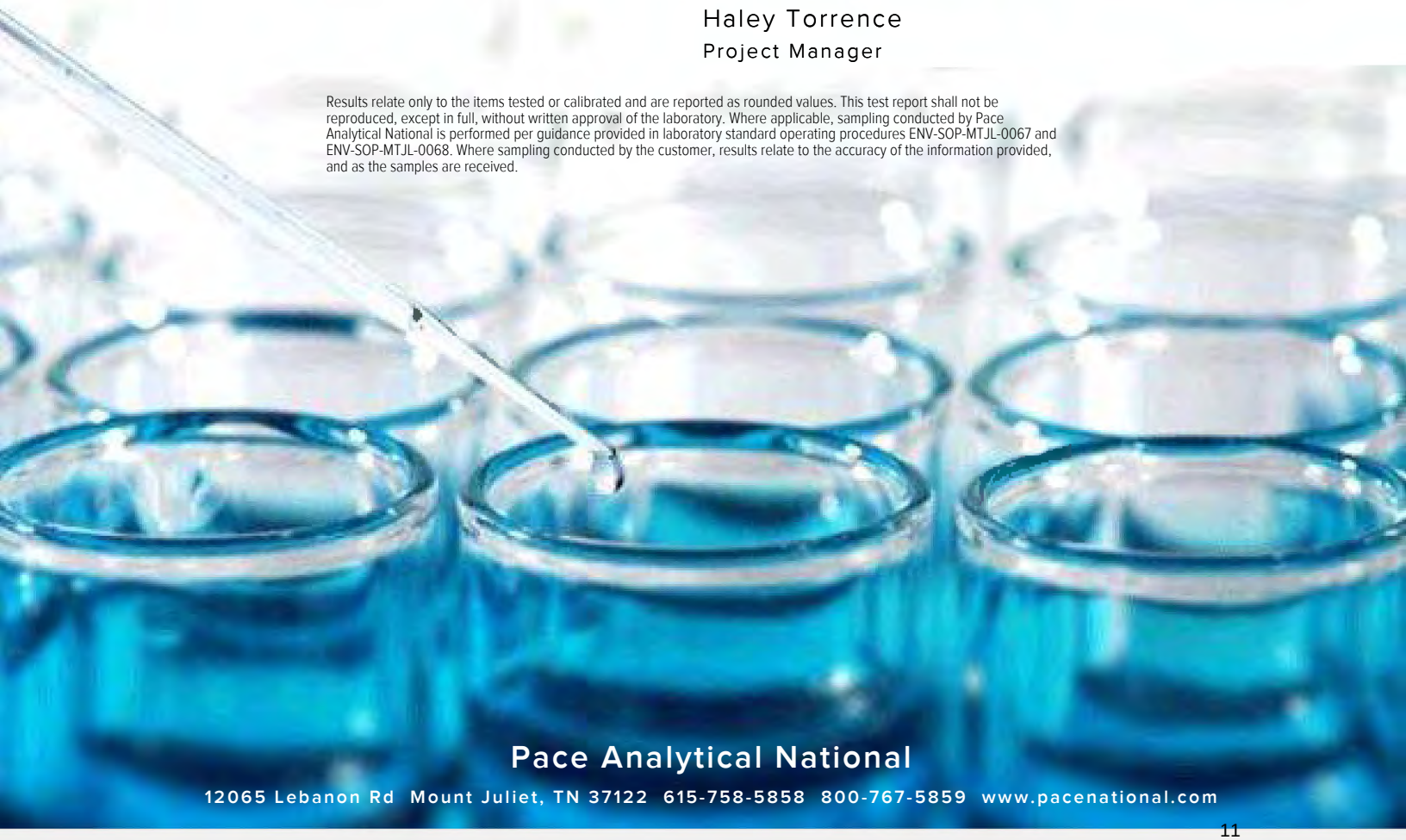
Report To: Diane Billings
2231 W. Altorfer Drive
Peoria, IL 61615

Entire Report Reviewed By:

[Preliminary Report]

Haley Torrence
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.



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SAMPLE SUMMARY

HB01314-01 L1704317-01 Non-Potable Water

			Collected by	Collected date/time	Received date/time	
				02/07/24 14:19	02/09/24 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2225536	1	02/14/24 22:43	02/22/24 16:49	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2224523	1	02/12/24 12:10	02/22/24 16:49	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2224523	1	02/12/24 12:10	02/15/24 18:19	ZRG	Mt. Juliet, TN

HB01314-02 L1704317-02 Non-Potable Water

			Collected by	Collected date/time	Received date/time	
				02/07/24 14:19	02/09/24 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2225536	1	02/14/24 22:43	02/22/24 16:49	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2224523	1	02/12/24 12:10	02/22/24 16:49	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2224523	1	02/12/24 12:10	02/15/24 18:19	ZRG	Mt. Juliet, TN

HB01314-03 L1704317-03 Non-Potable Water

			Collected by	Collected date/time	Received date/time	
				02/07/24 12:17	02/09/24 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2225536	1	02/14/24 22:43	02/22/24 16:49	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2224523	1	02/12/24 12:10	02/22/24 16:49	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2224523	1	02/12/24 12:10	02/15/24 18:19	ZRG	Mt. Juliet, TN

HB01314-04 L1704317-04 Non-Potable Water

			Collected by	Collected date/time	Received date/time	
				02/07/24 15:33	02/09/24 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2225536	1	02/14/24 22:43	02/22/24 16:49	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2224523	1	02/12/24 12:10	02/22/24 16:49	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2224523	1	02/12/24 12:10	02/15/24 18:19	ZRG	Mt. Juliet, TN

HB01314-05 L1704317-05 Non-Potable Water

			Collected by	Collected date/time	Received date/time	
				02/07/24 15:19	02/09/24 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2225536	1	02/14/24 22:43	02/22/24 16:49	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2224523	1	02/12/24 12:10	02/22/24 16:49	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2224523	1	02/12/24 12:10	02/15/24 18:19	ZRG	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.

[Preliminary Report]

Haley Torrence
Project Manager

Report Revision History

Level II Report - Version 1: 02/29/24 15:48
Level IV Report - Version 2: 02/29/24 16:07

Project Narrative

HB01314-01 SAMPLE RESULTS - 01

Collected date/time: 02/07/24 14:19 L1704317

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.05		0.419	1.32	0.791	0.412	02/22/2024 16:49	WG2225536
(T) Barium	*117*					*30.0-143*	*02/22/2024 16:49*	WG2225536
(T) Yttrium	*87.9*					*30.0-136*	*02/22/2024 16:49*	WG2225536

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.20		0.447	0.811	02/22/2024 16:49	WG2224523

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.149	J	0.157	0.0687	0.181	0.149	02/15/2024 18:19	WG2224523
(T) Barium-133	*87.0*					*30.0-143*	*02/15/2024 18:19*	WG2224523

HB01314-02 SAMPLE RESULTS - 02

Collected date/time: 02/07/24 14:19 L1704317

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.123	U	0.261	2.47	0.515	0.268	02/22/2024 16:49	WG2225536
(T) Barium	*117*					*30.0-143*	*02/22/2024 16:49*	WG2225536
(T) Yttrium	*97.8*					*30.0-136*	*02/22/2024 16:49*	WG2225536

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.0671	U	0.282	0.543	02/22/2024 16:49	WG2224523

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.0671	J	0.108	0.0478	0.172	0.142	02/15/2024 18:19	WG2224523
(T) Barium-133	*89.6*					*30.0-143*	*02/15/2024 18:19*	WG2224523

HB01314-03 SAMPLE RESULTS - 03

Collected date/time: 02/07/24 12:17 L1704317

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.590		0.260	1.16	0.492	0.257	02/22/2024 16:49	WG2225536
(T) Barium	*121*					*30.0-143*	*02/22/2024 16:49*	WG2225536
(T) Yttrium	*91.3*					*30.0-136*	*02/22/2024 16:49*	WG2225536

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.807		0.318	0.522	02/22/2024 16:49	WG2224523

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.217		0.183	0.0841	0.173	0.143	02/15/2024 18:19	WG2224523
(T) Barium-133	*91.0*					*30.0-143*	*02/15/2024 18:19*	WG2224523

HB01314-04 SAMPLE RESULTS - 04

Collected date/time: 02/07/24 15:33 L1704317

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	2.56		0.249	0.511	0.407	0.214	02/22/2024 16:49	WG2225536
(T) Barium	*126*					*30.0-143*	*02/22/2024 16:49*	WG2225536
(T) Yttrium	*104*					*30.0-136*	*02/22/2024 16:49*	WG2225536

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	3.45		0.434	0.449	02/22/2024 16:49	WG2224523

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.888		0.356	0.175	0.190	0.149	02/15/2024 18:19	WG2224523
(T) Barium-133	*94.8*					*30.0-143*	*02/15/2024 18:19*	WG2224523

HB01314-05 SAMPLE RESULTS - 05

Collected date/time: 02/07/24 15:19 L1704317

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.770		0.218	0.897	0.403	0.212	02/22/2024 16:49	WG2225536
(T) Barium	*114*					*30.0-143*	*02/22/2024 16:49*	WG2225536
(T) Yttrium	*97.4*					*30.0-136*	*02/22/2024 16:49*	WG2225536

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.03		0.288	0.432	02/22/2024 16:49	WG2224523

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.262		0.188	0.0947	0.155	0.128	02/15/2024 18:19	WG2224523
(T) Barium-133	*98.8*					*30.0-143*	*02/15/2024 18:19*	WG2224523

Method Blank (MB)

(MB) R4039034-1 02/21/24 22:20

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	-0.0620	U	0.189	0.178	0.0919
(T) Barium	*113*		*113*		
(T) Yttrium	*103*		*103*		

L1704317-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1704317-01 02/22/24 16:49 • (DUP) R4039034-5 02/22/24 16:49

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	1.05	0.419	0.791	0.412	0.344	0.324	0.626	0.327	101	1.33	J	20	3
(T) Barium	*117*				*124*	*124*							
(T) Yttrium	*87.9*				*99.9*	*99.9*							

Laboratory Control Sample (LCS)

(LCS) R4039034-2 02/22/24 16:49

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.26	105	80.0-120	
(T) Barium			*111*		
(T) Yttrium			*99.2*		

L1704299-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1704299-01 02/22/24 16:49 • (MS) R4039034-3 02/22/24 16:49 • (MSD) R4039034-4 02/22/24 16:49

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	1.27	18.8	15.8	105	87.3	1	70.0-130			16.9		20
(T) Barium		*133*			*125*	*127*							
(T) Yttrium		*102*			*104*	*112*							

WG2245523 QUALITY CONTROL SUMMARY

Radiochemistry by Method SM7500Ra B M

L1704317-01,02,03,04,05

Method Blank (MB)

(MB) R4035727-1 02/14/24 23:36

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.00498	U	0.0169	0.0350	0.0250
(T) Barium-133	*67.0*		*67.0*		

L1703450-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1703450-01 02/15/24 18:19 • (DUP) R4035727-5 02/15/24 18:19

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.535	0.272	0.181	0.142	0.109	0.137	0.180	0.149	132	1.40	J	20	3
(T) Barium-133	*91.8*				*87.1*	*87.1*							

Laboratory Control Sample (LCS)

(LCS) R4035727-2 02/15/24 18:19

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	4.98	99.7	80.0-120	
(T) Barium-133			*48.9*		

L1704317-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1704317-05 02/15/24 18:19 • (MS) R4035727-3 02/15/24 18:19 • (MSD) R4035727-4 02/15/24 18:19

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	0.262	18.6	20.4	91.6	101	1	75.0-125			9.53		20
(T) Barium-133		*98.8*			*86.0*	*88.3*							

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	LAO000356
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.

SUBCONTRACT ORDER
Transfer Chain of Custody

C090

Pace Analytical Services, LLC

HB01314

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L704357

Sample: HB01314-01
Name: AW-06

Sampled: 02/07/24 14:19
Matrix: Ground Water
Preservative: HNO3, pH <2

-01

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/20/24 16:00	08/05/24 14:19	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/20/24 16:00	08/05/24 14:19	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HB01314-02
Name: AW-06 DUP

Sampled: 02/07/24 14:19
Matrix: Ground Water
Preservative: HNO3, pH <2

-02

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/20/24 16:00	08/05/24 14:19	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/20/24 16:00	08/05/24 14:19	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HB01314-03
Name: AW-09

Sampled: 02/07/24 12:17
Matrix: Ground Water
Preservative: HNO3, pH <2

-03

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/20/24 16:00	08/05/24 12:17	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/20/24 16:00	08/05/24 12:17	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HB01314

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L1704317

Sample: HB01314-04
Name: AW-18

Sampled: 02/07/24 15:33
Matrix: Ground Water
Preservative: HNO3, pH <2

-04

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/20/24 16:00	08/05/24 15:33	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/20/24 16:00	08/05/24 15:33	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

21712500

Sample: HB01314-05
Name: AW-21

Sampled: 02/07/24 ~~15:14~~ 1519
Matrix: Ground Water
Preservative: HNO3, pH <2

-05

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/20/24 16:00	08/05/24 15:14	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/20/24 16:00	08/05/24 15:14	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample Receipt Checklist

COC Seal Present/Intact: N
COC Signed/Accurate: N
Bottles arrive intact: N
Correct bottles used: N
Sufficient volume sent: N
RA Screen <0.5 mR/hr: N

If Applicable
VOA Zero Headspace: Y N
Pres. Correct/Check: Y N

Amb

Please email results to Diane Billings at diane.billings@pacelabs.com

Date Shipped: 2/8/24 Total # of Containers: 5 Sample Origin (State): IL PO #: _____

Turn-Around Time Requested ☐ NORMAL ☐ RUSH Date Results Needed: _____

Relinquished By	Date/Time	Received By	Date/Time
[signature]	2/8/24 1115		
		N. Jown	2/9/24 0900

Sample Temperature Upon Receipt ____ °C
Sample(s) Received on Ice Y or N
Proper Bottles Received in Good Condition Y or N
Bottles Filled with Adequate Volume Y or N
Samples Received Within Hold Time Y or N
Date/Time Taken From Sample Bottle Y or N

ANALYTICAL REPORT

March 06, 2024

Pace IR - Peoria, IL

Sample Delivery Group:	L1705233
Samples Received:	02/13/2024
Project Number:	
Description:	

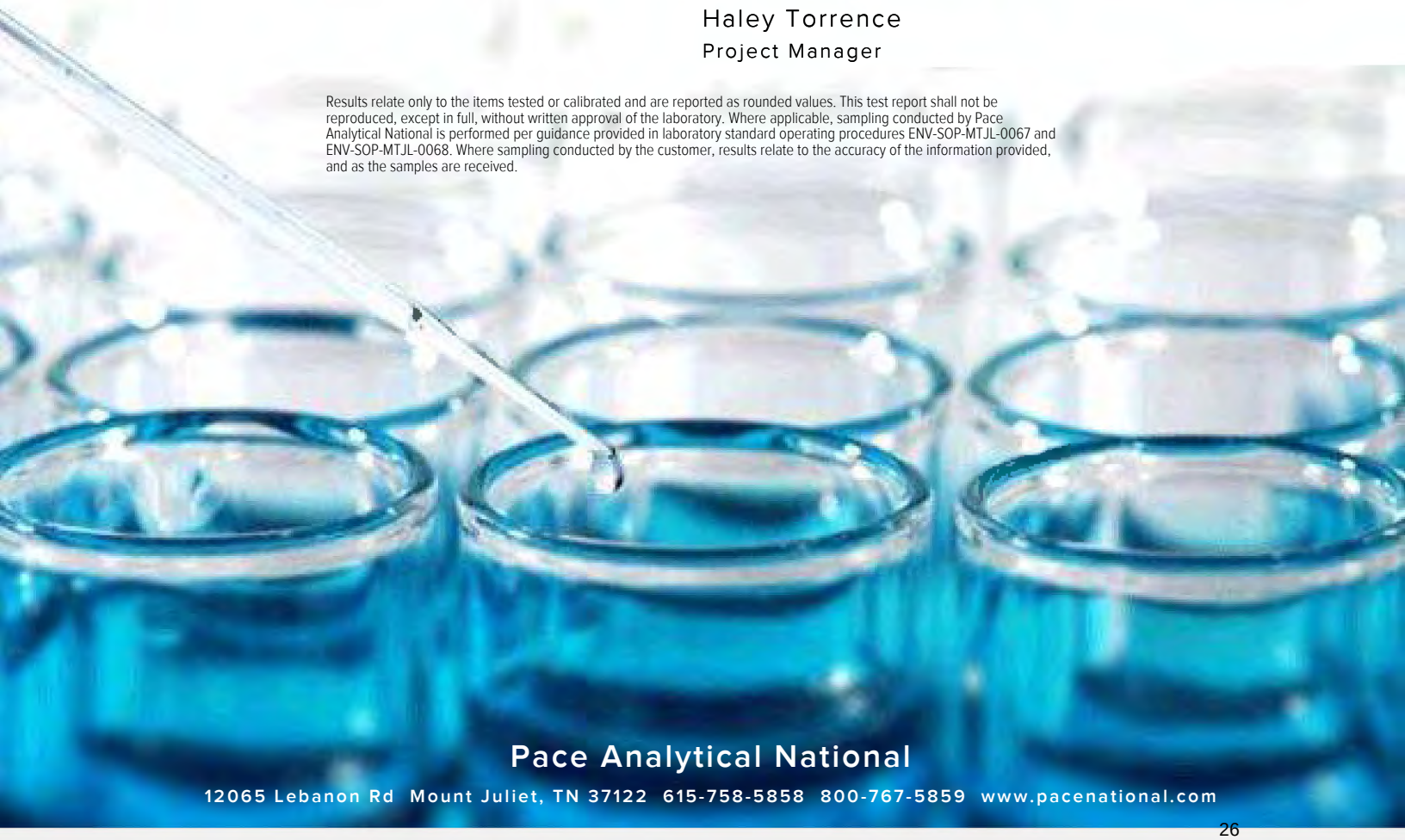
Report To: Diane Billings
2231 W. Altorfer Drive
Peoria, IL 61615

Entire Report Reviewed By:

[Preliminary Report]

Haley Torrence
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.



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SAMPLE SUMMARY

HB01605-01 L1705233-01 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/08/24 15:31	02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2229435	1	02/19/24 17:47	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2227301	1	02/19/24 11:45	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2227301	1	02/19/24 11:45	02/22/24 14:33	ZRG	Mt. Juliet, TN

HB01605-02 L1705233-02 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/08/24 15:44	02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2229435	1	02/19/24 17:47	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2227301	1	02/19/24 11:45	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2227301	1	02/19/24 11:45	02/22/24 14:33	ZRG	Mt. Juliet, TN

HB01605-03 L1705233-03 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/08/24 11:12	02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2229435	1	02/19/24 17:47	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2227301	1	02/19/24 11:45	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2227301	1	02/19/24 11:45	02/22/24 14:33	ZRG	Mt. Juliet, TN

HB01605-04 L1705233-04 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/08/24 11:12	02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2229435	1	02/19/24 17:47	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2227301	1	02/19/24 11:45	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2227301	1	02/19/24 11:45	02/22/24 14:33	ZRG	Mt. Juliet, TN

HB01605-05 L1705233-05 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/08/24 14:35	02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2229435	1	02/19/24 17:47	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2227301	1	02/19/24 11:45	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2227301	1	02/19/24 11:45	02/22/24 14:33	ZRG	Mt. Juliet, TN

HB01605-06 L1705233-06 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/08/24 13:15	02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2229435	1	02/19/24 17:47	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2227301	1	02/19/24 11:45	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2227301	1	02/19/24 11:45	02/22/24 14:33	ZRG	Mt. Juliet, TN

SAMPLE SUMMARY

HB01605-07 L1705233-07 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/08/24 15:06	02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2229435	1	02/19/24 17:47	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2227301	1	02/19/24 11:45	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2227301	1	02/19/24 11:45	02/22/24 14:33	ZRG	Mt. Juliet, TN

HB01605-08 L1705233-08 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/08/24 13:28	02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2229435	1	02/19/24 17:47	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2227301	1	02/19/24 11:45	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2227301	1	02/19/24 11:45	02/22/24 14:33	ZRG	Mt. Juliet, TN

HB01605-09 L1705233-09 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/08/24 12:38	02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2229435	1	02/19/24 17:47	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2227301	1	02/19/24 11:45	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2227301	1	02/19/24 11:45	02/22/24 14:33	ZRG	Mt. Juliet, TN

HB01605-10 L1705233-10 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/08/24 10:14	02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2229435	1	02/19/24 17:47	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2227301	1	02/19/24 11:45	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2227301	1	02/19/24 11:45	02/22/24 14:33	ZRG	Mt. Juliet, TN

HB01605-11 L1705233-11 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/08/24 11:26	02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2229435	1	02/19/24 17:47	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2227301	1	02/19/24 11:45	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2227301	1	02/19/24 11:45	02/22/24 14:33	ZRG	Mt. Juliet, TN

HB01605-12 L1705233-12 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/08/24 14:07	02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2229435	1	02/19/24 17:47	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2229469	1	02/21/24 11:40	03/01/24 21:53	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2229469	1	02/21/24 11:40	02/22/24 17:07	ZRG	Mt. Juliet, TN

SAMPLE SUMMARY

HB01605-13 L1705233-13 Non-Potable Water

			Collected by	Collected date/time	Received date/time	
				02/08/24 14:07	02/13/24 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2229435	1	02/19/24 17:47	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2229469	1	02/21/24 11:40	03/01/24 21:53	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2229469	1	02/21/24 11:40	02/22/24 17:07	ZRG	Mt. Juliet, TN

HB01605-14 L1705233-14 Non-Potable Water

			Collected by	Collected date/time	Received date/time	
				02/08/24 12:05	02/13/24 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2229435	1	02/19/24 17:47	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2229469	1	02/21/24 11:40	03/01/24 21:53	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2229469	1	02/21/24 11:40	02/22/24 17:07	ZRG	Mt. Juliet, TN

HB01605-15 L1705233-15 Non-Potable Water

			Collected by	Collected date/time	Received date/time	
				02/08/24 10:35	02/13/24 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2229435	1	02/19/24 17:47	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2229469	1	02/21/24 11:40	03/01/24 21:53	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2229469	1	02/21/24 11:40	02/22/24 17:07	ZRG	Mt. Juliet, TN

HB01605-16 L1705233-16 Non-Potable Water

			Collected by	Collected date/time	Received date/time	
				02/08/24 15:30	02/13/24 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2229435	1	02/19/24 17:47	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2229469	1	02/21/24 11:40	03/01/24 21:53	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2229469	1	02/21/24 11:40	02/22/24 17:07	ZRG	Mt. Juliet, TN

HB01605-17 L1705233-17 Non-Potable Water

			Collected by	Collected date/time	Received date/time	
				02/08/24 15:45	02/13/24 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2229435	1	02/19/24 17:47	03/01/24 21:53	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2229469	1	02/21/24 11:40	03/01/24 21:53	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2229469	1	02/21/24 11:40	02/22/24 17:07	ZRG	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.

[Preliminary Report]

Haley Torrence
Project Manager

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.678	J	0.654	2.59	1.19	0.622	03/01/2024 21:53	WG2229435
(T) Barium	*115*					*30.0-143*	*03/01/2024 21:53*	WG2229435
(T) Yttrium	*98.7*					*30.0-136*	*03/01/2024 21:53*	WG2229435

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.58		0.754	1.22	03/01/2024 21:53	WG2227301

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.899		0.375	0.171	0.265	0.188	02/22/2024 14:33	WG2227301
(T) Barium-133	*89.2*					*30.0-143*	*02/22/2024 14:33*	WG2227301

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

SAMPLE RESULTS - 02

HB01605-02
Collected date/time: 02/08/24 15:44
L1705233

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.347	J	0.248	1.47	0.452	0.237	03/01/2024 21:53	WG2229435
(T) Barium	*122*					*30.0-143*	*03/01/2024 21:53*	WG2229435
(T) Yttrium	*101*					*30.0-136*	*03/01/2024 21:53*	WG2229435

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.487	J	0.344	0.580	03/01/2024 21:53	WG2227301

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.141	J	0.238	0.0888	0.364	0.244	02/22/2024 14:33	WG2227301
(T) Barium-133	*84.0*					*30.0-143*	*02/22/2024 14:33*	WG2227301

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT, ASH POND
EDW-257-301

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.333	J	0.236	1.45	0.431	0.226	03/01/2024 21:53	WG2229435
(T) Barium	*119*					*30.0-143*	*03/01/2024 21:53*	WG2229435
(T) Yttrium	*102*					*30.0-136*	*03/01/2024 21:53*	WG2229435

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.444	J	0.333	0.570	03/01/2024 21:53	WG2227301

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.111	U	0.235	0.0877	0.373	0.246	02/22/2024 14:33	WG2227301
(T) Barium-133	*86.0*					*30.0-143*	*02/22/2024 14:33*	WG2227301

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.258	J	0.262	1.86	0.482	0.253	03/01/2024 21:53	WG2229435
(T) Barium	*120*					*30.0-143*	*03/01/2024 21:53*	WG2229435
(T) Yttrium	*86.5*					*30.0-136*	*03/01/2024 21:53*	WG2229435

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.395	J	0.350	0.599	03/01/2024 21:53	WG2227301

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.137	J	0.232	0.0848	0.355	0.238	02/22/2024 14:33	WG2227301
(T) Barium-133	*82.2*					*30.0-143*	*02/22/2024 14:33*	WG2227301

SAMPLE RESULTS - 05

HB01605-05
Collected date/time: 02/08/24 14:35
L1705233

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.392	U	0.513	3.19	0.952	0.503	03/01/2024 21:53	WG2229435
(T) Barium	*106*					*30.0-143*	*03/01/2024 21:53*	WG2229435
(T) Yttrium	*87.9*					*30.0-136*	*03/01/2024 21:53*	WG2229435

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.861	J	0.603	1.01	03/01/2024 21:53	WG2227301

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.469		0.316	0.134	0.328	0.227	02/22/2024 14:33	WG2227301
(T) Barium-133	*86.7*					*30.0-143*	*02/22/2024 14:33*	WG2227301

HB01605-06 SAMPLE RESULTS - 06

Collected date/time: 02/08/24 13:15 L1705233

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.19		0.371	1.12	0.656	0.342	03/01/2024 21:53	WG2229435
(T) Barium	*233*	C1				*30.0-143*	*03/01/2024 21:53*	WG2229435
(T) Yttrium	*99.3*					*30.0-136*	*03/01/2024 21:53*	WG2229435

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.54		0.476	0.755	03/01/2024 21:53	WG2227301

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.349	J	0.298	0.121	0.373	0.238	02/22/2024 14:33	WG2227301
(T) Barium-133	*88.0*					*30.0-143*	*02/22/2024 14:33*	WG2227301

HB01605-07 SAMPLE RESULTS - 07

Collected date/time: 02/08/24 15:06 L1705233

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.531	J	0.500	2.57	0.919	0.484	03/01/2024 21:53	WG2229435
(T) Barium	*121*					*30.0-143*	*03/01/2024 21:53*	WG2229435
(T) Yttrium	*98.5*					*30.0-136*	*03/01/2024 21:53*	WG2229435

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	2.08		0.715	0.969	03/01/2024 21:53	WG2227301

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	1.55		0.511	0.223	0.306	0.214	02/22/2024 14:33	WG2227301
(T) Barium-133	*83.9*					*30.0-143*	*02/22/2024 14:33*	WG2227301

HB01605-08 SAMPLE RESULTS - 08

Collected date/time: 02/08/24 13:28 L1705233

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.71		0.598	1.59	1.06	0.557	03/01/2024 21:53	WG2229435
(T) Barium	*130*					*30.0-143*	*03/01/2024 21:53*	WG2229435
(T) Yttrium	*95.3*					*30.0-136*	*03/01/2024 21:53*	WG2229435

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	2.82		0.732	1.09	03/01/2024 21:53	WG2227301

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	1.11		0.423	0.183	0.261	0.190	02/22/2024 14:33	WG2227301
(T) Barium-133	*82.9*					*30.0-143*	*02/22/2024 14:33*	WG2227301

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT, ASH POND
EDW-257-301

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.928		0.403	1.45	0.723	0.378	03/01/2024 21:53	WG2229435
(T) Barium	*123*					*30.0-143*	*03/01/2024 21:53*	WG2229435
(T) Yttrium	*90.1*					*30.0-136*	*03/01/2024 21:53*	WG2229435

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.74		0.573	0.803	03/01/2024 21:53	WG2227301

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.810		0.407	0.174	0.349	0.241	02/22/2024 14:33	WG2227301
(T) Barium-133	*85.7*					*30.0-143*	*02/22/2024 14:33*	WG2227301

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	2.96		0.386	0.742	0.629	0.330	03/01/2024 21:53	WG2229435
(T) Barium	*128*					*30.0-143*	*03/01/2024 21:53*	WG2229435
(T) Yttrium	*95.1*					*30.0-136*	*03/01/2024 21:53*	WG2229435

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	5.34		0.763	0.755	03/01/2024 21:53	WG2227301

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	2.38		0.658	0.277	0.418	0.272	02/22/2024 14:33	WG2227301
(T) Barium-133	*81.6*					*30.0-143*	*02/22/2024 14:33*	WG2227301

HB01605-11 SAMPLE RESULTS - 11

Collected date/time: 02/08/24 11:26 L1705233

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.522	J	0.348	1.68	0.632	0.331	03/01/2024 21:53	WG2229435
(T) Barium	*117*					*30.0-143*	*03/01/2024 21:53*	WG2229435
(T) Yttrium	*103*					*30.0-136*	*03/01/2024 21:53*	WG2229435

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.522	J	0.366	0.686	03/01/2024 21:53	WG2227301

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.000	U	0.112	0.0393	0.268	0.195	02/22/2024 14:33	WG2227301
(T) Barium-133	*88.5*					*30.0-143*	*02/22/2024 14:33*	WG2227301

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.69		0.230	0.629	0.372	0.196	03/01/2024 21:53	WG2229435
(T) Barium	*113*					*30.0-143*	*03/01/2024 21:53*	WG2229435
(T) Yttrium	*102*					*30.0-136*	*03/01/2024 21:53*	WG2229435

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	3.46		0.558	0.421	03/01/2024 21:53	WG2229469

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	1.77		0.508	0.240	0.197	0.154	02/22/2024 17:07	WG2229469
(T) Barium-133	*89.6*					*30.0-143*	*02/22/2024 17:07*	WG2229469

Collected date/time: 02/08/24 14:07 L1705233

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.60		0.276	0.744	0.465	0.244	03/01/2024 21:53	WG2229435
(T) Barium	*121*					*30.0-143*	*03/01/2024 21:53*	WG2229435
(T) Yttrium	*91.0*					*30.0-136*	*03/01/2024 21:53*	WG2229435

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	3.76		0.606	0.492	03/01/2024 21:53	WG2229469

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	2.15		0.539	0.279	0.161	0.133	02/22/2024 17:07	WG2229469
(T) Barium-133	*96.1*					*30.0-143*	*02/22/2024 17:07*	WG2229469

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	1.17		0.257	0.832	0.442	0.232	03/01/2024 21:53	WG2229435
(T) Barium	*124*					*30.0-143*	*03/01/2024 21:53*	WG2229435
(T) Yttrium	*92.1*					*30.0-136*	*03/01/2024 21:53*	WG2229435

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	2.26		0.458	0.469	03/01/2024 21:53	WG2229469

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	1.09		0.379	0.188	0.157	0.130	02/22/2024 17:07	WG2229469
(T) Barium-133	*95.6*					*30.0-143*	*02/22/2024 17:07*	WG2229469

Collected date/time: 02/08/24 10:35 L1705233

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.928		0.308	1.23	0.544	0.288	03/01/2024 21:53	WG2229435
(T) Barium	*141*					*30.0-143*	*03/01/2024 21:53*	WG2229435
(T) Yttrium	*92.1*					*30.0-136*	*03/01/2024 21:53*	WG2229435

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.17		0.361	0.576	03/01/2024 21:53	WG2229469

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.243		0.189	0.0923	0.190	0.145	02/22/2024 17:07	WG2229469
(T) Barium-133	*98.2*					*30.0-143*	*02/22/2024 17:07*	WG2229469

Collected date/time: 02/08/24 15:30 L1705233

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.0234	U	0.205	5.35	0.386	0.204	03/01/2024 21:53	WG2229435
(T) Barium	*133*					*30.0-143*	*03/01/2024 21:53*	WG2229435
(T) Yttrium	*92.5*					*30.0-136*	*03/01/2024 21:53*	WG2229435

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.206	J	0.266	0.424	03/01/2024 21:53	WG2229469

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.182		0.170	0.0776	0.175	0.145	02/22/2024 17:07	WG2229469
(T) Barium-133	*90.8*					*30.0-143*	*02/22/2024 17:07*	WG2229469

Collected date/time: 02/08/24 15:45 L1705233

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.584		0.280	1.46	0.506	0.268	03/01/2024 21:53	WG2229435
(T) Barium	*131*					*30.0-143*	*03/01/2024 21:53*	WG2229435
(T) Yttrium	*94.3*					*30.0-136*	*03/01/2024 21:53*	WG2229435

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.680		0.305	0.530	03/01/2024 21:53	WG2229469

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.0959	J	0.120	0.0598	0.158	0.130	02/22/2024 17:07	WG2229469
(T) Barium-133	*101*					*30.0-143*	*02/22/2024 17:07*	WG2229469

WG2229435 QUALITY CONTROL SUMMARY

Radiochemistry by Method 904/9320

L1705233-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17

Method Blank (MB)

(MB) R4040726-1 03/01/24 21:53

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	-0.172	U	0.184	0.170	
(T) Barium	*126*		*126*		
(T) Yttrium	*96.8*		*96.8*		

L1705233-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1705233-11 03/01/24 21:53 • (DUP) R4040726-5 03/01/24 21:53

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.522	0.348	0.632	0.331	0.879	0.388	0.696		50.9	0.684		20	3
(T) Barium	*117*				*125*	*125*							
(T) Yttrium	*103*				*102*	*102*							

Laboratory Control Sample (LCS)

(LCS) R4040726-2 03/01/24 21:53

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.82	96.4	80.0-120	
(T) Barium			*136*		
(T) Yttrium			*101*		

L1705233-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705233-17 03/01/24 21:53 • (MS) R4040726-3 03/01/24 21:53 • (MSD) R4040726-4 03/01/24 21:53

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-228	16.7	0.584	16.3	15.6	94.2	90.0	1	70.0-130			4.38		20
(T) Barium		*131*			*124*	*123*							
(T) Yttrium		*94.3*			*96.8*	*94.2*							

QUALITY CONTROL SUMMARY

Radiochemistry by Method SM7500Ra B M

L1705233-01,02,03,04,05,06,07,08,09,10,11

Method Blank (MB)

(MB) R4038342-1 02/22/24 14:33

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	-0.0133	U	0.0237	0.0768	0.0551
(T) Barium-133	*80.8*		*80.8*		

L1705233-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1705233-11 02/22/24 14:33 • (DUP) R4038342-5 02/22/24 14:33

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.000	0.112	0.268	0.195	0.0624	0.187	0.337	0.236	200	0.286	U	20	3
(T) Barium-133	*88.5*				*74.0*	*74.0*							

Laboratory Control Sample (LCS)

(LCS) R4038342-2 02/22/24 14:33

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	4.80	95.9	80.0-120	
(T) Barium-133			*75.0*		

L1705231-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705231-01 02/22/24 14:33 • (MS) R4038342-3 02/22/24 14:33 • (MSD) R4038342-4 02/22/24 14:33

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	0.00760	19.3	19.9	96.4	99.4	1	75.0-125			3.06		20
(T) Barium-133		*77.3*			*62.7*	*67.3*							

Method Blank (MB)

(MB) R4041068-1 02/22/24 17:07

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.0311	J	0.0390	0.0512	0.0423
(T) Barium-133	*87.9*		*87.9*		

L1705230-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705230-01 02/22/24 17:07 • (DUP) R4041068-5 02/22/24 17:07

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.244	0.188	0.165	0.136	0.394	0.240	0.168	0.139	47.3	0.495		20	3
(T) Barium-133	*93.2*				*93.2*	*93.2*							

Laboratory Control Sample (LCS)

(LCS) R4041068-2 02/22/24 17:07

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	4.93	98.6	80.0-120	
(T) Barium-133			*91.7*		

L1705249-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705249-03 02/22/24 17:07 • (MS) R4041068-3 02/22/24 17:07 • (MSD) R4041068-4 02/22/24 17:07

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	0.247	20.0	22.3	98.6	110	1	75.0-125			10.9		20
(T) Barium-133		*90.8*			*96.2*	*90.1*							

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
C1	Tracer recovery limits have been exceeded; values are outside upper control limits.
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	LAO000356
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.

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HB01605

D047

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L705233

Sample: HB01605-01
Name: AP05S

Sampled: 02/08/24 15:31
Matrix: Ground Water
Preservative: HNO3, pH <2

-01

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 15:31	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 15:31	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HB01605-02
Name: AP07S

Sampled: 02/08/24 15:44
Matrix: Ground Water
Preservative: HNO3, pH <2

-02

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 15:44	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 15:44	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HB01605-03
Name: AW-01

Sampled: 02/08/24 11:12
Matrix: Ground Water
Preservative: HNO3, pH <2

-03

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 11:12	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 11:12	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HB01605

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L7705233

Sample: HB01605-04
Name: AW-01 DUP

Sampled: 02/08/24 11:12
Matrix: Ground Water
Preservative: HNO3, pH <2

-04

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 11:12	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 11:12	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HB01605-05
Name: AW-05

Sampled: 02/08/24 14:35
Matrix: Ground Water
Preservative: HNO3, pH <2

-05

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 14:35	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 14:35	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HB01605-06
Name: AW-08

Sampled: 02/08/24 13:15
Matrix: Ground Water
Preservative: HNO3, pH <2

-06

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 13:15	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 13:15	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HB01605

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L1705233

Sample: HB01605-07
Name: AW-10

Sampled: 02/08/24 15:06
Matrix: Ground Water
Preservative: HNO3, pH <2

-07

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 15:06	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 15:06	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HB01605-08
Name: AW-11

Sampled: 02/08/24 13:28
Matrix: Ground Water
Preservative: HNO3, pH <2

-08

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 13:28	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 13:28	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HB01605-09
Name: AW-14

Sampled: 02/08/24 12:38
Matrix: Ground Water
Preservative: HNO3, pH <2

-09

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 12:38	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 12:38	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HB01605

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L1705233

Sample: HB01605-10
Name: AW-15

Sampled: 02/08/24 10:14
Matrix: Ground Water
Preservative: HNO3, pH <2

-10

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 10:14	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 10:14	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HB01605-11
Name: AW-15S

Sampled: 02/08/24 11:26
Matrix: Ground Water
Preservative: HNO3, pH <2

-11

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 11:26	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 11:26	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HB01605-12
Name: AW-16

Sampled: 02/08/24 14:07
Matrix: Ground Water
Preservative: HNO3, pH <2

-12

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 14:07	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 14:07	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HB01605

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L1705233

Sample: HB01605-13
Name: AW-16 DUP

Sampled: 02/08/24 14:07
Matrix: Ground Water
Preservative: HNO3, pH <2

-13

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 14:07	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 14:07	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HB01605-14
Name: AW-17

Sampled: 02/08/24 12:05
Matrix: Ground Water
Preservative: HNO3, pH <2

-14

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 12:05	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 12:05	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HB01605-15
Name: AW-19

Sampled: 02/08/24 10:35
Matrix: Ground Water
Preservative: HNO3, pH <2

-15

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 10:35	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 10:35	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HB01605

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L1705233

Sample: HB01605-16
Name: EB-01

Sampled: 02/08/24 15:30
Matrix: DI Water
Preservative: HNO3, pH <2

-16

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 15:30	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 15:30	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HB01605-17
Name: FIELD BLANK

Sampled: 02/08/24 15:45
Matrix: DI Water
Preservative: HNO3, pH <2

-17

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 15:45	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT
01-Radium 226/228 combined	02/21/24 16:00	08/06/24 15:45	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

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		
RA Screen <0.5 mR/hr:	Y N		

17.5+0=17.5 TOAB

Please email results to Diane Billings at diane.billings@pacelabs.com

Date Shipped: 2/9/24 Total # of Containers: 17 Sample Origin (State): IL PO #: _____

Turn-Around Time Requested ☐ NORMAL ☐ RUSH Date Results Needed: _____

Relinquished By	Date/Time	Received By	Date/Time
	2/9/24 1200		
			2/12/24 0930
			~~2/10/24 0900~~

NF 2/14/24

Sample Temperature Upon Receipt	____ °C
Sample(s) Received on Ice	Y or N
Proper Bottles Received in Good Condition	Y or N
Bottles Filled with Adequate Volume	Y or N
Samples Received Within Hold Time	Y or N
Date/Time Taken From Sample Bottle	Y or N

RADS – HB01314

IDSL

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: of

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Vistra Corp-Edwards	Report To:	Brian Voelker	Attention:	Mark Davis
Address:	7800 Cilco Lane	Copy To:	Sam Davies-samantha.davies@vistracorp.com	Company Name:	Vistra Corp-Edwards
	Peoria, IL 61607		Mark Davis-Mark.Davis1@vistracorp.com	Address:	see Section A
Email To:	Brian.Voelker@VistraCorp.com	Purchase Order No.:		Quote Reference:	
Phone:	(217) 753-8911 Fax:	Project Name:		Project Manager:	
Requested Due Date/TAT:	10 day	Project Number:	2285	Profile #:	

REGULATORY AGENCY			
NPDES	GROUND WATER	DRINKING WATER	
UST	RCRA	OTHER	
Site Location STATE:	IL		

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AW-06	WT	G	2/7/24	1419		4	X		X									
2	AW-06 Dup	WT	G	2/7/24	1419		4	X		X									
4	AW-09	WT	G	2/7/24	1217		4	X		X									
5	AW-18	WT	G	2/7/24	1633		4	X		X									
6	AW-21	WT	G	2/7/24	1519		4	X		X									
7	XPW01A	WT	G	2/7/24	1132		3	X		X									
8	XPW02	WT	G	2/7/24	1227		3	X		X									
9	XPW03	WT	G	2/7/24	1352		3	X		X									
10																			
11																			
12																			
13																			
14																			
15																			
16																			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
EDW-24Q1-Rev 0	JBohannon	2/7/24	16:25				
					2/7/24	1625	52

SAMPLER NAME AND SIGNATURE			Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	DP, AW, JB					
SIGNATURE of SAMPLER:		DATE Signed (MM/DD/YY): 02/07/24				

COURIER

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: of

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Vistra Corp-Edwards	Report To:	Brian Voelker	Attention:	Mark Davis
Address:	7800 Cilco Lane	Copy To:	Sam Davies-samantha.davies@vistracorp.com	Company Name:	Vistra Corp-Edwards
	Peoria, IL 61607		Mark Davis-Mark.Davis1@vistracorp.com	Address:	see Section A
Email To:	Brian.Voelker@VistraCorp.com	Purchase Order No.:		Quote Reference:	
Phone:	(217) 753-8911 Fax:	Project Name:		Project Manager:	
Requested Due Date/TAT:	10 day	Project Number:	2285	Profile #:	

REGULATORY AGENCY		
NPDES	GROUND WATER	DRINKING WATER
UST	RCRA	OTHER
Site Location STATE:	IL	

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis Filtered (Y/N): Y/N	Analysis Test: EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	APOSS	WT	G	2/8/24	1531		4	X		X							X			
2	APOTS	WT	G	2/8/24	1544		4	X		X							X			
4	MWO1	WT	G	2/8/24	1112		4	X		X							X			
5	AWO1 DUP	WT	G	2/8/24	1112		4	X		X							X			
6	AWO5	WT	G	2/8/24	1435		4	X		X							X			
7	AWO8	WT	G	2/8/24	1315		4	X		X							X			
8	AW10	WT	G	2/8/24	1506		4	X		X							X			
9	AW11	WT	G	2/8/24	1328		4	X		X							X			
10	AW14	WT	G	2/8/24	1238		4	X		X							X			
11	AW15	WT	G	2/8/24	1014		4	X		X							X			
12	AW15S	WT	G	2/8/24	1126		4	X		X							X			
13	AW16	WT	G	2/8/24	1407		4	X		X							X			
14	AW16 DUP	WT	G	2/8/24	1407		4	X		X							X			
15	AW17	WT	G	2/8/24	1205		4	X		X							X			
16	AW19	WT	G	2/8/24	1035		4	X		X							X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q1-Rev 0		2/8/24	1636							
					2/8/24	1636	9.4	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: AF, SB, AW, AM, LK

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 02/08/24

BD01601

BD01605 - RADS

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: of

Section A Required Client Information:

Company: Vistra Corp-Edwards
Address: 7800 Cilco Lane
Peoria, IL 61607
Email To: Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911 Fax:
Requested Due Date/TAT: 10 day

Section B Required Project Information:

Report To: Brian Voelker
Copy To: Sam Davies-samantha.davies@vistracorp.com
Mark Davis-Mark.Davis1@vistracorp.com
Purchase Order No.:
Project Name:
Project Number: 2285

Section C Invoice Information:

Attention: Mark Davis
Company Name: Vistra Corp-Edwards
Address: see Section A
Quote Reference:
Project Manager:
Profile #:

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	Section D: SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	Equipment Blank 1	WT	G	2/8/24	1530		4	X		X									
2	Field Blank	WT	G	2/8/24	1545		4	X		X									
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q1-Rev 0		2/8/24	1636							
					2/9/24	1636	9.2	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: AH, JB, AW, BM, LR

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 02/08/24

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

May 27, 2024

Brian Voelker
Vistra - Edwards
604 Pierce Boulevard
O'Fallon, IL 62269

Dear Brian Voelker:

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 General Manager, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Sincerely,

Diane Billings
Project Manager

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

SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order HD05170

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

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

Work Order HE00275

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

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

Work Order HE00566

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

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

ANALYTICAL RESULTS

Sample: HD05170-01
Name: AP05S
Matrix: Ground Water - Grab

Sampled: 04/30/24 16:15
Received: 04/30/24 17:43
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	42	mg/L	Q4	05/13/24 21:56	10	10	05/13/24 21:56	JSM	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		05/13/24 20:19	1	0.250	05/13/24 20:19	JSM	EPA 300.0 REV 2.1
Sulfate	1.2	mg/L		05/13/24 20:19	1	1.0	05/13/24 20:19	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	3.7	Feet		04/30/24 16:15	1		04/30/24 16:15	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		04/30/24 16:15	1		04/30/24 16:15	FIELD	Field*
Oxidation Reduction Potential	-139	mV		04/30/24 16:15	1	-500	04/30/24 16:15	FIELD	Field*
pH, Field Measured	6.74	pH Units		04/30/24 16:15	1		04/30/24 16:15	FIELD	Field*
Specific Conductance, Field Measured	1520	umhos/cm		04/30/24 16:15	1		04/30/24 16:15	FIELD	Field*
Temperature, Field Measured	16.1	°C		04/30/24 16:15	1		04/30/24 16:15	FIELD	Field*
Turbidity, Field Measured	45.1	NTU		04/30/24 16:15	1	0.00	04/30/24 16:15	FIELD	Field*
General Chemistry - PIA									
Solids - total dissolved solids (TDS)	900	mg/L	B2	05/06/24 06:57	1	26	05/06/24 09:12	LAL2	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/02/24 09:22	5	3.0	05/03/24 12:36	TJJ	EPA 6020A
Arsenic	1.2	ug/L		05/02/24 09:22	5	1.0	05/03/24 12:36	TJJ	EPA 6020A
Barium	830	ug/L		05/02/24 09:22	5	1.0	05/03/24 12:36	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 12:36	TJJ	EPA 6020A
Boron	300	ug/L		05/02/24 09:22	5	10	05/07/24 10:19	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 12:36	TJJ	EPA 6020A
Calcium	100	mg/L		05/02/24 09:22	5	0.20	05/03/24 12:36	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/02/24 09:22	5	4.0	05/03/24 12:36	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		05/02/24 09:22	5	2.0	05/03/24 12:36	TJJ	EPA 6020A
Lead	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 12:36	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/02/24 09:22	5	0.20	05/03/24 12:36	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 12:36	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 12:36	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 12:36	TJJ	EPA 6020A
Lithium	28	ug/L		05/02/24 09:22	1	20	05/08/24 12:34	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HD05170-02
Name: AP07S
Matrix: Ground Water - Grab

Sampled: 04/30/24 15:01
Received: 04/30/24 17:43
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	73	mg/L		05/10/24 19:51	50	50	05/10/24 19:51	JSM	EPA 300.0 REV 2.1
Sulfate	520	mg/L		05/13/24 22:15	100	100	05/13/24 22:15	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	23.11	Feet		04/30/24 15:01	1		04/30/24 15:01	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		04/30/24 15:01	1		04/30/24 15:01	FIELD	Field*
Oxidation Reduction Potential	6.00	mV		04/30/24 15:01	1	-500	04/30/24 15:01	FIELD	Field*
pH, Field Measured	6.86	pH Units		04/30/24 15:01	1		04/30/24 15:01	FIELD	Field*
Specific Conductance, Field Measured	1850	umhos/cm		04/30/24 15:01	1		04/30/24 15:01	FIELD	Field*
Temperature, Field Measured	21.2	°C		04/30/24 15:01	1		04/30/24 15:01	FIELD	Field*
Turbidity, Field Measured	8.80	NTU		04/30/24 15:01	1	0.00	04/30/24 15:01	FIELD	Field*
General Chemistry - PIA									
Fluoride	< 0.250	mg/L		05/16/24 14:53	1	0.250	05/16/24 14:53	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	1700	mg/L	B2	05/06/24 06:57	1	26	05/06/24 09:12	LAL2	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/02/24 09:22	5	3.0	05/03/24 13:17	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:17	TJJ	EPA 6020A
Barium	84	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:17	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:17	TJJ	EPA 6020A
Boron	18000	ug/L		05/02/24 09:22	50	100	05/07/24 11:36	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:17	TJJ	EPA 6020A
Calcium	240	mg/L		05/02/24 09:22	5	0.20	05/03/24 13:17	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/02/24 09:22	5	4.0	05/03/24 13:17	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		05/02/24 09:22	5	2.0	05/03/24 13:17	TJJ	EPA 6020A
Lead	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:17	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/02/24 09:22	5	0.20	05/03/24 13:17	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:17	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:17	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:17	TJJ	EPA 6020A
Lithium	< 20	ug/L		05/02/24 09:22	1	20	05/08/24 12:38	LAM	EPA 6010B

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Sample: HD05170-03
Name: AW-01
Matrix: Ground Water - Grab

Sampled: 04/30/24 11:30
Received: 04/30/24 17:43
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	9.6	mg/L		05/10/24 20:08	1	1.0	05/10/24 20:08	JSM	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		05/10/24 20:08	1	0.250	05/10/24 20:08	JSM	EPA 300.0 REV 2.1
Sulfate	50	mg/L		05/10/24 20:59	10	10	05/10/24 20:59	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	11.4	Feet		04/30/24 11:30	1		04/30/24 11:30	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		04/30/24 11:30	1		04/30/24 11:30	FIELD	Field*
Oxidation Reduction Potential	-43.0	mV		04/30/24 11:30	1	-500	04/30/24 11:30	FIELD	Field*
pH, Field Measured	7.20	pH Units		04/30/24 11:30	1		04/30/24 11:30	FIELD	Field*
Specific Conductance, Field Measured	1340	umhos/cm		04/30/24 11:30	1		04/30/24 11:30	FIELD	Field*
Temperature, Field Measured	15.1	°C		04/30/24 11:30	1		04/30/24 11:30	FIELD	Field*
Turbidity, Field Measured	35.8	NTU		04/30/24 11:30	1	0.00	04/30/24 11:30	FIELD	Field*
General Chemistry - PIA									
Solids - total dissolved solids (TDS)	870	mg/L	B2	05/06/24 06:57	1	26	05/06/24 09:12	LAL2	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/02/24 09:22	5	3.0	05/03/24 13:21	TJJ	EPA 6020A
Arsenic	5.3	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:21	TJJ	EPA 6020A
Barium	90	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:21	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:21	TJJ	EPA 6020A
Boron	87	ug/L		05/02/24 09:22	5	10	05/07/24 10:31	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:21	TJJ	EPA 6020A
Calcium	170	mg/L		05/02/24 09:22	5	0.20	05/03/24 13:21	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/02/24 09:22	5	4.0	05/03/24 13:21	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		05/02/24 09:22	5	2.0	05/03/24 13:21	TJJ	EPA 6020A
Lead	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:21	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/02/24 09:22	5	0.20	05/03/24 13:21	TJJ	EPA 6020A
Molybdenum	3.4	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:21	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:21	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:21	TJJ	EPA 6020A
Lithium	< 20	ug/L		05/02/24 09:22	1	20	05/08/24 12:41	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HD05170-04
Name: AW-01 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 04/30/24 11:30
Received: 04/30/24 17:43
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	9.6	mg/L		05/10/24 21:33	1	1.0	05/10/24 21:33	JSM	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		05/10/24 21:33	1	0.250	05/10/24 21:33	JSM	EPA 300.0 REV 2.1
Sulfate	47	mg/L		05/10/24 21:50	10	10	05/10/24 21:50	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	11.4	Feet		04/30/24 11:30	1		04/30/24 11:30	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		04/30/24 11:30	1		04/30/24 11:30	FIELD	Field*
Oxidation Reduction Potential	-43.0	mV		04/30/24 11:30	1	-500	04/30/24 11:30	FIELD	Field*
pH, Field Measured	7.20	pH Units		04/30/24 11:30	1		04/30/24 11:30	FIELD	Field*
Specific Conductance, Field Measured	1340	umhos/cm		04/30/24 11:30	1		04/30/24 11:30	FIELD	Field*
Temperature, Field Measured	15.1	°C		04/30/24 11:30	1		04/30/24 11:30	FIELD	Field*
Turbidity, Field Measured	35.8	NTU		04/30/24 11:30	1	0.00	04/30/24 11:30	FIELD	Field*
General Chemistry - PIA									
Solids - total dissolved solids (TDS)	830	mg/L	B2	05/06/24 06:57	1	26	05/06/24 09:12	LAL2	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/02/24 09:22	5	3.0	05/03/24 13:24	TJJ	EPA 6020A
Arsenic	5.4	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:24	TJJ	EPA 6020A
Barium	90	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:24	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:24	TJJ	EPA 6020A
Boron	84	ug/L		05/02/24 09:22	5	10	05/07/24 10:35	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:24	TJJ	EPA 6020A
Calcium	180	mg/L		05/02/24 09:22	5	0.20	05/03/24 13:24	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/02/24 09:22	5	4.0	05/03/24 13:24	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		05/02/24 09:22	5	2.0	05/03/24 13:24	TJJ	EPA 6020A
Lead	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:24	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/02/24 09:22	5	0.20	05/03/24 13:24	TJJ	EPA 6020A
Molybdenum	3.4	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:24	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:24	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:24	TJJ	EPA 6020A
Lithium	< 20	ug/L		05/02/24 09:22	1	20	05/08/24 12:43	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HD05170-05
Name: AW-05
Matrix: Ground Water - Grab

Sampled: 04/30/24 13:15
Received: 04/30/24 17:43
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	68	mg/L		05/10/24 22:42	50	50	05/10/24 22:42	JSM	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		05/10/24 22:24	1	0.250	05/10/24 22:24	JSM	EPA 300.0 REV 2.1
Sulfate	350	mg/L		05/10/24 22:42	50	50	05/10/24 22:42	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	7.13	Feet		04/30/24 13:15	1		04/30/24 13:15	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		04/30/24 13:15	1		04/30/24 13:15	FIELD	Field*
Oxidation Reduction Potential	-66.0	mV		04/30/24 13:15	1	-500	04/30/24 13:15	FIELD	Field*
pH, Field Measured	7.03	pH Units		04/30/24 13:15	1		04/30/24 13:15	FIELD	Field*
Specific Conductance, Field Measured	1480	umhos/cm		04/30/24 13:15	1		04/30/24 13:15	FIELD	Field*
Temperature, Field Measured	16.1	°C		04/30/24 13:15	1		04/30/24 13:15	FIELD	Field*
Turbidity, Field Measured	509	NTU		04/30/24 13:15	1	0.00	04/30/24 13:15	FIELD	Field*
General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1200	mg/L	B2	05/06/24 06:57	1	26	05/06/24 09:12	LAL2	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/02/24 09:22	5	3.0	05/03/24 13:40	TJJ	EPA 6020A
Arsenic	3.6	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:40	TJJ	EPA 6020A
Barium	110	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:40	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:40	TJJ	EPA 6020A
Boron	4100	ug/L		05/02/24 09:22	5	10	05/07/24 11:05	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:40	TJJ	EPA 6020A
Calcium	160	mg/L		05/02/24 09:22	5	0.20	05/03/24 13:40	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/02/24 09:22	5	4.0	05/03/24 13:40	TJJ	EPA 6020A
Cobalt	2.8	ug/L		05/02/24 09:22	5	2.0	05/03/24 13:40	TJJ	EPA 6020A
Lead	1.9	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:40	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/02/24 09:22	5	0.20	05/03/24 13:40	TJJ	EPA 6020A
Molybdenum	1.9	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:40	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:40	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:40	TJJ	EPA 6020A
Lithium	< 20	ug/L		05/02/24 09:22	1	20	05/08/24 12:44	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HD05170-06
Name: AW-16
Matrix: Ground Water - Grab

Sampled: 04/30/24 16:37
Received: 04/30/24 17:43
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	45	mg/L		05/10/24 23:16	10	10	05/10/24 23:16	JSM	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		05/10/24 22:59	1	0.250	05/10/24 22:59	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		05/10/24 22:59	1	1.0	05/10/24 22:59	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	24.43	Feet		04/30/24 16:37	1		04/30/24 16:37	FIELD	Field*
Dissolved oxygen, Field	0.12	mg/L		04/30/24 16:37	1		04/30/24 16:37	FIELD	Field*
Oxidation Reduction Potential	-138	mV		04/30/24 16:37	1	-500	04/30/24 16:37	FIELD	Field*
pH, Field Measured	6.50	pH Units		04/30/24 16:37	1		04/30/24 16:37	FIELD	Field*
Specific Conductance, Field Measured	2120	umhos/cm		04/30/24 16:37	1		04/30/24 16:37	FIELD	Field*
Temperature, Field Measured	19.7	°C		04/30/24 16:37	1		04/30/24 16:37	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		04/30/24 16:37	1	0.00	04/30/24 16:37	FIELD	Field*
General Chemistry - PIA									
Solids - total dissolved solids (TDS)	1300	mg/L	B2	05/06/24 06:57	1	26	05/06/24 09:12	LAL2	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/02/24 09:22	5	3.0	05/03/24 13:44	TJJ	EPA 6020A
Arsenic	1.2	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:44	TJJ	EPA 6020A
Barium	1200	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:44	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:44	TJJ	EPA 6020A
Boron	440	ug/L		05/02/24 09:22	5	10	05/07/24 11:09	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:44	TJJ	EPA 6020A
Calcium	140	mg/L		05/02/24 09:22	5	0.20	05/03/24 13:44	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/02/24 09:22	5	4.0	05/03/24 13:44	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		05/02/24 09:22	5	2.0	05/03/24 13:44	TJJ	EPA 6020A
Lead	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:44	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/02/24 09:22	5	0.20	05/03/24 13:44	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:44	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:44	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:44	TJJ	EPA 6020A
Lithium	35	ug/L		05/02/24 09:22	1	20	05/08/24 12:45	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HD05170-07
Name: AW-18
Matrix: Ground Water - Grab

Sampled: 04/30/24 13:55
Received: 04/30/24 17:43
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	94	mg/L		05/11/24 00:41	10	10	05/11/24 00:41	JSM	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		05/10/24 23:33	1	0.250	05/10/24 23:33	JSM	EPA 300.0 REV 2.1
Sulfate	2.6	mg/L		05/10/24 23:33	1	1.0	05/10/24 23:33	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	26.49	Feet		04/30/24 13:55	1		04/30/24 13:55	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		04/30/24 13:55	1		04/30/24 13:55	FIELD	Field*
Oxidation Reduction Potential	-134	mV		04/30/24 13:55	1	-500	04/30/24 13:55	FIELD	Field*
pH, Field Measured	6.66	pH Units		04/30/24 13:55	1		04/30/24 13:55	FIELD	Field*
Specific Conductance, Field Measured	1720	umhos/cm		04/30/24 13:55	1		04/30/24 13:55	FIELD	Field*
Temperature, Field Measured	25.4	°C		04/30/24 13:55	1		04/30/24 13:55	FIELD	Field*
Turbidity, Field Measured	31.3	NTU		04/30/24 13:55	1	0.00	04/30/24 13:55	FIELD	Field*
General Chemistry - PIA									
Solids - total dissolved solids (TDS)	980	mg/L	B2	05/06/24 06:57	1	26	05/06/24 09:12	LAL2	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/02/24 09:22	5	3.0	05/03/24 13:48	TJJ	EPA 6020A
Arsenic	3.3	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:48	TJJ	EPA 6020A
Barium	1400	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:48	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:48	TJJ	EPA 6020A
Boron	750	ug/L		05/02/24 09:22	5	10	05/07/24 11:12	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:48	TJJ	EPA 6020A
Calcium	120	mg/L		05/02/24 09:22	5	0.20	05/03/24 13:48	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/02/24 09:22	5	4.0	05/03/24 13:48	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		05/02/24 09:22	5	2.0	05/03/24 13:48	TJJ	EPA 6020A
Lead	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:48	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/02/24 09:22	5	0.20	05/03/24 13:48	TJJ	EPA 6020A
Molybdenum	1.5	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:48	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:48	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:48	TJJ	EPA 6020A
Lithium	24	ug/L		05/02/24 09:22	1	20	05/08/24 12:46	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HD05170-08
Name: AW-19
Matrix: Ground Water - Grab

Sampled: 04/30/24 12:25
Received: 04/30/24 17:43
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	73	mg/L		05/11/24 01:16	10	10	05/11/24 01:16	JSM	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		05/11/24 00:58	1	0.250	05/11/24 00:58	JSM	EPA 300.0 REV 2.1
Sulfate	55	mg/L		05/11/24 01:16	10	10	05/11/24 01:16	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	13.52	Feet		04/30/24 12:25	1		04/30/24 12:25	FIELD	Field*
Dissolved oxygen, Field	0.94	mg/L		04/30/24 12:25	1		04/30/24 12:25	FIELD	Field*
Oxidation Reduction Potential	-93.0	mV		04/30/24 12:25	1	-500	04/30/24 12:25	FIELD	Field*
pH, Field Measured	6.84	pH Units		04/30/24 12:25	1		04/30/24 12:25	FIELD	Field*
Specific Conductance, Field Measured	1090	umhos/cm		04/30/24 12:25	1		04/30/24 12:25	FIELD	Field*
Temperature, Field Measured	20.3	°C		04/30/24 12:25	1		04/30/24 12:25	FIELD	Field*
Turbidity, Field Measured	20.1	NTU		04/30/24 12:25	1	0.00	04/30/24 12:25	FIELD	Field*
General Chemistry - PIA									
Solids - total dissolved solids (TDS)	760	mg/L	B2	05/06/24 06:57	1	26	05/06/24 09:12	LAL2	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/02/24 09:22	5	3.0	05/03/24 13:52	TJJ	EPA 6020A
Arsenic	13	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:52	TJJ	EPA 6020A
Barium	190	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:52	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:52	TJJ	EPA 6020A
Boron	2800	ug/L		05/02/24 09:22	5	10	05/07/24 11:17	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:52	TJJ	EPA 6020A
Calcium	120	mg/L		05/02/24 09:22	5	0.20	05/03/24 13:52	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/02/24 09:22	5	4.0	05/03/24 13:52	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		05/02/24 09:22	5	2.0	05/03/24 13:52	TJJ	EPA 6020A
Lead	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:52	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/02/24 09:22	5	0.20	05/03/24 13:52	TJJ	EPA 6020A
Molybdenum	3.6	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:52	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:52	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:52	TJJ	EPA 6020A
Lithium	< 20	ug/L		05/02/24 09:22	1	20	05/08/24 12:47	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HD05170-09
Name: AW-21
Matrix: Ground Water - Grab

Sampled: 04/30/24 10:50
Received: 04/30/24 17:43
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	60	mg/L		05/11/24 01:51	25	25	05/11/24 01:51	JSM	EPA 300.0 REV 2.1
Fluoride	0.279	mg/L		05/11/24 01:34	1	0.250	05/11/24 01:34	JSM	EPA 300.0 REV 2.1
Sulfate	210	mg/L		05/11/24 01:51	25	25	05/11/24 01:51	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	15.68	Feet		04/30/24 10:50	1		04/30/24 10:50	FIELD	Field*
Dissolved oxygen, Field	5.6	mg/L		04/30/24 10:50	1		04/30/24 10:50	FIELD	Field*
Oxidation Reduction Potential	82.0	mV		04/30/24 10:50	1	-500	04/30/24 10:50	FIELD	Field*
pH, Field Measured	7.70	pH Units		04/30/24 10:50	1		04/30/24 10:50	FIELD	Field*
Specific Conductance, Field Measured	618.0	umhos/cm		04/30/24 10:50	1		04/30/24 10:50	FIELD	Field*
Temperature, Field Measured	18.9	°C		04/30/24 10:50	1		04/30/24 10:50	FIELD	Field*
Turbidity, Field Measured	3.80	NTU		04/30/24 10:50	1	0.00	04/30/24 10:50	FIELD	Field*
General Chemistry - PIA									
Solids - total dissolved solids (TDS)	770	mg/L	B2	05/06/24 06:57	1	26	05/06/24 09:12	LAL2	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/02/24 09:22	5	3.0	05/03/24 13:56	TJJ	EPA 6020A
Arsenic	3.9	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:56	TJJ	EPA 6020A
Barium	79	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:56	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:56	TJJ	EPA 6020A
Boron	9500	ug/L		05/02/24 09:22	5	10	05/07/24 11:20	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:56	TJJ	EPA 6020A
Calcium	100	mg/L		05/02/24 09:22	5	0.20	05/03/24 13:56	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/02/24 09:22	5	4.0	05/03/24 13:56	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		05/02/24 09:22	5	2.0	05/03/24 13:56	TJJ	EPA 6020A
Lead	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:56	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/02/24 09:22	5	0.20	05/03/24 13:56	TJJ	EPA 6020A
Molybdenum	21	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:56	TJJ	EPA 6020A
Selenium	2.6	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:56	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/02/24 09:22	5	1.0	05/03/24 13:56	TJJ	EPA 6020A
Lithium	< 20	ug/L		05/02/24 09:22	1	20	05/08/24 12:49	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HE00275-01
Name: AW-11
Matrix: Ground Water - Grab

Sampled: 05/01/24 14:33
Received: 05/01/24 16:41
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	31	mg/L	Q4	05/13/24 16:42	5	5.0	05/13/24 16:42	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		05/13/24 15:51	1	1.0	05/13/24 15:51	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	5.31	Feet		05/01/24 14:33	1		05/01/24 14:33	FIELD	Field*
Dissolved oxygen, Field	1.4	mg/L		05/01/24 14:33	1		05/01/24 14:33	FIELD	Field*
Oxidation Reduction Potential	-117	mV		05/01/24 14:33	1	-500	05/01/24 14:33	FIELD	Field*
pH, Field Measured	7.09	pH Units		05/01/24 14:33	1		05/01/24 14:33	FIELD	Field*
Specific Conductance, Field Measured	1649	umhos/cm		05/01/24 14:33	1		05/01/24 14:33	FIELD	Field*
Temperature, Field Measured	16.4	°C		05/01/24 14:33	1		05/01/24 14:33	FIELD	Field*
Turbidity, Field Measured	75.4	NTU		05/01/24 14:33	1	0.00	05/01/24 14:33	FIELD	Field*
General Chemistry - PIA									
Fluoride	< 0.250	mg/L		05/14/24 16:56	1	0.250	05/14/24 16:56	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	990	mg/L		05/07/24 09:55	1	26	05/07/24 11:47	MKH	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/06/24 09:17	5	3.0	05/06/24 18:12	TJJ	EPA 6020A
Arsenic	7.7	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:12	TJJ	EPA 6020A
Barium	820	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:12	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:12	TJJ	EPA 6020A
Boron	250	ug/L		05/06/24 09:17	5	10	05/07/24 13:31	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:12	TJJ	EPA 6020A
Calcium	160	mg/L		05/06/24 09:17	5	0.20	05/06/24 18:12	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/06/24 09:17	5	4.0	05/06/24 18:12	TJJ	EPA 6020A
Cobalt	2.2	ug/L		05/06/24 09:17	5	2.0	05/06/24 18:12	TJJ	EPA 6020A
Lead	1.6	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:12	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/06/24 09:17	5	0.20	05/06/24 18:12	TJJ	EPA 6020A
Molybdenum	1.7	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:12	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:12	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:12	TJJ	EPA 6020A
Lithium	21	ug/L		05/06/24 09:17	1	20	05/08/24 13:01	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HE00275-02
Name: AW-14
Matrix: Ground Water - Grab

Sampled: 05/01/24 13:20
Received: 05/01/24 16:41
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	28	mg/L		05/13/24 17:16	5	5.0	05/13/24 17:16	JSM	EPA 300.0 REV 2.1
Sulfate	12	mg/L		05/13/24 17:16	5	5.0	05/13/24 17:16	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	6.3	Feet		05/01/24 13:20	1		05/01/24 13:20	FIELD	Field*
Dissolved oxygen, Field	0.080	mg/L		05/01/24 13:20	1		05/01/24 13:20	FIELD	Field*
Oxidation Reduction Potential	-118	mV		05/01/24 13:20	1	-500	05/01/24 13:20	FIELD	Field*
pH, Field Measured	6.98	pH Units		05/01/24 13:20	1		05/01/24 13:20	FIELD	Field*
Specific Conductance, Field Measured	1714	umhos/cm		05/01/24 13:20	1		05/01/24 13:20	FIELD	Field*
Temperature, Field Measured	15.3	°C		05/01/24 13:20	1		05/01/24 13:20	FIELD	Field*
Turbidity, Field Measured	4.45	NTU		05/01/24 13:20	1	0.00	05/01/24 13:20	FIELD	Field*
General Chemistry - PIA									
Fluoride	< 0.250	mg/L		05/14/24 16:57	1	0.250	05/14/24 16:57	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	990	mg/L		05/07/24 09:55	1	26	05/07/24 11:47	MKH	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/06/24 09:17	5	3.0	05/06/24 18:31	TJJ	EPA 6020A
Arsenic	2.1	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:31	TJJ	EPA 6020A
Barium	600	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:31	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:31	TJJ	EPA 6020A
Boron	260	ug/L		05/06/24 09:17	5	10	05/07/24 13:35	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:31	TJJ	EPA 6020A
Calcium	170	mg/L		05/06/24 09:17	5	0.20	05/06/24 18:31	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/06/24 09:17	5	4.0	05/06/24 18:31	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		05/06/24 09:17	5	2.0	05/06/24 18:31	TJJ	EPA 6020A
Lead	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:31	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/06/24 09:17	5	0.20	05/06/24 18:31	TJJ	EPA 6020A
Molybdenum	1.7	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:31	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:31	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:31	TJJ	EPA 6020A
Lithium	< 20	ug/L		05/06/24 09:17	1	20	05/08/24 13:05	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HE00275-03
Name: AW-15
Matrix: Ground Water - Grab

Sampled: 05/01/24 11:10
Received: 05/01/24 16:41
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	33	mg/L		05/13/24 17:50	5	5.0	05/13/24 17:50	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		05/13/24 17:33	1	1.0	05/13/24 17:33	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	8.19	Feet		05/01/24 11:10	1		05/01/24 11:10	FIELD	Field*
Dissolved oxygen, Field	0.83	mg/L		05/01/24 11:10	1		05/01/24 11:10	FIELD	Field*
Oxidation Reduction Potential	-79.3	mV		05/01/24 11:10	1	-500	05/01/24 11:10	FIELD	Field*
pH, Field Measured	6.82	pH Units		05/01/24 11:10	1		05/01/24 11:10	FIELD	Field*
Specific Conductance, Field Measured	1886	umhos/cm		05/01/24 11:10	1		05/01/24 11:10	FIELD	Field*
Temperature, Field Measured	15.7	°C		05/01/24 11:10	1		05/01/24 11:10	FIELD	Field*
Turbidity, Field Measured	18.3	NTU		05/01/24 11:10	1	0.00	05/01/24 11:10	FIELD	Field*
General Chemistry - PIA									
Fluoride	< 0.250	mg/L		05/14/24 16:58	1	0.250	05/14/24 16:58	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	1000	mg/L		05/07/24 09:55	1	26	05/07/24 11:47	MKH	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/06/24 09:17	5	3.0	05/06/24 18:35	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:35	TJJ	EPA 6020A
Barium	1700	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:35	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:35	TJJ	EPA 6020A
Boron	360	ug/L		05/06/24 09:17	5	10	05/07/24 13:39	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:35	TJJ	EPA 6020A
Calcium	140	mg/L		05/06/24 09:17	5	0.20	05/06/24 18:35	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/06/24 09:17	5	4.0	05/06/24 18:35	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		05/06/24 09:17	5	2.0	05/06/24 18:35	TJJ	EPA 6020A
Lead	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:35	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/06/24 09:17	5	0.20	05/06/24 18:35	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:35	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:35	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:35	TJJ	EPA 6020A
Lithium	29	ug/L		05/06/24 09:17	1	20	05/08/24 13:06	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HE00275-04
Name: AW-15S
Matrix: Ground Water - Grab

Sampled: 05/01/24 12:10
Received: 05/01/24 16:41
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	28	mg/L		05/13/24 18:25	10	10	05/13/24 18:25	JSM	EPA 300.0 REV 2.1
Sulfate	540	mg/L		05/13/24 19:16	100	100	05/13/24 19:16	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	8.87	Feet		05/01/24 12:10	1		05/01/24 12:10	FIELD	Field*
Dissolved oxygen, Field	0.51	mg/L		05/01/24 12:10	1		05/01/24 12:10	FIELD	Field*
Oxidation Reduction Potential	95.4	mV		05/01/24 12:10	1	-500	05/01/24 12:10	FIELD	Field*
pH, Field Measured	6.85	pH Units		05/01/24 12:10	1		05/01/24 12:10	FIELD	Field*
Specific Conductance, Field Measured	1664	umhos/cm		05/01/24 12:10	1		05/01/24 12:10	FIELD	Field*
Temperature, Field Measured	14.1	°C		05/01/24 12:10	1		05/01/24 12:10	FIELD	Field*
Turbidity, Field Measured	2.96	NTU		05/01/24 12:10	1	0.00	05/01/24 12:10	FIELD	Field*
General Chemistry - PIA									
Fluoride	< 0.250	mg/L		05/14/24 16:58	1	0.250	05/14/24 16:58	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	1400	mg/L		05/07/24 09:55	1	26	05/07/24 11:47	MKH	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/06/24 09:17	5	3.0	05/06/24 18:08	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:08	TJJ	EPA 6020A
Barium	78	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:08	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:08	TJJ	EPA 6020A
Boron	5500	ug/L		05/06/24 09:17	5	10	05/07/24 13:47	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:08	TJJ	EPA 6020A
Calcium	260	mg/L		05/06/24 09:17	5	0.20	05/06/24 18:08	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/06/24 09:17	5	4.0	05/06/24 18:08	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		05/06/24 09:17	5	2.0	05/06/24 18:08	TJJ	EPA 6020A
Lead	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:08	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/06/24 09:17	5	0.20	05/06/24 18:08	TJJ	EPA 6020A
Molybdenum	2.5	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:08	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:08	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:08	TJJ	EPA 6020A
Lithium	< 20	ug/L		05/06/24 09:17	1	20	05/08/24 13:07	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HE00275-05
Name: AW-17
Matrix: Ground Water - Grab

Sampled: 05/01/24 15:49
Received: 05/01/24 16:41
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	50	mg/L		05/13/24 19:50	10	10	05/13/24 19:50	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		05/13/24 19:33	1	1.0	05/13/24 19:33	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	25.42	Feet		05/01/24 15:49	1		05/01/24 15:49	FIELD	Field*
Dissolved oxygen, Field	0.050	mg/L		05/01/24 15:49	1		05/01/24 15:49	FIELD	Field*
Oxidation Reduction Potential	-125	mV		05/01/24 15:49	1	-500	05/01/24 15:49	FIELD	Field*
pH, Field Measured	6.84	pH Units		05/01/24 15:49	1		05/01/24 15:49	FIELD	Field*
Specific Conductance, Field Measured	1721	umhos/cm		05/01/24 15:49	1		05/01/24 15:49	FIELD	Field*
Temperature, Field Measured	18.1	°C		05/01/24 15:49	1		05/01/24 15:49	FIELD	Field*
Turbidity, Field Measured	47.4	NTU		05/01/24 15:49	1	0.00	05/01/24 15:49	FIELD	Field*
General Chemistry - PIA									
Fluoride	< 0.250	mg/L		05/14/24 16:59	1	0.250	05/14/24 16:59	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	910	mg/L		05/07/24 09:55	1	26	05/07/24 11:47	MKH	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/06/24 09:17	5	3.0	05/06/24 18:47	TJJ	EPA 6020A
Arsenic	5.3	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:47	TJJ	EPA 6020A
Barium	1300	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:47	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:47	TJJ	EPA 6020A
Boron	410	ug/L		05/06/24 09:17	5	10	05/07/24 13:43	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:47	TJJ	EPA 6020A
Calcium	110	mg/L		05/06/24 09:17	5	0.20	05/06/24 18:47	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/06/24 09:17	5	4.0	05/06/24 18:47	TJJ	EPA 6020A
Cobalt	2.1	ug/L		05/06/24 09:17	5	2.0	05/06/24 18:47	TJJ	EPA 6020A
Lead	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:47	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/06/24 09:17	5	0.20	05/06/24 18:47	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:47	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:47	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/06/24 09:17	5	1.0	05/06/24 18:47	TJJ	EPA 6020A
Lithium	35	ug/L		05/06/24 09:17	1	20	05/08/24 13:11	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HE00566-01
Name: AW-06
Matrix: Ground Water - Grab

Sampled: 05/02/24 11:34
Received: 05/02/24 17:22
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	31	mg/L	Q4	05/13/24 20:58	10	10	05/13/24 20:58	JSM	EPA 300.0 REV 2.1
Fluoride	0.307	mg/L		05/13/24 20:07	1	0.250	05/13/24 20:07	JSM	EPA 300.0 REV 2.1
Sulfate	26	mg/L	Q4	05/13/24 20:58	10	10	05/13/24 20:58	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	26.28	Feet		05/02/24 11:34	1		05/02/24 11:34	FIELD	Field*
Dissolved oxygen, Field	1.6	mg/L		05/02/24 11:34	1		05/02/24 11:34	FIELD	Field*
Oxidation Reduction Potential	-115	mV		05/02/24 11:34	1	-500	05/02/24 11:34	FIELD	Field*
pH, Field Measured	7.05	pH Units		05/02/24 11:34	1		05/02/24 11:34	FIELD	Field*
Specific Conductance, Field Measured	1150	umhos/cm		05/02/24 11:34	1		05/02/24 11:34	FIELD	Field*
Temperature, Field Measured	16.2	°C		05/02/24 11:34	1		05/02/24 11:34	FIELD	Field*
Turbidity, Field Measured	109	NTU		05/02/24 11:34	1	0.00	05/02/24 11:34	FIELD	Field*
General Chemistry - PIA									
Solids - total dissolved solids (TDS)	580	mg/L	B2	05/08/24 12:25	1	17	05/09/24 10:39	MKH	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/08/24 08:57	5	3.0	05/08/24 15:46	TJJ	EPA 6020A
Arsenic	5.7	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:46	TJJ	EPA 6020A
Barium	200	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:23	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:46	TJJ	EPA 6020A
Boron	99	ug/L		05/08/24 08:57	5	10	05/09/24 10:23	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:46	TJJ	EPA 6020A
Calcium	120	mg/L		05/08/24 08:57	5	0.20	05/08/24 15:46	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/08/24 08:57	5	4.0	05/08/24 15:46	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		05/08/24 08:57	5	2.0	05/08/24 15:46	TJJ	EPA 6020A
Lead	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:23	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/08/24 08:57	5	0.20	05/09/24 10:23	TJJ	EPA 6020A
Molybdenum	6.2	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:46	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:46	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:23	TJJ	EPA 6020A
Lithium	< 20	ug/L		05/08/24 08:57	1	20	05/08/24 13:18	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HE00566-02
Name: AW-06 DUP
Matrix: Ground Water - Grab

Sampled: 05/02/24 11:34
Received: 05/02/24 17:22
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	35	mg/L		05/13/24 21:32	10	10	05/13/24 21:32	JSM	EPA 300.0 REV 2.1
Fluoride	0.325	mg/L		05/13/24 21:15	1	0.250	05/13/24 21:15	JSM	EPA 300.0 REV 2.1
Sulfate	20	mg/L		05/13/24 21:32	10	10	05/13/24 21:32	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	26.28	Feet		05/02/24 11:34	1		05/02/24 11:34	FIELD	Field*
Dissolved oxygen, Field	1.6	mg/L		05/02/24 11:34	1		05/02/24 11:34	FIELD	Field*
Oxidation Reduction Potential	-115	mV		05/02/24 11:34	1	-500	05/02/24 11:34	FIELD	Field*
pH, Field Measured	7.05	pH Units		05/02/24 11:34	1		05/02/24 11:34	FIELD	Field*
Specific Conductance, Field Measured	1150	umhos/cm		05/02/24 11:34	1		05/02/24 11:34	FIELD	Field*
Temperature, Field Measured	16.2	°C		05/02/24 11:34	1		05/02/24 11:34	FIELD	Field*
Turbidity, Field Measured	109	NTU		05/02/24 11:34	1	0.00	05/02/24 11:34	FIELD	Field*
General Chemistry - PIA									
Solids - total dissolved solids (TDS)	620	mg/L	B2	05/08/24 12:25	1	17	05/09/24 10:39	MKH	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/08/24 08:57	5	3.0	05/08/24 15:50	TJJ	EPA 6020A
Arsenic	5.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:50	TJJ	EPA 6020A
Barium	200	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:27	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:50	TJJ	EPA 6020A
Boron	94	ug/L		05/08/24 08:57	5	10	05/09/24 10:27	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:50	TJJ	EPA 6020A
Calcium	120	mg/L		05/08/24 08:57	5	0.20	05/08/24 15:50	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/08/24 08:57	5	4.0	05/08/24 15:50	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		05/08/24 08:57	5	2.0	05/08/24 15:50	TJJ	EPA 6020A
Lead	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:27	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/08/24 08:57	5	0.20	05/09/24 10:27	TJJ	EPA 6020A
Molybdenum	6.5	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:50	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:50	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:27	TJJ	EPA 6020A
Lithium	< 20	ug/L		05/08/24 08:57	1	20	05/08/24 13:22	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HE00566-03
Name: AW-08
Matrix: Ground Water - Grab

Sampled: 05/02/24 16:18
Received: 05/02/24 17:22
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	15	mg/L	Q4	05/13/24 23:15	5	5.0	05/13/24 23:15	JSM	EPA 300.0 REV 2.1
Sulfate	1.2	mg/L		05/13/24 21:50	1	1.0	05/13/24 21:50	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	20.86	Feet		05/02/24 16:18	1		05/02/24 16:18	FIELD	Field*
Dissolved oxygen, Field	0.41	mg/L		05/02/24 16:18	1		05/02/24 16:18	FIELD	Field*
Oxidation Reduction Potential	-153	mV		05/02/24 16:18	1	-500	05/02/24 16:18	FIELD	Field*
pH, Field Measured	6.86	pH Units		05/02/24 16:18	1		05/02/24 16:18	FIELD	Field*
Specific Conductance, Field Measured	1610	umhos/cm		05/02/24 16:18	1		05/02/24 16:18	FIELD	Field*
Temperature, Field Measured	21.6	°C		05/02/24 16:18	1		05/02/24 16:18	FIELD	Field*
Turbidity, Field Measured	11.2	NTU		05/02/24 16:18	1	0.00	05/02/24 16:18	FIELD	Field*
General Chemistry - PIA									
Fluoride	< 0.250	mg/L		05/14/24 17:00	1	0.250	05/14/24 17:00	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	610	mg/L	B2	05/08/24 12:25	1	17	05/09/24 10:39	MKH	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/08/24 08:57	5	3.0	05/08/24 15:54	TJJ	EPA 6020A
Arsenic	13	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:54	TJJ	EPA 6020A
Barium	410	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:40	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:54	TJJ	EPA 6020A
Boron	130	ug/L		05/08/24 08:57	5	10	05/09/24 10:40	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:54	TJJ	EPA 6020A
Calcium	140	mg/L		05/08/24 08:57	5	0.20	05/08/24 15:54	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/08/24 08:57	5	4.0	05/08/24 15:54	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		05/08/24 08:57	5	2.0	05/08/24 15:54	TJJ	EPA 6020A
Lead	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:40	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/08/24 08:57	5	0.20	05/09/24 10:40	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:54	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:54	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:40	TJJ	EPA 6020A
Lithium	< 20	ug/L		05/08/24 08:57	1	20	05/08/24 13:25	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HE00566-04
Name: AW-09
Matrix: Ground Water - Grab

Sampled: 05/02/24 12:48
Received: 05/02/24 17:22
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	28	mg/L		05/13/24 23:49	5	5.0	05/13/24 23:49	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		05/13/24 23:32	1	1.0	05/13/24 23:32	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	25.66	Feet		05/02/24 12:48	1		05/02/24 12:48	FIELD	Field*
Dissolved oxygen, Field	1.2	mg/L		05/02/24 12:48	1		05/02/24 12:48	FIELD	Field*
Oxidation Reduction Potential	-139	mV		05/02/24 12:48	1	-500	05/02/24 12:48	FIELD	Field*
pH, Field Measured	6.92	pH Units		05/02/24 12:48	1		05/02/24 12:48	FIELD	Field*
Specific Conductance, Field Measured	1680	umhos/cm		05/02/24 12:48	1		05/02/24 12:48	FIELD	Field*
Temperature, Field Measured	17.9	°C		05/02/24 12:48	1		05/02/24 12:48	FIELD	Field*
Turbidity, Field Measured	27.8	NTU		05/02/24 12:48	1	0.00	05/02/24 12:48	FIELD	Field*
General Chemistry - PIA									
Fluoride	< 0.250	mg/L		05/14/24 17:01	1	0.250	05/14/24 17:01	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	770	mg/L	B2	05/08/24 12:25	1	17	05/09/24 10:39	MKH	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/08/24 08:57	5	3.0	05/08/24 15:58	TJJ	EPA 6020A
Arsenic	26	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:58	TJJ	EPA 6020A
Barium	470	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:44	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:58	TJJ	EPA 6020A
Boron	270	ug/L		05/08/24 08:57	5	10	05/09/24 10:44	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:58	TJJ	EPA 6020A
Calcium	120	mg/L		05/08/24 08:57	5	0.20	05/08/24 15:58	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		05/08/24 08:57	5	4.0	05/08/24 15:58	TJJ	EPA 6020A
Cobalt	2.1	ug/L		05/08/24 08:57	5	2.0	05/08/24 15:58	TJJ	EPA 6020A
Lead	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:44	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/08/24 08:57	5	0.20	05/09/24 10:44	TJJ	EPA 6020A
Molybdenum	15	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:58	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 15:58	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:44	TJJ	EPA 6020A
Lithium	< 20	ug/L		05/08/24 08:57	1	20	05/08/24 13:27	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HE00566-05
Name: AW-10
Matrix: Ground Water - Grab

Sampled: 05/02/24 14:55
Received: 05/02/24 17:22
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	89	mg/L		05/14/24 00:23	10	10	05/14/24 00:23	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		05/14/24 00:06	1	1.0	05/14/24 00:06	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	1.41	Feet		05/02/24 14:55	1		05/02/24 14:55	FIELD	Field*
Dissolved oxygen, Field	0.40	mg/L		05/02/24 14:55	1		05/02/24 14:55	FIELD	Field*
Oxidation Reduction Potential	-140	mV		05/02/24 14:55	1	-500	05/02/24 14:55	FIELD	Field*
pH, Field Measured	6.99	pH Units		05/02/24 14:55	1		05/02/24 14:55	FIELD	Field*
Specific Conductance, Field Measured	2410	umhos/cm		05/02/24 14:55	1		05/02/24 14:55	FIELD	Field*
Temperature, Field Measured	18.7	°C		05/02/24 14:55	1		05/02/24 14:55	FIELD	Field*
Turbidity, Field Measured	343	NTU		05/02/24 14:55	1	0.00	05/02/24 14:55	FIELD	Field*
General Chemistry - PIA									
Fluoride	< 0.250	mg/L		05/14/24 17:02	1	0.250	05/14/24 17:02	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	1200	mg/L	B2	05/08/24 12:25	1	17	05/09/24 10:39	MKH	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/08/24 08:57	5	3.0	05/09/24 10:48	TJJ	EPA 6020A
Arsenic	9.7	ug/L		05/08/24 08:57	5	1.0	05/08/24 16:09	TJJ	EPA 6020A
Barium	900	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:48	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 16:09	TJJ	EPA 6020A
Boron	440	ug/L		05/08/24 08:57	5	10	05/09/24 10:48	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 16:09	TJJ	EPA 6020A
Calcium	130	mg/L		05/08/24 08:57	5	0.20	05/08/24 16:09	TJJ	EPA 6020A
Chromium	14	ug/L		05/08/24 08:57	5	4.0	05/08/24 16:09	TJJ	EPA 6020A
Cobalt	9.6	ug/L		05/08/24 08:57	5	2.0	05/08/24 16:09	TJJ	EPA 6020A
Lead	6.3	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:48	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/08/24 08:57	5	0.20	05/09/24 10:48	TJJ	EPA 6020A
Molybdenum	1.8	ug/L		05/08/24 08:57	5	1.0	05/08/24 16:09	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 16:09	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:48	TJJ	EPA 6020A
Lithium	53	ug/L		05/08/24 08:57	1	20	05/08/24 13:28	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HE00566-06
Name: AW-10 DUP
Matrix: Ground Water - Grab

Sampled: 05/02/24 14:55
Received: 05/02/24 17:22
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	89	mg/L		05/14/24 00:57	10	10	05/14/24 00:57	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		05/14/24 00:40	1	1.0	05/14/24 00:40	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	1.41	Feet		05/02/24 14:55	1		05/02/24 14:55	FIELD	Field*
Dissolved oxygen, Field	0.40	mg/L		05/02/24 14:55	1		05/02/24 14:55	FIELD	Field*
Oxidation Reduction Potential	-140	mV		05/02/24 14:55	1	-500	05/02/24 14:55	FIELD	Field*
pH, Field Measured	6.99	pH Units		05/02/24 14:55	1		05/02/24 14:55	FIELD	Field*
Specific Conductance, Field Measured	2410	umhos/cm		05/02/24 14:55	1		05/02/24 14:55	FIELD	Field*
Temperature, Field Measured	18.7	°C		05/02/24 14:55	1		05/02/24 14:55	FIELD	Field*
Turbidity, Field Measured	343	NTU		05/02/24 14:55	1	0.00	05/02/24 14:55	FIELD	Field*
General Chemistry - PIA									
Fluoride	< 0.250	mg/L		05/14/24 17:03	1	0.250	05/14/24 17:03	ANK	SM 4500F C 1997
Solids - total dissolved solids (TDS)	1200	mg/L	B2	05/08/24 12:25	1	17	05/09/24 10:39	MKH	SM 2540C
Total Metals - PIA									
Antimony	< 3.0	ug/L		05/08/24 08:57	5	3.0	05/09/24 10:52	TJJ	EPA 6020A
Arsenic	10	ug/L		05/08/24 08:57	5	1.0	05/08/24 16:13	TJJ	EPA 6020A
Barium	870	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:52	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 16:13	TJJ	EPA 6020A
Boron	410	ug/L		05/08/24 08:57	5	10	05/09/24 10:52	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 16:13	TJJ	EPA 6020A
Calcium	130	mg/L		05/08/24 08:57	5	0.20	05/08/24 16:13	TJJ	EPA 6020A
Chromium	19	ug/L		05/08/24 08:57	5	4.0	05/08/24 16:13	TJJ	EPA 6020A
Cobalt	12	ug/L		05/08/24 08:57	5	2.0	05/08/24 16:13	TJJ	EPA 6020A
Lead	7.7	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:52	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		05/08/24 08:57	5	0.20	05/09/24 10:52	TJJ	EPA 6020A
Molybdenum	1.8	ug/L		05/08/24 08:57	5	1.0	05/08/24 16:13	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/08/24 16:13	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		05/08/24 08:57	5	1.0	05/09/24 10:52	TJJ	EPA 6020A
Lithium	56	ug/L		05/08/24 08:57	1	20	05/08/24 13:30	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HE00566-08
Name: SG-01
Matrix: Ground Water
Sampled: 04/29/24 12:41
Received: 05/02/24 17:22
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - PIA									
Depth, From Measuring Point	443	Feet		04/29/24 12:41	1		04/29/24 12:41	DAB	Field*

Sample: HE00566-09
Name: XPW01A
Matrix: Ground Water
Sampled: 04/29/24 11:01
Received: 05/02/24 17:22
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - PIA									
Depth, From Measuring Point	10.29	Feet		04/29/24 11:01	1		04/29/24 11:01	DAB	Field*

Sample: HE00566-10
Name: XPW02
Matrix: Ground Water
Sampled: 04/29/24 11:09
Received: 05/02/24 17:22
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - PIA									
Depth, From Measuring Point	18.45	Feet		04/29/24 11:09	1		04/29/24 11:09	DAB	Field*

Sample: HE00566-11
Name: XPW03
Matrix: Ground Water
Sampled: 04/29/24 12:53
Received: 05/02/24 17:22
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - PIA									
Depth, From Measuring Point	15.86	Feet		04/29/24 12:53	1		04/29/24 12:53	DAB	Field*

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B431970 - SW 3015 - EPA 6010B									
Blank (B431970-BLK1)				Prepared: 05/02/24 Analyzed: 05/08/24					
Lithium	< 20	ug/L							
LCS (B431970-BS1)				Prepared: 05/02/24 Analyzed: 05/08/24					
Lithium	560	ug/L		555.6		101	80-120		
Matrix Spike (B431970-MS1)	**Sample: HD05170-01**			Prepared: 05/02/24 Analyzed: 05/08/24					
Lithium	574	ug/L		555.6	27.5	98	75-125		
Matrix Spike Dup (B431970-MSD1)	**Sample: HD05170-01**			Prepared: 05/02/24 Analyzed: 05/08/24					
Lithium	565	ug/L		555.6	27.5	97	75-125	1	20
Batch B431970 - SW 3015 - EPA 6020A									
Blank (B431970-BLK1)				Prepared: 05/02/24 Analyzed: 05/03/24					
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							
Mercury	< 0.20	ug/L							
Molybdenum	< 1.0	ug/L							
Selenium	< 1.0	ug/L							
Thallium	< 1.0	ug/L							
LCS (B431970-BS1)				Prepared: 05/02/24 Analyzed: 05/03/24					
Antimony	563	ug/L		555.6		101	80-120		
Arsenic	544	ug/L		555.6		98	80-120		
Barium	553	ug/L		555.6		100	80-120		
Beryllium	463	ug/L		555.6		83	80-120		
Boron	510	ug/L		555.6		92	80-120		
Cadmium	545	ug/L		555.6		98	80-120		
Calcium	6.05	mg/L		5.556		109	80-120		
Chromium	548	ug/L		555.6		99	80-120		
Cobalt	541	ug/L		555.6		97	80-120		
Lead	550	ug/L		555.6		99	80-120		
Mercury	56.5	ug/L		55.56		102	80-120		
Molybdenum	524	ug/L		555.6		94	80-120		
Selenium	545	ug/L		555.6		98	80-120		
Thallium	516	ug/L		555.6		93	80-120		
Matrix Spike (B431970-MS1)	**Sample: HD05170-01**			Prepared: 05/02/24 Analyzed: 05/03/24					
Antimony	562	ug/L		555.6	ND	101	75-125		
Arsenic	546	ug/L		555.6	1.25	98	75-125		
Barium	1380	ug/L		555.6	834	97	75-125		
Beryllium	457	ug/L		555.6	ND	82	75-125		

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike (B431970-MS1)	**Sample: HD05170-01**			Prepared: 05/02/24 Analyzed: 05/07/24					
Boron	804	ug/L		555.6	301	90	75-125		
Cadmium	546	ug/L		555.6	ND	98	75-125		
Calcium	107	mg/L		5.556	102	98	75-125		
Chromium	545	ug/L		555.6	ND	98	75-125		
Cobalt	538	ug/L		555.6	1.02	97	75-125		
Lead	544	ug/L		555.6	0.450	98	75-125		
Mercury	59.4	ug/L		55.56	ND	107	75-125		
Molybdenum	533	ug/L		555.6	ND	96	75-125		
Selenium	555	ug/L		555.6	ND	100	75-125		
Thallium	520	ug/L		555.6	ND	94	75-125		
Matrix Spike Dup (B431970-MSD1)	**Sample: HD05170-01**			Prepared: 05/02/24 Analyzed: 05/03/24					
Antimony	566	ug/L		555.6	ND	102	75-125	0.9	20
Arsenic	556	ug/L		555.6	1.25	100	75-125	2	20
Barium	1380	ug/L		555.6	834	99	75-125	0.5	20
Beryllium	459	ug/L		555.6	ND	83	75-125	0.3	20
Boron	811	ug/L		555.6	301	92	75-125	0.8	20
Cadmium	555	ug/L		555.6	ND	100	75-125	2	20
Calcium	107	mg/L		5.556	102	93	75-125	0.3	20
Chromium	557	ug/L		555.6	ND	100	75-125	2	20
Cobalt	545	ug/L		555.6	1.02	98	75-125	1	20
Lead	553	ug/L		555.6	0.450	99	75-125	2	20
Mercury	60.2	ug/L		55.56	ND	108	75-125	1	20
Molybdenum	549	ug/L		555.6	ND	99	75-125	3	20
Selenium	567	ug/L		555.6	ND	102	75-125	2	20
Thallium	529	ug/L		555.6	ND	95	75-125	2	20
Batch B432188 - No Prep - SM 2540C									
Blank (B432188-BLK1)				Prepared & Analyzed: 05/06/24					
Solids - total dissolved solids (TDS)	40.0	mg/L							
LCS (B432188-BS1)				Prepared & Analyzed: 05/06/24					
Solids - total dissolved solids (TDS)	1020	mg/L		1000		102	84.9-109		
Duplicate (B432188-DUP1)	**Sample: HD05170-01**			Prepared & Analyzed: 05/06/24					
Solids - total dissolved solids (TDS)	940	mg/L			900			4	5
Batch B432206 - SW 3015 - EPA 6010B									
Blank (B432206-BLK1)				Prepared: 05/06/24 Analyzed: 05/08/24					
Lithium	< 20	ug/L							
LCS (B432206-BS1)				Prepared: 05/06/24 Analyzed: 05/08/24					
Lithium	546	ug/L		555.6		98	80-120		
Matrix Spike (B432206-MS1)	**Sample: HE00275-01**			Prepared: 05/06/24 Analyzed: 05/08/24					
Lithium	569	ug/L		555.6	21.2	99	75-125		
Matrix Spike Dup (B432206-MSD1)	**Sample: HE00275-01**			Prepared: 05/06/24 Analyzed: 05/08/24					
Lithium	568	ug/L		555.6	21.2	98	75-125	0.1	20
Batch B432206 - SW 3015 - EPA 6020A									
Blank (B432206-BLK1)				Prepared & Analyzed: 05/06/24					
Antimony	< 3.0	ug/L							

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (B432206-BLK1)				Prepared & Analyzed: 05/06/24					
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							
Mercury	< 0.20	ug/L							
Molybdenum	< 1.0	ug/L							
Selenium	< 1.0	ug/L							
Thallium	< 1.0	ug/L							
LCS (B432206-BS1)				Prepared & Analyzed: 05/06/24					
Antimony	539	ug/L		555.6		97	80-120		
Arsenic	525	ug/L		555.6		95	80-120		
Barium	539	ug/L		555.6		97	80-120		
Beryllium	571	ug/L		555.6		103	80-120		
Boron	563	ug/L		555.6		101	80-120		
Cadmium	553	ug/L		555.6		99	80-120		
Calcium	6.17	mg/L		5.556		111	80-120		
Chromium	561	ug/L		555.6		101	80-120		
Cobalt	543	ug/L		555.6		98	80-120		
Lead	580	ug/L		555.6		104	80-120		
Mercury	57.0	ug/L		55.56		103	80-120		
Molybdenum	532	ug/L		555.6		96	80-120		
Selenium	545	ug/L		555.6		98	80-120		
Thallium	572	ug/L		555.6		103	80-120		
Matrix Spike (B432206-MS1)	**Sample: HE00275-01**			Prepared & Analyzed: 05/06/24					
Antimony	527	ug/L		555.6	ND	95	75-125		
Arsenic	531	ug/L		555.6	7.67	94	75-125		
Barium	1360	ug/L		555.6	824	96	75-125		
Beryllium	561	ug/L		555.6	ND	101	75-125		
Boron	775	ug/L		555.6	246	95	75-125		
Cadmium	548	ug/L		555.6	ND	99	75-125		
Calcium	160	mg/L		5.556	155	77	75-125		
Chromium	554	ug/L		555.6	ND	100	75-125		
Cobalt	541	ug/L		555.6	2.23	97	75-125		
Lead	565	ug/L		555.6	1.59	101	75-125		
Mercury	58.3	ug/L		55.56	ND	105	75-125		
Molybdenum	552	ug/L		555.6	1.68	99	75-125		
Selenium	539	ug/L		555.6	ND	97	75-125		
Thallium	559	ug/L		555.6	ND	101	75-125		
Matrix Spike Dup (B432206-MSD1)	**Sample: HE00275-01**			Prepared & Analyzed: 05/06/24					
Antimony	528	ug/L		555.6	ND	95	75-125	0.3	20
Arsenic	530	ug/L		555.6	7.67	94	75-125	0.05	20
Barium	1350	ug/L		555.6	824	95	75-125	0.4	20

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike Dup (B432206-MSD1)	**Sample: HE00275-01**			Prepared & Analyzed: 05/06/24					
Beryllium	559	ug/L		555.6	ND	101	75-125	0.5	20
Boron	830	ug/L		555.6	246	105	75-125	7	20
Cadmium	547	ug/L		555.6	ND	98	75-125	0.1	20
Calcium	159	mg/L		5.556	155	76	75-125	0.04	20
Chromium	557	ug/L		555.6	ND	100	75-125	0.6	20
Cobalt	539	ug/L		555.6	2.23	97	75-125	0.3	20
Lead	564	ug/L		555.6	1.59	101	75-125	0.3	20
Mercury	58.7	ug/L		55.56	ND	106	75-125	0.7	20
Molybdenum	544	ug/L		555.6	1.68	98	75-125	1	20
Selenium	540	ug/L		555.6	ND	97	75-125	0.1	20
Thallium	554	ug/L		555.6	ND	100	75-125	1	20
Batch B432344 - No Prep - SM 2540C									
Blank (B432344-BLK1)				Prepared & Analyzed: 05/07/24					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B432344-BS1)				Prepared & Analyzed: 05/07/24					
Solids - total dissolved solids (TDS)	963	mg/L		1000		96	84.9-109		
Duplicate (B432344-DUP1)	**Sample: HE00275-01**			Prepared & Analyzed: 05/07/24					
Solids - total dissolved solids (TDS)	985	mg/L			990			0.5	5
Duplicate (B432344-DUP2)	**Sample: HE00275-05**			Prepared & Analyzed: 05/07/24					
Solids - total dissolved solids (TDS)	925	mg/L			910			2	5
Batch B432465 - SW 3015 - EPA 6010B									
Blank (B432465-BLK1)				Prepared & Analyzed: 05/08/24					
Lithium	< 20	ug/L							
LCS (B432465-BS1)				Prepared & Analyzed: 05/08/24					
Lithium	604	ug/L		555.6		109	80-120		
Matrix Spike (B432465-MS1)	**Sample: HE00566-01**			Prepared & Analyzed: 05/08/24					
Lithium	585	ug/L		555.6	11.9	103	75-125		
Matrix Spike Dup (B432465-MSD1)	**Sample: HE00566-01**			Prepared & Analyzed: 05/08/24					
Lithium	592	ug/L		555.6	11.9	104	75-125	1	20
Batch B432465 - SW 3015 - EPA 6020A									
Blank (B432465-BLK1)				Prepared & Analyzed: 05/08/24					
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							
Mercury	< 0.20	ug/L							
Molybdenum	< 1.0	ug/L							
Selenium	< 1.0	ug/L							

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (B432465-BLK1)				Prepared: 05/08/24 Analyzed: 05/09/24					
Thallium	< 1.0	ug/L							
LCS (B432465-BS1)				Prepared & Analyzed: 05/08/24					
Antimony	539	ug/L		555.6		97	80-120		
Arsenic	543	ug/L		555.6		98	80-120		
Barium	548	ug/L		555.6		99	80-120		
Beryllium	548	ug/L		555.6		99	80-120		
Boron	514	ug/L		555.6		93	80-120		
Cadmium	545	ug/L		555.6		98	80-120		
Calcium	5.39	mg/L		5.556		97	80-120		
Chromium	540	ug/L		555.6		97	80-120		
Cobalt	543	ug/L		555.6		98	80-120		
Lead	536	ug/L		555.6		97	80-120		
Mercury	52.3	ug/L		55.56		94	80-120		
Molybdenum	530	ug/L		555.6		95	80-120		
Selenium	541	ug/L		555.6		97	80-120		
Thallium	555	ug/L		555.6		100	80-120		
Matrix Spike (B432465-MS1)	**Sample: HE00566-01**			Prepared & Analyzed: 05/08/24					
Antimony	550	ug/L		555.6	ND	99	75-125		
Arsenic	566	ug/L		555.6	5.66	101	75-125		
Barium	745	ug/L		555.6	200	98	75-125		
Beryllium	562	ug/L		555.6	ND	101	75-125		
Boron	612	ug/L		555.6	98.8	92	75-125		
Cadmium	566	ug/L		555.6	ND	102	75-125		
Calcium	126	mg/L		5.556	121	104	75-125		
Chromium	556	ug/L		555.6	ND	100	75-125		
Cobalt	544	ug/L		555.6	1.15	98	75-125		
Lead	535	ug/L		555.6	0.806	96	75-125		
Mercury	53.7	ug/L		55.56	ND	97	75-125		
Molybdenum	566	ug/L		555.6	6.15	101	75-125		
Selenium	559	ug/L		555.6	ND	101	75-125		
Thallium	555	ug/L		555.6	ND	100	75-125		
Matrix Spike Dup (B432465-MSD1)	**Sample: HE00566-01**			Prepared & Analyzed: 05/08/24					
Antimony	551	ug/L		555.6	ND	99	75-125	0.4	20
Arsenic	561	ug/L		555.6	5.66	100	75-125	0.8	20
Barium	728	ug/L		555.6	200	95	75-125	2	20
Beryllium	553	ug/L		555.6	ND	100	75-125	2	20
Boron	604	ug/L		555.6	98.8	91	75-125	1	20
Cadmium	562	ug/L		555.6	ND	101	75-125	0.6	20
Calcium	127	mg/L		5.556	121	110	75-125	0.3	20
Chromium	554	ug/L		555.6	ND	100	75-125	0.4	20
Cobalt	549	ug/L		555.6	1.15	99	75-125	0.9	20
Lead	524	ug/L		555.6	0.806	94	75-125	2	20
Mercury	53.2	ug/L		55.56	ND	96	75-125	0.9	20
Molybdenum	564	ug/L		555.6	6.15	100	75-125	0.3	20
Selenium	556	ug/L		555.6	ND	100	75-125	0.5	20
Thallium	545	ug/L		555.6	ND	98	75-125	2	20

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

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B432473 - No Prep - SM 2540C									
Blank (B432473-BLK1)				Prepared: 05/08/24 Analyzed: 05/09/24					
Solids - total dissolved solids (TDS)	20.0	mg/L	B1, B2						
LCS (B432473-BS1)				Prepared: 05/08/24 Analyzed: 05/09/24					
Solids - total dissolved solids (TDS)	990	mg/L		1000		99	84.9-109		
Duplicate (B432473-DUP2)	**Sample: HE00566-01**			Prepared: 05/08/24 Analyzed: 05/09/24					
Solids - total dissolved solids (TDS)	595	mg/L			580			3	5
Batch B432910 - IC No Prep - EPA 300.0 REV 2.1									
Calibration Blank (B432910-CCB1)				Prepared & Analyzed: 05/10/24					
Chloride	0.0792	mg/L							
Sulfate	0.00	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B432910-CCV1)				Prepared & Analyzed: 05/10/24					
Chloride	4.75	mg/L		5.000		95	90-110		
Sulfate	4.86	mg/L		5.000		97	90-110		
Fluoride	5.00	mg/L		5.000		100	90-110		
Batch B432981 - No Prep - SM 4500F C 1997									
Calibration Blank (B432981-CCB1)				Prepared & Analyzed: 05/14/24					
Fluoride	0.0240	mg/L							
Calibration Blank (B432981-CCB2)				Prepared & Analyzed: 05/14/24					
Fluoride	0.0240	mg/L							
Calibration Check (B432981-CCV1)				Prepared & Analyzed: 05/14/24					
Fluoride	0.693	mg/L		0.7000		99	90-110		
Calibration Check (B432981-CCV2)				Prepared & Analyzed: 05/14/24					
Fluoride	0.686	mg/L		0.7000		98	90-110		
Batch B432983 - IC No Prep - EPA 300.0 REV 2.1									
Calibration Blank (B432983-CCB1)				Prepared & Analyzed: 05/13/24					
Chloride	0.104	mg/L							
Sulfate	0.00	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B432983-CCV1)				Prepared & Analyzed: 05/13/24					
Sulfate	5.06	mg/L		5.000		101	90-110		
Chloride	4.99	mg/L		5.000		100	90-110		
Fluoride	5.23	mg/L		5.000		105	90-110		
Matrix Spike (B432983-MS1)	**Sample: HE00275-01**			Prepared & Analyzed: 05/13/24					
Chloride	1.0E9	mg/L	Q4	1.500	31	NR	80-120		
Sulfate	1.53	mg/L		1.500	ND	102	80-120		
Matrix Spike (B432983-MS2)	**Sample: HE00566-01**			Prepared & Analyzed: 05/13/24					
Fluoride	1.86	mg/L		1.500	0.307	104	80-120		
Chloride	1.0E9	mg/L	Q4	1.500	31	NR	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	26.0	NR	80-120		
Matrix Spike (B432983-MS3)	**Sample: HE00566-03**			Prepared & Analyzed: 05/13/24					
Sulfate	2.78	mg/L		1.500	1.16	108	80-120		

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike (B432983-MS3)	**Sample: HE00566-03**			Prepared & Analyzed: 05/13/24					
Chloride	1.0E9	mg/L	Q4	1.500	15	NR	80-120		
Matrix Spike Dup (B432983-MSD1)	**Sample: HE00275-01**			Prepared & Analyzed: 05/13/24					
Chloride	1.0E9	mg/L	Q4	1.500	31	NR	80-120	0	20
Sulfate	1.61	mg/L		1.500	ND	107	80-120	5	20
Matrix Spike Dup (B432983-MSD2)	**Sample: HE00566-01**			Prepared & Analyzed: 05/13/24					
Fluoride	1.85	mg/L		1.500	0.307	103	80-120	0.6	20
Sulfate	1.00E9	mg/L	Q4	1.500	26.0	NR	80-120	0	20
Chloride	1.0E9	mg/L	Q4	1.500	31	NR	80-120	0	20
Matrix Spike Dup (B432983-MSD3)	**Sample: HE00566-03**			Prepared & Analyzed: 05/13/24					
Chloride	1.0E9	mg/L	Q4	1.500	15	NR	80-120	0	20
Sulfate	2.74	mg/L		1.500	1.16	105	80-120	2	20
Batch B432993 - IC No Prep - EPA 300.0 REV 2.1									
Calibration Blank (B432993-CCB1)				Prepared & Analyzed: 05/14/24					
Chloride	0.00	mg/L							
Sulfate	0.00	mg/L							
Fluoride	0.00	mg/L							
Calibration Blank (B432993-CCB2)				Prepared & Analyzed: 05/13/24					
Sulfate	0.00	mg/L							
Chloride	0.805	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B432993-CCV1)				Prepared & Analyzed: 05/13/24					
Chloride	5.40	mg/L		5.000		108	90-110		
Fluoride	5.49	mg/L		5.000		110	90-110		
Sulfate	5.46	mg/L		5.000		109	90-110		
Calibration Check (B432993-CCV2)				Prepared & Analyzed: 05/13/24					
Fluoride	5.18	mg/L		5.000		104	90-110		
Sulfate	5.10	mg/L		5.000		102	90-110		
Chloride	4.92	mg/L		5.000		98	90-110		
Matrix Spike (B432993-MS1)	**Sample: HD05170-01**			Prepared & Analyzed: 05/13/24					
Fluoride	1.39	mg/L		1.500	0.144	83	80-120		
Sulfate	2.69	mg/L		1.500	1.19	100	80-120		
Chloride	< 1.0	mg/L	Q4	1.500	42	NR	80-120		
Matrix Spike Dup (B432993-MSD1)	**Sample: HD05170-01**			Prepared & Analyzed: 05/13/24					
Chloride	< 1.0	mg/L	Q4	1.500	42	NR	80-120		20
Fluoride	1.61	mg/L		1.500	0.144	98	80-120	14	20
Sulfate	2.75	mg/L		1.500	1.19	104	80-120	2	20
Batch B433255 - No Prep - SM 4500F C 1997									
Calibration Blank (B433255-CCB1)				Prepared & Analyzed: 05/16/24					
Fluoride	0.0240	mg/L							
Calibration Blank (B433255-CCB2)				Prepared & Analyzed: 05/16/24					
Fluoride	0.0260	mg/L							
Calibration Check (B433255-CCV1)				Prepared & Analyzed: 05/16/24					
Fluoride	0.692	mg/L		0.7000		99	90-110		
Calibration Check (B433255-CCV2)				Prepared & Analyzed: 05/16/24					
Fluoride	0.690	mg/L		0.7000		99	90-110		

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

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike (B433255-MS1)	**Sample: HD05170-02**			Prepared & Analyzed: 05/16/24					
Fluoride	1.23	mg/L		1.000	0.235	100	80-120		
Matrix Spike Dup (B433255-MSD1)	**Sample: HD05170-02**			Prepared & Analyzed: 05/16/24					
Fluoride	1.27	mg/L		1.000	0.235	103	80-120	3	20

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

NOTES

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

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050
TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615
TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553
Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)
Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)
Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807
USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050
Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Qualifiers

B1	Blank contamination suspected and the sample result is less than Method Reporting Limit.
B2	Contamination does not impact data since sample result is greater than ten times the contamination level found in the blank.
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.

Certified by: Diane Billings, Project Manager

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 of 2

Section A Required Client Information:

Company:	Vistra Corp-Edwards
Address:	7800 Cilco Lane
	Peoria, IL 61607
Email To:	Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911	Fax:
Requested Due Date/TAT:	10 day

Section B Required Project Information:

Report To:	Brian Voelker
Copy To:	Sam Davies-samantha.davies@vistracorp.com
	Mark Davis-Mark.Davis1@vistracorp.com
Purchase Order No.:	
Project Name:	
Project Number:	2285

Section C Invoice Information:

Attention:	Mark Davis
Company Name:	Vistra Corp-Edwards
Address:	see Section A
Quote Reference:	
Project Manager:	
Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S	WT	G	4/30/24	16:15		4	X		X										
2	AP07S	WT	G	4/30/24	15:01		4	X		X										
3	AW-01 (1a DUP 513024)	WT	G	4/30/24	11:30		8	X		X										
4	AW-05	WT	G	4/30/24	13:15		4	X		X										
5	AW-06																			
6	AW-08																			
7	AW-09																			
8	AW-10																			
9	AW-11																			
10	AW-14																			
11	AW-15																			
12	AW-15S																			
13	AW-16	WT	G	4/30/24	16:37		4	N		X										
14	AW-17																			
15	AW-18	WT	G	4/30/24	13:55		4	X		X										
16	AW-19	WT	G	4/30/24	12:25		4	X		X										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q2-Rev 0										
	[signature]	4/30/24	1743	[signature]	4/30/24	1743	5.8	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Austin Mace

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 04/30/24

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 of 2

Section A Required Client Information:

Company:	Vistra Corp-Edwards
Address:	7800 Cilco Lane
	Peoria, IL 61607
Email To:	Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911	Fax:
Requested Due Date/TAT:	10 day

Section B Required Project Information:

Report To:	Brian Voelker
Copy To:	Sam Davies-samantha.davies@vistracorp.com
	Mark Davis-Mark.Davis1@vistracorp.com
Purchase Order No.:	
Project Name:	
Project Number:	2285

Section C Invoice Information:

Attention:	Mark Davis
Company Name:	Vistra Corp-Edwards
Address:	see Section A
Quote Reference:	
Project Manager:	
Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AW-21	WT	G	4/30/24	10:50		4	X		X										
2	XPW01A																			
3	XPW02																			
4	XPW03																			
5	EDW_ylLRIVER																			
6	Field Blank																			
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q2-Rev 0	Austin Moore	4/30/24	1743							
					4/30/24	17:43	5.8	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Austin Moore

SIGNATURE of SAMPLER: Austin Moore

DATE Signed (MM/DD/YY): 04/30/24

HE00275
KM

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 of 2

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Requested Due Date/TAT:	10 day

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Copy To:	Sam Davies-samantha.davies@vistracorp.com
	Mark Davis-Mark.Davis1@vistracorp.com
Purchase Order No.:	
Project Name:	
Project Number:	2285

Section C Invoice Information:

Attention:	Mark Davis
Company Name:	Vistra Corp-Edwards
Address:	see Section A
Quote Reference:	
Project Manager:	
Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S																			
2	AP07S																			
3	AW-01																			
4	AW-05																			
5	AW-06																			
6	AW-08																			
7	AW-09																			
8	AW-10																			
9	AW-11	WT	G	5/1/24	1433		4	X		X							X	X		
10	AW-14	WT	G	5/1/24	1320		4	X		X							X	X		
11	AW-15	WT	G	5/1/24	1110		4	X		X							X	X		
12	AW-15S	WT	G	5/1/24	1210		4	X		X							X	X		
13	AW-16																			
14	AW-17	WT	G	5/1/24	1549		4	X		X							X	X		
15	AW-18																			
16	AW-19																			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
EDW-24Q2-Rev 0		5/1/24	1641				
					5/1/24	1641	5.3 / Y / Y / Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Aaron Pemberton
SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 05/01/24

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Courier

HE005566

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 of 2

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Email To:	Brian.Voelker@VistraCorp.com
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Copy To:	Sam Davies-samantha.davies@vistracorp.com
	Mark Davis-Mark.Davis1@vistracorp.com
Purchase Order No.:	
Project Name:	
Project Number:	2285

Section C Invoice Information:

Attention:	Mark Davis
Company Name:	Vistra Corp-Edwards
Address:	see Section A
Quote Reference:	
Project Manager:	
Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER

UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S																		
2	AP07S																		
3	AW-01																		
4	AW-05																		
5	AW-06 (+DUP)	WT	G	5/2/24	1134		8	X		X									
6	AW-08	WT	G	5/2/24	1618		4	X		X									
7	AW-09	WT	G	5/2/24	1248		4	X		X									
8	AW-10 (+DUP)	WT	G	5/2/24	1455		8	X		X									
9	AW-11																		
10	AW-14																		
11	AW-15																		
12	AW-15S																		
13	AW-16																		
14	AW-17																		
15	AW-18																		
16	AW-19																		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q2-Rev 0		5/2/24	1722							
					5/2/24	1722	4.6	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Aaron Samuelson

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 05/02/24

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 2

Section A Required Client Information:

Company:	Vistra Corp-Edwards
Address:	7800 Cilco Lane
	Peoria, IL 61607
Email To:	Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911	Fax:
Requested Due Date/TAT:	10 day

Section B Required Project Information:

Report To:	Brian Voelker
Copy To:	Sam Davies-samantha.davies@vistracorp.com
	Mark Davis-Mark.Davis1@vistracorp.com
Purchase Order No.:	
Project Name:	
Project Number:	2285

Section C Invoice Information:

Attention:	Mark Davis
Company Name:	Vistra Corp-Edwards
Address:	see Section A
Quote Reference:	
Project Manager:	
Profile #:	

REGULATORY AGENCY

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

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AW-21																			
2	XPW01A																			
3	XPW02																			
4	XPW03																			
5	EDW_ylLRfVER																			
6	Field Blank	WT	G	5/2/24	1630		4	X		X										
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q2-Rev 0		5/2/24	1722				4.6			
					5/2/24	1722	+	X	X/N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Aaron McCarton

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 05/02/24

SAR-3: Episodic Depth to Groundwater Measurements
All DTWs on SAR-3 and SAR-4 must be collected within 24 hours.
Plant: EDW
Event: EDW-24Q2

Well	Unique ID	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
AP08	EDW_AP08	4/29/24	10:54	5.42	DTB: 21.98	AM
AP09	EDW_AP09		12:56	8.54	DTB: 11.91	AM
APW-01	EDW_APW-01		11:39	4.79		AW
AW-14	EDW_AW-14		11:44	6.30		AM
AW-20	EDW_AW-20		10:17	15.53		AW
AW-23	EDW_AW-23		14:13	3.16		AM
OW-01	EDW_OW-01		10:36	21.99	DTB: 38.90	AW
OW-02	EDW_OW-02		12:11	7.35	DTB: 38.79 / Heavy Sediment	AM
PTW-01	EDW_PTW-01		10:32	23.66	DTB: 40.90	
PTW-02	EDW_PTW-02		12:07	7.55	DTB: 40.99	AM

U:6/21/23 GKJ

SAR-4: Depth to Groundwater Measurements - On-site Transducer Downloads

All episodic water levels on SAR-3 and SAR-4 must be collected within a 24 hour period.
Transducer data on SAR-4 form may be collected at anytime during the sampling event.

Plant: EDW
Event: EDW-24Q2

Well	Unique ID	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	On-site Transducer Data					Comments	Initials
						Data Logger Serial No.	Does Data Logger Serial No. Match?	WL Reading on Transducer (ft)	Data down-loaded?	Batt (H/M/L/R)		
AP05S	EDW_AP05#S		4/29/24	11:43	3.71	21629301	yes	439.71	Y	H		AW
AP07S	EDW_AP07#S			10:39	22.92	21615552	Yes	438.14	Y	H		AW
AW-01	EDW_AW-01			11:26	9.87	21615144	Yes	454.76	Y	H		AW
AW-05	EDW_AW-05			10:56	6.45	21615132	Yes	437.05	Y	H		AW
AW-06	EDW_AW-06		4/29/24	10:11	24.92	21615127	yes	435.95	Y	H		AM
AW-08	EDW_AW-08			11:06	21.10	21615722	yes	441.49	Y	M	DTB: 58.16	AW
AW-09	EDW_AW-09			10:35	25.77	21615130	yes	439.92	Y	H		AM
AW-10	EDW_AW-10			11:26	1.31	21615754	yes	439.82	Y	H	DTB: 54.54	AM
AW-11	EDW_AW-11			11:39	5.19	21615129	yes	434.96	Y	H		AM
AW-15	EDW_AW-15			11:59	8.04	21615761	yes	433.97	Y	H		AM
AW-15S	EDW_AW-15#S			12:01	8.94	21629298	yes	431.95	Y	H		AM
AW-16	EDW_AW-16			10:41	24.35	21615714	yes	437.66	Y	H		AM
AW-17	EDW_AW-17			10:25	25.29	21615756	yes	437.07	Y	H		AM
AW-18	EDW_AW-18			10:20	26.45	21615763	yes	436.38	Y	H		AM
AW-19	EDW_AW-19			10:11	13.45	21615718	yes	447.46	Y	H		AW
AW-21	EDW_AW-21			10:21	15.67	21615514	yes	445.19	Y	H		AW

Confidential

SAR-4: Depth to Groundwater Measurements - On-site Transducer Downloads

All episodic water levels on SAR-3 and SAR-4 must be collected within a 24 hour period.
Transducer data on SAR-4 form may be collected at anytime during the sampling event.

Plant: EDW
Event: EDW-24Q2

Well	Unique ID	Unit Name	Date	Time	Measured Depth to Water (ft bmp)	On-site Transducer Data					Comments	Initials
						Data Logger Serial No.	Does Data Logger Serial No. Match?	WL Reading on Transducer (ft)	Data down-loaded?	Batt (H/M/L/R)		
EMW-05	EDW_EMW-05		4/29/24	13:04	18.49	21615739	Yes	439.07	Y	H		AM
XPW01A	EDW_XPW01A_pore		4/29/24	11:01	10.29	21615740	Yes	454.11	Y	H		AM
XPW02	EDW_XPW02_pore		"	11:09	18.45	21615752	Yes	455.53	Y	H		AM
XPW03	EDW_XPW03_pore		"	12:53	15.86	21629300	Yes	450.62	Y	H		AM
SG-01	EDW_yILRIVER		"	12:41	4.43	21768086	Yes	32.94	Y	H		AM

U: 6/21/23 GKJ

Notes:
Batt = battery
bmp = below measuring point
ft = feet
H = high
L = low
M = medium
R = replaced

Site: Edwards Ash Pond

WELL/SAMPLE POINT AP05S **Purge Method:** Compressor

Date: 4/30/24 Start Time: 15:15 Finish/Sample Time: 16:15

Well Depth (Bottom) From MP: _____ ft
Depth to Water From MP: 3.70 ft
Water Column Length: _____ ft
Well Water Volume: _____ Gal / L

Min. Purge Volume: 1000 ~~Gal/L~~ mL
Total Purge Volume: 1200 ~~Gal/L~~ mL
Max Drawdown: _____ ft
Total Drawdown: 0.20 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	15:36	3.85	100	6.78	1480	16.15	-136	0.0	41.7
2	15:39	3.85	100	6.76	1500	16.13	-138	0.0	42.8
3	15:42	3.85	100	6.74	1520	16.12	-139	0.0	45.1
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

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

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

BOTTLE INFORMATION:

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

(4)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
	General (P,500mL)
1	General (P, 1000 mL)

Ferrous Iron — mg/L Final DTW: 3.90

Comments Water level tape: Heron Dipper-T ~~317~~ 3717-T 4/30/24 AW

Sampler's Signature: Andy Watson

Site: Edwards Ash Pond

WELL/SAMPLE POINT AP07S **Purge Method:** Compressor

Date: 4/30/24 Start Time: 13:30 Finish/Sample Time: 15:01

Well Depth (Bottom) From MP: _____ ft
Depth to Water From MP: 23.11 ft
Water Column Length: _____ ft
Well Water Volume: _____ Gal / L

Min. Purge Volume: 1000 Gal / L
Total Purge Volume: 1100 Gal / L
Max Drawdown: _____ ft
Total Drawdown: 0.14 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	13:49	23.29	100	6.90	1710	21.19	10	0.22	8.6
2	13:52	23.32	100	6.88	1780	21.18	6	0.0	0.0
3	13:55	23.32	100	6.87	1830	21.17	6	0.0	15.2
4	13:58	23.32	100	6.86	1850	21.16	6	0.0	8.8
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

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

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	General (P, 1000 mL)
1	P, 2.5L, HNO3

(4)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
	General (P,500mL)
1	General (P, 1000 mL)

~~Ferrous Iron~~ _____ mg/L Final DTW: 23.25

Comments Water level tape: Heron dipper-T 3717-T

Sampler's Signature: Emily Webster

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-01 **Purge Method:** Compressor

Date: ~~4/29/24~~ AW 4/30/24 Start Time: ~~15:10~~ 9:31 4/30/24 AW Finish/Sample Time: 11:30

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1000 Gal / L

Depth to Water From MP: ~~9.80~~ ft 11.40 ft 4/30/24 AW Total Purge Volume: 1100 Gal / L

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L 7.24 AW 4/30/24 Total Drawdown: 14.98 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	~~15:35~~	14.28	100	~~15.08~~	1350	15.08	-36	0.0	57.8
2	~~15:34~~	14.85	100	7.22	1340	15.06	-39	0.0	46.2
3	~~15:39~~	15.54	100	7.20	1340	15.07	-43	0.0	35.8
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

AW 4/30/24 9:47 9:50 9:53

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1+1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1+1	P, 2.5L, HNO3
1+1	General (P, 1000mL)

(8)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
	General (P,500mL)
1+1	General (P, 1000mL)

~~Ferrous Iron~~ _____ mg/L Final DTW: 26.38

Comments Water level tape: Heron Dipper-T ~~3717~~ 3717-T
Field dup. AW 4/30/24

Sampler's Signature: Andy Webster

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-05 **Purge Method:** Compressor

Date: ~~4/30/24~~ 4/30/24 AW Start Time: 11:55 Finish/Sample Time: 13:15

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1000 Gal / L

Depth to Water From MP: 7.13 ft Total Purge Volume: 1100 Gal / L

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: 0.31 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	12:16	7.56	100	7.04	1470	16.14	-53	0.0	725
2	12:19	7.61	100	7.03	1480	16.14	-61	0.0	575
3	12:22	7.61	100	7.03	1480	16.14	-66	0.0	509
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ~~☒ Strong~~ AW 4/30/24

Color ☐ None ☐ Slight ☐ Mod. ☒ Strong

Turb: ☐ None ☐ Slight ☒ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	P, 2.5L HNO3
1	General (P, 1000mL)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
	General (P,500mL)
1	General (P, 1000mL)

(4)

~~Ferrous Iron~~ _____ mg/L Final DTW: 7.44

Comments Water level tape: Heron Dipper-T 3717-T

Sampler's Signature: Trudy Wolstenholme

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-06 **Purge Method:** Dedicated Bladder

Date: 5/2/2024 Start Time: 0932 Finish/Sample Time: 1134

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1000 Gal / L (mL)

Depth to Water From MP: 26.28 ft Total Purge Volume: 1600 Gal / L

Water Column Length: _____ ft Max Drawdown: — ft

Well Water Volume: _____ Gal / L Total Drawdown: 13.06 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	0945	28.48	100	7.04	1160	16.37	-109	1.77	179
2	0948	28.88	100	7.05	1150	16.24	-113	1.65	146
3	0951	29.28	100	7.05	1150	16.18	-115	1.59	109
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1 + 1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1 X 1	General (P, ~~250 mL~~) 1000mL
1 + 1	Rad (P, 2.5L, HNO3)

HLH

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1 + 1	General (P,~~500mL~~) 1000 mL

Ferrous Iron _____ mg/L

Comments Final DTW 39.34 ft Field Dup Filled Here

Sampler's Signature: _____

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-08 **Purge Method:** Peristaltic

Date: 5/2/2024 Start Time: 1459 Finish/Sample Time: 1618

Well Depth (Bottom) From MP:	58.23 ft	Min. Purge Volume:	1000 Gal / L (mL)
Depth to Water From MP:	20.86 ft	Total Purge Volume:	1500 Gal / L (1.5L)
Water Column Length:	37.37 ft	Max Drawdown:	— ft
Well Water Volume:	22.60 Gal / L	Total Drawdown:	7.77 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1511	21.74	100	6.88	1610	21.70	-151	0.60	19.8
2	1514	22.10	100	6.87	1620	21.68	-152	0.52	15.1
3	1517	22.59	100	6.86	1610	21.60	-153	0.41	11.2
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250 mL~~) 1000mL
1	Rad (P, 2.5L, HNO3)

(4)

Filtered Qty	Filtered Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~) 1000 mL

~~Ferrous Iron~~ _____ ~~mg/L~~

Comments Final DTW: 28.63' FH

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-09 **Purge Method:** Dedicated Bladder

Date: 5/2/2024 Start Time: 1142 Finish/Sample Time: 1248

Well Depth (Bottom) From MP:	ft	Min. Purge Volume:	1000 Gal / L (mL)
Depth to Water From MP:	25.66 ft	Total Purge Volume:	1600 Gal / L (mL)
Water Column Length:	ft	Max Drawdown:	— ft
Well Water Volume:	Gal / L	Total Drawdown:	8.92 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1152	27.28	100	6.98	1650	18.06	-134	1.27	24.3
2	1155	27.65	100	6.94	1680	17.98	-136	1.21	27.0
3	1158	28.02	100	6.92	1680	17.91	-139	1.15	27.8
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☑ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250 mL~~ 1000mL)
1	Rad (P, 2.5L, HNO3)

(4)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~ 1000mL

~~Ferrous Iron~~ ~~mg/L~~

Comments Final DTW 34.58

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-10 **Purge Method:** peristaltic w/ dedicated tubing

Date: 5/2/2024 (4/2) Start Time: 1257 Finish/Sample Time: 1455

Well Depth (Bottom) From MP: 33.53 ft (AW 5/1/24) Min. Purge Volume: 1000 Gal / L (mL)

Depth to Water From MP: 1.41 ft Total Purge Volume: 1600 Gal / L (mL)

Water Column Length: 32.12 ft Max Drawdown: — ft

Well Water Volume: 14.43 Gal (1) Total Drawdown: 4.98 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1312	2.60	100	6.97	2400	18.63	-135	0.55	149
2	1315	2.91	100	6.98	2410	18.68	-138	0.47	244
3	1318	3.19	100	6.99	2410	18.72	-140	0.40	343
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☐ None ☑ Slight ☐ Mod. ☐ Strong

Color ☐ None ☑ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☑ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

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

(HH)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1 +1 dup	General (P, ~~500mL~~) 1000mL

~~Ferrous Iron~~ _____ ~~mg/L~~

Comments Final DTW 6.39 AL Field Dup Filled Here

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-11 **Purge Method:** Dedicated bladder

Date: 5/1/24 Start Time: 1329 Finish/Sample Time: 1433

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1000 Gal / mL

Depth to Water From MP: 5.31 ft Total Purge Volume: 1700 Gal / mL

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: 0.05 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1339	5.36	100	7.10	1521.7	16.52	-125.7	1.50	73.56
2	1340	5.36	100	7.10	1607.4	16.68	-122.0	1.41	79.28
3	1342	5.36	100	7.09	1674.8	16.53	-120.3	1.44	71.09
4	1343	5.36	100	7.10	1656.5	16.45	-118.1	1.36	76.51
5	1345	5.36	100	7.09	1649.0	16.41	-117.1	1.38	75.45
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Aquaread 1600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	General P 1000mL
1	Rad P 2.5L

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
	General (P,500mL)
1	General P 1000mL

~~Ferrous Iron~~ _____ mg/L

Comments FDUP: 5.36'

Sampler's Signature: [signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-14 **Purge Method:** Dedicated bladder

Date: 5/1/24 Start Time: 1221 Finish/Sample Time: 1320

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1 Gal (L)

Depth to Water From MP: 6.30 ft Total Purge Volume: 1100 mL Gal / L

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: 8.00 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1229	7.90	100	6.99	1723.6	15.43	-114.3	0.12	6.14
2	1230	8.09	100	6.98	1707.8	15.44	-116.1	0.16	8.19
3	1232	8.33	100	6.98	1713.6	15.31	-118.2	0.08	4.45
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Aquaread 600

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☐ None ☑ Slight ☐ Mod. ☐ Strong

Turb: ☑ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	General P 1000mL
1	Rad P 2.5L

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
	General (P,500mL)
1	General P 1000 mL

~~Ferrous Iron~~ _____ mg/L

Comments FDTW: 14.30'

Sampler's Signature: [signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-15 **Purge Method:** Dedicated Bladder

Date: 5/1/24 Start Time: 1005 Finish/Sample Time: 1110

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

Depth to Water From MP: 8.19 ft Total Purge Volume: 1400 mL Gal / L

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: 0.11 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1016	8.30	100	6.82	1889.6	15.78	-66.3	0.99	14.10
2	1017	8.30	100	6.82	1855.2	15.76	-73.0	0.96	6.41
3	1019	8.30	100	6.82	1885.6	15.70	-79.3	0.83	18.34
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Aquatroll 600

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	General P 1000mL
1	Rad @ 2.5L

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
	General (P,500mL)
1	General P 1000mL

~~Ferrous Iron~~ _____ mg/L

Comments FDTW = 8:30'

Sampler's Signature: [signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-15S **Purge Method:** Dedicated bladder

Date: 5/1/24 Start Time: 1115 Finish/Sample Time: 1210

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1 Gal (L)

Depth to Water From MP: 8.87 ft Total Purge Volume: 1000mL Gal / L

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: 3.47 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1122	9.95	100	6.84	1664.2	14.21	104.4	0.66	3.98
2	1123	10.23	100	6.84	1665.2	14.14	101.6	0.58	3.99
3	1124	10.42	100	6.85	1664.2	14.08	95.4	0.51	2.96
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Aquatroll 600

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☑ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☑ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	General P 1000mL
1	Rad P 2.5L

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
	General (P,500mL)
1	General P 1000mL

~~Ferrous Iron~~ mg/L

Comments FDTU = 12.34'

Sampler's Signature: [signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-16 **Purge Method:** Compressor

Date: 4/30/24 Start Time: 1519 Finish/Sample Time: 1637

Well Depth (Bottom) From MP: _____ ft
Depth to Water From MP: 24.43 ft
Water Column Length: _____ ft
Well Water Volume: _____ Gal / L

Min. Purge Volume: 1 Gal / (D)
Total Purge Volume: 1.9 Gal / (L)
Max Drawdown: _____ ft
Total Drawdown: 0.67 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1536	25.10	100	6.54	2170	19.86	-134	0.25	0.0
2	1539	25.10	↓	6.52	2140	19.85	-136	0.20	0.0
3	1542	25.10	↓	6.98	2150	19.75	-137	0.14	0.0
4	1545	25.10	+	6.50	2120	19.73	-138	0.12	0.0
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

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

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, ~~250 mL~~) 1L
1	Rad (P, 2.5L, HNO3)

(4)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P,~~500mL~~) 1L

Ferrous Iron _____ mg/L

Comments

Sampler's Signature: Austin Mill

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-17 **Purge Method:** Dedicated bladder

Date: 5/1/24 Start Time: 1448 Finish/Sample Time: 1549

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1 Gal / L

Depth to Water From MP: 25.42 ft Total Purge Volume: 1100mL Gal / L

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: 1.20 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1459	25.88	100	6.84	1752.2	18.21	-123.4	0.14	43.91
2	1500	25.94	100	6.84	1743.2	18.15	-123.7	0.08	44.40
3	1502	26.00	100	6.84	1720.8	18.09	-124.8	0.05	47.38
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Aquatroll 600

Sample Appearance:

Odor: ☐ None ☑ Slight ☐ Mod. ☐ Strong

Color ☐ None ☑ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☑ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	General P 1000mL
1	Rad P 2.5L

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
	General (P,500mL)
1	General P 1000 mL

~~Ferrous Iron~~ _____ mg/L

Comments FDTW = 26.62

Sampler's Signature: [signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-18 **Purge Method:** Compressor

Date: 4/30/2024 Start Time: 12:37 Finish/Sample Time: 13:55

Well Depth (Bottom) From MP: 51.87 ft (Top of Pump) Min. Purge Volume: 1000 Gal / L

Depth to Water From MP: 26.49 ft Total Purge Volume: 1900 Gal / L

Water Column Length: 24.78 ft Max Drawdown: ____ ft

Well Water Volume: 15.01 Gal / L Total Drawdown: 2.96 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	13:05	27.96	100	6.75	1710	25.52	-183	0.00	32.0
2	13:08	28.13	100	6.68	1726	25.48	-131	0.00	31.7
3	13:11	28.28	100	6.66	1720	25.41	-134	0.00	31.3
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ■ None □ Slight □ Mod. □ Strong

Color ■ None □ Slight □ Mod. □ Strong

Turb: ■ None □ Slight □ Mod □ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	General (P, 1000 mL)
1	(P, 2.5L, HNO3)

(4)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
	General (P,500mL)
1	General (P, 1000 mL)

~~Ferrous Iron~~ mg/L

Comments Final DTW: 29.45

Sampler's Signature: JBohannon

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-19 **Purge Method:** Compressor

Date: 4/30/2024 Start Time: 11:00 Finish/Sample Time: 1225

Well Depth (Bottom) From MP: 38.60 ft (Top of Pump) Min. Purge Volume: 1000 Gal / L

Depth to Water From MP: 13.52 ft Total Purge Volume: 1900 Gal / L

Water Column Length: 25.08 ft Max Drawdown: ____ ft

Well Water Volume: 15.19 Gal / L Total Drawdown: 3.90 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	11:30	14.62	100	6.96	1100	22.37	-90	1.18	38.3
2	11:33	14.97	100	6.86	1100	22.24	-93	0.98	24.3
3	11:36	15.30	100	6.84	1090	2033	-93	0.94	20.1
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ■ None □ Slight □ Mod. □ Strong

Color ■ None □ Slight □ Mod. □ Strong

Turb: ■ None □ Slight □ Mod □ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	(P, 2.5L
1	(P, 1000mL)

(4)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
	General (P,500mL)
1	(P, 1000mL)

~~Ferrous Iron~~ ____ mg/L

Comments Final DTW: 16.92

Sampler's Signature: JBohannon

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-21 **Purge Method:** Compressor

Date: 4/30/2024 Start Time: 0989 Finish/Sample Time: 10:50

Well Depth (Bottom) From MP: 33.56 ft (Top of Pump) Min. Purge Volume: 1000 Gal / L

Depth to Water From MP: 15.68 ft Total Purge Volume: 2200 Gal / L

Water Column Length: 17.88 ft Max Drawdown: ____ ft

Well Water Volume: 10.83 Gal / L Total Drawdown: 1.48 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	9 59	16:90	100	7.85	591	18.77	64	6.27	2.2
2	10:02	16:97	100	7.80	586	19.08	70	5.54	2.4
3	10:05	16:97	100	7.81	613	18.92	76	5.71	4.2
4	10:08	17:07	100	7.70	618	18.91	82	5.63	3.8
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☑ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☑ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	(P,2.5L, HNO3)
1	General (P, 1000 mL)

4

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
	General (P,500mL)
1	General (P, 1000mL)

~~Ferrous Iron~~ ____ mg/L

Comments Final DTW: 17.16ft

Sampler's Signature: JBohannon

Multiparameter Meter Field Calibration Checklist

Field Personnel:	AW	Location:	Edwards
Weather:	56° - 78° 4mph Wind South	Environment:	grassy, Muddy
Multiparameter Water Meter	Make: Horiba	Model: U-5000	Serial Number: AGJTK4XG
Water Level Meter	Make: Heron	Model: Dipper-T	Serial Number: 3717 - T

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.96	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023067-01	3/14/2025
pH 7.00a	7.01	s.u.	±0.1 s.u.	P	NO		MSI	023051-02	2/21/2025
pH 10.00a	10.06	s.u.	±0.1 s.u.	P	NO		MSI	022361-01	12/27/2024
SC Zero (DI)	0.0	µS/cm	0<25 µS/cm	P	NO		Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2010	µS/cm	±5%	P	NO		Geotech	3GF1197	Jun-24
ORP	240	mV	±15 mV	P	NO		InSitu	3GI1011	Jun-24
DO (Zero pt)	0.0	mg/L	±0.1	P	NO		Macron	#000228049	8/26/2025
DO (Saturated)	98.7%	%	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: 8:35

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	399	s.u.	±0.15 s.u.	P	N/A	Geotech	3GB1049	Feb-25
pH 7.00b	7.08	s.u.	±0.15 s.u.	P		Geotech	2GF113	Jun-24
pH 10.00b	10.01	s.u.	±0.15 s.u.	P		Geotech	3GA1134	Jan-25
SC 1000	1030	µS/cm	±5%	P		Ricca	4209A12	Aug-24

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	4.01	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023067-01	3/14/2025
pH 7.00a	7.03	s.u.	±0.1 s.u.	P	NO		MSI	023051-02	2/21/2025
pH 10.00a	10.04	s.u.	±0.1 s.u.	P	NO		MSI	022361-01	12/27/2024
SC 1000	1020	µS/cm	±5%	P	NO		Ricca	4209A12	Aug-24
DO (Zero pt)	0.0	mg/L	±0.1 mg/L	P	NO		Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	P	NO		Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

Comments:

Signature: [signature] Date: 4/30/24

Multiparameter Meter Field Calibration Checklist

Field Personnel:	Jordan Bohannon	Location:	Edwards Power Plant
Weather:	58-79°F, Sunny, 4mph wind	Environment:	Grass, mud
Multiparameter Water Meter	Make: Horiba	Model: U-5000	Serial Number: WUG83C85
Water Level Meter	Make: Heron	Model: Dipper T	Serial Number: 19FF2202131ML

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.49	s.u.	±0.1 s.u.	F	Yes	4.00	MSI	023067-01	3/14/2025
pH 7.00a	7.20	s.u.	±0.1 s.u.			7.00	MSI	023051-02	2/21/2025
pH 10.00a	10.42	s.u.	±0.1 s.u.			10.00	MSI	022361-01	12/27/2024
SC Zero (DI)	0019	µS/cm	0<25 µS/cm	P	No	N/A	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1970	µS/cm	±5%				Geotech	3GF1197	Jun-24
ORP	232	mV	±15 mV				InSitu	3GI1011	Jun-24
DO (Zero pt)	0.00	mg/L	±0.1				Macron	#000228049	8/26/2025
DO (Saturated)	100%	%	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: 0840			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	3.96	s.u.	±0.15 s.u.	P	None	Geotech	3GB1049	Feb-25
pH 7.00b	6.98	s.u.	±0.15 s.u.			Geotech	2GF113	Jun-24
pH 10.00b	9.97	s.u.	±0.15 s.u.			Geotech	3GA1134	Jan-25
SC 1000	1030	µS/cm	±5%			Ricca	4209A12	Aug-24

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	4.05	s.u.	±0.1 s.u.	P	NO	None	MSI	023067-01	3/14/2025
pH 7.00a	7.08	s.u.	±0.1 s.u.	P			MSI	023051-02	2/21/2025
pH 10.00a	10.09	s.u.	±0.1 s.u.	P			MSI	022361-01	12/27/2024
SC 1000	1040	µS/cm	±5%	P			Ricca	4209A12	Aug-24
DO (Zero pt)	0.00	mg/L	±0.1 mg/L	P			Macron	#000228049	8/26/2025
Turbidity (DI)	0.00	NTU	<2 NTU	P			Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

Comments:

Signature: JBohannon Date: 4/30/2024

Multiparameter Meter Field Calibration Checklist

Field Personnel:	JD, AP	Location:	Edwards Virgin
Weather:	67-76°F pressing wind NNW 7-13 mph	Environment:	grass, weeds
Multiparameter Water Meter	Make: Aquatroll	Model: 600	Serial Number: 739449
Water Level Meter	Make: Heron	Model: Dipper-T	Serial Number: 3717-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	N	NA	MSI	023067-01	3/14/2025
pH 7.00a	7.07	s.u.	±0.1 s.u.	"	"	"	MSI	023051-02	2/21/2025
pH 10.00a	10.08	s.u.	±0.1 s.u.	"	"	"	MSI	022361-01	12/27/2024
SC Zero (DI)	13.92	µS/cm	0<25 µS/cm	"	"	"	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2005.5	µS/cm	±5%	"	"	"	Geotech	3GF1197	Jun-24
ORP	204.1	mV	±15 mV	F	Y	231.9	InSitu	3GI1011	Jun-24
DO (Zero pt)	0.09	mg/L	±0.1	P	N	NA	Macron	#000228049	8/26/2025
DO (Saturated)	98.30	%	97-100%	"	"	"	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.29	NTU	<2 NTU	"	—	"	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 0947			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	3.95	s.u.	±0.15 s.u.	P	NA	Geotech	3GB1049	Feb-25
pH 7.00b	6.93	s.u.	±0.15 s.u.	"	"	Geotech	2GF113	Jun-24
pH 10.00b	10.03	s.u.	±0.15 s.u.	"	"	Geotech	3GA1134	Jan-25
SC 1000	1017.4	µS/cm	±5%	"	"	Ricca	4209A12	Aug-24

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification):					Time:				
Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a		s.u.	±0.1 s.u.				MSI	023067-01	3/14/2025
pH 7.00a		s.u.	±0.1 s.u.				MSI	023051-02	2/21/2025
pH 10.00a		s.u.	±0.1 s.u.				MSI	022361-01	12/27/2024
SC 1000	1021.8	µS/cm	±5%				Ricca	4209A12	Aug-24
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)	0.27	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

Comments:

Signature: [signature] Date: 5/1/24

Multiparameter Meter Field Calibration Checklist

Field Personnel:	JD, AP	Location:	Edwards Ferry
Weather:	67°-86°F Sunny Wind SE 11mph	Environment:	grass, gravel
Multiparameter Water Meter	Make: Hach	Model: U-5000	Serial Number: WJ683C85
Water Level Meter	Make: Heron	Model: Dipper-T	Serial Number: 3717-T

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.63	s.u.	±0.1 s.u.	F	Yes	4.00	MSI	023067-01	3/14/2025
pH 7.00a	7.08	s.u.	±0.1 s.u.	P	NO	–	MSI	023051-02	2/21/2025
pH 10.00a	10.30	s.u.	±0.1 s.u.	F	yes	10.00	MSI	022361-01	12/27/2024
SC Zero (DI)	0.0	µS/cm	0<25 µS/cm	P	Yes	0.0	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1820	µS/cm	±5%	C	Yes	2000	Geotech	3GF1197	Jun-24
ORP	240	mV	±15 mV	P	NO	–	InSitu	3GI1011	Jun-24
DO (Zero pt)	0.09	mg/L	±0.1	P	NO	–	Macron	#000228049	8/26/2025
DO (Saturated)	99.9	%	97-100%	P	NO	–	Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	1.8	NTU	<2 NTU	P	No	–	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

236 @ 20°C

ICV (Initial Calibration Verification) Time: 0903

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.07	s.u.	±0.15 s.u.	P	–	Geotech	3GB1049	Feb-25
pH 7.00b	6.87	s.u.	±0.15 s.u.	P	–	Geotech	2GF113	Jun-24
pH 10.00b	9.89	s.u.	±0.15 s.u.	P	–	Geotech	3GA1134	Jan-25
SC 1000	1000	µS/cm	±5%	P	–	Ricca	4209A12	Aug-24

Approx. every 4 hrs, unless only one well

CCV (Continued Calibration Verification): Time: 1630

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	–	MSI	023067-01	3/14/2025
pH 7.00a	6.93	s.u.	±0.1 s.u.	P	NO	–	MSI	023051-02	2/21/2025
pH 10.00a	9.98	s.u.	±0.1 s.u.	P	NO	–	MSI	022361-01	12/27/2024
SC 1000	1020	µS/cm	±5%	P	NO	–	Ricca	4209A12	Aug-24
DO (Zero pt)	0.09	mg/L	±0.1 mg/L	P	NO	–	Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	P	NO	–	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 4 hrs, unless only one well

Comments:

Signature: [signature] Date: 5/2/2024

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

June 05, 2024

Brian Voelker
Vistra - Edwards
604 Pierce Boulevard
O'Fallon, IL 62269

Dear Brian Voelker:

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 General Manager, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Sincerely,

Diane Billings
Project Manager

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

SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order HD05171

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

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Work Order HE00278

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

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Work Order HE00567

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

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ANALYTICAL RESULTS

Sample: HD05171-01 **Sampled:** 04/30/24 16:15
Name: AP05S **Received:** 04/30/24 17:43
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.06 J	pCi/L			1	1.46	05/23/24 20:56	PACE	904.0 903.0

Sample: HD05171-02 **Sampled:** 04/30/24 15:01
Name: AP07S **Received:** 04/30/24 17:43
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.575	pCi/L			1	0.556	05/23/24 20:56	PACE	904.0 903.0

Sample: HD05171-03 **Sampled:** 04/30/24 11:30
Name: AW-01 **Received:** 04/30/24 17:43
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.483 J	pCi/L			1	0.547	05/23/24 20:56	PACE	904.0 903.0

Sample: HD05171-04 **Sampled:** 04/30/24 11:30
Name: AW-01 DUP **Received:** 04/30/24 17:43
Matrix: Ground Water - Field Duplicate **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.843	pCi/L			1	0.483	05/23/24 20:56	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HD05171-05 **Sampled:** 04/30/24 13:15
Name: AW-05 **Received:** 04/30/24 17:43
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	2.22	pCi/L			1	0.5	05/23/24 20:56	PACE	904.0 903.0

Sample: HD05171-06 **Sampled:** 04/30/24 16:37
Name: AW-16 **Received:** 04/30/24 17:43
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	2.44	pCi/L			1	1.24	05/23/24 20:56	PACE	904.0 903.0

Sample: HD05171-07 **Sampled:** 04/30/24 13:55
Name: AW-18 **Received:** 04/30/24 17:43
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	3.23	pCi/L			1	0.997	05/23/24 20:56	PACE	904.0 903.0

Sample: HD05171-08 **Sampled:** 04/30/24 12:25
Name: AW-19 **Received:** 04/30/24 17:43
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.180 U	pCi/L			1	0.56	05/23/24 20:56	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HD05171-09 **Sampled:** 04/30/24 10:50
Name: AW-21 **Received:** 04/30/24 17:43
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.788	pCi/L			1	0.675	05/23/24 20:56	PACE	904.0 903.0

Sample: HE00278-01 **Sampled:** 05/01/24 14:33
Name: AW-11 **Received:** 05/01/24 16:41
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.78	pCi/L			1	0.499	05/14/24 16:50	PACE	904.0 903.0

Sample: HE00278-02 **Sampled:** 05/01/24 13:20
Name: AW-14 **Received:** 05/01/24 16:41
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	4.49	pCi/L			1	0.568	05/14/24 16:50	PACE	904.0 903.0

Sample: HE00278-03 **Sampled:** 05/01/24 11:10
Name: AW-15 **Received:** 05/01/24 16:41
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	7.02	pCi/L			1	0.646	05/14/24 16:50	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HE00278-04 **Sampled:** 05/01/24 12:10
Name: AW-15S **Received:** 05/01/24 16:41
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.846	pCi/L			1	0.705	05/14/24 16:50	PACE	904.0 903.0

Sample: HE00278-05 **Sampled:** 05/01/24 15:49
Name: AW-17 **Received:** 05/01/24 16:41
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.75	pCi/L			1	0.644	05/14/24 16:50	PACE	904.0 903.0

Sample: HE00567-01 **Sampled:** 05/02/24 11:34
Name: AW-06 **Received:** 05/02/24 17:22
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.77	pCi/L			1	0.515	05/21/24 20:23	PACE	904.0 903.0

Sample: HE00567-02 **Sampled:** 05/02/24 11:34
Name: AW-06 DUP **Received:** 05/02/24 17:22
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.765	pCi/L			1	0.413	05/21/24 20:23	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HE00567-03 **Sampled:** 05/02/24 16:18
Name: AW-08 **Received:** 05/02/24 17:22
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.468 J	pCi/L			1	0.498	05/23/24 20:56	PACE	904.0 903.0

Sample: HE00567-04 **Sampled:** 05/02/24 12:48
Name: AW-09 **Received:** 05/02/24 17:22
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.32 J	pCi/L			1	1.45	05/23/24 20:56	PACE	904.0 903.0

Sample: HE00567-05 **Sampled:** 05/02/24 14:55
Name: AW-10 **Received:** 05/02/24 17:22
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	2.53	pCi/L			1	1.19	05/23/24 20:56	PACE	904.0 903.0

Sample: HE00567-06 **Sampled:** 05/02/24 14:55
Name: AW-10 DUP **Received:** 05/02/24 17:22
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	3.77	pCi/L			1	1.16	05/23/24 20:56	PACE	904.0 903.0

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

ANALYTICAL RESULTS

Sample: HE00567-07
Name: FIELD BLANK
Matrix: DI Water - Field Blank

Sampled: 05/02/24 16:30
Received: 05/02/24 17:22
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.307 J	pCi/L			1	0.611	05/23/24 20:56	PACE	904.0 903.0

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

NOTES

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

* Not a TNI accredited analyte

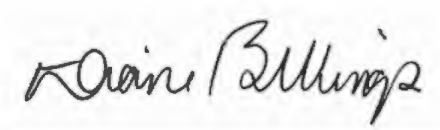
Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050
TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615
TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553
Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)
Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)
Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807
USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050
Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050



Certified by: Diane Billings, Project Manager

ANALYTICAL REPORT

May 31, 2024

Pace IR - Peoria, IL

Sample Delivery Group:	L1732520
Samples Received:	05/03/2024
Project Number:	HD05171
Description:	

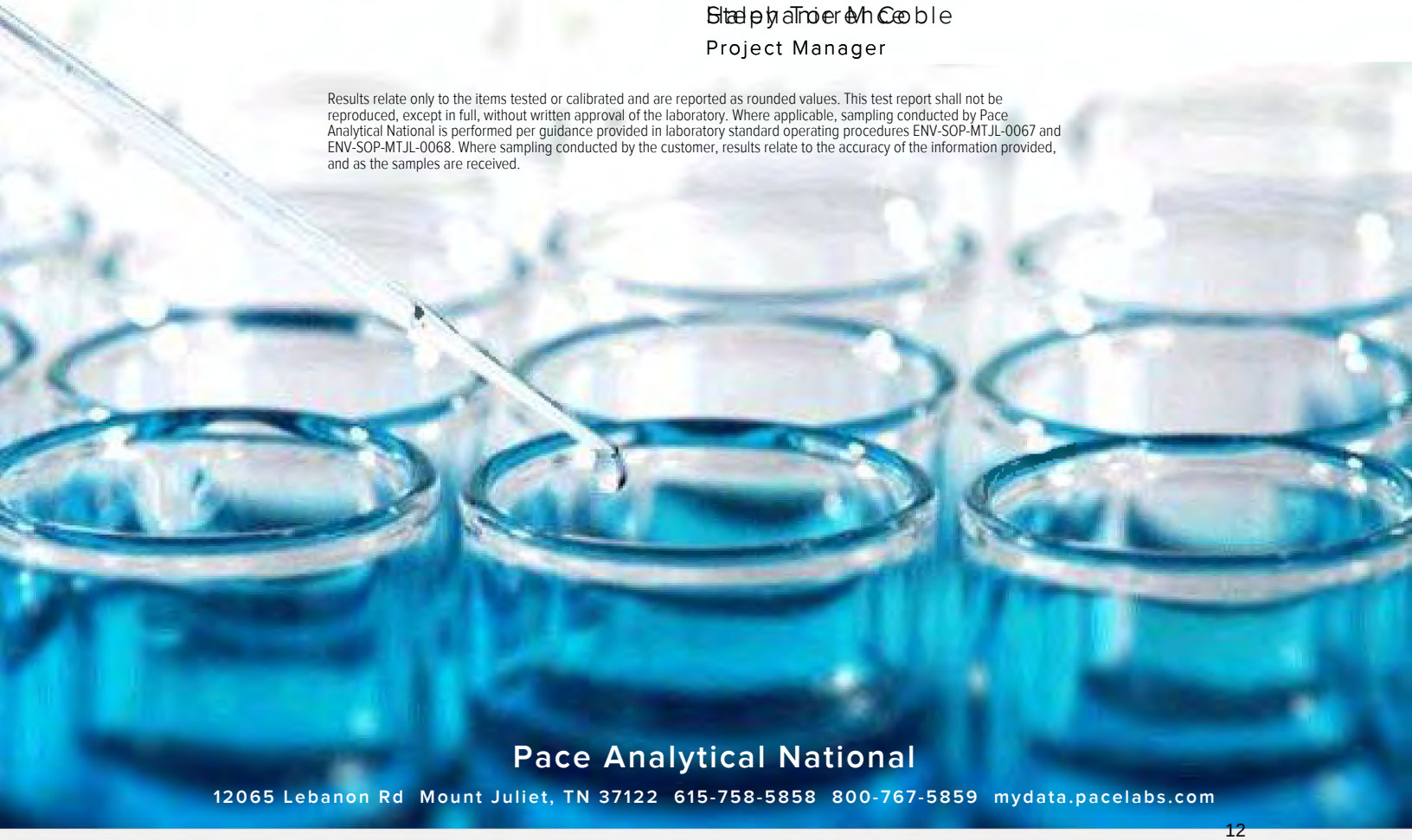
Report To: Diane Billings
2231 W. Altorfer Drive
Peoria, IL 61615

Entire Report Reviewed By:

[Preliminary Report]

Shelby Treverton Cable
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.



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SAMPLE SUMMARY

HD05171-01 L1732520-01 Non-Potable Water

			Collected by	Collected date/time	Received date/time	
				04/30/24 16:15	05/03/24 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2287284	1	05/21/24 08:25	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2289951	1	05/20/24 16:49	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2289951	1	05/20/24 16:49	05/22/24 18:14	ZRG	Mt. Juliet, TN

HD05171-02 L1732520-02 Non-Potable Water

			Collected by	Collected date/time	Received date/time	
				04/30/24 15:01	05/03/24 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2287284	1	05/21/24 08:25	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2289951	1	05/20/24 16:49	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2289951	1	05/20/24 16:49	05/22/24 18:14	ZRG	Mt. Juliet, TN

HD05171-03 L1732520-03 Non-Potable Water

			Collected by	Collected date/time	Received date/time	
				04/30/24 11:30	05/03/24 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2287284	1	05/21/24 08:25	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2289951	1	05/20/24 16:49	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2289951	1	05/20/24 16:49	05/22/24 18:14	ZRG	Mt. Juliet, TN

HD05171-04 L1732520-04 Non-Potable Water

			Collected by	Collected date/time	Received date/time	
				04/30/24 11:30	05/03/24 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2287284	1	05/21/24 08:25	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2289951	1	05/20/24 16:49	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2289951	1	05/20/24 16:49	05/22/24 18:14	ZRG	Mt. Juliet, TN

HD05171-05 L1732520-05 Non-Potable Water

			Collected by	Collected date/time	Received date/time	
				04/30/24 13:15	05/03/24 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2287284	1	05/21/24 08:25	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2289951	1	05/20/24 16:49	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2289951	1	05/20/24 16:49	05/22/24 18:14	ZRG	Mt. Juliet, TN

HD05171-06 L1732520-06 Non-Potable Water

			Collected by	Collected date/time	Received date/time	
				04/30/24 16:37	05/03/24 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2287284	1	05/21/24 08:25	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2289951	1	05/20/24 16:49	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2289951	1	05/20/24 16:49	05/22/24 18:14	ZRG	Mt. Juliet, TN

SAMPLE SUMMARY

HD05171-07 L1732520-07 Non-Potable Water

	Collected by	Collected date/time	Received date/time
		04/30/24 13:55	05/03/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2287284	1	05/21/24 08:25	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2289951	1	05/20/24 16:49	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2289951	1	05/20/24 16:49	05/22/24 18:14	ZRG	Mt. Juliet, TN

HD05171-08 L1732520-08 Non-Potable Water

	Collected by	Collected date/time	Received date/time
		04/30/24 12:25	05/03/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2287284	1	05/21/24 08:25	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2289951	1	05/20/24 16:49	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2289951	1	05/20/24 16:49	05/22/24 18:14	ZRG	Mt. Juliet, TN

HD05171-09 L1732520-09 Non-Potable Water

	Collected by	Collected date/time	Received date/time
		04/30/24 10:50	05/03/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2287284	1	05/21/24 08:25	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2289951	1	05/20/24 16:49	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2289951	1	05/20/24 16:49	05/22/24 18:14	ZRG	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.

[Preliminary Report]

Stephanie M Cobble
Project Manager

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT, ASH POND
EDW-257-301

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	-2.28	U	0.742	0.858	1.41	0.738	05/23/2024 20:56	WG2287284
(T) Barium	*111*					*30.0-143*	*05/23/2024 20:56*	WG2287284
(T) Yttrium	*76.5*					*30.0-136*	*05/23/2024 20:56*	WG2287284

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.06	J	0.866	1.46	05/23/2024 20:56	WG2289951

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	1.06		0.447	0.218	0.381	0.249	05/22/2024 18:14	WG2289951
(T) Barium-133	*97.8*					*30.0-143*	*05/22/2024 18:14*	WG2289951

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT, ASH POND
EDW-257-301

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.0750	U	0.257	0.372	0.468	0.248	05/23/2024 20:56	WG2287284
(T) Barium	*94.1*					*30.0-143*	*05/23/2024 20:56*	WG2287284
(T) Yttrium	*79.7*					*30.0-136*	*05/23/2024 20:56*	WG2287284

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.575		0.411	0.556	05/23/2024 20:56	WG2289951

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.500		0.321	0.136	0.300	0.218	05/22/2024 18:14	WG2289951
(T) Barium-133	*84.3*					*30.0-143*	*05/22/2024 18:14*	WG2289951

HD05171-03 SAMPLE RESULTS - 03

Collected date/time: 04/30/24 11:30 L1732520

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.288	J	0.214	0.319	0.381	0.202	05/23/2024 20:56	WG2287284
(T) Barium	*110*					*30.0-143*	*05/23/2024 20:56*	WG2287284
(T) Yttrium	*89.5*					*30.0-136*	*05/23/2024 20:56*	WG2287284

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.483	J	0.343	0.547	05/23/2024 20:56	WG2289951

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.194	J	0.268	0.0882	0.392	0.277	05/22/2024 18:14	WG2289951
(T) Barium-133	*70.9*					*30.0-143*	*05/22/2024 18:14*	WG2289951

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT, ASH POND
EDW-257-301
L1732520

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.362	J	0.217	0.323	0.384	0.204	05/23/2024 20:56	WG2287284
(T) Barium	*104*					*30.0-143*	*05/23/2024 20:56*	WG2287284
(T) Yttrium	*87.7*					*30.0-136*	*05/23/2024 20:56*	WG2287284

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.843		0.371	0.483	05/23/2024 20:56	WG2289951

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.481		0.301	0.134	0.293	0.205	05/22/2024 18:14	WG2289951
(T) Barium-133	*90.1*					*30.0-143*	*05/22/2024 18:14*	WG2289951

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT, ASH POND
EDW-257-301

L1732520

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.908		0.242	0.347	0.409	0.216	05/23/2024 20:56	WG2287284
(T) Barium	*89.8*					*30.0-143*	*05/23/2024 20:56*	WG2287284
(T) Yttrium	*99.6*					*30.0-136*	*05/23/2024 20:56*	WG2287284

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	2.22		0.532	0.500	05/23/2024 20:56	WG2289951

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	1.32		0.474	0.224	0.288	0.206	05/22/2024 18:14	WG2289951
(T) Barium-133	*90.6*					*30.0-143*	*05/22/2024 18:14*	WG2289951

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT, ASH POND
EDW-257-301

L1732520

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.142	U	0.659	0.777	1.20	0.632	05/23/2024 20:56	WG2287284
(T) Barium	*115*					*30.0-143*	*05/23/2024 20:56*	WG2287284
(T) Yttrium	*73.6*					*30.0-136*	*05/23/2024 20:56*	WG2287284

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	2.44		0.895	1.24	05/23/2024 20:56	WG2289951

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	2.30		0.605	0.267	0.297	0.208	05/22/2024 18:14	WG2289951
(T) Barium-133	*82.7*					*30.0-143*	*05/22/2024 18:14*	WG2289951

HD05171-07 SAMPLE RESULTS - 07

Collected date/time: 04/30/24 13:55 L1732520

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	2.29		0.573	0.676	0.964	0.508	05/23/2024 20:56	WG2287284
(T) Barium	*112*					*30.0-143*	*05/23/2024 20:56*	WG2287284
(T) Yttrium	*92.4*					*30.0-136*	*05/23/2024 20:56*	WG2287284

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	3.23		0.675	0.997	05/23/2024 20:56	WG2289951

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.943		0.356	0.175	0.256	0.174	05/22/2024 18:14	WG2289951
(T) Barium-133	*95.9*					*30.0-143*	*05/22/2024 18:14*	WG2289951

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

HD05171-08 SAMPLE RESULTS - 08

Collected date/time: 04/30/24 12:25 L1732520

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.0112	U	0.271	0.370	0.489	0.255	05/23/2024 20:56	WG2287284
(T) Barium	*123*					*30.0-143*	*05/23/2024 20:56*	WG2287284
(T) Yttrium	*99.7*					*30.0-136*	*05/23/2024 20:56*	WG2287284

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.180	U	0.338	0.560	05/23/2024 20:56	WG2289951

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.180	J	0.202	0.0888	0.272	0.188	05/22/2024 18:14	WG2289951
(T) Barium-133	*94.0*					*30.0-143*	*05/22/2024 18:14*	WG2289951

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

HD05171-09 SAMPLE RESULTS - 09

Collected date/time: 04/30/24 10:50 L1732520

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.115	U	0.239	0.341	0.430	0.226	05/23/2024 20:56	WG2287284
(T) Barium	*112*					*30.0-143*	*05/23/2024 20:56*	WG2287284
(T) Yttrium	*94.9*					*30.0-136*	*05/23/2024 20:56*	WG2287284

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.788		0.529	0.675	05/23/2024 20:56	WG2289951

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.673		0.472	0.150	0.520	0.349	05/22/2024 18:14	WG2289951
(T) Barium-133	*66.1*					*30.0-143*	*05/22/2024 18:14*	WG2289951

WG2287284 QUALITY CONTROL SUMMARY

Radiochemistry by Method 904/9320

L1732520-01,02,03,04,05,06,07,08,09

Method Blank (MB)

(MB) R4074757-1 05/23/24 20:56

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	-0.152	U	0.198	0.363	0.190
(T) Barium	*110*		*110*		
(T) Yttrium	*91.5*		*91.5*		

L1732520-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1732520-03 05/23/24 20:56 • (DUP) R4074757-5 05/23/24 20:56

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.288	0.214	0.381	0.202	0.770	0.282	0.486	0.260	91.1	1.36		20	3
(T) Barium	*110*				*113*	*113*							
(T) Yttrium	*89.5*				*88.2*	*88.2*							

Laboratory Control Sample (LCS)

(LCS) R4074757-2 05/23/24 20:56

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.67	113	80.0-120	
(T) Barium			*103*		
(T) Yttrium			*88.6*		

L1732520-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1732520-02 05/23/24 20:56 • (MS) R4074757-3 05/23/24 20:56 • (MSD) R4074757-4 05/23/24 20:56

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	0.0750	18.2	17.4	108	104	1	70.0-130			4.27		20
(T) Barium		*94.1*			*98.6*	*97.7*							
(T) Yttrium		*79.7*			*95.1*	*90.6*							

QUALITY CONTROL SUMMARY

Radiochemistry by Method SM7500Ra B M

L1732520-01,02,03,04,05,06,07,08,09

Method Blank (MB)

(MB) R4073809-1 05/22/24 18:14

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	-0.0167	U	0.0432	0.102	0.0693
(T) Barium-133	*72.7*		*72.7*		

L1732520-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1732520-02 05/22/24 18:14 • (DUP) R4073809-5 05/22/24 18:14

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.500	0.321	0.300	0.218	1.12	0.446	0.377	0.244	76.5	1.13		20	3
(T) Barium-133	*84.3*				*82.8*	*82.8*							

Laboratory Control Sample (LCS)

(LCS) R4073809-2 05/22/24 18:14

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.45	109	80.0-120	
(T) Barium-133			*53.5*		

L1732520-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1732520-09 05/22/24 18:14 • (MS) R4073809-3 05/22/24 18:14 • (MSD) R4073809-4 05/22/24 18:14

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	0.673	19.4	20.8	93.6	101	1	75.0-125			7.11		20
(T) Barium-133		*66.1*			*53.7*	*80.8*							

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	LAO000356
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.

SUBCONTRACT ORDER
Transfer Chain of Custody

1232

Pace Analytical Services, LLC

HD05171

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L1732527

Sample: HD05171-01 -01
Name: AP05S
Sampled: 04/30/24 16:15
Matrix: Ground Water
Preservative: HNO3, pH <2

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/13/24 16:00	10/27/24 16:15	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HD05171-02 -02
Name: AP07S
Sampled: 04/30/24 15:01
Matrix: Ground Water
Preservative: HNO3, pH <2

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/13/24 16:00	10/27/24 15:01	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HD05171-03 -03
Name: AW-01
Sampled: 04/30/24 11:30
Matrix: Ground Water
Preservative: HNO3, pH <2

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/13/24 16:00	10/27/24 11:30	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HD05171-04 -04
Name: AW-01 DUP
Sampled: 04/30/24 11:30
Matrix: Ground Water
Preservative: HNO3, pH <2

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/13/24 16:00	10/27/24 11:30	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

OK

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HD05171

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L1732529

Sample: HD05171-05 -05
Name: AW-05
Sampled: 04/30/24 13:15
Matrix: Ground Water
Preservative: HNO3, pH <2

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/13/24 16:00	10/27/24 13:15	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HD05171-06 -06
Name: AW-16
Sampled: 04/30/24 16:37
Matrix: Ground Water
Preservative: HNO3, pH <2

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/13/24 16:00	10/27/24 16:37	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HD05171-07 -07
Name: AW-18
Sampled: 04/30/24 13:55
Matrix: Ground Water
Preservative: HNO3, pH <2

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/13/24 16:00	10/27/24 13:55	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HD05171-08 -08
Name: AW-19
Sampled: 04/30/24 12:25
Matrix: Ground Water
Preservative: HNO3, pH <2

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/13/24 16:00	10/27/24 12:25	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

OK

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HD05171

4732520

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

Sample: HD05171-09
Name: AW-21

Sampled: 04/30/24 10:50
Matrix: Ground Water
Preservative: HNO3, pH <2

-09

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/13/24 16:00	10/27/24 10:50	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample Receipt Checklist — total 9

			If Applicable	
COC Seal Present/Intact:	Y N		VOA Zero Headspace:	Y N
COC Signed/Accurate:	Y N		Pres. Correct/Check:	Y N
Bottles arrive intact:	Y N			
Correct bottles used:	Y N			
Sufficient volume sent:	Y N			
RA Screen <0.5 mR/hr:	Y N	776203075007		

DIC

Please email results to Diane Billings at diane.billings@pacelabs.com

Date Shipped: 5/2/24 Total # of Containers: 9 Sample Origin (State): IL PO #: _____

Turn-Around Time Requested ☐ NORMAL ☐ RUSH Date Results Needed: _____

Relinquished By	Date/Time	Received By	Date/Time
	5/2/24 0850		0900 05-03-24

Sample Temperature Upon Receipt	20.1 to 20.2 °C
Sample(s) Received on Ice	Y or N
Proper Bottles Received in Good Condition	Y or N
Bottles Filled with Adequate Volume	Y or N
Samples Received Within Hold Time	Y or N
Date/Time Taken From Sample Bottle	Y or N

ANALYTICAL REPORT

May 20, 2024

Revised Report

Pace IR - Peoria, IL

Sample Delivery Group:	L1732347
Samples Received:	05/03/2024
Project Number:	
Description:	

Report To: Diane Billings
2231 W. Altorfer Drive
Peoria, IL 61615

Entire Report Reviewed By:

[Preliminary Report]

Haley Torrence
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.

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SAMPLE SUMMARY

HE00278-01 L1732347-01 Non-Potable Water

Collected by	Collected date/time	Received date/time
	05/01/24 14:33	05/03/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2283150	1	05/09/24 13:13	05/14/24 16:50	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2281006	1	05/06/24 12:24	05/14/24 16:50	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2281006	1	05/06/24 12:24	05/09/24 12:14	ZRG	Mt. Juliet, TN

HE00278-02 L1732347-02 Non-Potable Water

Collected by	Collected date/time	Received date/time
	05/01/24 13:20	05/03/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2283150	1	05/09/24 13:13	05/14/24 16:50	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2281006	1	05/06/24 12:24	05/14/24 16:50	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2281006	1	05/06/24 12:24	05/09/24 12:14	ZRG	Mt. Juliet, TN

HE00278-03 L1732347-03 Non-Potable Water

Collected by	Collected date/time	Received date/time
	05/01/24 11:10	05/03/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2283150	1	05/09/24 13:13	05/14/24 16:50	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2281006	1	05/06/24 12:24	05/14/24 16:50	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2281006	1	05/06/24 12:24	05/09/24 12:14	ZRG	Mt. Juliet, TN

HE00278-04 L1732347-04 Non-Potable Water

Collected by	Collected date/time	Received date/time
	05/01/24 12:10	05/03/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2283150	1	05/09/24 13:13	05/14/24 16:50	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2281006	1	05/06/24 12:24	05/14/24 16:50	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2281006	1	05/06/24 12:24	05/09/24 12:14	ZRG	Mt. Juliet, TN

HE00278-05 L1732347-05 Non-Potable Water

Collected by	Collected date/time	Received date/time
	05/01/24 15:49	05/03/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2283150	1	05/09/24 13:13	05/14/24 16:50	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2281006	1	05/06/24 12:24	05/14/24 16:50	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2281006	1	05/06/24 12:24	05/09/24 12:14	ZRG	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.

[Preliminary Report]

Haley Torrence
Project Manager

Report Revision History

Level II Report - Version 1: 05/17/24 16:25

Project Narrative

HE00278-01 SAMPLE RESULTS - 01

Collected date/time: 05/01/24 14:33 L1732347

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.12		0.245	0.392	0.417	0.219	05/14/2024 16:50	WG2283150
(T) Barium	*112*					*30.0-143*	*05/14/2024 16:50*	WG2283150
(T) Yttrium	*108*					*30.0-136*	*05/14/2024 16:50*	WG2283150

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.78		0.411	0.499	05/14/2024 16:50	WG2281006

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.667		0.330	0.160	0.274	0.192	05/09/2024 12:14	WG2281006
(T) Barium-133	*96.4*					*30.0-143*	*05/09/2024 12:14*	WG2281006

HE00278-02 SAMPLE RESULTS - 02

Collected date/time: 05/01/24 13:20 L1732347

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	3.38		0.322	0.598	0.495	0.259	05/14/2024 16:50	WG2283150
(T) Barium	*109*					*30.0-143*	*05/14/2024 16:50*	WG2283150
(T) Yttrium	*86.1*					*30.0-136*	*05/14/2024 16:50*	WG2283150

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	4.49		0.539	0.568	05/14/2024 16:50	WG2281006

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	1.12		0.432	0.209	0.279	0.200	05/09/2024 12:14	WG2281006
(T) Barium-133	*93.4*					*30.0-143*	*05/09/2024 12:14*	WG2281006

HE00278-05 SAMPLE RESULTS - 03

Collected date/time: 05/01/24 11:10 L1732347

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	4.09		0.379	0.704	0.581	0.304	05/14/2024 16:50	WG2283150
(T) Barium	*84.9*					*30.0-143*	*05/14/2024 16:50*	WG2283150
(T) Yttrium	*87.8*					*30.0-136*	*05/14/2024 16:50*	WG2283150

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	7.02		0.763	0.646	05/14/2024 16:50	WG2281006

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	2.93		0.662	0.313	0.282	0.198	05/09/2024 12:14	WG2281006
(T) Barium-133	*87.1*					*30.0-143*	*05/09/2024 12:14*	WG2281006

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.619	J	0.350	0.480	0.625	0.327	05/14/2024 16:50	WG2283150
(T) Barium	*79.6*					*30.0-143*	*05/14/2024 16:50*	WG2283150
(T) Yttrium	*91.4*					*30.0-136*	*05/14/2024 16:50*	WG2283150

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.846		0.427	0.705	05/14/2024 16:50	WG2281006

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.227	J	0.245	0.0857	0.327	0.222	05/09/2024 12:14	WG2281006
(T) Barium-133	*75.0*					*30.0-143*	*05/09/2024 12:14*	WG2281006

HE00278-05 SAMPLE RESULTS - 05

Collected date/time: 05/01/24 15:49 L1732347

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.811		0.331	0.461	0.584	0.303	05/14/2024 16:50	WG2283150
(T) Barium	*94.9*					*30.0-143*	*05/14/2024 16:50*	WG2283150
(T) Yttrium	*97.3*					*30.0-136*	*05/14/2024 16:50*	WG2283150

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.75		0.501	0.644	05/14/2024 16:50	WG2281006

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.940		0.376	0.181	0.271	0.187	05/09/2024 12:14	WG2281006
(T) Barium-133	*94.4*					*30.0-143*	*05/09/2024 12:14*	WG2281006

WG2283150 QUALITY CONTROL SUMMARY

Radiochemistry by Method 904/9320 L1732347-01,02,03,04,05

Method Blank (MB)

(MB) R4070256-1 05/14/24 16:50

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	-0.248	U	0.198	0.372	0.194
(T) Barium	*102*		*102*		
(T) Yttrium	*89.5*		*89.5*		

L1732347-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1732347-04 05/14/24 16:50 • (DUP) R4070256-5 05/14/24 16:50

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.619	0.350	0.625	0.327	-0.300	0.322	0.611	0.323	200	1.93	U	20	3
(T) Barium	*79.6*				*84.0*	*84.0*							
(T) Yttrium	*91.4*				*97.9*	*97.9*							

Laboratory Control Sample (LCS)

(LCS) R4070256-2 05/14/24 16:50

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.61	92.3	80.0-120	
(T) Barium			*111*		
(T) Yttrium			*101*		

L1732366-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1732366-01 05/14/24 16:50 • (MS) R4070256-3 05/14/24 16:50 • (MSD) R4070256-4 05/14/24 16:50

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	0.664	16.8	18.7	96.4	108	1	70.0-130			10.8		20
(T) Barium		*101*			*112*	*118*							
(T) Yttrium		*94.9*			*91.2*	*78.2*							

Radiochemistry by Method SM7500Ra-B M

Method Blank (MB)

(MB) R4067868-1 05/09/24 12:14

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	-0.0305	U	0.0556	0.131	0.0863
(T) Barium-133	*70.2*		*70.2*		

L1727514-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1727514-05 05/09/24 12:14 • (DUP) R4067868-5 05/09/24 12:14

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.654	0.365	0.283	0.215	0.197	0.271	0.394	0.264	108	1.01	J	20	3
(T) Barium-133	*79.3*				*87.4*	*87.4*							

Laboratory Control Sample (LCS)

(LCS) R4067868-2 05/09/24 12:14

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.38	108	80.0-120	
(T) Barium-133			*85.9*		

L1727514-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1727514-03 05/09/24 12:14 • (MS) R4067868-3 05/09/24 12:14 • (MSD) R4067868-4 05/09/24 12:14

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	-0.0347	22.4	20.8	112	104	1	75.0-125			7.41		20
(T) Barium-133		*67.4*			*75.3*	*86.8*							

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	LAO000356
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.

SUBCONTRACT ORDER
Transfer Chain of Custody

B024

Pace Analytical Services, LLC
HE00278

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L732347

Sample: HE00278-01
Name: AW-11

Sampled: 05/01/24 14:33
Matrix: Ground Water
Preservative: HNO3, pH <2

-01

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/14/24 16:00	10/28/24 14:33	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HE00278-02
Name: AW-14

Sampled: 05/01/24 13:20
Matrix: Ground Water
Preservative: HNO3, pH <2

-02

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/14/24 16:00	10/28/24 13:20	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HE00278-03
Name: AW-15

Sampled: 05/01/24 11:10
Matrix: Ground Water
Preservative: HNO3, pH <2

-03

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/14/24 16:00	10/28/24 11:10	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HE00278-04
Name: AW-15S

Sampled: 05/01/24 12:10
Matrix: Ground Water
Preservative: HNO3, pH <2

-04

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/14/24 16:00	10/28/24 12:10	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample Receipt Checklist

		If Applicable	
COC Seal Present/Intact:	Y N	VOA Zero Headspace:	Y N
COC Signed/Accurate:	Y N	Pres. Correct/Check:	Y N
Bottles arrive intact:	Y N		
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
RA Screen <0.5 mR/hr:	Y N		

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HE00278

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L732347

Sample: HE00278-05
Name: AW-17

Sampled: 05/01/24 15:49
Matrix: Ground Water
Preservative: HNO3, pH <2

-05

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/14/24 16:00	10/28/24 15:49	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

TCAS
18.740.1 = 18.8

Please email results to Diane Billings at diane.billings@pacelabs.com

Date Shipped: 5/2/24 Total # of Containers: 5 Sample Origin (State): IL PO #: _____

Turn-Around Time Requested ☐ NORMAL ☐ RUSH Date Results Needed: _____

Relinquished By	Date/Time	Received By	Date/Time
[signature]	5/2/24 0900		
		[signature]	5/3/24 0940

Sample Temperature Upon Receipt	____ °C
Sample(s) Received on Ice	Y or N
Proper Bottles Received in Good Condition	Y or N
Bottles Filled with Adequate Volume	Y or N
Samples Received Within Hold Time	Y or N
Date/Time Taken From Sample Bottle	Y or N

ANALYTICAL REPORT

June 03, 2024

Pace IR - Peoria, IL

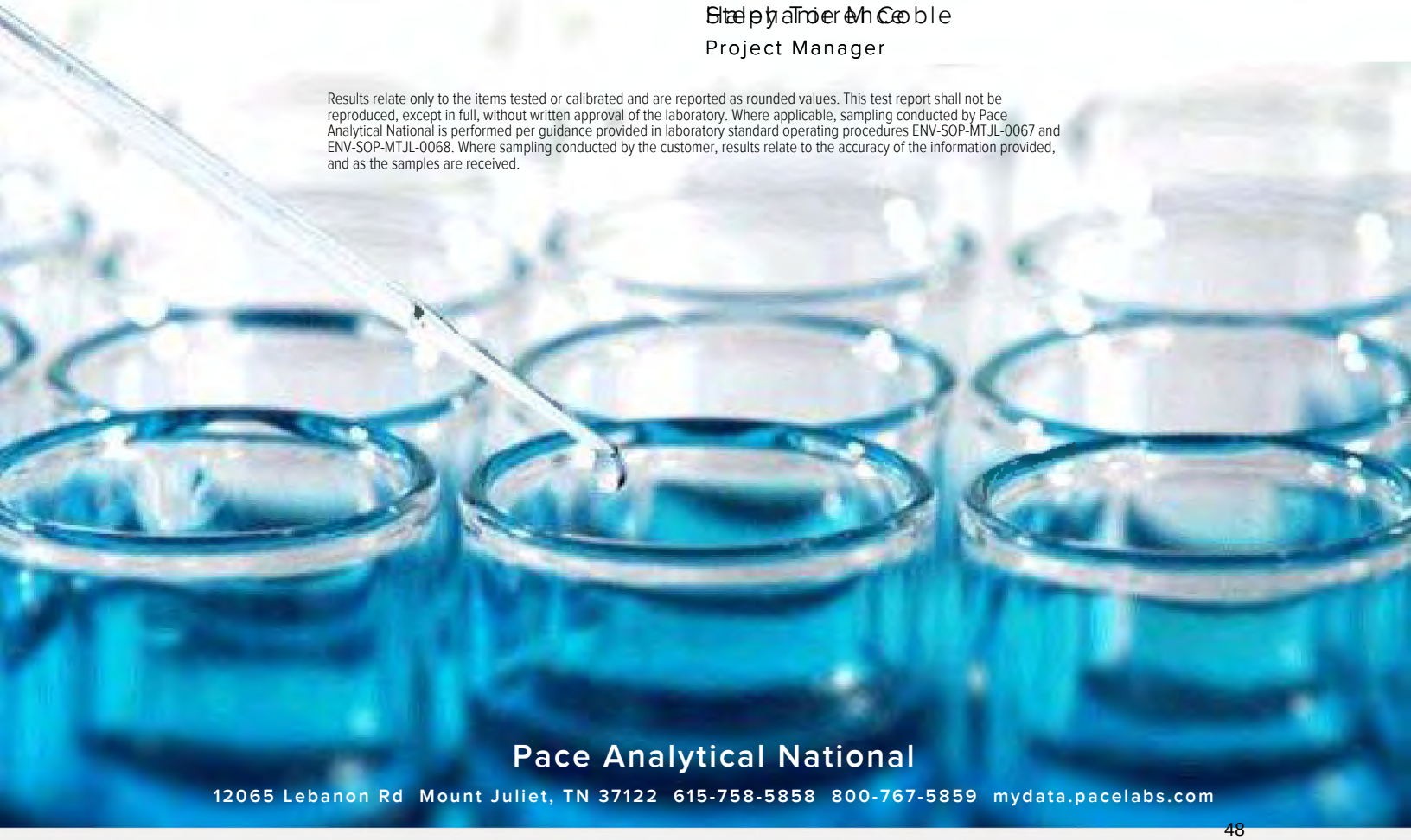
Sample Delivery Group:	L1733366
Samples Received:	05/07/2024
Project Number:	HE00567
Description:	
Site:	001
Report To:	Diane Billings 2231 W. Altorfer Drive Peoria, IL 61615

Entire Report Reviewed By:

[Preliminary Report]

Stephanie McCoble
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.



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SAMPLE SUMMARY

HE00567-01 L1733366-01 Non-Potable Water

	Collected by	Collected date/time	Received date/time
		05/02/24 11:34	05/07/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2286643	1	05/15/24 11:42	05/21/24 20:23	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2286162	1	05/15/24 12:17	05/21/24 20:23	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2286162	1	05/15/24 12:17	05/17/24 19:14	ZRG	Mt. Juliet, TN

HE00567-02 L1733366-02 Non-Potable Water

	Collected by	Collected date/time	Received date/time
		05/02/24 11:34	05/07/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2286643	1	05/15/24 11:42	05/21/24 20:23	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2286162	1	05/15/24 12:17	05/21/24 20:23	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2286162	1	05/15/24 12:17	05/17/24 19:14	ZRG	Mt. Juliet, TN

HE00567-03 L1733366-03 Non-Potable Water

	Collected by	Collected date/time	Received date/time
		05/02/24 16:18	05/07/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2287284	1	05/21/24 08:25	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2286162	1	05/15/24 12:17	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2286162	1	05/15/24 12:17	05/17/24 19:14	ZRG	Mt. Juliet, TN

HE00567-04 L1733366-04 Non-Potable Water

	Collected by	Collected date/time	Received date/time
		05/02/24 12:48	05/07/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2287284	1	05/21/24 08:25	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2286162	1	05/15/24 12:17	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2286162	1	05/15/24 12:17	05/17/24 19:14	ZRG	Mt. Juliet, TN

HE00567-05 L1733366-05 Non-Potable Water

	Collected by	Collected date/time	Received date/time
		05/02/24 14:55	05/07/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2287284	1	05/21/24 08:25	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2286162	1	05/15/24 12:17	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2286162	1	05/15/24 12:17	05/17/24 19:14	ZRG	Mt. Juliet, TN

HE00567-06 L1733366-06 Non-Potable Water

	Collected by	Collected date/time	Received date/time
		05/02/24 14:55	05/07/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2287284	1	05/21/24 08:25	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2286162	1	05/15/24 12:17	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2286162	1	05/15/24 12:17	05/17/24 19:14	ZRG	Mt. Juliet, TN

SAMPLE SUMMARY

	Collected by	Collected date/time	Received date/time
HE00567-07 L1733366-07 Non-Potable Water		05/02/24 16:30	05/07/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2287284	1	05/21/24 08:25	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2286162	1	05/15/24 12:17	05/23/24 20:56	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2286162	1	05/15/24 12:17	05/17/24 19:14	ZRG	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.

[Preliminary Report]

Stephanie M Cobble
Project Manager

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT, ASH POND
EDW-257-301

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.41		0.282	0.402	0.468	0.249	05/21/2024 20:23	WG2286643
(T) Barium	*73.4*					*30.0-143*	*05/21/2024 20:23*	WG2286643
(T) Yttrium	*97.4*					*30.0-136*	*05/21/2024 20:23*	WG2286643

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.77		0.384	0.515	05/21/2024 20:23	WG2286162

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.361		0.260	0.108	0.214	0.176	05/17/2024 19:14	WG2286162
(T) Barium-133	*81.8*					*30.0-143*	*05/17/2024 19:14*	WG2286162

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT, ASH POND
EDW-257-301

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.459		0.224	0.330	0.397	0.211	05/21/2024 20:23	WG2286643
(T) Barium	*87.4*					*30.0-143*	*05/21/2024 20:23*	WG2286643
(T) Yttrium	*107*					*30.0-136*	*05/21/2024 20:23*	WG2286643

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.765		0.308	0.413	05/21/2024 20:23	WG2286162

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.306		0.212	0.0979	0.115	0.115	05/17/2024 19:14	WG2286162
(T) Barium-133	*89.8*					*30.0-143*	*05/17/2024 19:14*	WG2286162

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT, ASH POND
EDW-257-301

L1733366

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.0657	U	0.251	0.350	0.451	0.236	05/23/2024 20:56	WG2287284
(T) Barium	*111*					*30.0-143*	*05/23/2024 20:56*	WG2287284
(T) Yttrium	*98.6*					*30.0-136*	*05/23/2024 20:56*	WG2287284

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.468	J	0.370	0.498	05/23/2024 20:56	WG2286162

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.402		0.272	0.0956	0.211	0.174	05/17/2024 19:14	WG2286162
(T) Barium-133	*68.9*					*30.0-143*	*05/17/2024 19:14*	WG2286162

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT, ASH POND
EDW-257-301
L1733366

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.807	J	0.806	0.924	1.43	0.748	05/23/2024 20:56	WG2287284
(T) Barium	*118*					*30.0-143*	*05/23/2024 20:56*	WG2287284
(T) Yttrium	*74.4*					*30.0-136*	*05/23/2024 20:56*	WG2287284

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.32	J	0.857	1.45	05/23/2024 20:56	WG2286162

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.510		0.290	0.125	0.214	0.168	05/17/2024 19:14	WG2286162
(T) Barium-133	*84.1*					*30.0-143*	*05/17/2024 19:14*	WG2286162

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT, ASH POND
EDW-257-301

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.678	J	0.652	0.755	1.16	0.605	05/23/2024 20:56	WG2287284
(T) Barium	*111*					*30.0-143*	*05/23/2024 20:56*	WG2287284
(T) Yttrium	*93.1*					*30.0-136*	*05/23/2024 20:56*	WG2287284

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	2.53		0.836	1.19	05/23/2024 20:56	WG2286162

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	1.86		0.524	0.251	0.245	0.178	05/17/2024 19:14	WG2286162
(T) Barium-133	*90.0*					*30.0-143*	*05/17/2024 19:14*	WG2286162

HE00567-06 SAMPLE RESULTS - 06

Collected date/time: 05/03/24 14:55 L1733366

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.49		0.653	0.756	1.14	0.594	05/23/2024 20:56	WG2287284
(T) Barium	*125*					*30.0-143*	*05/23/2024 20:56*	WG2287284
(T) Yttrium	*93.3*					*30.0-136*	*05/23/2024 20:56*	WG2287284

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	3.77		0.871	1.16	05/23/2024 20:56	WG2286162

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	2.28		0.577	0.286	0.215	0.164	05/17/2024 19:14	WG2286162
(T) Barium-133	*91.6*					*30.0-143*	*05/17/2024 19:14*	WG2286162

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

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT, ASH POND
EDW-257-301

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.373	U	0.314	0.418	0.574	0.299	05/23/2024 20:56	WG2287284
(T) Barium	*112*					*30.0-143*	*05/23/2024 20:56*	WG2287284
(T) Yttrium	*91.3*					*30.0-136*	*05/23/2024 20:56*	WG2287284

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.307	J	0.394	0.611	05/23/2024 20:56	WG2286162

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.307		0.238	0.0914	0.209	0.172	05/17/2024 19:14	WG2286162
(T) Barium-133	*75.6*					*30.0-143*	*05/17/2024 19:14*	WG2286162

WG2286643 QUALITY CONTROL SUMMARY

Radiochemistry by Method 904/9320 L1733366-01,02

Method Blank (MB)

(MB) R4072968-1 05/21/24 20:23

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.693		0.185	0.318	0.167
(T) Barium	*91.0*		*91.0*		
(T) Yttrium	*91.6*		*91.6*		

L1728414-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1728414-07 05/21/24 20:23 • (DUP) R4072968-5 05/21/24 20:23

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	1.55	0.348	0.593	0.310	1.09	0.422	0.741	0.387	34.7	0.837		20	3
(T) Barium	*86.8*				*90.7*	*90.7*							
(T) Yttrium	*86.3*				*99.9*	*99.9*							

Laboratory Control Sample (LCS)

(LCS) R4072968-2 05/21/24 20:23

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.74	115	80.0-120	
(T) Barium			*89.7*		
(T) Yttrium			*96.9*		

L1728414-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1728414-21 05/21/24 20:23 • (MS) R4072968-3 05/21/24 20:23 • (MSD) R4072968-4 05/21/24 20:23

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	3.59	21.3	20.2	106	99.1	1	70.0-130			5.36		20
(T) Barium		*89.4*			*89.4*	*93.9*							
(T) Yttrium		*94.3*			*99.6*	*98.1*							

WG2287284 QUALITY CONTROL SUMMARY

Radiochemistry by Method 904/9320 L1733366-03,04,05,06,07

Method Blank (MB)

(MB) R4074757-1 05/23/24 20:56

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	-0.152	U	0.198	0.363	0.190
(T) Barium	*110*		*110*		
(T) Yttrium	*91.5*		*91.5*		

L1732520-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1732520-03 05/23/24 20:56 • (DUP) R4074757-5 05/23/24 20:56

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.288	0.214	0.381	0.202	0.770	0.282	0.486	0.260	91.1	1.36		20	3
(T) Barium	*110*				*113*	*113*							
(T) Yttrium	*89.5*				*88.2*	*88.2*							

Laboratory Control Sample (LCS)

(LCS) R4074757-2 05/23/24 20:56

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.67	113	80.0-120	
(T) Barium			*103*		
(T) Yttrium			*88.6*		

L1732520-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1732520-02 05/23/24 20:56 • (MS) R4074757-3 05/23/24 20:56 • (MSD) R4074757-4 05/23/24 20:56

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	0.0750	18.2	17.4	108	104	1	70.0-130			4.27		20
(T) Barium		*94.1*			*98.6*	*97.7*							
(T) Yttrium		*79.7*			*95.1*	*90.6*							

QUALITY CONTROL SUMMARY

Radiochemistry by Method SM7500Ra B M

L1733366-01,02,03,04,05,06,07

Method Blank (MB)

(MB) R4071512-1 05/17/24 19:14

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.0371	U	0.0788	0.125	0.0826
(T) Barium-133	*73.3*		*73.3*		

L1733369-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1733369-01 05/17/24 19:14 • (DUP) R4071512-5 05/17/24 19:14

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.290	0.254	0.174	0.174	0.570	0.399	0.440	0.296	65.1	0.592		20	3
(T) Barium-133	*57.2*				*78.1*	*78.1*							

Laboratory Control Sample (LCS)

(LCS) R4071512-2 05/17/24 19:14

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.40	108	80.0-120	
(T) Barium-133			*71.0*		

L1727916-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1727916-04 05/17/24 19:14 • (MS) R4071512-3 05/17/24 19:14 • (MSD) R4071512-4 05/17/24 19:14

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	0.116	21.2	18.6	105	92.5	1	75.0-125			12.7		20
(T) Barium-133		*81.0*			*61.2*	*76.8*							

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	LAO000356
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.

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HE00567

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

A160

LT333d0

Sample: HE00567-01
Name: AW-06

Sampled: 05/02/24 11:34
Matrix: Ground Water
Preservative: HNO3, pH <2

-01

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/15/24 16:00	10/29/24 11:34	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HE00567-02
Name: AW-06 DUP

Sampled: 05/02/24 11:34
Matrix: Ground Water
Preservative: HNO3, pH <2

-02

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/15/24 16:00	10/29/24 11:34	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HE00567-03
Name: AW-08

Sampled: 05/02/24 16:18
Matrix: Ground Water
Preservative: HNO3, pH <2

-03

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/15/24 16:00	10/29/24 16:18	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HE00567-04
Name: AW-09

Sampled: 05/02/24 12:48
Matrix: Ground Water
Preservative: HNO3, pH <2

-04

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/15/24 16:00	10/29/24 12:48	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HE00567

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

LT333366

Sample: HE00567-05
Name: AW-10

Sampled: 05/02/24 14:55
Matrix: Ground Water
Preservative: HNO3, pH <2 -05

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/15/24 16:00	10/29/24 14:55	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HE00567-06
Name: AW-10 DUP

Sampled: 05/02/24 14:55
Matrix: Ground Water
Preservative: HNO3, pH <2 -06

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/15/24 16:00	10/29/24 14:55	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HE00567-07
Name: FIELD BLANK

Sampled: 05/02/24 16:30
Matrix: DI Water
Preservative: HNO3, pH <2 -07

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	05/15/24 16:00	10/29/24 16:30	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Please email results to Diane Billings at diane.billings@pacelabs.com

Date Shipped: 5/6/24 Total # of Containers: 7 Sample Origin (State): IL PO #: _____

Turn-Around Time Requested ☐ NORMAL ☐ RUSH Date Results Needed: _____

5/6/24 1000 Hailey Rabatin 5/7/24 0900
Relinquished By Date/Time Received By Date/Time

Sample Receipt Checklist 19.5+0.1=19.6 ED ALO

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		
RA Screen <0.5 mR/hr:	Y N		

7162 4943 2100

Date/Time

Sample Temperature Upon Receipt	°C
Sample(s) Received on Ice	Y or N
Proper Bottles Received in Good Condition	Y or N
Bottles Filled with Adequate Volume	Y or N
Samples Received Within Hold Time	Y or N
Date/Time Taken From Sample Bottle	Y or N

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 2

Section A Required Client Information

Company:	Vistra Corp-Edwards
Address:	7800 Cilco Lane
	Peoria, IL 61607
Email To:	[illegible]
Phone: (217) 753-8911	Fax:
Requested Due Date/TAT:	10 day

Section B Required Project Information

Report To:	Brian Voelker
Copy To:	Sam Davies-samantha.davies@vistracorp.com
	Mark Davis-Mark.Davis1@vistracorp.com
Purchase Order No.:	
Project Name:	
Project Number:	2285

Section C Invoice Information

Attention:	Mark Davis
Company Name:	Vistra Corp-Edwards
Address:	see Section A
Quote Reference:	
Project Manager:	
Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER

UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / , -)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AW-21	WT	G	[illegible]	1200		4	X		X										
2	XPW01A																			
3	XPW02																			
4	XPW03																			
5	EDW_yILRIVER																			
6	Field Blank																			
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q2-Rev 0	[illegible]	[illegible]	[illegible]							
				[illegible]	[illegible]	[illegible]	1.9	X	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [illegible]

SIGNATURE of SAMPLER: [illegible] DATE Signed (MM/DD/YY): [illegible]

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 2

Section A Required Client Information:

Company:	Vistra Corp-Edwards
Address:	7800 Cilco Lane
	Peoria, IL 61607
Email To	Brian.Voelker@VistraCorp.com
Phone:	(217) 753-8911 Fax:
Requested Due Date/TAT:	10 day

Section B Required Project Information:

Report To:	Brian Voelker
Copy To:	Sam Davies-samantha.davies@vistracorp.com
	Mark Davis-Mark.Davis1@vistracorp.com
Purchase Order No.:	
Project Name:	
Project Number:	2285

Section C Invoice Information:

Attention:	Mark Davis
Company Name:	Vistra Corp-Edwards
Address:	see Section A
Quote Reference	
Project Manager:	
Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

IMD05170
IMD05171 Rec'd

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S	WT	G	7/30/24	11:15		4	X		X										
2	AP07S	WT	G	7/30/24	12:19		4	X		X										
3	AW-01 / DUP 513024	WT	G	7/30/24	11:30		4	X		X										
4	AW-05	WT	G	7/30/24	13:15		4	X		X										
5	AW-06																			
6	AW-08																			
7	AW-09																			
8	AW-10																			
9	AW-11																			
10	AW-14																			
11	AW-15																			
12	AW-15S																			
13	AW-16	WT	G	7/30/24	16:37		4	X		X										
14	AW-17																			
15	AW-18	WT	G	7/30/24	13:55		4	X		X										
16	AW-19	WT	G	7/30/24	12:25		4	X		X										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q2-Rev 0										
			1743		7/30/24	1743	5.8	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Austin Ward

SIGNATURE of SAMPLER: Austin Ward

DATE Signed (MM/DD/YY): 07/30/24

HE00278
KM

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 of 2

Section A Required Client Information:	Section B Required Project Information	Section C Invoice Information
Company: Vistra Corp-Edwards	Report To: Brian Voelker	Attention: Mark Davis
Address: 7800 Cilco Lane	Copy To: Sam Davies-samantha.davies@vistracorp.com	Company Name: Vistra Corp-Edwards
Peoria, IL 61607	Mark Davis-Mark.Davis1@vistracorp.com	Address: see Section A
Email To:	Purchase Order No:	Quote Reference:
Phone: (217) 753-8911 Fax:	Project Name:	Project Manager:
Requested Due Date/TAT: 10 day	Project Number: 2285	Profile #:

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / , -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX / CODE: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S																				
2	AP07S																				
3	AW-01																				
4	AW-05																				
5	AW-06																				
6	AW-08																				
7	AW-09																				
8	AW-10																				
9	AW-11	WT	G	5/1/24	1433			4	X		X										
10	AW-14	WT	G	5/1/24	1320			4	X		X										
11	AW-15	WT	G	5/1/24	1110			4	X		X										
12	AW-15S	WT	G	5/1/24	1210			4	X		X										
13	AW-16																				
14	AW-17	WT	G	5/1/24	1544			4	X		X										
15	AW-18																				
16	AW-19																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q2-Rev 0		5/1/24	1641							
					5/1/24	1641	5.3	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Brian Pemberton

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 05/01/24

Courier

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page 2 of 2

Section A Required Client Information

Company	Vistra Corp-Edwards
Address	7800 Cilco Lane
	Peoria, IL 61607
Email To	
Phone	(217) 753-8911
Fax	
Requested Due Date/TAT	10 day

Section B Required Project Information

Report To	Brian Voelker
Copy To	Sam Davies-samantha.davies@vistracorp.com
	Mark Davis-Mark.Davis1@vistracorp.com
Purchase Order No.	
Project Name	
Project Number	2285

Section C Invoice Information

Attention	Mark Davis
Company Name	Vistra Corp-Edwards
Address	see Section A
Quote Reference	
Project Manager	
Profile #	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER

UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / , -)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

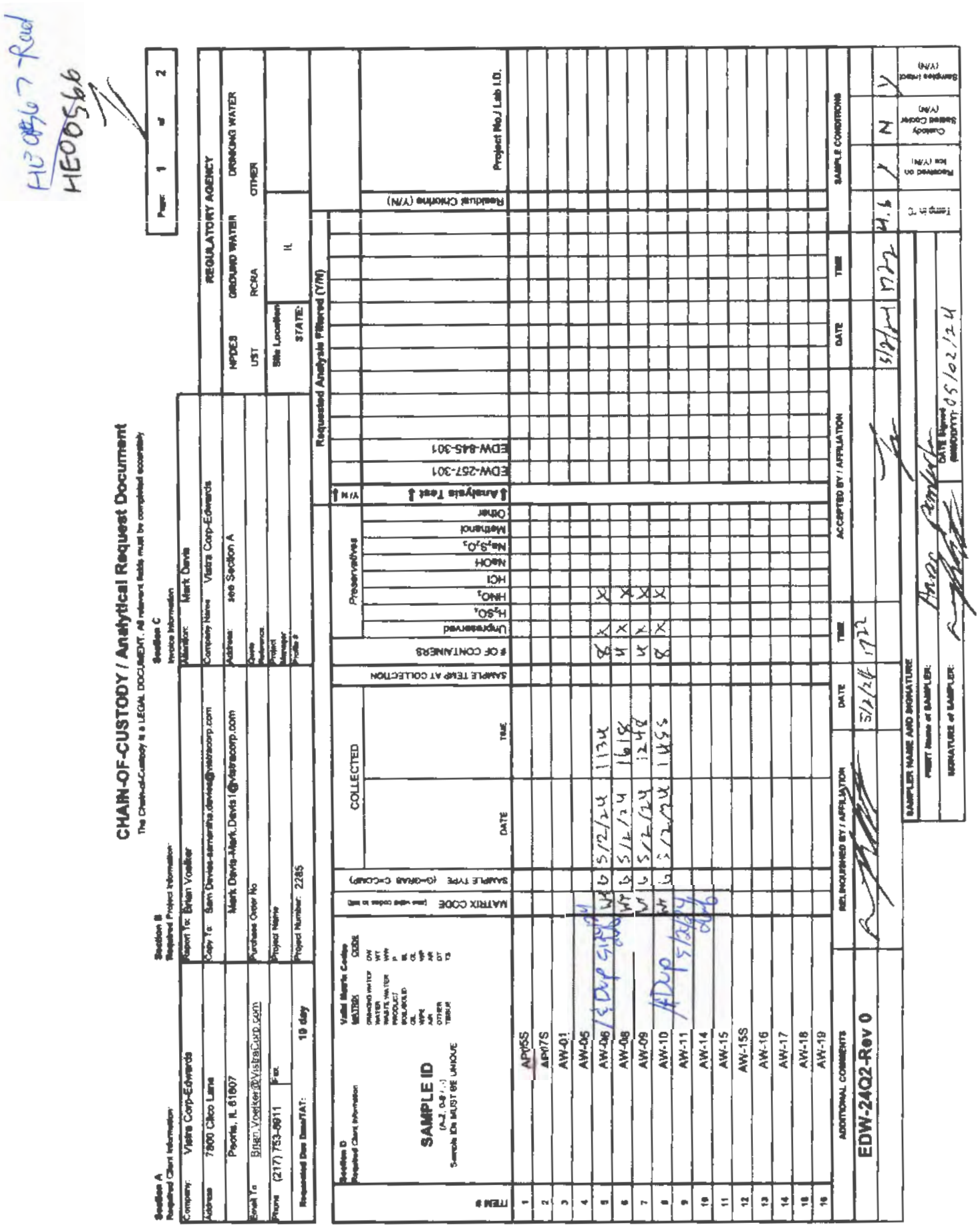
ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AW-21																			
2	XPW01A																			
3	XPW02																			
4	XPW03																			
5	EDW_yILRIVER																			
6	Field Blank	GW	G	5/2/24	1630		4	X		X										
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q2-Rev 0		5/2/24	1722				-1.6	X	X	Y
					5/3/24	1733	+	+	X	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Aaron Pemberton

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 05/02/24



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page 1 of 2

Section A — Required Client Information: Company: Vistra Corp-Edwards; Address: 7800 Cilco Lane, Peoria, IL 61607; Email To: Brian.Voelker@VistraCorp.com; Phone: (217) 753-6911; Fax:; Requested Due Date/TAT: 10 day

Section B — Required Project Information: Report To: Brian Voelker; Copy To: Sam Davies-samantha.davies@vistracorp.com; Mark Davis-Mark.Davis1@vistracorp.com; Purchase Order No; Project Name; Project Number: 2285

Section C — Invoice Information: Attention: Mark Davis; Company Name: Vistra Corp-Edwards; Address: 366 Section A; Site Location: IL

REGULATORY AGENCY: NPDES, GROUND WATER, DRINKING WATER; UST, RCRA, OTHER; STATE:

ITEM #	SAMPLE ID (A-Z, 0-9 / , -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes: MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test	Y/N	EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	APW5S	DW WT WW P SL OL WP AR OT TS	G																		
2	APW7S		G																		
3	AW-01		G																		
4	AW-05		G																		
5	AW-06 / FB Dup	WT	G	5/2/24	1134		8	X													
6	AW-08	WT	G	5/2/24	1618		4	X		X											
7	AW-09	WT	G	5/2/24	1248		4	X		X											
8	AW-10 / FDup	WT	G	5/2/24	1455		8	X		X											
9	AW-11																				
10	AW-14																				
11	AW-15																				
12	AW-15S																				
13	AW-16																				
14	AW-17																				
15	AW-18																				
16	AW-19																				

ADDITIONAL COMMENTS: EDW-24Q2-Rev 0

RELINQUISHED BY / AFFILIATION: DATE 5/2/24 TIME 1722

ACCEPTED BY / AFFILIATION: DATE 5/2/24 TIME 1722

SAMPLE CONDITIONS: Received on Ice (Y/N) N; Custody Sealed Cooler (Y/N) N; Samples Intact (Y/N) Y; Temp in °C 4.6

SAMPLER NAME AND SIGNATURE: PRINT Name of SAMPLER: [illegible]; SIGNATURE of SAMPLER: [illegible]; DATE Signed (MM/DD/YY): 05/02/24

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

August 07, 2024

Brian Voelker
Vistra - Edwards
604 Pierce Boulevard
O'Fallon, IL 62269

Dear Brian Voelker:

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 General Manager, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Sincerely,

Diane Billings
Project Manager

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

SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order HG02696

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

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

Work Order HG02901

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

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

Work Order HG03226

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

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

Work Order HG03595

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

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

ANALYTICAL RESULTS

Sample: HG02696-01
Name: AW-06 DUP
Matrix: Ground Water - Grab

Sampled: 07/15/24 15:42
Received: 07/15/24 16:49
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	31	mg/L	Q4	07/19/24 11:23	5	5.0	07/19/24 11:23	JSM	EPA 300.0 REV 2.1
Fluoride	0.314	mg/L	Q3	07/19/24 11:05	1	0.250	07/19/24 11:05	JSM	EPA 300.0 REV 2.1
Sulfate	34	mg/L	Q4	07/19/24 11:23	5	5.0	07/19/24 11:23	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	27.38	Feet		07/15/24 15:42	1		07/15/24 15:42	FIELD	Field*
Dissolved oxygen, Field	1.7	mg/L		07/15/24 15:42	1		07/15/24 15:42	FIELD	Field*
Oxidation Reduction Potential	-64.0	mV		07/15/24 15:42	1	-500	07/15/24 15:42	FIELD	Field*
pH, Field Measured	7.02	pH Units		07/15/24 15:42	1		07/15/24 15:42	FIELD	Field*
Specific Conductance, Field Measured	1150	umhos/cm		07/15/24 15:42	1		07/15/24 15:42	FIELD	Field*
Temperature, Field Measured	25.2	°C		07/15/24 15:42	1		07/15/24 15:42	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		07/15/24 15:42	1	0.00	07/15/24 15:42	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	510	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Solids - total dissolved solids (TDS)	560	mg/L		07/17/24 08:33	1	26	07/18/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/16/24 09:11	5	3.0	07/18/24 15:32	TJJ	EPA 6020A
Arsenic	4.3	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:32	TJJ	EPA 6020A
Barium	180	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:32	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:32	TJJ	EPA 6020A
Boron	160	ug/L		07/16/24 09:11	5	10	07/23/24 09:12	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:32	TJJ	EPA 6020A
Calcium	120	mg/L		07/16/24 09:11	5	0.20	07/18/24 15:32	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/16/24 09:11	5	4.0	07/18/24 15:32	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		07/16/24 09:11	5	2.0	07/18/24 15:32	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:32	TJJ	EPA 6020A
Magnesium	46	mg/L		07/16/24 09:11	5	0.10	07/18/24 15:32	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/16/24 09:11	5	0.20	07/18/24 15:32	TJJ	EPA 6020A
Molybdenum	5.9	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:32	TJJ	EPA 6020A
Potassium	0.48	mg/L		07/16/24 09:11	5	0.10	07/18/24 15:32	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:32	TJJ	EPA 6020A
Sodium	41	mg/L		07/16/24 09:11	5	0.10	07/18/24 15:32	TJJ	EPA 6020A

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

ANALYTICAL RESULTS

Sample: HG02696-01
Name: AW-06 DUP
Matrix: Ground Water - Grab

Sampled: 07/15/24 15:42
Received: 07/15/24 16:49
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:32	TJJ	EPA 6020A
Lithium	< 20	ug/L		07/16/24 09:11	1	20	07/25/24 14:30	LAM	EPA 6010B

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

ANALYTICAL RESULTS

Sample: HG02696-02
Name: AW-06
Matrix: Ground Water - Grab

Sampled: 07/15/24 15:42
Received: 07/15/24 16:49
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	37	mg/L		07/19/24 12:35	5	5.0	07/19/24 12:35	JSM	EPA 300.0 REV 2.1
Fluoride	0.321	mg/L		07/19/24 12:17	1	0.250	07/19/24 12:17	JSM	EPA 300.0 REV 2.1
Sulfate	24	mg/L		07/19/24 12:35	5	5.0	07/19/24 12:35	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	27.38	Feet		07/15/24 15:42	1		07/15/24 15:42	FIELD	Field*
Dissolved oxygen, Field	1.7	mg/L		07/15/24 15:42	1		07/15/24 15:42	FIELD	Field*
Oxidation Reduction Potential	-64.0	mV		07/15/24 15:42	1	-500	07/15/24 15:42	FIELD	Field*
pH, Field Measured	7.02	pH Units		07/15/24 15:42	1		07/15/24 15:42	FIELD	Field*
Specific Conductance, Field Measured	1150	umhos/cm		07/15/24 15:42	1		07/15/24 15:42	FIELD	Field*
Temperature, Field Measured	25.2	°C		07/15/24 15:42	1		07/15/24 15:42	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		07/15/24 15:42	1	0.00	07/15/24 15:42	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	480	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Solids - total dissolved solids (TDS)	570	mg/L		07/17/24 08:33	1	26	07/18/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/16/24 09:11	5	3.0	07/18/24 15:35	TJJ	EPA 6020A
Arsenic	4.8	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:35	TJJ	EPA 6020A
Barium	190	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:35	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:35	TJJ	EPA 6020A
Boron	120	ug/L		07/16/24 09:11	5	10	07/23/24 09:16	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:35	TJJ	EPA 6020A
Calcium	120	mg/L		07/16/24 09:11	5	0.20	07/18/24 15:35	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/16/24 09:11	5	4.0	07/18/24 15:35	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		07/16/24 09:11	5	2.0	07/18/24 15:35	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:35	TJJ	EPA 6020A
Magnesium	45	mg/L		07/16/24 09:11	5	0.10	07/18/24 15:35	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/16/24 09:11	5	0.20	07/18/24 15:35	TJJ	EPA 6020A
Molybdenum	5.8	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:35	TJJ	EPA 6020A
Potassium	0.58	mg/L		07/16/24 09:11	5	0.10	07/18/24 15:35	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:35	TJJ	EPA 6020A
Sodium	42	mg/L		07/16/24 09:11	5	0.10	07/18/24 15:35	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG02696-02
Name: AW-06
Matrix: Ground Water - Grab

Sampled: 07/15/24 15:42
Received: 07/15/24 16:49
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:35	TJJ	EPA 6020A
Lithium	< 20	ug/L		07/16/24 09:11	1	20	07/25/24 14:31	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG02696-03
Name: AW-21
Matrix: Ground Water - Grab

Sampled: 07/15/24 16:10
Received: 07/15/24 16:49
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	77	mg/L		07/19/24 13:11	50	50	07/19/24 13:11	JSM	EPA 300.0 REV 2.1
Fluoride	0.319	mg/L		07/19/24 12:53	1	0.250	07/19/24 12:53	JSM	EPA 300.0 REV 2.1
Sulfate	230	mg/L		07/19/24 13:11	50	50	07/19/24 13:11	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	17.85	Feet		07/15/24 16:10	1		07/15/24 16:10	FIELD	Field*
Dissolved oxygen, Field	10	mg/L		07/15/24 16:10	1		07/15/24 16:10	FIELD	Field*
Oxidation Reduction Potential	197	mV		07/15/24 16:10	1	-500	07/15/24 16:10	FIELD	Field*
pH, Field Measured	7.34	pH Units		07/15/24 16:10	1		07/15/24 16:10	FIELD	Field*
Specific Conductance, Field Measured	865.0	umhos/cm		07/15/24 16:10	1		07/15/24 16:10	FIELD	Field*
Temperature, Field Measured	21.4	°C		07/15/24 16:10	1		07/15/24 16:10	FIELD	Field*
Turbidity, Field Measured	14.5	NTU		07/15/24 16:10	1	0.00	07/15/24 16:10	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	190	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Solids - total dissolved solids (TDS)	720	mg/L		07/17/24 08:33	1	26	07/18/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/16/24 09:11	5	3.0	07/18/24 15:39	TJJ	EPA 6020A
Arsenic	1.3	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:39	TJJ	EPA 6020A
Barium	59	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:39	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:39	TJJ	EPA 6020A
Boron	10000	ug/L		07/16/24 09:11	20	40	07/23/24 09:20	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:39	TJJ	EPA 6020A
Calcium	120	mg/L		07/16/24 09:11	5	0.20	07/18/24 15:39	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/16/24 09:11	5	4.0	07/18/24 15:39	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		07/16/24 09:11	5	2.0	07/18/24 15:39	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:39	TJJ	EPA 6020A
Magnesium	37	mg/L		07/16/24 09:11	5	0.10	07/18/24 15:39	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/16/24 09:11	5	0.20	07/18/24 15:39	TJJ	EPA 6020A
Molybdenum	13	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:39	TJJ	EPA 6020A
Potassium	1.2	mg/L		07/16/24 09:11	5	0.10	07/18/24 15:39	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:39	TJJ	EPA 6020A
Sodium	52	mg/L		07/16/24 09:11	5	0.10	07/18/24 15:39	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG02696-03
Name: AW-21
Matrix: Ground Water - Grab

Sampled: 07/15/24 16:10
Received: 07/15/24 16:49
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:39	TJJ	EPA 6020A
Lithium	< 20	ug/L		07/16/24 09:11	1	20	07/25/24 14:32	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG02696-04
Name: AW-19
Matrix: Ground Water - Grab

Sampled: 07/15/24 14:38
Received: 07/15/24 16:49
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	75	mg/L		07/19/24 13:47	25	25	07/19/24 13:47	JSM	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		07/19/24 13:29	1	0.250	07/19/24 13:29	JSM	EPA 300.0 REV 2.1
Sulfate	54	mg/L		07/19/24 13:47	25	25	07/19/24 13:47	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	14.31	Feet		07/15/24 14:38	1		07/15/24 14:38	FIELD	Field*
Dissolved oxygen, Field	2.9	mg/L		07/15/24 14:38	1		07/15/24 14:38	FIELD	Field*
Oxidation Reduction Potential	-55.0	mV		07/15/24 14:38	1	-500	07/15/24 14:38	FIELD	Field*
pH, Field Measured	7.23	pH Units		07/15/24 14:38	1		07/15/24 14:38	FIELD	Field*
Specific Conductance, Field Measured	1110	umhos/cm		07/15/24 14:38	1		07/15/24 14:38	FIELD	Field*
Temperature, Field Measured	23.8	°C		07/15/24 14:38	1		07/15/24 14:38	FIELD	Field*
Turbidity, Field Measured	73.5	NTU		07/15/24 14:38	1	0.00	07/15/24 14:38	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	460	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Solids - total dissolved solids (TDS)	640	mg/L		07/17/24 08:33	1	26	07/18/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/16/24 09:11	5	3.0	07/18/24 15:43	TJJ	EPA 6020A
Arsenic	13	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:43	TJJ	EPA 6020A
Barium	210	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:43	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:43	TJJ	EPA 6020A
Boron	3100	ug/L		07/16/24 09:11	5	10	07/23/24 09:24	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:43	TJJ	EPA 6020A
Calcium	120	mg/L		07/16/24 09:11	5	0.20	07/18/24 15:43	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/16/24 09:11	5	4.0	07/18/24 15:43	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		07/16/24 09:11	5	2.0	07/18/24 15:43	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:43	TJJ	EPA 6020A
Magnesium	54	mg/L		07/16/24 09:11	5	0.10	07/18/24 15:43	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/16/24 09:11	5	0.20	07/18/24 15:43	TJJ	EPA 6020A
Molybdenum	4.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:43	TJJ	EPA 6020A
Potassium	1.1	mg/L		07/16/24 09:11	5	0.10	07/18/24 15:43	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:43	TJJ	EPA 6020A
Sodium	53	mg/L		07/16/24 09:11	5	0.10	07/18/24 15:43	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG02696-04
Name: AW-19
Matrix: Ground Water - Grab

Sampled: 07/15/24 14:38
Received: 07/15/24 16:49
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/16/24 09:11	5	1.0	07/18/24 15:43	TJJ	EPA 6020A
Lithium	< 20	ug/L		07/16/24 09:11	1	20	07/25/24 14:33	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG02901-01
Name: AP07S
Matrix: Ground Water - Grab

Sampled: 07/16/24 14:14
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	77	mg/L	Q3	07/23/24 19:01	25	25	07/23/24 19:01	JSM	EPA 300.0 REV 2.1
Sulfate	520	mg/L	Q4	07/23/24 19:19	100	100	07/23/24 19:19	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	24.68	Feet		07/16/24 14:14	1		07/16/24 14:14	FIELD	Field*
Dissolved oxygen, Field	1.9	mg/L		07/16/24 14:14	1		07/16/24 14:14	FIELD	Field*
Oxidation Reduction Potential	97.0	mV		07/16/24 14:14	1	-500	07/16/24 14:14	FIELD	Field*
pH, Field Measured	6.89	pH Units		07/16/24 14:14	1		07/16/24 14:14	FIELD	Field*
Specific Conductance, Field Measured	1090	umhos/cm		07/16/24 14:14	1		07/16/24 14:14	FIELD	Field*
Temperature, Field Measured	18.8	°C		07/16/24 14:14	1		07/16/24 14:14	FIELD	Field*
Turbidity, Field Measured	1.10	NTU		07/16/24 14:14	1	0.00	07/16/24 14:14	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	440	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Fluoride	0.251	mg/L		07/25/24 14:47	1	0.250	07/25/24 14:47	ANK	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	1500	mg/L		07/17/24 08:33	1	26	07/18/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/17/24 08:48	5	3.0	07/19/24 16:07	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:07	TJJ	EPA 6020A
Barium	70	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:07	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:07	TJJ	EPA 6020A
Boron	21000	ug/L	Q3	07/17/24 08:48	50	100	07/23/24 10:17	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:07	TJJ	EPA 6020A
Calcium	230	mg/L	Q4	07/17/24 08:48	5	0.20	07/19/24 16:07	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/17/24 08:48	5	4.0	07/19/24 16:07	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		07/17/24 08:48	5	2.0	07/19/24 16:07	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:07	TJJ	EPA 6020A
Magnesium	92	mg/L	Q4	07/17/24 08:48	5	0.10	07/19/24 16:07	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/17/24 08:48	5	0.20	07/19/24 16:07	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:07	TJJ	EPA 6020A
Potassium	1.6	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:07	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:07	TJJ	EPA 6020A
Sodium	81	mg/L	Q4	07/17/24 08:48	5	0.10	07/19/24 16:07	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG02901-01
Name: AP07S
Matrix: Ground Water - Grab

Sampled: 07/16/24 14:14
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:07	TJJ	EPA 6020A
Lithium	< 20	ug/L		07/17/24 08:48	1	20	07/25/24 14:37	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG02901-02
Name: AW-01
Matrix: Ground Water - Grab

Sampled: 07/16/24 12:09
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	8.2	mg/L		07/22/24 21:00	1	1.0	07/22/24 21:00	JSM	EPA 300.0 REV 2.1
Sulfate	47	mg/L		07/22/24 21:18	5	5.0	07/22/24 21:18	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	10.25	Feet		07/16/24 12:09	1		07/16/24 12:09	FIELD	Field*
Dissolved oxygen, Field	3.3	mg/L		07/16/24 12:09	1		07/16/24 12:09	FIELD	Field*
Oxidation Reduction Potential	30.0	mV		07/16/24 12:09	1	-500	07/16/24 12:09	FIELD	Field*
pH, Field Measured	6.98	pH Units		07/16/24 12:09	1		07/16/24 12:09	FIELD	Field*
Specific Conductance, Field Measured	1030	umhos/cm		07/16/24 12:09	1		07/16/24 12:09	FIELD	Field*
Temperature, Field Measured	20.8	°C		07/16/24 12:09	1		07/16/24 12:09	FIELD	Field*
Turbidity, Field Measured	87.0	NTU		07/16/24 12:09	1	0.00	07/16/24 12:09	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	840	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Fluoride	0.270	mg/L		07/25/24 14:48	1	0.250	07/25/24 14:48	ANK	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	800	mg/L		07/17/24 08:33	1	26	07/18/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/17/24 08:48	5	3.0	07/19/24 16:26	TJJ	EPA 6020A
Arsenic	6.8	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:26	TJJ	EPA 6020A
Barium	120	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:26	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:26	TJJ	EPA 6020A
Boron	89	ug/L		07/17/24 08:48	5	10	07/23/24 10:33	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:26	TJJ	EPA 6020A
Calcium	180	mg/L		07/17/24 08:48	5	0.20	07/19/24 16:26	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/17/24 08:48	5	4.0	07/19/24 16:26	TJJ	EPA 6020A
Cobalt	3.5	ug/L		07/17/24 08:48	5	2.0	07/19/24 16:26	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:26	TJJ	EPA 6020A
Magnesium	76	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:26	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/17/24 08:48	5	0.20	07/19/24 16:26	TJJ	EPA 6020A
Molybdenum	3.3	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:26	TJJ	EPA 6020A
Potassium	0.31	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:26	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:26	TJJ	EPA 6020A
Sodium	18	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:26	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG02901-02
Name: AW-01
Matrix: Ground Water - Grab

Sampled: 07/16/24 12:09
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:26	TJJ	EPA 6020A
Lithium	< 20	ug/L		07/17/24 08:48	1	20	07/25/24 14:40	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG02901-03
Name: AW-05
Matrix: Ground Water - Grab

Sampled: 07/16/24 15:28
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	71	mg/L		07/22/24 22:48	10	10	07/22/24 22:48	JSM	EPA 300.0 REV 2.1
Sulfate	390	mg/L		07/22/24 23:06	50	50	07/22/24 23:06	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	8.05	Feet		07/16/24 15:28	1		07/16/24 15:28	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		07/16/24 15:28	1		07/16/24 15:28	FIELD	Field*
Oxidation Reduction Potential	-69.0	mV		07/16/24 15:28	1	-500	07/16/24 15:28	FIELD	Field*
pH, Field Measured	7.27	pH Units		07/16/24 15:28	1		07/16/24 15:28	FIELD	Field*
Specific Conductance, Field Measured	1460	umhos/cm		07/16/24 15:28	1		07/16/24 15:28	FIELD	Field*
Temperature, Field Measured	18.0	°C		07/16/24 15:28	1		07/16/24 15:28	FIELD	Field*
Turbidity, Field Measured	266	NTU		07/16/24 15:28	1	0.00	07/16/24 15:28	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	410	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		07/25/24 14:49	1	0.250	07/25/24 14:49	ANK	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	1100	mg/L		07/18/24 08:16	1	26	07/19/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/17/24 08:48	5	3.0	07/19/24 16:30	TJJ	EPA 6020A
Arsenic	3.2	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:30	TJJ	EPA 6020A
Barium	100	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:30	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:30	TJJ	EPA 6020A
Boron	7400	ug/L		07/17/24 08:48	5	10	07/23/24 10:37	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:30	TJJ	EPA 6020A
Calcium	170	mg/L		07/17/24 08:48	5	0.20	07/19/24 16:30	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/17/24 08:48	5	4.0	07/19/24 16:30	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		07/17/24 08:48	5	2.0	07/19/24 16:30	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:30	TJJ	EPA 6020A
Magnesium	78	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:30	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/17/24 08:48	5	0.20	07/19/24 16:30	TJJ	EPA 6020A
Molybdenum	2.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:30	TJJ	EPA 6020A
Potassium	1.0	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:30	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:30	TJJ	EPA 6020A
Sodium	74	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:30	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG02901-03
Name: AW-05
Matrix: Ground Water - Grab

Sampled: 07/16/24 15:28
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:30	TJJ	EPA 6020A
Lithium	< 20	ug/L		07/17/24 08:48	1	20	07/25/24 14:44	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG02901-04
Name: AW-01 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 07/16/24 12:09
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	8.3	mg/L		07/22/24 23:24	1	1.0	07/22/24 23:24	JSM	EPA 300.0 REV 2.1
Sulfate	46	mg/L		07/22/24 23:42	5	5.0	07/22/24 23:42	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	10.25	Feet		07/16/24 12:09	1		07/16/24 12:09	FIELD	Field*
Dissolved oxygen, Field	3.3	mg/L		07/16/24 12:09	1		07/16/24 12:09	FIELD	Field*
Oxidation Reduction Potential	30.0	mV		07/16/24 12:09	1	-500	07/16/24 12:09	FIELD	Field*
pH, Field Measured	6.98	pH Units		07/16/24 12:09	1		07/16/24 12:09	FIELD	Field*
Specific Conductance, Field Measured	1030	umhos/cm		07/16/24 12:09	1		07/16/24 12:09	FIELD	Field*
Temperature, Field Measured	20.8	°C		07/16/24 12:09	1		07/16/24 12:09	FIELD	Field*
Turbidity, Field Measured	87.0	NTU		07/16/24 12:09	1	0.00	07/16/24 12:09	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	750	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Fluoride	0.260	mg/L		07/25/24 14:50	1	0.250	07/25/24 14:50	ANK	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	780	mg/L		07/18/24 08:16	1	26	07/19/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/17/24 08:48	5	3.0	07/19/24 16:34	TJJ	EPA 6020A
Arsenic	6.9	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:34	TJJ	EPA 6020A
Barium	120	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:34	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:34	TJJ	EPA 6020A
Boron	150	ug/L		07/17/24 08:48	5	10	07/23/24 10:40	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:34	TJJ	EPA 6020A
Calcium	180	mg/L		07/17/24 08:48	5	0.20	07/19/24 16:34	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/17/24 08:48	5	4.0	07/19/24 16:34	TJJ	EPA 6020A
Cobalt	3.5	ug/L		07/17/24 08:48	5	2.0	07/19/24 16:34	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:34	TJJ	EPA 6020A
Magnesium	76	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:34	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/17/24 08:48	5	0.20	07/19/24 16:34	TJJ	EPA 6020A
Molybdenum	3.1	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:34	TJJ	EPA 6020A
Potassium	0.38	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:34	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:34	TJJ	EPA 6020A
Sodium	18	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:34	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG02901-04
Name: AW-01 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 07/16/24 12:09
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:34	TJJ	EPA 6020A
Lithium	< 20	ug/L		07/17/24 08:48	1	20	07/25/24 14:45	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG02901-05
Name: AW-09
Matrix: Ground Water - Grab

Sampled: 07/16/24 12:33
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	26	mg/L		07/23/24 00:37	5	5.0	07/23/24 00:37	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		07/23/24 00:19	1	1.0	07/23/24 00:19	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	26.53	Feet		07/16/24 12:33	1		07/16/24 12:33	FIELD	Field*
Dissolved oxygen, Field	1.7	mg/L		07/16/24 12:33	1		07/16/24 12:33	FIELD	Field*
Oxidation Reduction Potential	-118	mV		07/16/24 12:33	1	-500	07/16/24 12:33	FIELD	Field*
pH, Field Measured	6.98	pH Units		07/16/24 12:33	1		07/16/24 12:33	FIELD	Field*
Specific Conductance, Field Measured	1580	umhos/cm		07/16/24 12:33	1		07/16/24 12:33	FIELD	Field*
Temperature, Field Measured	22.0	°C		07/16/24 12:33	1		07/16/24 12:33	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		07/16/24 12:33	1	0.00	07/16/24 12:33	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	760	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		07/25/24 14:51	1	0.250	07/25/24 14:51	ANK	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	800	mg/L		07/18/24 08:16	1	26	07/19/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/17/24 08:48	5	3.0	07/19/24 16:46	TJJ	EPA 6020A
Arsenic	24	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:46	TJJ	EPA 6020A
Barium	450	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:46	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:46	TJJ	EPA 6020A
Boron	280	ug/L		07/17/24 08:48	5	10	07/23/24 11:14	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:46	TJJ	EPA 6020A
Calcium	120	mg/L		07/17/24 08:48	5	0.20	07/19/24 16:46	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/17/24 08:48	5	4.0	07/19/24 16:46	TJJ	EPA 6020A
Cobalt	2.7	ug/L		07/17/24 08:48	5	2.0	07/19/24 16:46	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:46	TJJ	EPA 6020A
Magnesium	48	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:46	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/17/24 08:48	5	0.20	07/19/24 16:46	TJJ	EPA 6020A
Molybdenum	14	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:46	TJJ	EPA 6020A
Potassium	2.1	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:46	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:46	TJJ	EPA 6020A
Sodium	130	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:46	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG02901-05
Name: AW-09
Matrix: Ground Water - Grab

Sampled: 07/16/24 12:33
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:46	TJJ	EPA 6020A
Lithium	27	ug/L		07/17/24 08:48	1	20	07/25/24 14:46	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG02901-06
Name: AW-16 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 07/16/24 15:22
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	49	mg/L		07/23/24 01:49	5	5.0	07/23/24 01:49	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		07/23/24 00:55	1	1.0	07/23/24 00:55	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	24.62	Feet		07/16/24 15:22	1		07/16/24 15:22	FIELD	Field*
Dissolved oxygen, Field	0.18	mg/L		07/16/24 15:22	1		07/16/24 15:22	FIELD	Field*
Oxidation Reduction Potential	-96.0	mV		07/16/24 15:22	1	-500	07/16/24 15:22	FIELD	Field*
pH, Field Measured	6.69	pH Units		07/16/24 15:22	1		07/16/24 15:22	FIELD	Field*
Specific Conductance, Field Measured	2400	umhos/cm		07/16/24 15:22	1		07/16/24 15:22	FIELD	Field*
Temperature, Field Measured	18.8	°C		07/16/24 15:22	1		07/16/24 15:22	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		07/16/24 15:22	1	0.00	07/16/24 15:22	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	1100	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		07/25/24 14:52	1	0.250	07/25/24 14:52	ANK	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	1200	mg/L		07/18/24 08:16	1	26	07/19/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/17/24 08:48	5	3.0	07/19/24 16:50	TJJ	EPA 6020A
Arsenic	1.1	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:50	TJJ	EPA 6020A
Barium	1100	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:50	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:50	TJJ	EPA 6020A
Boron	400	ug/L		07/17/24 08:48	5	10	07/23/24 11:18	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:50	TJJ	EPA 6020A
Calcium	140	mg/L		07/17/24 08:48	5	0.20	07/19/24 16:50	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/17/24 08:48	5	4.0	07/19/24 16:50	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		07/17/24 08:48	5	2.0	07/19/24 16:50	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:50	TJJ	EPA 6020A
Magnesium	58	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:50	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/17/24 08:48	5	0.20	07/19/24 16:50	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:50	TJJ	EPA 6020A
Potassium	4.4	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:50	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:50	TJJ	EPA 6020A
Sodium	230	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:50	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG02901-06
Name: AW-16 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 07/16/24 15:22
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:50	TJJ	EPA 6020A
Lithium	31	ug/L		07/17/24 08:48	1	20	07/25/24 14:47	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG02901-07
Name: AW-16
Matrix: Ground Water - Grab

Sampled: 07/16/24 15:22
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	47	mg/L		07/23/24 02:43	5	5.0	07/23/24 02:43	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		07/23/24 02:25	1	1.0	07/23/24 02:25	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	24.62	Feet		07/16/24 15:22	1		07/16/24 15:22	FIELD	Field*
Dissolved oxygen, Field	0.18	mg/L		07/16/24 15:22	1		07/16/24 15:22	FIELD	Field*
Oxidation Reduction Potential	-96.0	mV		07/16/24 15:22	1	-500	07/16/24 15:22	FIELD	Field*
pH, Field Measured	6.69	pH Units		07/16/24 15:22	1		07/16/24 15:22	FIELD	Field*
Specific Conductance, Field Measured	2400	umhos/cm		07/16/24 15:22	1		07/16/24 15:22	FIELD	Field*
Temperature, Field Measured	18.8	°C		07/16/24 15:22	1		07/16/24 15:22	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		07/16/24 15:22	1	0.00	07/16/24 15:22	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	1200	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		07/25/24 14:53	1	0.250	07/25/24 14:53	ANK	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	1200	mg/L		07/18/24 08:16	1	26	07/19/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/17/24 08:48	5	3.0	07/19/24 16:54	TJJ	EPA 6020A
Arsenic	1.2	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:54	TJJ	EPA 6020A
Barium	1100	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:54	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:54	TJJ	EPA 6020A
Boron	410	ug/L		07/17/24 08:48	5	10	07/23/24 11:22	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:54	TJJ	EPA 6020A
Calcium	140	mg/L		07/17/24 08:48	5	0.20	07/19/24 16:54	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/17/24 08:48	5	4.0	07/19/24 16:54	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		07/17/24 08:48	5	2.0	07/19/24 16:54	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:54	TJJ	EPA 6020A
Magnesium	58	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:54	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/17/24 08:48	5	0.20	07/19/24 16:54	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:54	TJJ	EPA 6020A
Potassium	4.3	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:54	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:54	TJJ	EPA 6020A
Sodium	230	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:54	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG02901-07
Name: AW-16
Matrix: Ground Water - Grab

Sampled: 07/16/24 15:22
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:54	TJJ	EPA 6020A
Lithium	30	ug/L		07/17/24 08:48	1	20	07/25/24 14:48	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG02901-08
Name: AW-17
Matrix: Ground Water - Grab

Sampled: 07/16/24 10:45
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	50	mg/L		07/23/24 03:55	25	25	07/23/24 03:55	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		07/23/24 03:19	1	1.0	07/23/24 03:19	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	25.61	Feet		07/16/24 10:45	1		07/16/24 10:45	FIELD	Field*
Dissolved oxygen, Field	6.5	mg/L		07/16/24 10:45	1		07/16/24 10:45	FIELD	Field*
Oxidation Reduction Potential	-127	mV		07/16/24 10:45	1	-500	07/16/24 10:45	FIELD	Field*
pH, Field Measured	6.77	pH Units		07/16/24 10:45	1		07/16/24 10:45	FIELD	Field*
Specific Conductance, Field Measured	2100	umhos/cm		07/16/24 10:45	1		07/16/24 10:45	FIELD	Field*
Temperature, Field Measured	18.4	°C		07/16/24 10:45	1		07/16/24 10:45	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		07/16/24 10:45	1	0.00	07/16/24 10:45	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	880	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		07/25/24 14:56	1	0.250	07/25/24 14:56	ANK	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	940	mg/L		07/18/24 08:16	1	26	07/19/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/17/24 08:48	5	3.0	07/19/24 16:58	TJJ	EPA 6020A
Arsenic	3.5	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:58	TJJ	EPA 6020A
Barium	1000	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:58	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:58	TJJ	EPA 6020A
Boron	400	ug/L		07/17/24 08:48	5	10	07/23/24 11:26	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:58	TJJ	EPA 6020A
Calcium	100	mg/L		07/17/24 08:48	5	0.20	07/19/24 16:58	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/17/24 08:48	5	4.0	07/19/24 16:58	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		07/17/24 08:48	5	2.0	07/19/24 16:58	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:58	TJJ	EPA 6020A
Magnesium	42	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:58	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/17/24 08:48	5	0.20	07/19/24 16:58	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:58	TJJ	EPA 6020A
Potassium	4.2	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:58	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:58	TJJ	EPA 6020A
Sodium	210	mg/L		07/17/24 08:48	5	0.10	07/19/24 16:58	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG02901-08
Name: AW-17
Matrix: Ground Water - Grab

Sampled: 07/16/24 10:45
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 16:58	TJJ	EPA 6020A
Lithium	33	ug/L		07/17/24 08:48	1	20	07/25/24 14:49	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG02901-09
Name: AW-18
Matrix: Ground Water - Grab

Sampled: 07/16/24 14:12
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	87	mg/L		07/23/24 02:15	25	25	07/23/24 02:15	JSM	EPA 300.0 REV 2.1
Sulfate	7.6	mg/L		07/23/24 01:39	1	1.0	07/23/24 01:39	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	27.75	Feet		07/16/24 14:12	1		07/16/24 14:12	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		07/16/24 14:12	1		07/16/24 14:12	FIELD	Field*
Oxidation Reduction Potential	-155	mV		07/16/24 14:12	1	-500	07/16/24 14:12	FIELD	Field*
pH, Field Measured	6.94	pH Units		07/16/24 14:12	1		07/16/24 14:12	FIELD	Field*
Specific Conductance, Field Measured	1640	umhos/cm		07/16/24 14:12	1		07/16/24 14:12	FIELD	Field*
Temperature, Field Measured	17.0	°C		07/16/24 14:12	1		07/16/24 14:12	FIELD	Field*
Turbidity, Field Measured	56.7	NTU		07/16/24 14:12	1	0.00	07/16/24 14:12	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	760	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		07/25/24 14:57	1	0.250	07/25/24 14:57	ANK	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	920	mg/L		07/18/24 08:16	1	26	07/19/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/17/24 08:48	5	3.0	07/19/24 17:02	TJJ	EPA 6020A
Arsenic	4.1	ug/L		07/17/24 08:48	5	1.0	07/19/24 17:02	TJJ	EPA 6020A
Barium	1500	ug/L		07/17/24 08:48	5	1.0	07/19/24 17:02	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 17:02	TJJ	EPA 6020A
Boron	430	ug/L		07/17/24 08:48	5	10	07/23/24 11:30	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 17:02	TJJ	EPA 6020A
Calcium	120	mg/L		07/17/24 08:48	5	0.20	07/19/24 17:02	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/17/24 08:48	5	4.0	07/19/24 17:02	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		07/17/24 08:48	5	2.0	07/19/24 17:02	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 17:02	TJJ	EPA 6020A
Magnesium	55	mg/L		07/17/24 08:48	5	0.10	07/19/24 17:02	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/17/24 08:48	5	0.20	07/19/24 17:02	TJJ	EPA 6020A
Molybdenum	1.3	ug/L		07/17/24 08:48	5	1.0	07/19/24 17:02	TJJ	EPA 6020A
Potassium	4.1	mg/L		07/17/24 08:48	5	0.10	07/19/24 17:02	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 17:02	TJJ	EPA 6020A
Sodium	190	mg/L		07/17/24 08:48	5	0.10	07/19/24 17:02	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG02901-09
Name: AW-18
Matrix: Ground Water - Grab

Sampled: 07/16/24 14:12
Received: 07/16/24 16:26
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/17/24 08:48	5	1.0	07/19/24 17:02	TJJ	EPA 6020A
Lithium	< 20	ug/L		07/17/24 08:48	1	20	07/25/24 14:50	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG03226-01
Name: AW-11
Matrix: Ground Water - Grab

Sampled: 07/17/24 15:45
Received: 07/17/24 16:21
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	33	mg/L	Q4	07/22/24 15:16	5	5.0	07/22/24 15:16	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		07/22/24 14:58	1	1.0	07/22/24 14:58	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	5.98	Feet		07/17/24 15:45	1		07/17/24 15:45	FIELD	Field*
Dissolved oxygen, Field	12	mg/L		07/17/24 15:45	1		07/17/24 15:45	FIELD	Field*
Oxidation Reduction Potential	-139	mV		07/17/24 15:45	1	-500	07/17/24 15:45	FIELD	Field*
pH, Field Measured	7.20	pH Units		07/17/24 15:45	1		07/17/24 15:45	FIELD	Field*
Specific Conductance, Field Measured	1740	umhos/cm		07/17/24 15:45	1		07/17/24 15:45	FIELD	Field*
Temperature, Field Measured	20.0	°C		07/17/24 15:45	1		07/17/24 15:45	FIELD	Field*
Turbidity, Field Measured	114	NTU		07/17/24 15:45	1	0.00	07/17/24 15:45	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	960	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		07/25/24 14:59	1	0.250	07/25/24 14:59	ANK	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	1000	mg/L		07/18/24 08:16	1	26	07/19/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/22/24 08:56	5	3.0	07/25/24 18:20	TJJ	EPA 6020A
Arsenic	10	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:20	TJJ	EPA 6020A
Barium	850	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:20	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/29/24 12:37	TJJ	EPA 6020A
Boron	230	ug/L		07/22/24 08:56	5	10	07/29/24 12:37	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:20	TJJ	EPA 6020A
Calcium	150	mg/L	Q4	07/22/24 08:56	5	0.20	07/25/24 18:20	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/22/24 08:56	5	4.0	07/25/24 18:20	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		07/22/24 08:56	5	2.0	07/25/24 18:20	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:20	TJJ	EPA 6020A
Magnesium	67	mg/L	Q4	07/22/24 08:56	5	0.10	07/25/24 18:20	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/22/24 08:56	5	0.20	07/25/24 18:20	TJJ	EPA 6020A
Molybdenum	1.5	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:20	TJJ	EPA 6020A
Potassium	2.6	mg/L		07/22/24 08:56	5	0.10	07/25/24 18:20	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:20	TJJ	EPA 6020A
Sodium	150	mg/L	Q4	07/22/24 08:56	5	0.10	07/25/24 18:20	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG03226-01
Name: AW-11
Matrix: Ground Water - Grab

Sampled: 07/17/24 15:45
Received: 07/17/24 16:21
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:20	TJJ	EPA 6020A
Lithium	< 20	ug/L		07/22/24 08:56	1	20	07/25/24 14:54	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG03226-02
Name: AW-14
Matrix: Ground Water - Grab

Sampled: 07/17/24 13:02
Received: 07/17/24 16:21
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	24	mg/L	Q4	07/22/24 16:29	5	5.0	07/22/24 16:29	JSM	EPA 300.0 REV 2.1
Sulfate	4.1	mg/L		07/22/24 16:10	1	1.0	07/22/24 16:10	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	7.1	Feet		07/17/24 13:02	1		07/17/24 13:02	FIELD	Field*
Dissolved oxygen, Field	1.1	mg/L		07/17/24 13:02	1		07/17/24 13:02	FIELD	Field*
Oxidation Reduction Potential	-146	mV		07/17/24 13:02	1	-500	07/17/24 13:02	FIELD	Field*
pH, Field Measured	7.05	pH Units		07/17/24 13:02	1		07/17/24 13:02	FIELD	Field*
Specific Conductance, Field Measured	1730	umhos/cm		07/17/24 13:02	1		07/17/24 13:02	FIELD	Field*
Temperature, Field Measured	19.2	°C		07/17/24 13:02	1		07/17/24 13:02	FIELD	Field*
Turbidity, Field Measured	72.7	NTU		07/17/24 13:02	1	0.00	07/17/24 13:02	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	940	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		07/25/24 15:03	1	0.250	07/25/24 15:03	ANK	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	1000	mg/L		07/18/24 08:16	1	26	07/19/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/22/24 08:56	5	3.0	07/25/24 18:39	TJJ	EPA 6020A
Arsenic	2.6	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:39	TJJ	EPA 6020A
Barium	810	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:39	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/29/24 12:49	TJJ	EPA 6020A
Boron	200	ug/L		07/22/24 08:56	5	10	07/29/24 12:49	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:39	TJJ	EPA 6020A
Calcium	170	mg/L		07/22/24 08:56	5	0.20	07/25/24 18:39	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/22/24 08:56	5	4.0	07/25/24 18:39	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		07/22/24 08:56	5	2.0	07/25/24 18:39	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:39	TJJ	EPA 6020A
Magnesium	65	mg/L		07/22/24 08:56	5	0.10	07/25/24 18:39	TJJ	EPA 6020A
Mercury	0.21	ug/L		07/22/24 08:56	5	0.20	07/25/24 18:39	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:39	TJJ	EPA 6020A
Potassium	2.5	mg/L		07/22/24 08:56	5	0.10	07/25/24 18:39	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:39	TJJ	EPA 6020A
Sodium	140	mg/L		07/22/24 08:56	5	0.10	07/25/24 18:39	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG03226-02
Name: AW-14
Matrix: Ground Water - Grab

Sampled: 07/17/24 13:02
Received: 07/17/24 16:21
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:39	TJJ	EPA 6020A
Lithium	< 20	ug/L		07/22/24 08:56	1	20	07/25/24 15:57	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG03226-03
Name: AW-15
Matrix: Ground Water - Grab

Sampled: 07/17/24 10:19
Received: 07/17/24 16:21
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	33	mg/L	Q4	07/22/24 17:41	5	5.0	07/22/24 17:41	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		07/22/24 17:23	1	1.0	07/22/24 17:23	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	8.58	Feet		07/17/24 10:19	1		07/17/24 10:19	FIELD	Field*
Dissolved oxygen, Field	1.8	mg/L		07/17/24 10:19	1		07/17/24 10:19	FIELD	Field*
Oxidation Reduction Potential	-116	mV		07/17/24 10:19	1	-500	07/17/24 10:19	FIELD	Field*
pH, Field Measured	6.95	pH Units		07/17/24 10:19	1		07/17/24 10:19	FIELD	Field*
Specific Conductance, Field Measured	1850	umhos/cm		07/17/24 10:19	1		07/17/24 10:19	FIELD	Field*
Temperature, Field Measured	17.9	°C		07/17/24 10:19	1		07/17/24 10:19	FIELD	Field*
Turbidity, Field Measured	104	NTU		07/17/24 10:19	1	0.00	07/17/24 10:19	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	1000	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		07/25/24 15:03	1	0.250	07/25/24 15:03	ANK	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	1100	mg/L		07/18/24 08:16	1	26	07/19/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/22/24 08:56	5	3.0	07/25/24 18:43	TJJ	EPA 6020A
Arsenic	1.4	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:43	TJJ	EPA 6020A
Barium	1700	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:43	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/29/24 12:52	TJJ	EPA 6020A
Boron	350	ug/L		07/22/24 08:56	5	10	07/29/24 12:52	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:43	TJJ	EPA 6020A
Calcium	140	mg/L		07/22/24 08:56	5	0.20	07/25/24 18:43	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/22/24 08:56	5	4.0	07/25/24 18:43	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		07/22/24 08:56	5	2.0	07/25/24 18:43	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:43	TJJ	EPA 6020A
Magnesium	55	mg/L		07/22/24 08:56	5	0.10	07/25/24 18:43	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/22/24 08:56	5	0.20	07/25/24 18:43	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:43	TJJ	EPA 6020A
Potassium	3.8	mg/L		07/22/24 08:56	5	0.10	07/25/24 18:43	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:43	TJJ	EPA 6020A
Sodium	200	mg/L		07/22/24 08:56	5	0.10	07/25/24 18:43	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG03226-03
Name: AW-15
Matrix: Ground Water - Grab

Sampled: 07/17/24 10:19
Received: 07/17/24 16:21
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:43	TJJ	EPA 6020A
Lithium	28	ug/L		07/22/24 08:56	1	20	07/25/24 15:58	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG03226-04
Name: AW-15S
Matrix: Ground Water - Grab

Sampled: 07/17/24 11:42
Received: 07/17/24 16:21
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	30	mg/L		07/22/24 19:29	5	5.0	07/22/24 19:29	JSM	EPA 300.0 REV 2.1
Sulfate	540	mg/L		07/22/24 19:47	100	100	07/22/24 19:47	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	9.85	Feet		07/17/24 11:42	1		07/17/24 11:42	FIELD	Field*
Dissolved oxygen, Field	1.9	mg/L		07/17/24 11:42	1		07/17/24 11:42	FIELD	Field*
Oxidation Reduction Potential	33.0	mV		07/17/24 11:42	1	-500	07/17/24 11:42	FIELD	Field*
pH, Field Measured	7.09	pH Units		07/17/24 11:42	1		07/17/24 11:42	FIELD	Field*
Specific Conductance, Field Measured	1068	umhos/cm		07/17/24 11:42	1		07/17/24 11:42	FIELD	Field*
Temperature, Field Measured	22.6	°C		07/17/24 11:42	1		07/17/24 11:42	FIELD	Field*
Turbidity, Field Measured	18.4	NTU		07/17/24 11:42	1	0.00	07/17/24 11:42	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	500	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/18/24 08:36	1	10	07/18/24 08:36	RLD	SM 2320 B-2011*
Fluoride	0.257	mg/L		07/25/24 15:05	1	0.250	07/25/24 15:05	ANK	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	1300	mg/L		07/18/24 08:16	1	26	07/19/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/22/24 08:56	5	3.0	07/25/24 18:47	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:47	TJJ	EPA 6020A
Barium	78	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:47	TJJ	EPA 6020A
Beryllium	< 2.0	ug/L		07/22/24 08:56	10	2.0	07/29/24 12:55	TJJ	EPA 6020A
Boron	5600	ug/L		07/22/24 08:56	10	20	07/29/24 12:55	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:47	TJJ	EPA 6020A
Calcium	260	mg/L		07/22/24 08:56	5	0.20	07/25/24 18:47	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/22/24 08:56	5	4.0	07/25/24 18:47	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		07/22/24 08:56	5	2.0	07/25/24 18:47	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:47	TJJ	EPA 6020A
Magnesium	82	mg/L		07/22/24 08:56	5	0.10	07/25/24 18:47	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/22/24 08:56	5	0.20	07/25/24 18:47	TJJ	EPA 6020A
Molybdenum	2.5	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:47	TJJ	EPA 6020A
Potassium	0.66	mg/L		07/22/24 08:56	5	0.10	07/25/24 18:47	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:47	TJJ	EPA 6020A
Sodium	49	mg/L		07/22/24 08:56	5	0.10	07/25/24 18:47	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG03226-04
Name: AW-15S
Matrix: Ground Water - Grab

Sampled: 07/17/24 11:42
Received: 07/17/24 16:21
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:47	TJJ	EPA 6020A
Lithium	< 20	ug/L		07/22/24 08:56	1	20	07/25/24 16:00	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG03595-01
Name: AP05S
Matrix: Ground Water - Grab

Sampled: 07/18/24 10:10
Received: 07/18/24 16:04
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	47	mg/L	Q4	07/25/24 23:01	5	5.0	07/25/24 23:01	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		07/25/24 22:41	1	1.0	07/25/24 22:41	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	5.09	Feet		07/18/24 10:10	1		07/18/24 10:10	FIELD	Field*
Dissolved oxygen, Field	0.96	mg/L		07/18/24 10:10	1		07/18/24 10:10	FIELD	Field*
Oxidation Reduction Potential	-143	mV		07/18/24 10:10	1	-500	07/18/24 10:10	FIELD	Field*
pH, Field Measured	7.00	pH Units		07/18/24 10:10	1		07/18/24 10:10	FIELD	Field*
Specific Conductance, Field Measured	1057	umhos/cm		07/18/24 10:10	1		07/18/24 10:10	FIELD	Field*
Temperature, Field Measured	15.6	°C		07/18/24 10:10	1		07/18/24 10:10	FIELD	Field*
Turbidity, Field Measured	79.9	NTU		07/18/24 10:10	1	0.00	07/18/24 10:10	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	840	mg/L		07/22/24 13:48	1	10	07/22/24 13:48	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/22/24 13:48	1	10	07/22/24 13:48	TMS	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		07/30/24 13:45	1	0.250	07/30/24 13:45	QTC	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	900	mg/L		07/19/24 08:08	1	26	07/22/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/22/24 08:56	5	3.0	07/25/24 18:51	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:51	TJJ	EPA 6020A
Barium	1100	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:51	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/29/24 12:58	TJJ	EPA 6020A
Boron	360	ug/L		07/22/24 08:56	5	10	07/29/24 12:58	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:51	TJJ	EPA 6020A
Calcium	98	mg/L		07/22/24 08:56	5	0.20	07/25/24 18:51	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/22/24 08:56	5	4.0	07/25/24 18:51	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		07/22/24 08:56	5	2.0	07/25/24 18:51	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:51	TJJ	EPA 6020A
Magnesium	42	mg/L		07/22/24 08:56	5	0.10	07/25/24 18:51	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/22/24 08:56	5	0.20	07/25/24 18:51	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:51	TJJ	EPA 6020A
Potassium	4.0	mg/L		07/22/24 08:56	5	0.10	07/25/24 18:51	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:51	TJJ	EPA 6020A
Sodium	190	mg/L		07/22/24 08:56	5	0.10	07/25/24 18:51	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG03595-01
Name: AP05S
Matrix: Ground Water - Grab

Sampled: 07/18/24 10:10
Received: 07/18/24 16:04
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:51	TJJ	EPA 6020A
Lithium	30	ug/L		07/22/24 08:56	1	20	07/25/24 16:01	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG03595-02
Name: AW-08
Matrix: Ground Water - Grab

Sampled: 07/18/24 13:33
Received: 07/18/24 16:04
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	17	mg/L		07/26/24 00:37	5	5.0	07/26/24 00:37	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		07/26/24 00:18	1	1.0	07/26/24 00:18	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	23.09	Feet		07/18/24 13:33	1		07/18/24 13:33	FIELD	Field*
Dissolved oxygen, Field	1.4	mg/L		07/18/24 13:33	1		07/18/24 13:33	FIELD	Field*
Oxidation Reduction Potential	-155	mV		07/18/24 13:33	1	-500	07/18/24 13:33	FIELD	Field*
pH, Field Measured	7.11	pH Units		07/18/24 13:33	1		07/18/24 13:33	FIELD	Field*
Specific Conductance, Field Measured	1046	umhos/cm		07/18/24 13:33	1		07/18/24 13:33	FIELD	Field*
Temperature, Field Measured	21.0	°C		07/18/24 13:33	1		07/18/24 13:33	FIELD	Field*
Turbidity, Field Measured	14.3	NTU		07/18/24 13:33	1	0.00	07/18/24 13:33	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	710	mg/L		07/22/24 13:48	1	10	07/22/24 13:48	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/22/24 13:48	1	10	07/22/24 13:48	TMS	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		07/30/24 13:54	1	0.250	07/30/24 13:54	QTC	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	720	mg/L		07/19/24 08:08	1	26	07/22/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/22/24 08:56	5	3.0	07/25/24 18:55	TJJ	EPA 6020A
Arsenic	13	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:55	TJJ	EPA 6020A
Barium	310	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:55	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/29/24 13:23	TJJ	EPA 6020A
Boron	110	ug/L		07/22/24 08:56	5	10	07/29/24 13:23	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:55	TJJ	EPA 6020A
Calcium	140	mg/L		07/22/24 08:56	5	0.20	07/25/24 18:55	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		07/22/24 08:56	5	4.0	07/25/24 18:55	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		07/22/24 08:56	5	2.0	07/25/24 18:55	TJJ	EPA 6020A
Lead	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:55	TJJ	EPA 6020A
Magnesium	56	mg/L		07/22/24 08:56	5	0.10	07/25/24 18:55	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/22/24 08:56	5	0.20	07/25/24 18:55	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:55	TJJ	EPA 6020A
Potassium	1.5	mg/L		07/22/24 08:56	5	0.10	07/25/24 18:55	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:55	TJJ	EPA 6020A
Sodium	61	mg/L		07/22/24 08:56	5	0.10	07/25/24 18:55	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG03595-02
Name: AW-08
Matrix: Ground Water - Grab

Sampled: 07/18/24 13:33
Received: 07/18/24 16:04
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 18:55	TJJ	EPA 6020A
Lithium	< 20	ug/L		07/22/24 08:56	1	20	07/25/24 16:02	LAM	EPA 6010B

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ANALYTICAL RESULTS

Sample: HG03595-03
Name: AW-10
Matrix: Ground Water - Grab

Sampled: 07/18/24 11:45
Received: 07/18/24 16:04
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	89	mg/L		07/26/24 02:34	25	25	07/26/24 02:34	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		07/26/24 02:14	1	1.0	07/26/24 02:14	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	1.94	Feet		07/18/24 11:45	1		07/18/24 11:45	FIELD	Field*
Dissolved oxygen, Field	3.5	mg/L		07/18/24 11:45	1		07/18/24 11:45	FIELD	Field*
Oxidation Reduction Potential	-117	mV		07/18/24 11:45	1	-500	07/18/24 11:45	FIELD	Field*
pH, Field Measured	7.18	pH Units		07/18/24 11:45	1		07/18/24 11:45	FIELD	Field*
Specific Conductance, Field Measured	2013	umhos/cm		07/18/24 11:45	1		07/18/24 11:45	FIELD	Field*
Temperature, Field Measured	21.4	°C		07/18/24 11:45	1		07/18/24 11:45	FIELD	Field*
Turbidity, Field Measured	112	NTU		07/18/24 11:45	1	0.00	07/18/24 11:45	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	1100	mg/L		07/22/24 13:48	1	10	07/22/24 13:48	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		07/22/24 13:48	1	10	07/22/24 13:48	TMS	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		07/30/24 13:56	1	0.250	07/30/24 13:56	QTC	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	1200	mg/L		07/19/24 08:08	1	26	07/22/24 00:00	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		07/22/24 08:56	5	3.0	07/25/24 19:07	TJJ	EPA 6020A
Arsenic	11	ug/L		07/22/24 08:56	5	1.0	07/25/24 19:07	TJJ	EPA 6020A
Barium	1100	ug/L		07/22/24 08:56	5	1.0	07/25/24 19:07	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/29/24 13:26	TJJ	EPA 6020A
Boron	460	ug/L		07/22/24 08:56	5	10	07/29/24 13:26	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 19:07	TJJ	EPA 6020A
Calcium	140	mg/L		07/22/24 08:56	5	0.20	07/25/24 19:07	TJJ	EPA 6020A
Chromium	19	ug/L		07/22/24 08:56	5	4.0	07/25/24 19:07	TJJ	EPA 6020A
Cobalt	10	ug/L		07/22/24 08:56	5	2.0	07/25/24 19:07	TJJ	EPA 6020A
Lead	9.6	ug/L		07/22/24 08:56	5	1.0	07/25/24 19:07	TJJ	EPA 6020A
Magnesium	66	mg/L		07/22/24 08:56	5	0.10	07/25/24 19:07	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		07/22/24 08:56	5	0.20	07/25/24 19:07	TJJ	EPA 6020A
Molybdenum	1.3	ug/L		07/22/24 08:56	5	1.0	07/25/24 19:07	TJJ	EPA 6020A
Potassium	5.3	mg/L		07/22/24 08:56	5	0.10	07/25/24 19:07	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 19:07	TJJ	EPA 6020A
Sodium	260	mg/L		07/22/24 08:56	5	0.10	07/25/24 19:07	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HG03595-03
Name: AW-10
Matrix: Ground Water - Grab

Sampled: 07/18/24 11:45
Received: 07/18/24 16:04
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		07/22/24 08:56	5	1.0	07/25/24 19:07	TJJ	EPA 6020A
Lithium	49	ug/L		07/22/24 08:56	1	20	07/25/24 16:03	LAM	EPA 6010B

Sample: HG03595-05
Name: XPW01A
Matrix: Ground Water

Sampled: 07/15/24 11:22
Received: 07/18/24 16:04
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - PIA									
Depth, From Measuring Point	11.89	Feet		07/15/24 11:22	1		07/15/24 11:22	DAB	Field*

Sample: HG03595-06
Name: XPW02
Matrix: Ground Water

Sampled: 07/15/24 11:15
Received: 07/18/24 16:04
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - PIA									
Depth, From Measuring Point	20.59	Feet		07/15/24 11:15	1		07/15/24 11:15	DAB	Field*

Sample: HG03595-07
Name: XPW03
Matrix: Ground Water

Sampled: 07/15/24 10:57
Received: 07/18/24 16:04
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - PIA									
Depth, From Measuring Point	16.59	Feet		07/15/24 10:57	1		07/15/24 10:57	DAB	Field*

Sample: HG03595-08
Name: SG-01
Matrix: Ground Water

Sampled: 07/15/24 10:41
Received: 07/18/24 16:04
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - PIA									
Depth, From Measuring Point	436	Feet		07/15/24 10:41	1		07/15/24 10:41	DAB	Field*

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B438131 - SW 3015 - EPA 6010B									
Blank (B438131-BLK1)				Prepared: 07/16/24 Analyzed: 07/25/24					
Lithium	< 20	ug/L							
LCS (B438131-BS1)				Prepared: 07/16/24 Analyzed: 07/25/24					
Lithium	562	ug/L		555.6		101	80-120		
Batch B438131 - SW 3015 - EPA 6020A									
Blank (B438131-BLK1)				Prepared: 07/16/24 Analyzed: 07/18/24					
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							
LCS (B438131-BS1)				Prepared: 07/16/24 Analyzed: 07/18/24					
Antimony	538	ug/L		555.6		97	80-120		
Arsenic	545	ug/L		555.6		98	80-120		
Barium	556	ug/L		555.6		100	80-120		
Beryllium	529	ug/L		555.6		95	80-120		
Boron	507	ug/L		555.6		91	80-120		
Cadmium	542	ug/L		555.6		98	80-120		
Calcium	5.55	mg/L		5.556		100	80-120		
Chromium	551	ug/L		555.6		99	80-120		
Cobalt	552	ug/L		555.6		99	80-120		
Lead	550	ug/L		555.6		99	80-120		
Magnesium	5.74	mg/L		5.556		103	80-120		
Mercury	54.3	ug/L		55.56		98	80-120		
Molybdenum	530	ug/L		555.6		95	80-120		
Potassium	5.70	mg/L		5.556		103	80-120		
Selenium	549	ug/L		555.6		99	80-120		
Sodium	5.71	mg/L		5.556		103	80-120		
Thallium	549	ug/L		555.6		99	80-120		
Batch B438237 - No Prep - SM 2540 C-2011									
Blank (B438237-BLK1)				Prepared: 07/17/24 Analyzed: 07/18/24					

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (B438237-BLK1)				Prepared: 07/17/24 Analyzed: 07/18/24					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B438237-BS1)				Prepared: 07/17/24 Analyzed: 07/18/24					
Solids - total dissolved solids (TDS)	967	mg/L		1000		97	84.4-107		
Duplicate (B438237-DUP1)	**Sample: HG02696-01**			Prepared: 07/17/24 Analyzed: 07/18/24					
Solids - total dissolved solids (TDS)	600	mg/L	M		565			6	5
Duplicate (B438237-DUP2)	**Sample: HG02901-01**			Prepared: 07/17/24 Analyzed: 07/18/24					
Solids - total dissolved solids (TDS)	1490	mg/L			1520			2	5
Batch B438247 - SW 3015 - EPA 6010B									
Blank (B438247-BLK1)				Prepared: 07/17/24 Analyzed: 07/25/24					
Lithium	< 20	ug/L							
LCS (B438247-BS1)				Prepared: 07/17/24 Analyzed: 07/25/24					
Lithium	556	ug/L		555.6		100	80-120		
Matrix Spike (B438247-MS1)	**Sample: HG02901-01**			Prepared: 07/17/24 Analyzed: 07/25/24					
Lithium	528	ug/L		555.6	6.52	94	75-125		
Matrix Spike Dup (B438247-MSD1)	**Sample: HG02901-01**			Prepared: 07/17/24 Analyzed: 07/25/24					
Lithium	546	ug/L		555.6	6.52	97	75-125	3	20
Batch B438247 - SW 3015 - EPA 6020A									
Blank (B438247-BLK1)				Prepared: 07/17/24 Analyzed: 07/19/24					
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							
LCS (B438247-BS1)				Prepared: 07/17/24 Analyzed: 07/19/24					
Antimony	535	ug/L		555.6		96	80-120		
Arsenic	524	ug/L		555.6		94	80-120		
Barium	535	ug/L		555.6		96	80-120		
Beryllium	520	ug/L		555.6		94	80-120		
Boron	550	ug/L		555.6		99	80-120		
Cadmium	543	ug/L		555.6		98	80-120		
Calcium	5.44	mg/L		5.556		98	80-120		
Chromium	545	ug/L		555.6		98	80-120		
Cobalt	537	ug/L		555.6		97	80-120		

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
LCS (B438247-BS1)				Prepared: 07/17/24 Analyzed: 07/19/24					
Lead	511	ug/L		555.6		92	80-120		
Magnesium	5.67	mg/L		5.556		102	80-120		
Mercury	55.6	ug/L		55.56		100	80-120		
Molybdenum	526	ug/L		555.6		95	80-120		
Potassium	5.36	mg/L		5.556		96	80-120		
Selenium	534	ug/L		555.6		96	80-120		
Sodium	5.58	mg/L		5.556		100	80-120		
Thallium	508	ug/L		555.6		91	80-120		
Matrix Spike (B438247-MS1)	**Sample: HG02901-01**			Prepared: 07/17/24 Analyzed: 07/19/24					
Antimony	537	ug/L		555.6	ND	97	75-125		
Arsenic	532	ug/L		555.6	ND	96	75-125		
Barium	596	ug/L		555.6	69.9	95	75-125		
Beryllium	495	ug/L		555.6	ND	89	75-125		
Boron	20900	ug/L	Q1	555.6	20600	52	75-125		
Cadmium	537	ug/L		555.6	ND	97	75-125		
Calcium	228	mg/L	Q4	5.556	232	NR	75-125		
Chromium	544	ug/L		555.6	ND	98	75-125		
Cobalt	525	ug/L		555.6	1.37	94	75-125		
Lead	492	ug/L		555.6	ND	89	75-125		
Magnesium	93.6	mg/L	Q4	5.556	91.6	36	75-125		
Mercury	57.4	ug/L		55.56	ND	103	75-125		
Molybdenum	543	ug/L		555.6	0.794	98	75-125		
Potassium	6.87	mg/L		5.556	1.61	95	75-125		
Selenium	537	ug/L		555.6	ND	97	75-125		
Sodium	82.8	mg/L	Q4	5.556	80.6	40	75-125		
Thallium	495	ug/L		555.6	ND	89	75-125		
Matrix Spike Dup (B438247-MSD1)	**Sample: HG02901-01**			Prepared: 07/17/24 Analyzed: 07/19/24					
Antimony	544	ug/L		555.6	ND	98	75-125	1	20
Arsenic	539	ug/L		555.6	ND	97	75-125	1	20
Barium	608	ug/L		555.6	69.9	97	75-125	2	20
Beryllium	507	ug/L		555.6	ND	91	75-125	2	20
Boron	21000	ug/L	Q2	555.6	20600	70	75-125	0.5	20
Cadmium	550	ug/L		555.6	ND	99	75-125	2	20
Calcium	231	mg/L	Q4	5.556	232	NR	75-125	1	20
Chromium	552	ug/L		555.6	ND	99	75-125	1	20
Cobalt	531	ug/L		555.6	1.37	95	75-125	1	20
Lead	505	ug/L		555.6	ND	91	75-125	3	20
Magnesium	94.0	mg/L	Q4	5.556	91.6	44	75-125	0.5	20
Mercury	58.4	ug/L		55.56	ND	105	75-125	2	20
Molybdenum	557	ug/L		555.6	0.794	100	75-125	3	20
Potassium	7.02	mg/L		5.556	1.61	97	75-125	2	20
Selenium	545	ug/L		555.6	ND	98	75-125	1	20
Sodium	83.3	mg/L	Q4	5.556	80.6	48	75-125	0.6	20
Thallium	505	ug/L		555.6	ND	91	75-125	2	20
Batch B438355 - No Prep - SM 2540 C-2011									
Blank (B438355-BLK1)				Prepared: 07/18/24 Analyzed: 07/19/24					

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (B438355-BLK1)				Prepared: 07/18/24 Analyzed: 07/19/24					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B438355-BS1)				Prepared: 07/18/24 Analyzed: 07/19/24					
Solids - total dissolved solids (TDS)	977	mg/L		1000		98	84.4-107		
Duplicate (B438355-DUP1)	**Sample: HG03226-01**			Prepared: 07/18/24 Analyzed: 07/19/24					
Solids - total dissolved solids (TDS)	1010	mg/L			1030			2	5
Duplicate (B438355-DUP2)	**Sample: HG03226-04**			Prepared: 07/18/24 Analyzed: 07/19/24					
Solids - total dissolved solids (TDS)	1340	mg/L			1320			2	5
Batch B438467 - No Prep - SM 2540 C-2011									
Blank (B438467-BLK1)				Prepared: 07/19/24 Analyzed: 07/22/24					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B438467-BS1)				Prepared: 07/19/24 Analyzed: 07/22/24					
Solids - total dissolved solids (TDS)	953	mg/L		1000		95	84.4-107		
Duplicate (B438467-DUP2)	**Sample: HG03595-01**			Prepared: 07/19/24 Analyzed: 07/22/24					
Solids - total dissolved solids (TDS)	895	mg/L			905			1	5
Batch B438471 - No Prep - SM 2320 B-2011									
Blank (B438471-BLK1)				Prepared & Analyzed: 07/18/24					
Alkalinity - bicarbonate as CaCO3	2.50	mg/L							
Alkalinity - carbonate as CaCO3	< 2.0	mg/L							
Blank (B438471-BLK2)				Prepared & Analyzed: 07/18/24					
Alkalinity - bicarbonate as CaCO3	2.50	mg/L							
Alkalinity - carbonate as CaCO3	< 2.0	mg/L							
Duplicate (B438471-DUP1)	**Sample: HG02696-01**			Prepared & Analyzed: 07/18/24					
Alkalinity - bicarbonate as CaCO3	500	mg/L			512			2	10
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
Duplicate (B438471-DUP2)	**Sample: HG03226-01**			Prepared & Analyzed: 07/18/24					
Alkalinity - bicarbonate as CaCO3	912	mg/L			962			5	10
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
Duplicate (B438471-DUP3)	**Sample: HG02901-01**			Prepared & Analyzed: 07/18/24					
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO3	462	mg/L			438			6	10
Batch B438596 - SW 3015 - EPA 6010B									
Blank (B438596-BLK1)				Prepared: 07/22/24 Analyzed: 07/25/24					
Lithium	< 20	ug/L							
LCS (B438596-BS1)				Prepared: 07/22/24 Analyzed: 07/25/24					
Lithium	561	ug/L		555.6		101	80-120		
Matrix Spike (B438596-MS1)	**Sample: HG03226-01**			Prepared: 07/22/24 Analyzed: 07/25/24					
Lithium	537	ug/L		555.6	19.1	93	75-125		
Matrix Spike Dup (B438596-MSD1)	**Sample: HG03226-01**			Prepared: 07/22/24 Analyzed: 07/25/24					
Lithium	515	ug/L		555.6	19.1	89	75-125	4	20
Batch B438596 - SW 3015 - EPA 6020A									
Blank (B438596-BLK1)				Prepared: 07/22/24 Analyzed: 07/25/24					
Antimony	< 3.0	ug/L							
Arsenic	< 1.0	ug/L							

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (B438596-BLK1)				Prepared: 07/22/24 Analyzed: 07/25/24					
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							
LCS (B438596-BS1)				Prepared: 07/22/24 Analyzed: 07/25/24					
Antimony	560	ug/L		555.6		101	80-120		
Arsenic	554	ug/L		555.6		100	80-120		
Barium	565	ug/L		555.6		102	80-120		
Beryllium	578	ug/L		555.6		104	80-120		
Boron	576	ug/L		555.6		104	80-120		
Cadmium	562	ug/L		555.6		101	80-120		
Calcium	5.78	mg/L		5.556		104	80-120		
Chromium	578	ug/L		555.6		104	80-120		
Cobalt	565	ug/L		555.6		102	80-120		
Lead	567	ug/L		555.6		102	80-120		
Magnesium	6.13	mg/L		5.556		110	80-120		
Mercury	52.7	ug/L		55.56		95	80-120		
Molybdenum	554	ug/L		555.6		100	80-120		
Potassium	5.73	mg/L		5.556		103	80-120		
Selenium	573	ug/L		555.6		103	80-120		
Sodium	6.03	mg/L		5.556		109	80-120		
Thallium	543	ug/L		555.6		98	80-120		
Matrix Spike (B438596-MS1)	**Sample: HG03226-01**			Prepared: 07/22/24 Analyzed: 07/25/24					
Antimony	531	ug/L		555.6	ND	96	75-125		
Arsenic	537	ug/L		555.6	9.99	95	75-125		
Barium	1370	ug/L		555.6	852	93	75-125		
Beryllium	548	ug/L		555.6	ND	99	75-125		
Boron	759	ug/L		555.6	228	96	75-125		
Cadmium	534	ug/L		555.6	ND	96	75-125		
Calcium	156	mg/L	Q4	5.556	153	54	75-125		
Chromium	546	ug/L		555.6	ND	98	75-125		
Cobalt	530	ug/L		555.6	1.58	95	75-125		
Lead	528	ug/L		555.6	0.594	95	75-125		
Magnesium	70.9	mg/L	Q4	5.556	67.1	67	75-125		
Mercury	52.1	ug/L		55.56	ND	94	75-125		
Molybdenum	542	ug/L		555.6	1.52	97	75-125		

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike (B438596-MS1)	**Sample: HG03226-01**			Prepared: 07/22/24 Analyzed: 07/25/24					
Potassium	7.97	mg/L		5.556	2.58	97	75-125		
Selenium	549	ug/L		555.6	ND	99	75-125		
Sodium	151	mg/L	Q4	5.556	149	39	75-125		
Thallium	508	ug/L		555.6	ND	91	75-125		
Matrix Spike Dup (B438596-MSD1)	**Sample: HG03226-01**			Prepared: 07/22/24 Analyzed: 07/25/24					
Antimony	534	ug/L		555.6	ND	96	75-125	0.6	20
Arsenic	539	ug/L		555.6	9.99	95	75-125	0.3	20
Barium	1370	ug/L		555.6	852	93	75-125	0.05	20
Beryllium	550	ug/L		555.6	ND	99	75-125	0.3	20
Boron	759	ug/L		555.6	228	96	75-125	0.04	20
Cadmium	538	ug/L		555.6	ND	97	75-125	0.8	20
Calcium	157	mg/L	Q4	5.556	153	72	75-125	0.7	20
Chromium	551	ug/L		555.6	ND	99	75-125	0.8	20
Cobalt	533	ug/L		555.6	1.58	96	75-125	0.5	20
Lead	531	ug/L		555.6	0.594	95	75-125	0.5	20
Magnesium	71.1	mg/L	Q4	5.556	67.1	72	75-125	0.4	20
Mercury	52.6	ug/L		55.56	ND	95	75-125	1	20
Molybdenum	546	ug/L		555.6	1.52	98	75-125	0.7	20
Potassium	7.93	mg/L		5.556	2.58	96	75-125	0.4	20
Selenium	546	ug/L		555.6	ND	98	75-125	0.5	20
Sodium	150	mg/L	Q4	5.556	149	28	75-125	0.4	20
Thallium	510	ug/L		555.6	ND	92	75-125	0.5	20
Batch B438610 - IC No Prep - EPA 300.0 REV 2.1									
Calibration Blank (B438610-CCB1)				Prepared & Analyzed: 07/19/24					
Sulfate	0.00	mg/L							
Fluoride	0.00	mg/L							
Chloride	0.00	mg/L							
Calibration Check (B438610-CCV1)				Prepared & Analyzed: 07/19/24					
Fluoride	5.29	mg/L		5.000		106	90-110		
Chloride	5.04	mg/L		5.000		101	90-110		
Sulfate	4.92	mg/L		5.000		98	90-110		
Matrix Spike (B438610-MS1)	**Sample: HG02696-01**			Prepared & Analyzed: 07/19/24					
Fluoride	2.16	mg/L	Q1	1.500	0.314	123	80-120		
Chloride	1.0E9	mg/L	Q4	1.500	31	NR	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	33.6	NR	80-120		
Matrix Spike Dup (B438610-MSD1)	**Sample: HG02696-01**			Prepared & Analyzed: 07/19/24					
Fluoride	2.14	mg/L	Q2	1.500	0.314	122	80-120	0.7	20
Chloride	1.0E9	mg/L	Q4	1.500	31	NR	80-120	0	20
Sulfate	1.00E9	mg/L	Q4	1.500	33.6	NR	80-120	0	20
Batch B438669 - No Prep - SM 2320 B-2011									
Blank (B438669-BLK1)				Prepared & Analyzed: 07/22/24					
Alkalinity - bicarbonate as CaCO3	2.50	mg/L							
Alkalinity - carbonate as CaCO3	< 2.0	mg/L							
Duplicate (B438669-DUP1)	**Sample: HG03595-01**			Prepared & Analyzed: 07/22/24					
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10

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

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Duplicate (B438669-DUP1)	**Sample: HG03595-01**			Prepared & Analyzed: 07/22/24					
Alkalinity - bicarbonate as CaCO3	838	mg/L			838			0	10
Batch B438745 - IC No Prep - EPA 300.0 REV 2.1									
Calibration Blank (B438745-CCB1)				Prepared & Analyzed: 07/22/24					
Sulfate	0.00	mg/L							
Chloride	0.00	mg/L							
Calibration Check (B438745-CCV1)				Prepared & Analyzed: 07/22/24					
Sulfate	5.14	mg/L		5.000		103	90-110		
Chloride	5.26	mg/L		5.000		105	90-110		
Matrix Spike (B438745-MS1)	**Sample: HG03226-01**			Prepared & Analyzed: 07/22/24					
Chloride	1.0E9	mg/L	Q4	1.500	33	NR	80-120		
Sulfate	1.60	mg/L		1.500	ND	107	80-120		
Matrix Spike (B438745-MS2)	**Sample: HG03226-02**			Prepared & Analyzed: 07/22/24					
Sulfate	5.71	mg/L		1.500	4.08	108	80-120		
Chloride	1.0E9	mg/L	Q4	1.500	24	NR	80-120		
Matrix Spike (B438745-MS3)	**Sample: HG03226-03**			Prepared & Analyzed: 07/22/24					
Sulfate	1.60	mg/L		1.500	0.243	91	80-120		
Chloride	1.0E9	mg/L	Q4	1.500	33	NR	80-120		
Matrix Spike Dup (B438745-MSD1)	**Sample: HG03226-01**			Prepared & Analyzed: 07/22/24					
Sulfate	1.58	mg/L		1.500	ND	106	80-120	1	20
Chloride	1.0E9	mg/L	Q4	1.500	33	NR	80-120	0	20
Matrix Spike Dup (B438745-MSD2)	**Sample: HG03226-02**			Prepared & Analyzed: 07/22/24					
Chloride	1.0E9	mg/L	Q4	1.500	24	NR	80-120	0	20
Sulfate	5.79	mg/L		1.500	4.08	114	80-120	1	20
Matrix Spike Dup (B438745-MSD3)	**Sample: HG03226-03**			Prepared & Analyzed: 07/22/24					
Sulfate	1.62	mg/L		1.500	0.243	92	80-120	1	20
Chloride	1.0E9	mg/L	Q4	1.500	33	NR	80-120	0	20
Batch B438746 - IC No Prep - EPA 300.0 REV 2.1									
Calibration Blank (B438746-CCB1)				Prepared & Analyzed: 07/22/24					
Chloride	0.650	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B438746-CCV1)				Prepared & Analyzed: 07/22/24					
Sulfate	5.08	mg/L		5.000		102	90-110		
Chloride	4.89	mg/L		5.000		98	90-110		
Batch B438865 - IC No Prep - EPA 300.0 REV 2.1									
Calibration Blank (B438865-CCB1)				Prepared & Analyzed: 07/23/24					
Sulfate	0.00	mg/L							
Chloride	0.643	mg/L							
Calibration Check (B438865-CCV1)				Prepared & Analyzed: 07/23/24					
Sulfate	4.99	mg/L		5.000		100	90-110		
Chloride	4.75	mg/L		5.000		95	90-110		
Matrix Spike (B438865-MS1)	**Sample: HG02901-01**			Prepared & Analyzed: 07/23/24					
Sulfate	1.00E9	mg/L	Q4	1.500	516	NR	80-120		
Chloride	< 1.0	mg/L	Q1	1.500	77	NR	80-120		
Matrix Spike Dup (B438865-MSD1)	**Sample: HG02901-01**			Prepared & Analyzed: 07/23/24					

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2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike Dup (B438865-MSD1)	**Sample: HG02901-01**			Prepared & Analyzed: 07/23/24					
Sulfate	1.00E9	mg/L	Q4	1.500	516	NR	80-120	0	20
Chloride	< 1.0	mg/L	Q2	1.500	77	NR	80-120		20
Batch B439073 - No Prep - SM 4500-F C-2011									
Calibration Blank (B439073-CCB1)				Prepared & Analyzed: 07/25/24					
Fluoride	0.0240	mg/L							
Calibration Blank (B439073-CCB2)				Prepared & Analyzed: 07/25/24					
Fluoride	0.0220	mg/L							
Calibration Check (B439073-CCV1)				Prepared & Analyzed: 07/25/24					
Fluoride	0.713	mg/L		0.7000		102	90-110		
Calibration Check (B439073-CCV2)				Prepared & Analyzed: 07/25/24					
Fluoride	0.670	mg/L		0.7000		96	90-110		
Matrix Spike (B439073-MS2)	**Sample: HG03226-01**			Prepared & Analyzed: 07/25/24					
Fluoride	1.15	mg/L		1.000	0.123	103	80-120		
Matrix Spike Dup (B439073-MSD2)	**Sample: HG03226-01**			Prepared & Analyzed: 07/25/24					
Fluoride	1.19	mg/L		1.000	0.123	107	80-120	3	20
Batch B439246 - IC No Prep - EPA 300.0 REV 2.1									
Calibration Blank (B439246-CCB1)				Prepared & Analyzed: 07/25/24					
Sulfate	0.00	mg/L							
Chloride	0.958	mg/L							
Calibration Check (B439246-CCV1)				Prepared & Analyzed: 07/25/24					
Chloride	4.78	mg/L		5.000		96	90-110		
Sulfate	4.99	mg/L		5.000		100	90-110		
Matrix Spike (B439246-MS1)	**Sample: HG03595-01**			Prepared & Analyzed: 07/25/24					
Sulfate	1.80	mg/L		1.500	0.343	97	80-120		
Chloride	< 1.0	mg/L	Q4	1.500	47	NR	80-120		
Matrix Spike Dup (B439246-MSD1)	**Sample: HG03595-01**			Prepared & Analyzed: 07/25/24					
Sulfate	1.79	mg/L		1.500	0.343	96	80-120	0.9	20
Chloride	< 1.0	mg/L	Q4	1.500	47	NR	80-120		20
Batch B439416 - No Prep - SM 4500-F C-2011									
Calibration Blank (B439416-CCB1)				Prepared & Analyzed: 07/30/24					
Fluoride	0.100	mg/L							
Calibration Blank (B439416-CCB2)				Prepared & Analyzed: 07/30/24					
Fluoride	0.0280	mg/L							
Calibration Check (B439416-CCV1)				Prepared & Analyzed: 07/30/24					
Fluoride	0.711	mg/L		0.7000		102	90-110		
Calibration Check (B439416-CCV2)				Prepared & Analyzed: 07/30/24					
Fluoride	0.688	mg/L		0.7000		98	90-110		
Matrix Spike (B439416-MS4)	**Sample: HG03595-01**			Prepared & Analyzed: 07/30/24					
Fluoride	1.05	mg/L		1.000	0.0770	97	80-120		
Matrix Spike Dup (B439416-MSD4)	**Sample: HG03595-01**			Prepared & Analyzed: 07/30/24					
Fluoride	1.07	mg/L		1.000	0.0770	100	80-120	3	20

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

NOTES

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

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050
TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615
TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553
Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)
Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)
Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807
USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050
Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Qualifiers

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

Certified by: Diane Billings, Project Manager

HG02696 VB

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 2

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Vistra Corp-Edwards	Report To: Brian Voelker	Attention: Brian Voelker
Address: 7800 Cilco Lane	Copy To: Sam Davies: samantha.davies@vistracorp.com	Company Name: Vistra Corp
Peoria, IL 61607	Mark Davis: Mark.Davis1@vistracorp.com	Address: see Section A
Email To: Brian.Voelker@VistraCorp.com	Purchase Order No.:	Quote Reference:
Phone: (217) 753-8911 Fax:	Project Name:	Project Manager:
Requested Due Date/TAT: 10 day	Project Number:	Profile #:

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S															X	X		
2	AP07S															X	X		
3	AW-01															X	X		
4	~~AW-05~~ AW-06 Dup			7/15/24	1542		4	X		X						X	X		
5	AW-06			7/15/24	1542		4	X		X						X	X		
6	AW-08															X	X		
7	AW-09															X	X		
8	AW-10															X	X		
9	AW-11															X	X		
10	AW-14															X	X		
11	AW-15															X	X		
12	AW-15S															X	X		
13	AW-16															X	X		
14	AW-17															X	X		
15	~~AW-18~~ AW-21			7/15/24	1610		4	X		X						X	X		
16	AW-19			7/15/24	1438		4	X		X						X	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q3 Rev 0		7/15/24	1649							
				VB	7/15/24	1649		Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: James David

SIGNATURE of SAMPLER: James David DATE Signed (MM/DD/YY): 7/15/24

IR Gun # 15 Correction Factor (Deg C) +0.2

Observed Temp (Deg C) 3.5 Corrected Temp (Deg C) 3.7

Delivery Method: FedEx UPS Walk-in USPS Other

Courier

HG02901/CJ

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 of 2

Section A Required Client Information:

Company:	Vistra Corp-Edwards
Address:	7800 Cilco Lane
	Peoria, IL 61607
Email To:	Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911	Fax:
Requested Due Date/TAT:	10 day

Section B Required Project Information:

Report To:	Brian Voelker
Copy To:	Sam Davies: samantha.davies@vistracorp.com
	Mark Davis: Mark.Davis1@vistracorp.com
Purchase Order No.:	
Project Name:	
Project Number:	

Section C Invoice Information:

Attention:	Brian Voelker
Company Name:	Vistra Corp
Address:	see Section A
Quote Reference:	
Project Manager:	
Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S																X	X		
2	AP07S	GW	G	7/16/24	1414		4	X		X							X	X		
3	AW-01	GW	G	7/16/24	1209		4	X		X							X	X		
4	AW-05	GW	G	7/16/24	1528		4	X		X							X	X		
5	~~AW-06~~ AW-07 dup	GW	G	7/16/24	1209		4	X		X							X	X		
6	AW-08																X	X		
7	AW-09	GW	G	7/16/24	1233		4	X		X							X	X		
8	AW-10																X	X		
9	AW-11																X	X		
10	AW-14																X	X		
11	AW-15																X	X		
12	~~AW-15~~ AW-16 dup	GW	G	7/16/24	1522		4	X		X							X	X		
13	AW-16	GW	G	7/16/24	1522		4	X		X							X	X		
14	AW-17	GW	G	7/16/24	1045		4	X		X							X	X		
15	AW-18	GW	G	7/16/24	1412		4	X		X							X	X		
16	AW-19																X	X		

Requested Analysis Filtered (Y/N)

IR Gun # 13 Correction Factor (Deg C) +0.1
Observed Temp (Deg C) 1.4 Corrected Temp (Deg C) 1.5
Delivery Method: FedEx UPS Walk-in USPS Other 0
courier

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
EDW-24Q3 Rev 0		7/16/24	1626			
				Cate P. Jones	7/16/24	1626

SAMPLE CONDITIONS

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
1.5	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: James David

SIGNATURE of SAMPLER: James David DATE Signed (MM/DD/YY): 7/16/24

HG03-26

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Vistra Corp-Edwards	Report To:	Brian Voelker	Attention:	Brian Voelker
Address:	7800 Cilco Lane	Copy To:	Sam Davies: samantha.davies@vistracorp.com	Company Name:	Vistra Corp
	Peoria, IL 61607		Mark Davis: Mark.Davis1@vistracorp.com	Address:	see Section A
Email To:	Brian.Voelker@VistraCorp.com	Purchase Order No.:		Quote Reference:	
Phone:	(217) 753-8911 Fax:	Project Name:		Project Manager:	
Requested Due Date/TAT:	10 day	Project Number:		Profile #:	

REGULATORY AGENCY

NPDES | GROUND WATER | DRINKING WATER
UST | RCRA | OTHER

Site Location STATE: IL

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S																X	X		
2	AP07S																X	X		
3	AW-01																X	X		
4	AW-05																X	X		
5	AW-06																X	X		
6	AW-08																X	X		
7	AW-09																X	X		
8	AW-10																X	X		
9	AW-11	WT	G	7/17/24	1545		4	X		X							X	X		
10	AW-14	WT	G	7/17/24	1302		4	X		X							X	X		
11	AW-15	WT	G	7/17/24	1019		4	X		X							X	X		
12	AW-15S	WT	G	7/17/24	1142		4	X		X							X	X		
13	AW-16																X	X		
14	AW-17																X	X		
15	AW-18																X	X		
16	AW-19																X	X		

IR Gun #: 16 Correction Factor (Deg C): +0.1

Observed Temp (Deg C): 3.7 Corrected Temp (Deg C): 3.8

Delivery Method: FedEx UPS Walk-in USPS (Other)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q3 Rev 0		7/17/24	1621							
					7/17/24	1621	3.8	Y	N	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Aaron Robertson

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 07/17/24

HG03595
Rad = HG-03596

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 of 2

Section A Required Client Information:

Company:	Vistra Corp-Edwards
Address:	7800 Cilco Lane
	Peoria, IL 61607
Email To:	Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911	Fax:
Requested Due Date/TAT:	10 day

Section B Required Project Information:

Report To:	Brian Voelker
Copy To:	Sam Davies: samantha.davies@vistracorp.com
	Mark Davis: Mark.Davis1@vistracorp.com
Purchase Order No.:	
Project Name:	
Project Number:	

Section C Invoice Information:

Attention:	Brian Voelker
Company Name:	Vistra Corp
Address:	see Section A
Quote Reference:	
Project Manager:	
Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S	GW	G	07/17/24	~~0937~~ 1010		4										X	X		
2	AP07S				7/18/24 DL												X	X		
3	AW-01																X	X		
4	AW-05																X	X		
5	AW-06				1333												X	X		
6	AW-08	GW	G	07/18/24	~~1228~~		4										X	X		
7	AW-09				7/18/24 DL												X	X		
8	AW-10	GW	G	07/18/24	~~1100~~		4										X	X		
9	AW-11				1145												X	X		
10	AW-14				7/18/24 DL												X	X		
11	AW-15																X	X		
12	AW-15S																X	X		
13	AW-16																X	X		
14	AW-17																X	X		
15	AW-18																X	X		
16	AW-19																X	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q3 Rev 0		07/18/24	1604		7/18/24	1604	2.8	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: KAITE DESKE

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 07/18/24

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 2

Section A Required Client Information:

Company: Vistra Corp-Edwards
Address: 7800 Cilco Lane
Peoria, IL 61607
Email To: Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911 Fax:
Requested Due Date/TAT: 10 day

Section B Required Project Information:

Report To: Brian Voelker
Copy To: Sam Davies: samantha.davies@vistracorp.com
Mark Davis: Mark.Davis1@vistracorp.com
Purchase Order No.:
Project Name:
Project Number:

Section C Invoice Information:

Attention: Brian Voelker
Company Name: Vistra Corp
Address: see Section A
Quote Reference:
Project Manager:
Profile #:

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test ↓ Y/N	EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AW-21																X	X		
2	SG-01																X	X		
3	XPW01A																X	X		
4	XPW02																X	X		
5	XPW03																X	X		
6	Field Blank	WG	G	07/18/24	1340		4													
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q3 Rev 0		07/18/24	1604							
					7/18/24	1604	2.3	Y	N	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: KYLER DEESE
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 07/18/24

SAR-3: Episodic Depth to Groundwater Measurements

All episodic water levels on SAR-3 and SAR-4 must be collected within a 24 hour period.

Plant: EDW
Event: EDW-24Q3 Rev 0

Well	Unique ID	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
AP08	EDW_AP08	7/15/24	1117	8.28	No lock	JD
AP09	EDW_AP09		1059	9.44		AM
APW-01	EDW_APW-01		1014	5.80		AM
AW-12	EDW_AW-12		1135	7.39		AW
AW-13	EDW_AW-13		1024	5.95		JD
AW-20	EDW_AW-20		1124	16.95		JD
AW-22	EDW_AW-22		1214	12.07		JD
AW-23	EDW_AW-23		0932	5.19		AM
OW-01	EDW_OW-01		1201	23.94		JD
OW-02	EDW_OW-02		0948	7.80	No lock	JD
PTW-01	EDW_PTW-01		1205	25.59		JD
PTW-02	EDW_PTW-02		0949	7.98	No lock	JD

U:6/17/24 RAB

SAR-4: Depth to Groundwater Measurements - On-site Transducer Downloads
All episodic water levels on SAR-3 and SAR-4 must be collected within a 24 period.
Plant: EDW
Event: EDW-24Q3 Rev 1

Well	Unique ID	Date	Time	Measured Depth to Water (ft bmp)	On-site Transducer Data					Comments	Initials
					Data Logger Serial No.	Does Data Logger Serial No. Match?	WL Reading on Transducer (ft)	Data down-loaded?	Batt (H/M/L/R)		
AP05S	EDW_AP05#S	7/15/24	1008	4.74	21629301	✓	438.72	✓	H		AM
AP07S	EDW_AP07#S		1203	24.90	21615552	✓	436.2142	✓	H		JD
AW-01	EDW_AW-01		1023	10.29	21615144	✓	454.48	✓	~~M~~ R	BG 7/19/24	AW
AW-05	EDW_AW-05		1019	8.35	21615132	✓	435.16	✓	H		AM
AW-06	EDW_AW-06		0908	27.41	21615127	✓	434.5084	✓	H		JD
AW-08	EDW_AW-08		1027	22.98	21615722	✓	439.55	✓	H		AM
AW-09	EDW_AW-09		0927	26.60	21615130	✓	435.1424	✓	H		JD
AW-10	EDW_AW-10		1131	1.78	21615754	✓	438.41	✓	H		AM
AW-11	EDW_AW-11		1020	5.87	21615129	✓	434.3426	✓	H		JD
AW-14	EDW_AW-14		1017	7.18	*No Transducer Installed Yet*	N/A	—	—	—		JD
AW-15	EDW_AW-15		0950	8.50	21615761	✓	433.5871	✓	H		JD
AW-15S	EDW_AW-15#S		0951	9.91	21629298	✓	431.0392	✓	H		JD
AW-16	EDW_AW-16		0940	24.69	21615714	✓	437.7119	✓	H		JD
AW-17	EDW_AW-17		0920	25.64	21615756	✓	436.7538	✓	H		JD
AW-18	EDW_AW-18		0913	27.94	21615763	✓	434.9563	✓	H		JD
AW-19	EDW_AW-19		1110	14.16	21615718	✓	446.7936	✓	H		JD
AW-21	EDW_AW-21	—	1129	17.90	21615514	✓	442.9732	✓	~~M~~ R		JD

BG
7/19/24

SAR-4: Depth to Groundwater Measurements - On-site Transducer Downloads
All episodic water levels on SAR-3 and SAR-4 must be collected within a 24 period.
Plant: EDW
Event: EDW-24Q3 Rev 1

Well	Unique ID	Date	Time	Measured Depth to Water (ft bmp)	On-site Transducer Data					Comments	Initials
					Data Logger Serial No.	Does Data Logger Serial No. Match?	WL Reading on Transducer (ft)	Data down-loaded?	Batt (H/M/L/R)		
EMW-05	EDW_EMW-05	7/15/24	1208	21.10	21615739	J	436.3921	✓	H		JD
XPW01A	EDW_XPW01A_pore		1122	11.89	21615740	J	452.55	J	~~M~~ R	BG 7/19/24	AW
XPW02	EDW_XPW02_pore		1115	20.59	21615752	J	453.43	J	H		AM
XPW03	EDW_XPW03_pore		1057	16.59	21629300	J	449.90	J	H		AM
RG-01	EDW_RG-01					N/A					
SG-01	EDW_yILRIVER		1041	436	21768086	J	25.75	J	~~M~~ R	BG 7/19/24	AM

U: 7/3/24 RAB

Notes:
Batt = battery
bmp = below measuring point
ft = feet
H = high
L = low
M = medium
R = replaced

Site: Edwards Ash Pond

WELL/SAMPLE POINT AP05S **Purge Method:** BLADDER

Date: 07/18/24 Start Time: 0915 Finish/Sample Time: 1010

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1 Gal (1)

Depth to Water From MP: 5.09 ft Total Purge Volume: 1.8 Gal (1.8)

Water Column Length: _____ ft Max Drawdown: — ft

Well Water Volume: _____ Gal / L Total Drawdown: 0.24 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	0930	5.49	100	7.01	1058	15.44	-141	0.98	96.1
2	0934	5.49	100	7.01	1056	15.55	-142	0.97	84.2
3	0937	5.49	100	7.00	1057	15.56	-143	0.96	79.9
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:

Odor: ☐ None ☑ Slight ☐ Mod. ☐ Strong

Color ☐ None ☑ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☑ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	P 1000mL
1	P 2.5L HNO3

(4)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
	General (P,500mL)
1	P 1000mL

Ferrous Iron _____ mg/L

Comments: DTW – 5.33

Sampler's Signature: [signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AP07S KMD 7/16/24 **Purge Method:** BLADDER

Date: 07/16/24 Start Time: ~~1221~~ 1255 Finish/Sample Time: 1414

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1 Gal (L)

Depth to Water From MP: 24.68 ft Total Purge Volume: 1.3 Gal / (L)

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: 0.32 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1326	25.00	100	6.91	1091	18.82	100	1.89	1.4
2	1327	25.00	100	6.90	1090	18.83	99	1.87	1.4
3	1328	25.00	100	6.89	1090	18.80	97	1.88	1.1
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☑ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☑ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	P 2.5L HNO3
1	P 1000mL

(2L)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P,~~500mL~~) 1000mL

Ferrous Iron _____ mg/L

Comments 25.00 FDTW

Sampler's Signature: [signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-01 **Purge Method:** BLADDER

Date: 07/16/24 Start Time: 1009 Finish/Sample Time: 1209

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1 Gal (L)

Depth to Water From MP: 10.25 ft Total Purge Volume: 1.3 Gal (L)

Water Column Length: _____ ft Max Drawdown: — ft

Well Water Volume: _____ Gal / L Total Drawdown: 13.31 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	1028	12.19	100	6.99	1031	20.76	28	3.34	88.30
2	1029	12.31	100	6.99	1032	20.79	31	3.29	84.80
3	1030	12.42	100	6.98	1030	20.76	30	3.28	87.00
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☑ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☑ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
2	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
2	P, 2.5L HNO3
2	P, 1000mL, TOTAL

(8)

Filtered Qty	Filtered Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
2	General (P, ~~500mL~~) 1000mL

Ferrous Iron _____ mg/L

Comments FDW-23.56 FIELD DUPE TAKEN HERE.

Sampler's Signature: [signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-05 **Purge Method:** Compressor

Date: 7/16/24 Start Time: 1450 Finish/Sample Time: 1528

Well Depth (Bottom) From MP: 22.42 ft Top of Pump Min. Purge Volume: 1000 Gal / L (mL)

Depth to Water From MP: 8.05 ft Total Purge Volume: 1900 Gal / L (mL)

Water Column Length: 14.37 ft Max Drawdown: — ft

Well Water Volume: 8.70 Gal (L) Total Drawdown: 0.49 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	1505	8.52	300	7.38	1470	18.06	-60	0.00	473
2	1506	8.62	300	7.28	1460	17.98	-65	0.00	355
3	1508	8.58	300	7.27	1460	17.97	-69	0.00	266
4	~~1509~~		~~300~~	7/16/B					
5	~~1511~~		~~300~~						
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ■ None □ Slight □ Mod. □ Strong

Color □ None ■ Slight □ Mod. □ Strong

Turb: □ None ■ Slight □ Mod □ Strong

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

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	(P, 2.5L, HNO_3)
1	(P, 1000 mL, unp)

(4)

Filtered Qty	Filtered Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~) 1000 mL

Ferrous Iron — mg/L

Comments Final DTW: 8.54ft

Reads stable after taking 3 reads

Sampler's Signature: JBohannan

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-06 **Purge Method:** Dedicated Bladder

Date: 7/15/2024 Start Time: 1343 Finish/Sample Time: 1542

Well Depth (Bottom) From MP: 58.16 ft Min. Purge Volume: 1000 Gal (L) mL

Depth to Water From MP: 27.38 ft Total Purge Volume: 1900 Gal (L) mL

Water Column Length: ____ ft Max Drawdown: — ft AMP 7/15/24

Well Water Volume: ____ Gal / L Total Drawdown: 12.12 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	1400	28.71	100	7.04	1140	25.32	-46	1.76	0.0
2	1403	29.01	100	7.01	1140	25.27	-55	1.72	0.0
3	1406	29.22	100	7.02	1150	25.24	-64	1.68	0.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☑ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☑ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250mL~~ 1000mL
1	Lab (P, 2.5L, HNO3)

4 V H

Filtered Qty	Filtered Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~) 1000mL

Ferrous Iron — mg/L

Comments FDTW = 39.50'

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-08 **Purge Method:** Peristaltic

Date: 07/18/24 Start Time: 1214 Finish/Sample Time: 1333

Well Depth (Bottom) From MP: 58.16 ft Min. Purge Volume: 1 Gal (L)

Depth to Water From MP: 23.09 ft Total Purge Volume: 1.8 Gal / L

Water Column Length: ft Max Drawdown: ft

Well Water Volume: Gal / L Total Drawdown: 11.36 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	1228	25.26	100	7.14	1046	21.16	-148	1.52	45.7
2	1230	25.72	100	7.12	1046	21.22	-154	1.36	30.6
3	1233	26.15	100	7.11	1046	20.98	-155	1.39	14.3
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☐ None ☑ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☑ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

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

(4)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~ 1000mL)

Ferrous Iron mg/L

Comments: FDTW-34.45 WELL HAS DEDICATED TUBING

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-09 **Purge Method:** Desicated Bladder

Date: 7/16/2024 Start Time: 1100 Finish/Sample Time: 1233

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1000 Gal / L (req)

Depth to Water From MP: 26.53 ft Total Purge Volume: 1900 Gal / L (ACT)

Water Column Length: _____ ft Max Drawdown: — ft

Well Water Volume: _____ Gal / L Total Drawdown: 8.81 ft

Aff 7/16/24

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	1131	28.08	100	7.08	1540	22.07	-114	1.72	0.0
2	~~1334~~ 1134	28.30	100	7.02	1590	22.03	-115	1.80	0.0
3	1137	28.63	100	6.98	1580	21.97	-118	1.74	0.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250 mL~~) 1000mL
1	Rad (P, 2.5L, HNO3)

(4)

Filtered Qty	Filtered Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~) 1000mL

~~Ferrous Iron~~ ~~mg/L~~

Comments Final WTW - 35.34 FL

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-10 **Purge Method:** PERISTALTIC ~~PERISTALTIC~~ Kad D

Date: 07/15/24 Start Time: 1046 Finish/Sample Time: 1145

Well Depth (Bottom) From MP: 34.54 ft Min. Purge Volume: 1 Gal (L)

Depth to Water From MP: 1.94 ft Total Purge Volume: 1.8 Gal (L)

Water Column Length: ____ ft Max Drawdown: ____ ft

Well Water Volume: ____ Gal / L Total Drawdown: 4.29 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1100	3.602	100	7.16	2007	21.30	-123	3.48	73.8
2	1103	3.86	100	7.15	2011	21.23	-122	3.59	89.4
3	1106	4.12	100	7.18	2013	21.39	-117	3.46	112.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:

Odor: ☐ None ☑ Slight ☐ Mod. ☐ Strong

Color ☐ None ☑ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☑ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	P 2.5L HNO3
1	P 1000mL

(4)

Filtered Qty	Filtered Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
	General (P,500mL)
1	P 1000mL

Ferrous Iron ____ mg/L

Comments WELL HAS DEDICATED TUBING EDTW – Co.23

Sampler's Signature: [signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-11 **Purge Method:** Compressor

Date: 7-17-24 Start Time: 1432 Finish/Sample Time: 1545

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1 Gal / L

Depth to Water From MP: 5.98 ft Total Purge Volume: 1.9 Gal / L

Water Column Length: _____ ft Max Drawdown: _____ ft

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

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1448	6.02	100	7.23	1730	20.79	-139	11.54	302
2	1451	6.06	"	7.22	1740	20.09	-141	11.77	220
3	1453	6.04	"	7.21	1740	20.07	-139	11.59	152
4	1456	6.04	"	7.20	1740	20.05	-139	11.57	114
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☐ None ☑ Slight ☐ Mod. ☐ Strong

Color ☑ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☐ Mod ☑ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250 mL~~) 1 L
1	HNO3 (P, 2.5L)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~) 1 L

Ferrous Iron _____ mg/L

Comments FDTW: 6.04 ft

Sampler's Signature: Chris M

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-14 **Purge Method:** BLADDER

Date: 7/17/2024 Start Time: 1150 Finish/Sample Time: 1302

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1000 Gal / L (mL)

Depth to Water From MP: 7.10 ft Total Purge Volume: 1900 Gal / L

Water Column Length: _____ ft Max Drawdown: _____ ft

Well Water Volume: _____ Gal / L Total Drawdown: 9.12 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1204	9.42	100	7.07	1810	19.33	~140	1.02	37.8
2	1207	9.94	100	7.06	1760	19.28	~143	0.94	51.2
3	1210	10.46	100	2.05	1730	19.19	~146	1.07	72.7
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250 mL~~ 1000mL
1	Rad (P, 2.5L, HNO3)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P,~~500mL~~ 1000mL

~~Ferrous Iron~~ _____ ~~mg/L~~

Comments Final DTW = 16.22 FL

Sampler's Signature: _____

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-15 **Purge Method:** Ded. cord bladder

Date: 7/17/24 Start Time: 0909 Finish/Sample Time: 1019

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1000 Gal / L

Depth to Water From MP: 8.58 ft Total Purge Volume: 1800 Gal / L

Water Column Length: _____ ft Max Drawdown: - ft

Well Water Volume: _____ Gal / L Total Drawdown: 0.20 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	0921	8.78	100	6.98	1900	17.76	-109	1.86	32.0
2	0924	8.78	100	6.96	1870	17.79	-113	1.84	62.0
3	0927	8.78	100	6.95	1850	17.87	-116	1.78	104.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba U-5000

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☐ None ☑ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☑ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250~~ mL) 1000 mL
1	Red 2.5L P HNO3

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500~~mL) 1000 mL

Ferrous Iron _____ mg/L

Comments FDTW = 8.78'

Sampler's Signature: [signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-15S **Purge Method:** Dedicated bladder

Date: 7/17/24 Start Time: 1022 Finish/Sample Time: 1142

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1000 Gal / L

Depth to Water From MP: 9.85 ft Total Purge Volume: 1500 Gal / L

Water Column Length: _____ ft Max Drawdown: — ft

Well Water Volume: _____ Gal / L Total Drawdown: 3.34 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1038	10.69	100	7.10	1069	22.76	35	1.91	21.0
2	1039	10.72	100	7.09	1069	22.57	33	1.89	20.7
3	1040	10.76	100	7.09	1068	2258	33	1.88	18.9
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☑ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☑ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250~~ mL) 1000mL
1	Red 2.5L P HNO3

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~) 1000mL

Ferrous Iron mg/L

Comments FDTV = 13.19'

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-16 **Purge Method:** Dedicated bladder

Date: 7/16/24 Start Time: 1320 Finish/Sample Time: 1522

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1000 Gal / L

Depth to Water From MP: 24.62 ft Total Purge Volume: 2300 Gal / L ~C

Water Column Length: _____ ft Max Drawdown: - ft

Well Water Volume: _____ Gal / L Total Drawdown: 0.88 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	1336	25.33	100	6.72	2410	18.90	-92	0.33	0.0
2	1339	25.34	100	6.70	2400	18.84	-94	0.23	0.0
3	1342	25.33	100	6.69	2400	18.85	-96	0.18	0.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba U-5000

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 + 1 dup	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1 + 1 dup	General (P, ~~250~~ mL) 1000mL
1 + 1 dup	2.5 L P HNO3

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1 + 1 dup	General (P, ~~500~~mL) 1000 mL

Ferrous Iron _____ mg/L

Comments FDTW: 25.50'

Sampler's Signature: [signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-17 **Purge Method:** Dedicated bladder

Date: 7/16/24 Start Time: 0925 Finish/Sample Time: 1045

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1000 Gal / L

Depth to Water From MP: 25.61 ft Total Purge Volume: 1500 Gal / L (~2)

Water Column Length: _____ ft Max Drawdown: — ft

Well Water Volume: _____ Gal / L Total Drawdown: 1.47 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	0942	26.26	100	6.83	2120	18.48	-135	6.63	0.0
2	0945	26.30	100	6.81	2090	18.51	-132	6.56	0.0
3	0948	26.35	100	6.77	2100	18.41	-127	6.52	0.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba U-5000

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☑ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☑ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250~~ mL) 1000 mL
1	2.5L P HNO3

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~) 1000 mL

Ferrous Iron _____ mg/L

Comments FDTW = 27.08'

Sampler's Signature: [signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-18 **Purge Method:** Compressor

Date: 7/16/24 Start Time: 1330 Finish/Sample Time: 1412

Well Depth (Bottom) From MP: 56.67 ft Top of Pump Min. Purge Volume: 1000 Gal ~~mL~~

Depth to Water From MP: 27.75 ft Total Purge Volume: 6/17 ~~1175~~ Gal / L 2175mL

Water Column Length: 28.92 ft Max Drawdown: — ft

Well Water Volume: 17.51 Gal / L Total Drawdown: 5.06 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1339	29.31	200	7.38	1650	17.44	-146	0.00	42.8
2	1340	29.45	200	7.18	1650	17.21	-149	0.00	46.2
3	1341	29.62	200	7.06	1640	17.09	-152	0.00	46.3
4	1342	29.78	200	6.95	1640	16.98	-154	0.00	64.0
5	1343	29.95	200	6.94	1640	16.95	-155	0.00	56.7
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☐ None ☐ Slight ☐ Mod. ☐ Strong

Color ■ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ■ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
1	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
	General (P, 250 mL)
1	(P, 2.5L, HNO_3)
1	(P, 1000mL)

(4)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~) 1000mL

Ferrous Iron — mg/L

Comments Find DTW: 32.81

Sampler's Signature: JBohannan

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-19 **Purge Method:** Compressor

Date: 7-15-24 Start Time: 1328 Finish/Sample Time: 1438

Well Depth (Bottom) From MP: _____ ft
Depth to Water From MP: 14.31 ft
Water Column Length: _____ ft
Well Water Volume: _____ Gal / L

Min. Purge Volume: 1 Gal / L
Total Purge Volume: 1.5 Gal / L
Max Drawdown: _____ ft
Total Drawdown: _____ ft

7/15/24 Spec Cond umhos/cm

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb	
(Units)		ft.	mL/min	s.u.	~~umhos/cm~~	deg C	mV	mg/L	NTU	
1	1346	15.59	100	7.24	1.11	24.73	-43	2.84	78.7	1140
2	1347	15.66		7.23	1.12	24.07	-46	2.08	72.7	1120
3	1348	15.74		7.23	1.12	23.83	-52	2.01	74.1	1120
4	1349	15.82		7.23	1.11	23.81	-54	2.94	74.4	1120
5	1350	15.89		7.23	1.11	23.82	-55	2.87	73.5	1110
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA	

Field Meter: Horiba

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

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	VOAs (C,V, 40mL, HCL)
	VOAS (C,V, 40mL)
	Organics (A,G,U 1000mL)
	Organics (A,G,U 500mL)
	TOC (A,V 40mL, H2SO4)
	TOX (A,G 250mL, H2SO4)
	Metals (P,250mL, HNO3)
	Cyanide (P, 250mL, NaOH)
	Phenols (A,G,250mL, H2SO4)
1	General (P, ~~250~~ mL) 1 L
1	HNO3 (P, 2.5L)

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~) 1 L

Ferrous Iron _____ mg/L

Comments FDTW 17.28

Sampler's Signature: Austin Ay

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-21 **Purge Method:** Compressor

Date: 7-15-24 Start Time: 1500 Finish/Sample Time: 1610

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1 Gal (L)

Depth to Water From MP: 17.85 ft Total Purge Volume: 1.3 Gal / L

Water Column Length: _____ ft Max Drawdown: _____ ft

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

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1520	19.20	100	7.35	855	21.38	196	10.14	17.1
2	1521	19.20	1	7.35	876	21.37	197	10.06	14.3
3	1522	19.20	—	7.34	865	21.43		10.07	14.5
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☐ None ☐ Slight ☐ Mod. ☐ Strong

Color ☐ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☑ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

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

Filtered	
Qty	Bottles
	Metals (P,250mL, HNO3)
	Ammonia (P,250mL, H2S04)
1	General (P, ~~500mL~~) 1L

Ferrous Iron _____ mg/L

Comments Final DTW 19.29

Sampler's Signature: [signature]

Multiparameter Meter Field Calibration Checklist

Field Personnel:	AW, AM	Location:	Edwards
Weather:	89°-93° Sunny SmphWindsW	Environment:	Grassy, Gravel, Muddy
Multiparameter Water Meter	Make: Horiba	Model: U-5000	Serial Number: V7320PKK
Water Level Meter	Make: Heron	Model: Opus-T	Serial Number: 19FF2202181ML

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	023219-02	8/9/2025
pH 7.00a	6.90	s.u.	±0.1 s.u.	P	NO		MSI	023334-01	12/7/2025
pH 10.00a	10.10	s.u.	±0.1 s.u.	P	NO		MSI	024037-01	2/21/2026
SC Zero (DI)	0.0	µS/cm	0<25 µS/cm	P	NO		Pace Labs	N/A (DI)	N/A (DI)
SC 2000	1970	µS/cm	±5%	P	NO		Proactive	3GJ1438	Oct-24
ORP	220	mV	±15 mV	P	NO		Reagents	8406644	Apr-25
DO (Zero pt)	0.0	mg/L	±0.1	P	NO		Macron	#000228049	8/26/2025
DO (Saturated)	98.6	%	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 8 hrs, unless only one well

ICV (Initial Calibration Verification) Time: 12:35

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	3.96	s.u.	±0.15 s.u.	P	NO	Proactive	3GE1074	May-25
pH 7.00b	7.02	s.u.	±0.15 s.u.	P	NO	Proactive	3GE1252	May-25
pH 10.00b	10.08	s.u.	±0.15 s.u.	P	NO	Geotech	3GA1134	Jan-25
SC 1000	971	µS/cm	±5%	P	NO	Spectrum	2NA0024	Dec-25

Approx. every 8 hrs, unless only one well

AW 7/15/24

CCV (Continued Calibration Verification): Time: ~~16:00~~ 16:10

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.04	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023219-02	8/9/2025
pH 7.00a	6.98	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023334-01	12/7/2025
pH 10.00a	10.08	s.u.	±0.1 s.u.	P	NO	N/A	MSI	024037-01	2/21/2026
SC 1000	994	µS/cm	±5%	P	NO	N/A	Spectrum	2NA0024	Dec-25
DO (Zero pt)	0.0	mg/L	±0.1 mg/L	P	NO	N/A	Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU	P	NO	N/A	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 8 hrs, unless only one well

Comments:

Signature: Ashley Winters Date: 7/15/24

Multiparameter Meter Field Calibration Checklist

Field Personnel:	JD	Location:	Edwards Vistra
Weather:	93-97 F sunny wind 5-14-25 mph	Environment:	grass, weeds
Multiparameter Water Meter	Make: Horiba	Model: U-5000	Serial Number: YL9K59HA
Water Level Meter	Make: Heron	Model: Dipper-T	Serial Number: 3717-T

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.98	s.u.	±0.1 s.u.	P	N	NA	MSI	023219-02	8/9/2025
pH 7.00a	6.79	s.u.	±0.1 s.u.	F	Y	7.01	MSI	023334-01	12/7/2025
pH 10.00a	9.95	s.u.	±0.1 s.u.	P	N	NA	MSI	024037-01	2/21/2026
SC Zero (DI)	4	µS/cm	0<25 µS/cm	↓	↓	↓	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2036	µS/cm	±5%				Proactive	3GJ1438	Oct-24
ORP	225	mV	±15 mV				Reagents	8406644	Apr-25
DO (Zero pt)	0.08	mg/L	±0.1				Macron	#000228049	8/26/2025
DO (Saturated)	99.8	%	97-100%				Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU	↓	↓	↓	Pace Labs	N/A (DI)	N/A (DI)

Approx. every 8 hrs, unless only one well

ICV (Initial Calibration Verification) — Time: 1321

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	3.88	s.u.	±0.15 s.u.	P	NA	Proactive	3GE1074	May-25
pH 7.00b	7.02	s.u.	±0.15 s.u.	↓	↓	Proactive	3GE1252	May-25
pH 10.00b	10.08	s.u.	±0.15 s.u.	↓	↓	Geotech	3GA1134	Jan-25
SC 1000	1000	µS/cm	±5%	↓	↓	Spectrum	2NA0024	Dec-25

Approx. every 8 hrs, unless only one well

CCV (Continued Calibration Verification): — Time:

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a		s.u.	±0.1 s.u.				MSI	023219-02	8/9/2025
pH 7.00a		s.u.	±0.1 s.u.				MSI	023334-01	12/7/2025
pH 10.00a		s.u.	±0.1 s.u.				MSI	024037-01	2/21/2026
SC 1000		µS/cm	±5%				Spectrum	2NA0024	Dec-25
DO (Zero pt)		mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)		NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 8 hrs, unless only one well

Comments: Only sampled one well, so no CCV.

Signature: [signature] Date: 7/15/24

Multiparameter Meter Field Calibration Checklist

Field Personnel:	JD, AP	Location:	Edwards Vista
Weather:	78-90°F cloudy wind W 7-12 mph	Environment:	weeds, gravel
Multiparameter Water Meter	Make: Hach	Model: U-5000	Serial Number: YL9K39HA
Water Level Meter	Make: Heron	Model: Dipper-T	Serial Number: 3717-T

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	NA	MSI	023219-02	8/9/2025
pH 7.00a	7.01	s.u.	±0.1 s.u.				MSI	023334-01	12/7/2025
pH 10.00a	10.07	s.u.	±0.1 s.u.				MSI	024037-01	2/21/2026
SC Zero (DI)	1	µS/cm	0<25 µS/cm				Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2060	µS/cm	±5%				Proactive	3GJ1438	Oct-24
ORP	234	mV	±15 mV				Reagents	8406644	Apr-25
DO (Zero pt)	0.08	mg/L	±0.1				Macron	#000228049	8/26/2025
DO (Saturated)	98.55	%	97-100%				Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 8 hrs, unless only one well

ICV (Initial Calibration Verification) Time: 0916

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.05	s.u.	±0.15 s.u.	P	NA	Proactive	3GE1074	May-25
pH 7.00b	7.00	s.u.	±0.15 s.u.			Proactive	3GE1252	May-25
pH 10.00b	10.10	s.u.	±0.15 s.u.			Geotech	3GA1134	Jan-25
SC 1000	1010	µS/cm	±5%			Spectrum	2NA0024	Dec-25

Approx. every 8 hrs, unless only one well

CCV (Continued Calibration Verification): Time: 1408

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	NA	MSI	023219-02	8/9/2025
pH 7.00a	7.07	s.u.	±0.1 s.u.				MSI	023334-01	12/7/2025
pH 10.00a	10.10	s.u.	±0.1 s.u.				MSI	024037-01	2/21/2026
SC 1000	1010	µS/cm	±5%				Spectrum	2NA0024	Dec-25
DO (Zero pt)	0.10	mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 8 hrs, unless only one well

Comments:

Signature: [signature] Date: 7/16/24

Multiparameter Meter Field Calibration Checklist

Field Personnel:	KALEB DEEKE	Location:	VISTRA EDWARDS
Weather:	77° CLOUDY CALM WEST	Environment:	GRASS, SWAMP
Multiparameter Water Meter	Make: HORIBA	Model:	Serial Number: U-52
Water Level Meter	Make: INT	Model: HERON	Serial Number: 19FF2202131ML

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.04	s.u.	±0.1 s.u.	Pass	NO	N/A	MSI	023067-01	3/14/2025
pH 7.00a	7.06	s.u.	±0.1 s.u.				MSI	023051-02	2/21/2025
pH 10.00a	10.02	s.u.	±0.1 s.u.				MSI	022361-01	12/27/2024
SC Zero (DI)	0.2	µS/cm	0<25 µS/cm				Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2013	µS/cm	±5%				Proactive Geotech	3GJ1438 3GF1197	Oct-24 Jun-24
ORP	232	mV	±15 mV				Reagents Insitu	8406644 3GE011	Apr-25 Jun-24
DO (Zero pt)	0.0	mg/L	±0.1				Macron	#000228049	8/26/2025
DO (Saturated)	98	%	97-100%				Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

BG 7/19/24

Approx. every 8 hrs, unless only one well

ICV (Initial Calibration Verification) Time: 0854

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	3.98	s.u.	±0.15 s.u.	Pass	NO	Geotech	3GB1049	Feb-25
pH 7.00b	7.01	s.u.	±0.15 s.u.			Proactive Geotech	3GE1252 2GF113	May-25 Jun-24
pH 10.00b	10.03	s.u.	±0.15 s.u.			Geotech	3GA1134	Jan-25
SC 1000	1012	µS/cm	±5%			Ricca	4209A12	Aug-24

BG 7/19/24

Approx. every 8 hrs, unless only one well

CCV (Continued Calibration Verification): Time: 1455

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	N/A	MSI	023067-01	3/14/2025
pH 7.00a	7.02	s.u.	±0.1 s.u.				MSI	023051-02	2/21/2025
pH 10.00a	10.08	s.u.	±0.1 s.u.				MSI	022361-01	12/27/2024
SC 1000	998	µS/cm	±5%				Ricca	4209A12	Aug-24
DO (Zero pt)	0.0	mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)	0.0	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 8 hrs, unless only one well

Comments:

Signature: [signature] Date: 16-Jul-24

Multiparameter Meter Field Calibration Checklist

Field Personnel:	KALEB DESKE	Location:	VISTRA EDWARDS
Weather:	72° SUNNY WIND S	Environment:	GRASS

Multiparameter Water Meter	Make: HORIBA	Model: U-5000	Serial Number:	V7324PKK	
Water Level Meter	Make: HERON	Model: WT	Serial Number:	19FT2202131 ML	

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.04	s.u.	±0.1 s.u.	PASS	NO	N/A	MSI	023219-02	8/9/2025
pH 7.00a	7.00	s.u.	±0.1 s.u.				MSI	023334-01	12/7/2025
pH 10.00a	10.01	s.u.	±0.1 s.u.				MSI	024037-01	2/21/2026
SC Zero (DI)	0	µS/cm	0<25 µS/cm				Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2003	µS/cm	±5%				Proactive	3GJ1438	Oct-24
ORP	231	mV	±15 mV				Reagents	8406644	Apr-25
DO (Zero pt)	0.0	mg/L	±0.1				Macron	#000228049	8/26/2025
DO (Saturated)	98	%	97-100%				Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 8 hrs, unless only one well

ICV (Initial Calibration Verification) Time: 0853

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.07	s.u.	±0.15 s.u.	PASS	NO	Proactive	3GE1074	May-25
pH 7.00b	7.03	s.u.	±0.15 s.u.			Proactive	3GE1252	May-25
pH 10.00b	9.98	s.u.	±0.15 s.u.			Geotech	3GA1134	Jan-25
SC 1000	1000	µS/cm	±5%			Spectrum	2NA0024	Dec-25

Approx. every 8 hrs, unless only one well

CCV (Continued Calibration Verification): Time: 1549

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	023219-02	8/9/2025
pH 7.00a	6.97	s.u.	±0.1 s.u.				MSI	023334-01	12/7/2025
pH 10.00a	10.01	s.u.	±0.1 s.u.				MSI	024037-01	2/21/2026
SC 1000	1018	µS/cm	±5%				Spectrum	2NA0024	Dec-25
DO (Zero pt)	0	mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)	0	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 8 hrs, unless only one well

Comments:

Signature: [signature] Date: 07/17/24

Multiparameter Meter Field Calibration Checklist

Field Personnel:	KALEB DESKE	Location:	VISTRA EDWARDS
Weather:	66° Sunny 7 mph NE	Environment:	GRASS
Multiparameter Water Meter	Make: HORIBA	Model: U5000	Serial Number: V7320PKK
Water Level Meter	Make: HERON	Model: WT	Serial Number: 19FF220813MC

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.57	s.u.	±0.1 s.u.	Fail	YES	4.00	MSI	023219-02	8/9/2025
pH 7.00a	7.02	s.u.	±0.1 s.u.	Pass	NO	N/A	MSI	023334-01	12/7/2025
pH 10.00a	10.06	s.u.	±0.1 s.u.				MSI	024037-01	2/21/2026
SC Zero (DI)	0	µS/cm	0<25 µS/cm				Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2016	µS/cm	±5%				Proactive	3GJ1438	Oct-24
ORP	237	mV	±15 mV				Reagents	8406644	Apr-25
DO (Zero pt)	0.0	mg/L	±0.1				Macron	#000228049	8/26/2025
DO (Saturated)	98	%	97-100%				Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.0	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 8 hrs, unless only one well

ICV (Initial Calibration Verification)					Time: 0850			
Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.04	s.u.	±0.15 s.u.	Pass	NO	Proactive	3GE1074	May-25
pH 7.00b	6.98	s.u.	±0.15 s.u.			Proactive	3GE1252	May-25
pH 10.00b	9.97	s.u.	±0.15 s.u.			Geotech	3GA1134	Jan-25
SC 1000	1009	µS/cm	±5%			Spectrum	2NA0024	Dec-25

Approx. every 8 hrs, unless only one well

CCV (Continued Calibration Verification):					Time: 1422			
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	023219-02	8/9/2025
pH 7.00a	7.06	s.u.	±0.1 s.u.				MSI	023334-01	12/7/2025
pH 10.00a	9.97	s.u.	±0.1 s.u.				MSI	024037-01	2/21/2026
SC 1000	1004	µS/cm	±5%				Spectrum	2NA0024	Dec-25
DO (Zero pt)	0.0	mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)	0	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 8 hrs, unless only one well

Comments:

Signature: [signature] Date: 07/18/24

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

August 13, 2024

Brian Voelker
Vistra - Edwards
604 Pierce Boulevard
O'Fallon, IL 62269

Dear Brian Voelker:

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 General Manager, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Sincerely,

Diane Billings
Project Manager

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

SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order HG02700

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

Pace Analytical Services, LLC
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Peoria, IL 61615
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Work Order HG02956

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

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

Work Order HG03219

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

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

Work Order HG03596

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

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

ANALYTICAL RESULTS

Sample: HG02700-01 **Sampled:** 07/15/24 15:42
Name: AW-06 DUP **Received:** 07/15/24 16:49
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.743	pCi/L			1	0.545	08/09/24 15:11	PACE	904.0 903.0

Sample: HG02700-02 **Sampled:** 07/15/24 15:42
Name: AW-06 **Received:** 07/15/24 16:49
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.417J	pCi/L			1	0.635	08/09/24 15:11	PACE	904.0 903.0

Sample: HG02700-03 **Sampled:** 07/15/24 16:10
Name: AW-21 **Received:** 07/15/24 16:49
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.37	pCi/L			1	1.02	08/09/24 15:11	PACE	904.0 903.0

Sample: HG02700-04 **Sampled:** 07/15/24 14:38
Name: AW-19 **Received:** 07/15/24 16:49
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	2.63	pCi/L			1	0.563	08/09/24 15:11	PACE	904.0 903.0

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

ANALYTICAL RESULTS

Sample: HG02956-01 **Sampled:** 07/16/24 14:14
Name: AP07S **Received:** 07/16/24 16:26
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.03	pCi/L			1	0.81	08/09/24 15:11	PACE	904.0 903.0

Sample: HG02956-02 **Sampled:** 07/16/24 12:09
Name: AW-01 **Received:** 07/16/24 16:26
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	3.92	pCi/L			1	0.586	08/09/24 15:11	PACE	904.0 903.0

Sample: HG02956-03 **Sampled:** 07/16/24 15:28
Name: AW-05 **Received:** 07/16/24 16:26
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.03	pCi/L			1	0.513	08/09/24 15:11	PACE	904.0 903.0

Sample: HG02956-04 **Sampled:** 07/16/24 12:09
Name: AW-01 DUP **Received:** 07/16/24 16:26
Matrix: Ground Water - Field Duplicate **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.4	pCi/L			1	0.516	08/09/24 15:11	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HG02956-05 **Sampled:** 07/16/24 12:33
Name: AW-09 **Received:** 07/16/24 16:26
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.919	pCi/L			1	0.628	08/09/24 15:11	PACE	904.0 903.0

Sample: HG02956-06 **Sampled:** 07/16/24 15:22
Name: AW-16 DUP **Received:** 07/16/24 16:26
Matrix: Ground Water - Field Duplicate **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	5.49	pCi/L			1	1.23	08/09/24 15:11	PACE	904.0 903.0

Sample: HG02956-07 **Sampled:** 07/16/24 15:22
Name: AW-16 **Received:** 07/16/24 16:26
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	5.85	pCi/L			1	0.898	08/09/24 15:11	PACE	904.0 903.0

Sample: HG02956-08 **Sampled:** 07/16/24 10:45
Name: AW-17 **Received:** 07/16/24 16:26
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	4.48	pCi/L			1	1.1	08/09/24 15:11	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HG02956-09 **Sampled:** 07/16/24 14:12
Name: AW-18 **Received:** 07/16/24 16:26
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	2.87	pCi/L			1	0.675	08/09/24 15:11	PACE	904.0 903.0

Sample: HG03219-01 **Sampled:** 07/17/24 15:45
Name: AW-11 **Received:** 07/17/24 16:21
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	2.43	pCi/L			1	1.06	07/31/24 15:24	PACE	904.0 903.0

Sample: HG03219-02 **Sampled:** 07/17/24 13:02
Name: AW-14 **Received:** 07/17/24 16:21
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	2.53	pCi/L			1	1.26	07/31/24 15:24	PACE	904.0 903.0

Sample: HG03219-03 **Sampled:** 07/17/24 10:19
Name: AW-15 **Received:** 07/17/24 16:21
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	4.39	pCi/L			1	1.22	07/31/24 15:24	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HG03219-04 **Sampled:** 07/17/24 11:42
Name: AW-15S **Received:** 07/17/24 16:21
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.79	pCi/L			1	0.631	07/31/24 15:24	PACE	904.0 903.0

Sample: HG03596-01 **Sampled:** 07/18/24 10:10
Name: AP05S **Received:** 07/18/24 16:04
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	4.13	pCi/L			1	0.533	08/04/24 16:43	PACE	904.0 903.0

Sample: HG03596-02 **Sampled:** 07/18/24 13:33
Name: AW-08 **Received:** 07/18/24 16:04
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	5.55	pCi/L			1	0.537	08/04/24 16:43	PACE	904.0 903.0

Sample: HG03596-03 **Sampled:** 07/18/24 11:45
Name: AW-10 **Received:** 07/18/24 16:04
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	2.43	pCi/L			1	0.624	08/04/24 16:43	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HG03596-04
Name: FIELD BLANK
Matrix: DI Water - Field Blank

Sampled: 07/18/24 13:40
Received: 07/18/24 16:04
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.665J	pCi/L			1	0.709	08/04/24 16:43	PACE	904.0 903.0

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit

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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

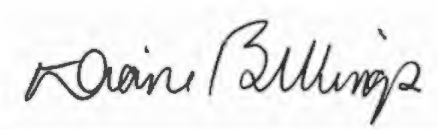
Certifications

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



Certified by: Diane Billings, Project Manager

ANALYTICAL REPORT

August 12, 2024

Pace IR - Peoria, IL

Sample Delivery Group:	L1757322
Samples Received:	07/17/2024
Project Number:	
Description:	

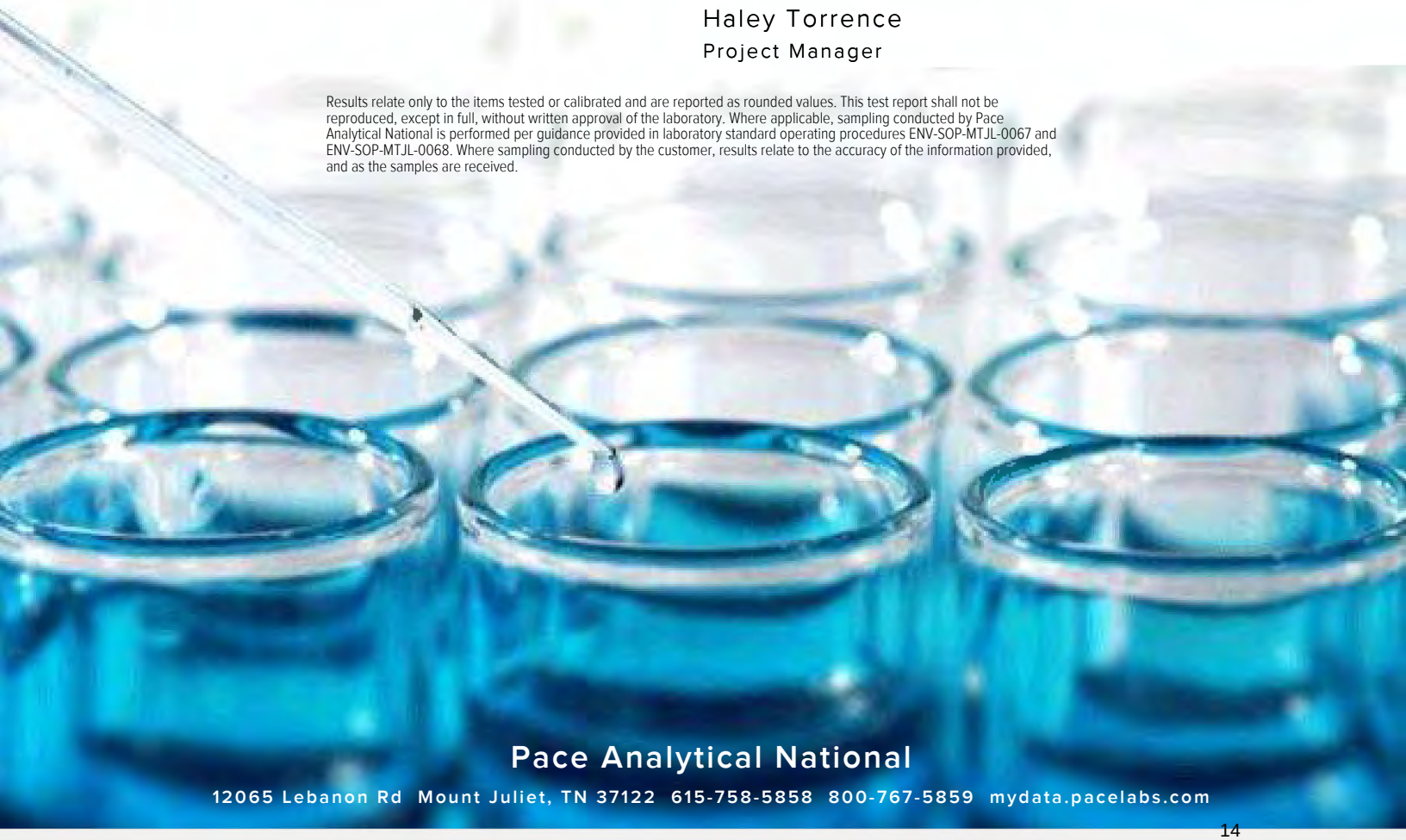
Report To: Diane Billings
2231 W. Altorfer Drive
Peoria, IL 61615

Entire Report Reviewed By:

[Preliminary Report]

Haley Torrence
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.



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SAMPLE SUMMARY

HG02700-01 L1757322-01 Non-Potable Water

	Collected by	Collected date/time	Received date/time
		07/15/24 15:42	07/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2328000	1	07/24/24 09:42	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2326137	1	07/19/24 10:29	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2326137	1	07/19/24 10:29	07/22/24 11:19	ZRG	Mt. Juliet, TN

HG02700-02 L1757322-02 Non-Potable Water

	Collected by	Collected date/time	Received date/time
		07/15/24 15:42	07/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2328000	1	07/24/24 09:42	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2326137	1	07/19/24 10:29	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2326137	1	07/19/24 10:29	07/22/24 11:19	ZRG	Mt. Juliet, TN

HG02700-03 L1757322-03 Non-Potable Water

	Collected by	Collected date/time	Received date/time
		07/15/24 16:10	07/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2328000	1	07/24/24 09:42	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2326137	1	07/19/24 10:29	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2326137	1	07/19/24 10:29	07/22/24 11:19	ZRG	Mt. Juliet, TN

HG02700-04 L1757322-04 Non-Potable Water

	Collected by	Collected date/time	Received date/time
		07/15/24 14:38	07/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2328000	1	07/24/24 09:42	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2326137	1	07/19/24 10:29	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2326137	1	07/19/24 10:29	07/22/24 11:19	ZRG	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.

[Preliminary Report]

Haley Torrence
Project Manager

HG02700-04 SAMPLE RESULTS - 01

Collected date/time: 07/15/24 15:42 L1757322

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.568		0.241	0.465	0.414	0.219	08/09/2024 15:11	WG2328000
(T) Barium	*126*					*30.0-143*	*08/09/2024 15:11*	WG2328000
(T) Yttrium	*80.2*					*30.0-136*	*08/09/2024 15:11*	WG2328000

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.743		0.341	0.545	08/09/2024 15:11	WG2326137

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.175	J	0.241	0.377	0.354	0.250	07/22/2024 11:19	WG2326137
(T) Barium-133	*81.0*					*30.0-143*	*07/22/2024 11:19*	WG2326137

HG02700-02 SAMPLE RESULTS - 02

Collected date/time: 07/15/24 15:42 L1757322

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.148	U	0.299	0.505	0.526	0.274	08/09/2024 15:11	WG2328000
(T) Barium	*129*					*30.0-143*	*08/09/2024 15:11*	WG2328000
(T) Yttrium	*93.1*					*30.0-136*	*08/09/2024 15:11*	WG2328000

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.417	J	0.409	0.635	08/09/2024 15:11	WG2326137

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.269	J	0.279	0.435	0.355	0.259	07/22/2024 11:19	WG2326137
(T) Barium-133	*72.6*					*30.0-143*	*07/22/2024 11:19*	WG2326137

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

HG02700-03 SAMPLE RESULTS - 03

Collected date/time: 07/15/24 16:10 L1757322

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.10		0.553	0.983	0.954	0.502	08/09/2024 15:11	WG2328000
(T) Barium	*102*					*30.0-143*	*08/09/2024 15:11*	WG2328000
(T) Yttrium	*72.1*					*30.0-136*	*08/09/2024 15:11*	WG2328000

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.37		0.621	1.02	08/09/2024 15:11	WG2326137

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.265	J	0.282	0.423	0.371	0.259	07/22/2024 11:19	WG2326137
(T) Barium-133	*77.5*					*30.0-143*	*07/22/2024 11:19*	WG2326137

HG02700-04 SAMPLE RESULTS - 04

Collected date/time: 07/15/24 14:38 L1757322

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.66		0.298	0.509	0.480	0.252	08/09/2024 15:11	WG2328000
(T) Barium	*126*					*30.0-143*	*08/09/2024 15:11*	WG2328000
(T) Yttrium	*88.9*					*30.0-136*	*08/09/2024 15:11*	WG2328000

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	2.63		0.513	0.563	08/09/2024 15:11	WG2326137

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.968		0.418	0.553	0.295	0.211	07/22/2024 11:19	WG2326137
(T) Barium-133	*91.6*					*30.0-143*	*07/22/2024 11:19*	WG2326137

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT, ASH POND
EDW-257-301

Method Blank (MB)

(MB) R4105072-1 08/09/24 15:11

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.586		0.219	0.372	0.196
(T) Barium	*121*		*121*		
(T) Yttrium	*69.5*		*69.5*		

L1756163-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1756163-08 08/09/24 15:11 • (DUP) R4105072-5 08/09/24 15:11

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.749	0.358	0.615	0.322	-0.289	0.420	0.753	0.392	200	1.88	U	20	3
(T) Barium	*127*				*105*	*105*							
(T) Yttrium	*101*				*87.3*	*87.3*							

Laboratory Control Sample (LCS)

(LCS) R4105072-2 08/09/24 15:11

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.87	117	80.0-120	
(T) Barium			*138*		
(T) Yttrium			*94.5*		

L1753934-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1753934-03 08/09/24 15:11 • (MS) R4105072-3 08/09/24 15:11 • (MSD) R4105072-4 08/09/24 15:11

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	1.25	18.0	19.9	101	111	1	70.0-130			9.65		20
(T) Barium		*126*			*134*	*133*							
(T) Yttrium		*87.8*			*103*	*85.8*							

Radiochemistry by Method SM7500Ra B M L1757322-01,02,03,04

Method Blank (MB)

(MB) R4097188-1 07/22/24 11:19

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	-0.00511	U	0.0388	0.0927	0.0656
(T) Barium-133	*76.1*		*76.1*		

L1757322-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1757322-03 07/22/24 11:19 • (DUP) R4097188-4 07/22/24 11:19

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.265	0.282	0.371	0.259	0.174	0.254	0.383	0.279	41.5	0.240	J	20	3
(T) Barium-133	*77.5*				*66.0*	*66.0*							

Laboratory Control Sample (LCS)

(LCS) R4097188-2 07/22/24 11:19

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.79	116	75.0-125	
(T) Barium-133			*75.9*		

L1757322-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1757322-01 07/22/24 11:19 • (MS) R4097188-3 07/22/24 11:19

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Radium-226	20.0	0.175	22.3	111	1	75.0-125	
(T) Barium-133		*81.0*		*76.5*			

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	LAO000356
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.

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HG02700

L1757322

L-207

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

Sample: HG02700-01
Name: AW-06 DUP

Sampled: 07/15/24 15:42
Matrix: Ground Water
Preservative: HNO3, pH <2

-01

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/26/24 16:00	01/11/25 15:42	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HG02700-02
Name: AW-06

Sampled: 07/15/24 15:42
Matrix: Ground Water
Preservative: HNO3, pH <2

-02

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/26/24 16:00	01/11/25 15:42	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HG02700-03
Name: AW-21

Sampled: 07/15/24 16:10
Matrix: Ground Water
Preservative: HNO3, pH <2

-03

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/26/24 16:00	01/11/25 16:10	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HG02700-04
Name: AW-19

Sampled: 07/15/24 14:38
Matrix: Ground Water
Preservative: HNO3, pH <2

-04

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/26/24 16:00	01/11/25 14:38	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC
HG02700

L1757322

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		
RA Screen <0.5 mR/hr:	Y N		

23.0+0.3=23.3 ER9

7774 2371 1357

Please email results to Diane Billings at diane.billings@pacelabs.com

Date Shipped: 7/16/24 Total # of Containers: 4 Sample Origin (State): IL PO #: _____

Turn-Around Time Requested ☐ NORMAL ☐ RUSH Date Results Needed: _____

Relinquished By	Date/Time	Received By	Date/Time
	7/16/24 1245		
		Hailey Rotuter	7/17/24 0900

Sample Temperature Upon Receipt	____ °C
Sample(s) Received on Ice	Y or N
Proper Bottles Received in Good Condition	Y or N
Bottles Filled with Adequate Volume	Y or N
Samples Received Within Hold Time	Y or N
Date/Time Taken From Sample Bottle	Y or N

ANALYTICAL REPORT

August 12, 2024

Pace IR - Peoria, IL

Sample Delivery Group:	L1758672
Samples Received:	07/19/2024
Project Number:	
Description:	

Report To: Diane Billings
2231 W. Altorfer Drive
Peoria, IL 61615

Entire Report Reviewed By:

[Preliminary Report]

Haley Torrence
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.

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SAMPLE SUMMARY

HG02956-01 L1758672-01 Non-Potable Water

Collected by	Collected date/time	Received date/time
	07/16/24 14:14	07/19/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2328000	1	07/24/24 09:42	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2327503	1	07/22/24 12:05	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2327503	1	07/22/24 12:05	07/24/24 15:05	ZRG	Mt. Juliet, TN

HG02956-02 L1758672-02 Non-Potable Water

Collected by	Collected date/time	Received date/time
	07/16/24 12:09	07/19/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2328000	1	07/24/24 09:42	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2327503	1	07/22/24 12:05	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2327503	1	07/22/24 12:05	07/24/24 15:05	ZRG	Mt. Juliet, TN

HG02956-03 L1758672-03 Non-Potable Water

Collected by	Collected date/time	Received date/time
	07/16/24 15:28	07/19/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2328000	1	07/24/24 09:42	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2327503	1	07/22/24 12:05	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2327503	1	07/22/24 12:05	07/24/24 15:05	ZRG	Mt. Juliet, TN

HG02956-04 L1758672-04 Non-Potable Water

Collected by	Collected date/time	Received date/time
	07/16/24 12:09	07/19/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2328000	1	07/24/24 09:42	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2327503	1	07/22/24 12:05	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2327503	1	07/22/24 12:05	07/24/24 15:05	ZRG	Mt. Juliet, TN

HG02956-05 L1758672-05 Non-Potable Water

Collected by	Collected date/time	Received date/time
	07/16/24 12:33	07/19/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2328000	1	07/24/24 09:42	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2327503	1	07/22/24 12:05	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2327503	1	07/22/24 12:05	07/24/24 15:05	ZRG	Mt. Juliet, TN

HG02956-06 L1758672-06 Non-Potable Water

Collected by	Collected date/time	Received date/time
	07/16/24 15:22	07/19/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2328000	1	07/24/24 09:42	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2327503	1	07/22/24 12:05	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2327503	1	07/22/24 12:05	07/24/24 15:05	ZRG	Mt. Juliet, TN

SAMPLE SUMMARY

HG02956-07 L1758672-07 Non-Potable Water

Collected by	Collected date/time	Received date/time
	07/16/24 15:22	07/19/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2328000	1	07/24/24 09:42	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2327503	1	07/22/24 12:05	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2327503	1	07/22/24 12:05	07/24/24 15:05	ZRG	Mt. Juliet, TN

HG02956-08 L1758672-08 Non-Potable Water

Collected by	Collected date/time	Received date/time
	07/16/24 10:45	07/19/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2328000	1	07/24/24 09:42	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2327503	1	07/22/24 12:05	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2327503	1	07/22/24 12:05	07/24/24 15:05	ZRG	Mt. Juliet, TN

HG02956-09 L1758672-09 Non-Potable Water

Collected by	Collected date/time	Received date/time
	07/16/24 14:12	07/19/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2328000	1	07/24/24 09:42	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2327503	1	07/22/24 12:05	08/09/24 15:11	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2327503	1	07/22/24 12:05	07/24/24 15:05	ZRG	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.

[Preliminary Report]

Haley Torrence
Project Manager

HG02956-04 SAMPLE RESULTS - 01

Collected date/time: 07/16/24 14:14 L1758672

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.479	J	0.377	0.667	0.658	0.345	08/09/2024 15:11	WG2328000
(T) Barium	*110*					*30.0-143*	*08/09/2024 15:11*	WG2328000
(T) Yttrium	*91.9*					*30.0-136*	*08/09/2024 15:11*	WG2328000

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.03		0.567	0.810	08/09/2024 15:11	WG2327503

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.555		0.423	0.597	0.473	0.327	07/24/2024 15:05	WG2327503
(T) Barium-133	*64.7*					*30.0-143*	*07/24/2024 15:05*	WG2327503

HG02956-02 SAMPLE RESULTS - 02

Collected date/time: 07/16/24 12:09 L1758672

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.518		0.263	0.465	0.453	0.238	08/09/2024 15:11	WG2328000
(T) Barium	*121*					*30.0-143*	*08/09/2024 15:11*	WG2328000
(T) Yttrium	*95.4*					*30.0-136*	*08/09/2024 15:11*	WG2328000

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	3.92		0.860	0.586	08/09/2024 15:11	WG2327503

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	3.41		0.819	0.958	0.371	0.259	07/24/2024 15:05	WG2327503
(T) Barium-133	*77.9*					*30.0-143*	*07/24/2024 15:05*	WG2327503

HG02956-03 SAMPLE RESULTS - 03

Collected date/time: 07/16/24 15:28 L1758672

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.563		0.264	0.542	0.455	0.242	08/09/2024 15:11	WG2328000
(T) Barium	*112*					*30.0-143*	*08/09/2024 15:11*	WG2328000
(T) Yttrium	*105*					*30.0-136*	*08/09/2024 15:11*	WG2328000

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.03		0.389	0.513	08/09/2024 15:11	WG2327503

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.468		0.286	0.409	0.238	0.181	07/24/2024 15:05	WG2327503
(T) Barium-133	*94.2*					*30.0-143*	*07/24/2024 15:05*	WG2327503

SAMPLE RESULTS - 04

HG02956-04
Collected date/time: 07/16/24 12:09
L1758672

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.783		0.207	0.405	0.343	0.182	08/09/2024 15:11	WG2328000
(T) Barium	*126*					*30.0-143*	*08/09/2024 15:11*	WG2328000
(T) Yttrium	*108*					*30.0-136*	*08/09/2024 15:11*	WG2328000

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.40		0.445	0.516	08/09/2024 15:11	WG2327503

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.615		0.394	0.539	0.385	0.272	07/24/2024 15:05	WG2327503
(T) Barium-133	*74.4*					*30.0-143*	*07/24/2024 15:05*	WG2327503

HG02956-05 SAMPLE RESULTS - 05

Collected date/time: 07/16/24 12:33 L1758672

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.583		0.294	0.571	0.507	0.268	08/09/2024 15:11	WG2328000
(T) Barium	*121*					*30.0-143*	*08/09/2024 15:11*	WG2328000
(T) Yttrium	*99.9*					*30.0-136*	*08/09/2024 15:11*	WG2328000

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.919		0.428	0.628	08/09/2024 15:11	WG2327503

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.337	J	0.311	0.471	0.370	0.270	07/24/2024 15:05	WG2327503
(T) Barium-133	*69.6*					*30.0-143*	*07/24/2024 15:05*	WG2327503

HG02956-06 SAMPLE RESULTS - 06

Collected date/time: 07/16/24 15:32 L1758672

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	3.45		0.716	1.20	1.17	0.615	08/09/2024 15:11	WG2328000
(T) Barium	*101*					*30.0-143*	*08/09/2024 15:11*	WG2328000
(T) Yttrium	*90.3*					*30.0-136*	*08/09/2024 15:11*	WG2328000

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	5.49		0.962	1.23	08/09/2024 15:11	WG2327503

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	2.03		0.642	0.783	0.371	0.259	07/24/2024 15:05	WG2327503
(T) Barium-133	*77.5*					*30.0-143*	*07/24/2024 15:05*	WG2327503

HG02956-07 SAMPLE RESULTS - 07

Collected date/time: 07/16/24 15:32 L1758672

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	3.41		0.539	1.00	0.847	0.448	08/09/2024 15:11	WG2328000
(T) Barium	*122*					*30.0-143*	*08/09/2024 15:11*	WG2328000
(T) Yttrium	*102*					*30.0-136*	*08/09/2024 15:11*	WG2328000

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	5.85		0.842	0.898	08/09/2024 15:11	WG2327503

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	2.44		0.647	0.783	0.298	0.214	07/24/2024 15:05	WG2327503
(T) Barium-133	*90.6*					*30.0-143*	*07/24/2024 15:05*	WG2327503

HG02956-08 SAMPLE RESULTS - 08

Collected date/time: 07/16/24 10:45 L1758672

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	3.05		0.646	1.13	1.06	0.556	08/09/2024 15:11	WG2328000
(T) Barium	*130*					*30.0-143*	*08/09/2024 15:11*	WG2328000
(T) Yttrium	*93.2*					*30.0-136*	*08/09/2024 15:11*	WG2328000

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	4.48		0.827	1.10	08/09/2024 15:11	WG2327503

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	1.44		0.517	0.653	0.286	0.212	07/24/2024 15:05	WG2327503
(T) Barium-133	*81.6*					*30.0-143*	*07/24/2024 15:05*	WG2327503

HG02956-09 SAMPLE RESULTS - 09

Collected date/time: 07/16/24 14:12 L1758672

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.54		0.372	0.649	0.617	0.323	08/09/2024 15:11	WG2328000
(T) Barium	*122*					*30.0-143*	*08/09/2024 15:11*	WG2328000
(T) Yttrium	*112*					*30.0-136*	*08/09/2024 15:11*	WG2328000

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	2.87		0.611	0.675	08/09/2024 15:11	WG2327503

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	1.33		0.485	0.616	0.273	0.203	07/24/2024 15:05	WG2327503
(T) Barium-133	*87.8*					*30.0-143*	*07/24/2024 15:05*	WG2327503

Radiochemistry by Method 904/9320

Method Blank (MB)

(MB) R4105072-1 08/09/24 15:11

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.586		0.219	0.372	0.196
(T) Barium	*121*		*121*		
(T) Yttrium	*69.5*		*69.5*		

L1756163-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1756163-08 08/09/24 15:11 • (DUP) R4105072-5 08/09/24 15:11

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.749	0.358	0.615	0.322	-0.289	0.420	0.753	0.392	200	1.88	U	20	3
(T) Barium	*127*				*105*	*105*							
(T) Yttrium	*101*				*87.3*	*87.3*							

Laboratory Control Sample (LCS)

(LCS) R4105072-2 08/09/24 15:11

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.87	117	80.0-120	
(T) Barium			*138*		
(T) Yttrium			*94.5*		

L1753934-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1753934-03 08/09/24 15:11 • (MS) R4105072-3 08/09/24 15:11 • (MSD) R4105072-4 08/09/24 15:11

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	1.25	18.0	19.9	101	111	1	70.0-130			9.65		20
(T) Barium		*126*			*134*	*133*							
(T) Yttrium		*87.8*			*103*	*85.8*							

Method Blank (MB)

(MB) R4098341-1 07/24/24 15:05

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.0636	J	0.0875	0.128	0.0907
(T) Barium-133	*55.0*		*55.0*		

L1758674-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1758674-04 07/24/24 15:05 • (DUP) R4098341-5 07/24/24 15:05

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.520	0.438	0.413	0.341	-0.201	0.527	1.12	0.728	200	1.05	U	20	3
(T) Barium-133	*42.3*				*35.0*	*35.0*							

Laboratory Control Sample (LCS)

(LCS) R4098341-2 07/24/24 15:05

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.56	111	75.0-125	
(T) Barium-133			*60.3*		

L1758672-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1758672-01 07/24/24 15:05 • (MS) R4098341-3 07/24/24 15:05 • (MSD) R4098341-4 07/24/24 15:05

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	0.555	22.2	21.4	108	104	1	75.0-125			3.49		20
(T) Barium-133		*64.7*			*81.6*	*65.7*							

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	LAO000356
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.

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HG02956

J176

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L1758672

Sample: HG02956-01
Name: AP07S

Sampled: 07/16/24 14:14
Matrix: Ground Water
Preservative: HNO3, pH <2

-01

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/29/24 16:00	01/12/25 14:14	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HG02956-02
Name: AW-01

Sampled: 07/16/24 12:09
Matrix: Ground Water
Preservative: HNO3, pH <2

-02

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/29/24 16:00	01/12/25 12:09	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HG02956-03
Name: AW-05

Sampled: 07/16/24 15:28
Matrix: Ground Water
Preservative: HNO3, pH <2

-03

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/29/24 16:00	01/12/25 15:28	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HG02956-04
Name: AW-01 DUP

Sampled: 07/16/24 12:09
Matrix: Ground Water
Preservative: HNO3, pH <2

-04

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/29/24 16:00	01/12/25 12:09	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample Receipt Checklist

COC Seal Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
RA Screen <0.5 mR/hr: Y N

If Applicable
VOA Zero Headspace: Y N
Pres. Correct/Check: Y N

7774 8143 3938

SUBCONTRACT ORDER
Transfer Chain of Custody
Pace Analytical Services, LLC
HG02956

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L1758672

Sample: HG02956-05
Name: AW-09

Sampled: 07/16/24 12:33
Matrix: Ground Water
Preservative: HNO3, pH <2

-05

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/29/24 16:00	01/12/25 12:33	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HG02956-06
Name: AW-16 DUP

Sampled: 07/16/24 15:22
Matrix: Ground Water
Preservative: HNO3, pH <2

-06

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/29/24 16:00	01/12/25 15:22	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HG02956-07
Name: AW-16

Sampled: 07/16/24 15:22
Matrix: Ground Water
Preservative: HNO3, pH <2

-07

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/29/24 16:00	01/12/25 15:22	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HG02956-08
Name: AW-17

Sampled: 07/16/24 10:45
Matrix: Ground Water
Preservative: HNO3, pH <2

-08

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/29/24 16:00	01/12/25 10:45	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HG02956

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L1758672

Sample: HG02956-09
Name: AW-18

Sampled: 07/16/24 14:12
Matrix: Ground Water
Preservative: HNO3, pH <2

-09

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/29/24 16:00	01/12/25 14:12	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Please email results to Diane Billings at diane.billings@pacelabs.com

Date Shipped: 7/18/24 Total # of Containers: 9 Sample Origin (State): IL PO #: _____

Turn-Around Time Requested ☐ NORMAL ☐ RUSH Date Results Needed: _____

EDAS

	7/18/24 1315			Sample Temperature Upon Receipt	13.1 + 0.3 = 13.4 °C
Relinquished By	Date/Time	Received By	Date/Time	Sample(s) Received on Ice	Y or (N)
				Proper Bottles Received in Good Condition	Y or N
				Bottles Filled with Adequate Volume	Y or N
		Elyph Wh	7/18 0934	Samples Received Within Hold Time	Y or N
Relinquished By	Date/Time	Received By	Date/Time	Date/Time Taken From Sample Bottle	Y or N

ANALYTICAL REPORT

August 05, 2024

Pace IR - Peoria, IL

Sample Delivery Group:	L1758674
Samples Received:	07/20/2024
Project Number:	
Description:	

Report To: Diane Billings
2231 W. Altorfer Drive
Peoria, IL 61615

Entire Report Reviewed By:

[Preliminary Report]

Haley Torrence
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.

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SAMPLE SUMMARY

HG03219-01 L1758674-01 Non-Potable Water

Collected by	Collected date/time	Received date/time
	07/17/24 15:45	07/20/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2328001	1	07/24/24 22:07	07/31/24 15:24	ALG	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2327503	1	07/22/24 12:05	07/31/24 15:24	ALG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2327503	1	07/22/24 12:05	07/24/24 15:05	ZRG	Mt. Juliet, TN

HG03219-02 L1758674-02 Non-Potable Water

Collected by	Collected date/time	Received date/time
	07/17/24 13:02	07/20/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2328001	1	07/24/24 22:07	07/31/24 15:24	ALG	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2327503	1	07/22/24 12:05	07/31/24 15:24	ALG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2327503	1	07/22/24 12:05	07/24/24 15:05	ZRG	Mt. Juliet, TN

HG03219-03 L1758674-03 Non-Potable Water

Collected by	Collected date/time	Received date/time
	07/17/24 10:19	07/20/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2328001	1	07/24/24 22:07	07/31/24 15:24	ALG	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2327503	1	07/22/24 12:05	07/31/24 15:24	ALG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2327503	1	07/22/24 12:05	07/24/24 15:05	ZRG	Mt. Juliet, TN

HG03219-04 L1758674-04 Non-Potable Water

Collected by	Collected date/time	Received date/time
	07/17/24 11:42	07/20/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2328001	1	07/24/24 22:07	07/31/24 15:24	ALG	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2327503	1	07/22/24 12:05	07/31/24 15:24	ALG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2327503	1	07/22/24 12:05	07/24/24 15:05	ZRG	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.

[Preliminary Report]

Haley Torrence
Project Manager

HG03219-01 SAMPLE RESULTS - 01

Collected date/time: 07/17/24 15:45 L1758674

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.63		0.572	0.675	1.01	0.531	07/31/2024 15:24	WG2328001
(T) Barium	*110*					*30.0-143*	*07/31/2024 15:24*	WG2328001
(T) Yttrium	*93.6*					*30.0-136*	*07/31/2024 15:24*	WG2328001

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	2.43		0.700	1.06	07/31/2024 15:24	WG2327503

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.801		0.403	0.534	0.311	0.227	07/24/2024 15:05	WG2327503
(T) Barium-133	*83.0*					*30.0-143*	*07/24/2024 15:05*	WG2327503

HG03219-02 SAMPLE RESULTS - 02

Collected date/time: 07/17/24 13:02 L1758674

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.71		0.695	0.803	1.24	0.647	07/31/2024 15:24	WG2328001
(T) Barium	*91.6*					*30.0-143*	*07/31/2024 15:24*	WG2328001
(T) Yttrium	*92.4*					*30.0-136*	*07/31/2024 15:24*	WG2328001

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	2.53		0.774	1.26	07/31/2024 15:24	WG2327503

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.816		0.340	0.459	0.224	0.163	07/24/2024 15:05	WG2327503
(T) Barium-133	*100*					*30.0-143*	*07/24/2024 15:05*	WG2327503

HG03219-03 SAMPLE RESULTS - 03

Collected date/time: 07/17/24 10:19 L1758674

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.76		0.671	0.778	1.19	0.623	07/31/2024 15:24	WG2328001
(T) Barium	*111*					*30.0-143*	*07/31/2024 15:24*	WG2328001
(T) Yttrium	*88.0*					*30.0-136*	*07/31/2024 15:24*	WG2328001

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	4.39		0.953	1.22	07/31/2024 15:24	WG2327503

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	2.63		0.677	0.802	0.290	0.211	07/24/2024 15:05	WG2327503
(T) Barium-133	*89.0*					*30.0-143*	*07/24/2024 15:05*	WG2327503

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT, ASH POND
EDW-257-301

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.270	J	0.262	0.364	0.477	0.249	07/31/2024 15:24	WG2328001
(T) Barium	*93.6*					*30.0-143*	*07/31/2024 15:24*	WG2328001
(T) Yttrium	*106*					*30.0-136*	*07/31/2024 15:24*	WG2328001

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.790		0.510	0.631	07/31/2024 15:24	WG2327503

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.520		0.438	0.680	0.413	0.341	07/24/2024 15:05	WG2327503
(T) Barium-133	*42.3*					*30.0-143*	*07/24/2024 15:05*	WG2327503

Method Blank (MB)

(MB) R4101630-1 07/31/24 15:24

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	-0.626	U	0.212	0.415	0.217
(T) Barium	*108*		*108*		
(T) Yttrium	*80.1*		*80.1*		

L1754377-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1754377-11 07/31/24 15:24 • (DUP) R4101630-5 07/31/24 15:24

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.295	0.264	0.486	0.258	0.556	0.264	0.475	0.252	61.2	0.697		20	3
(T) Barium	*121*				*128*	*128*							
(T) Yttrium	*103*				*103*	*103*							

Laboratory Control Sample (LCS)

(LCS) R4101630-2 07/31/24 15:24

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.81	96.1	80.0-120	
(T) Barium			*119*		
(T) Yttrium			*98.2*		

L1754476-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1754476-03 07/31/24 15:24 • (MS) R4101630-3 07/31/24 15:24 • (MSD) R4101630-4 07/31/24 15:24

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	-2.98	16.3	15.1	97.7	90.2	1	70.0-130			8.03		20
(T) Barium		*109*			*113*	*119*							
(T) Yttrium		*80.9*			*87.9*	*98.1*							

WG2327503 QUALITY CONTROL SUMMARY

Radiochemistry by Method SM7500Ra-B M L1758674-01,02,03,04

Method Blank (MB)

(MB) R4098341-1 07/24/24 15:05

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.0636	J	0.0875	0.128	0.0907
(T) Barium-133	*55.0*		*55.0*		

L1758674-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1758674-04 07/24/24 15:05 • (DUP) R4098341-5 07/24/24 15:05

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.520	0.438	0.413	0.341	-0.201	0.527	1.12	0.728	200	1.05	U	20	3
(T) Barium-133	*42.3*				*35.0*	*35.0*							

Laboratory Control Sample (LCS)

(LCS) R4098341-2 07/24/24 15:05

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.56	111	75.0-125	
(T) Barium-133			*60.3*		

L1758672-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1758672-01 07/24/24 15:05 • (MS) R4098341-3 07/24/24 15:05 • (MSD) R4098341-4 07/24/24 15:05

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	0.555	22.2	21.4	108	104	1	75.0-125			3.49		20
(T) Barium-133		*64.7*			*81.6*	*65.7*							

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	LAO000356
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.

SUBCONTRACT ORDER
Transfer Chain of Custody

G110

Pace Analytical Services, LLC

HG03219

L1756074

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

Sample: HG03219-01
Name: AW-11

Sampled: 07/17/24 15:45
Matrix: Ground Water
Preservative: HNO3, pH <2

-01

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/30/24 16:00	01/13/25 15:45	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HG03219-02
Name: AW-14

Sampled: 07/17/24 13:02
Matrix: Ground Water
Preservative: HNO3, pH <2

-02

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/30/24 16:00	01/13/25 13:02	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HG03219-03
Name: AW-15

Sampled: 07/17/24 10:19
Matrix: Ground Water
Preservative: HNO3, pH <2

-03

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/30/24 16:00	01/13/25 10:19	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HG03219-04
Name: AW-15S

Sampled: 07/17/24 11:42
Matrix: Ground Water
Preservative: HNO3, pH <2

-04

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/30/24 16:00	01/13/25 11:42	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

SUBCONTRACT ORDER

Transfer Chain of Custody

Pace Analytical Services, LLC

HG03219

L1758094

EDA 9 17.0 10.3 = 17.3

7774 8467 8990

Sample Receipt Checklist

			If Applicable
Signed Acceptable	Y	N	VOA Zero Headspace: Y N
Sufficient volume sent:	Y	N	Preservation Correct/Check: Y N
MS Screen <0.5 mR/hr:	Y	N	

Containers: 4

Please email results to Diane Billings at diane.billings@pacelabs.com

Date Shipped: 7/18/24 Total # of Containers: 4 Sample Origin (State): IL PO #: _____

Turn-Around Time Requested ☐ NORMAL ☐ RUSH Date Results Needed: _____

Relinquished By	Date/Time	Received By	Date/Time
	7/18/24 1330		7/19/24 ~~07/19/2024~~ 0930
			N.S 7/20/24

Sample Temperature Upon Receipt	____ °C
Sample(s) Received on Ice	Y or N
Proper Bottles Received in Good Condition	Y or N
Bottles Filled with Adequate Volume	Y or N
Samples Received Within Hold Time	Y or N
Date/Time Taken From Sample Bottle	Y or N

ANALYTICAL REPORT

August 07, 2024

Pace IR - Peoria, IL

Sample Delivery Group:	L1759346
Samples Received:	07/23/2024
Project Number:	
Description:	

Report To: Diane Billings
2231 W. Altorfer Drive
Peoria, IL 61615

Entire Report Reviewed By:

[Preliminary Report]

Haley Torrence
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.

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SAMPLE SUMMARY

HG03596-01 L1759346-01 Non-Potable Water

Collected by | Collected date/time 07/18/24 10:10 | Received date/time 07/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2332189	1	07/31/24 14:51	08/04/24 16:43	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2328654	1	07/24/24 12:16	08/04/24 16:43	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2328654	1	07/24/24 12:16	07/29/24 23:28	ZRG	Mt. Juliet, TN

HG03596-02 L1759346-02 Non-Potable Water

Collected by | Collected date/time 07/18/24 13:33 | Received date/time 07/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2332189	1	07/31/24 14:51	08/04/24 16:43	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2328654	1	07/24/24 12:16	08/04/24 16:43	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2328654	1	07/24/24 12:16	07/29/24 23:28	ZRG	Mt. Juliet, TN

HG03596-03 L1759346-03 Non-Potable Water

Collected by | Collected date/time 07/18/24 11:45 | Received date/time 07/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2332189	1	07/31/24 14:51	08/04/24 16:43	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2328654	1	07/24/24 12:16	08/04/24 16:43	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2328654	1	07/24/24 12:16	07/29/24 23:28	ZRG	Mt. Juliet, TN

HG03596-04 L1759346-04 Non-Potable Water

Collected by | Collected date/time 07/18/24 13:40 | Received date/time 07/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2332189	1	07/31/24 14:51	08/04/24 16:43	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2328654	1	07/24/24 12:16	08/04/24 16:43	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2328654	1	07/24/24 12:16	07/29/24 23:28	ZRG	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.

[Preliminary Report]

Haley Torrence
Project Manager

HG03596-04 SAMPLE RESULTS - 01

Collected date/time: 07/18/24 10:10 L1759346

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.639		0.265	0.366	0.474	0.248	08/04/2024 16:43	WG2332189
(T) Barium	*112*					*30.0-143*	*08/04/2024 16:43*	WG2332189
(T) Yttrium	*96.1*					*30.0-136*	*08/04/2024 16:43*	WG2332189

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	4.13		0.778	0.533	08/04/2024 16:43	WG2328654

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	3.50		0.732	0.854	0.244	0.181	07/29/2024 23:28	WG2328654
(T) Barium-133	*98.3*					*30.0-143*	*07/29/2024 23:28*	WG2328654

HG03596-02 SAMPLE RESULTS - 02

Collected date/time: 07/18/24 13:33 L1759346

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.508		0.261	0.360	0.471	0.246	08/04/2024 16:43	WG2332189
(T) Barium	*108*					*30.0-143*	*08/04/2024 16:43*	WG2332189
(T) Yttrium	*102*					*30.0-136*	*08/04/2024 16:43*	WG2332189

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	5.55		0.915	0.537	08/04/2024 16:43	WG2328654

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	5.05		0.877	0.991	0.258	0.188	07/29/2024 23:28	WG2328654
(T) Barium-133	*107*					*30.0-143*	*07/29/2024 23:28*	WG2328654

HG03596-03 SAMPLE RESULTS - 03

Collected date/time: 07/18/24 11:45 L1759346

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.859		0.321	0.422	0.573	0.298	08/04/2024 16:43	WG2332189
(T) Barium	*95.0*					*30.0-143*	*08/04/2024 16:43*	WG2332189
(T) Yttrium	*104*					*30.0-136*	*08/04/2024 16:43*	WG2332189

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	2.43		0.583	0.624	08/04/2024 16:43	WG2328654

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	1.58		0.487	0.615	0.248	0.180	07/29/2024 23:28	WG2328654
(T) Barium-133	*90.6*					*30.0-143*	*07/29/2024 23:28*	WG2328654

HG03596-04 SAMPLE RESULTS - 04

Collected date/time: 07/18/24 13:40 L1759346

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.455	J	0.295	0.399	0.536	0.280	08/04/2024 16:43	WG2332189
(T) Barium	*124*					*30.0-143*	*08/04/2024 16:43*	WG2332189
(T) Yttrium	*91.3*					*30.0-136*	*08/04/2024 16:43*	WG2332189

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.665	J	0.426	0.709	08/04/2024 16:43	WG2328654

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.211	J	0.308	0.493	0.464	0.338	07/29/2024 23:28	WG2328654
(T) Barium-133	*55.6*					*30.0-143*	*07/29/2024 23:28*	WG2328654

WG2332189 QUALITY CONTROL SUMMARY

Radiochemistry by Method 904/9320 L1759346-01,02,03,04

Method Blank (MB)

(MB) R4103399-1 08/04/24 16:43

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.251	J	0.176	0.321	0.169
(T) Barium	*107*		*107*		
(T) Yttrium	*82.3*		*82.3*		

L1761235-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1761235-07 08/05/24 13:45 • (DUP) R4103399-5 08/04/24 16:43

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.495	0.326	0.606	0.321	-0.0140	0.336	0.626	0.327	200	1.09	U	20	3
(T) Barium	*115*				*110*	*110*							
(T) Yttrium	*81.2*				*97.4*	*97.4*							

Laboratory Control Sample (LCS)

(LCS) R4103399-2 08/04/24 16:43

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.58	91.6	80.0-120	
(T) Barium			*85.9*		
(T) Yttrium			*90.4*		

L1761235-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1761235-01 08/04/24 16:43 • (MS) R4103399-3 08/04/24 16:43 • (MSD) R4103399-4 08/04/24 16:43

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	0.674	14.8	16.5	84.4	94.5	1	70.0-130			10.8		20
(T) Barium		*90.1*			*88.0*	*108*							
(T) Yttrium		*90.4*			*95.7*	*95.7*							

QUALITY CONTROL SUMMARY

Radiochemistry by Method SM7500Ra B M

L1759346-01,02,03,04

Method Blank (MB)

(MB) R4100201-1 07/26/24 13:45

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	-0.00940	U	0.0451	0.0879	0.0535
(T) Barium-133	*55.4*		*55.4*		

L1755790-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1755790-06 07/29/24 23:28 • (DUP) R4100201-5 07/29/24 23:28

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	14.5	1.84	0.434	0.307	17.6	2.26	0.494	0.360	19.2	1.06		20	3
(T) Barium-133	*65.9*				*51.1*	*51.1*							

Laboratory Control Sample (LCS)

(LCS) R4100201-2 07/29/24 23:28

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.57	111	75.0-125	
(T) Barium-133			*71.8*		

L1759346-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1759346-04 07/29/24 23:28 • (MS) R4100201-3 07/29/24 23:28 • (MSD) R4100201-4 07/29/24 23:28

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	0.211	18.8	19.9	93.0	98.4	1	75.0-125			5.63		20
(T) Barium-133		*55.6*			*56.4*	*54.9*							

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	LAO000356
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.

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC
HG03596

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

LI759346

Sample: HG03596-01
Name: AP05S

Sampled: 07/18/24 10:10
Matrix: Ground Water
Preservative: HNO3, pH <2 -01

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/31/24 16:00	01/14/25 10:10	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HG03596-02
Name: AW-08

Sampled: 07/18/24 13:33
Matrix: Ground Water
Preservative: HNO3, pH <2 -02

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/31/24 16:00	01/14/25 13:33	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HG03596-03
Name: AW-10

Sampled: 07/18/24 11:45
Matrix: Ground Water
Preservative: HNO3, pH <2 -03

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/31/24 16:00	01/14/25 11:45	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HG03596-04
Name: FIELD BLANK

Sampled: 07/18/24 13:40
Matrix: DI Water
Preservative: HNO3, pH <2 -04

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	07/31/24 16:00	01/14/25 13:40	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HG03596

L1759346

C034

7775 3460 1036

Sample Receipt Checklist

		If Applicable	
COC Seal Present/Intact:	Y N	VOA Zero Headspace:	Y N
COC Signed/Accurate:	Y N	Pres. Correct/Check:	Y N
Bottles arrive intact:	Y N		
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
PA Screen <0.5 mR/hr:	Y N		

EDM 21.0+1.3=21.3

Please email results to Diane Billings at diane.billings@pacelabs.com

Date Shipped: 7/22/24 Total # of Containers: 4 Sample Origin (State): IL PO #: _____

Turn-Around Time Requested ☐ NORMAL ☐ RUSH Date Results Needed: _____

Relinquished By	Date/Time	Received By	Date/Time
	7/22/24 0740	AM	7/23/24 900

Sample Temperature Upon Receipt	____ °C
Sample(s) Received on Ice	Y or N
Proper Bottles Received in Good Condition	Y or N
Bottles Filled with Adequate Volume	Y or N
Samples Received Within Hold Time	Y or N
Date/Time Taken From Sample Bottle	Y or N

HG02700
~~HG02090~~ VB

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page 1 of 2

Section A (Required Client Information)	Section B (Required Project Information)	Section C (Invoice Information)
Company: Vistra Corp-Edwards	Report To: Brian Voelker	Attention: Brian Voelker
Address: 7800 Cilco Lane	Copy To: Sam Davies samantha.davies@vistracorp.com	Company Name: Vistra Corp
Peoria, IL 61607	Mark Davis: Mark.Davis1@vistracorp.com	Address: see Section A
Email To:	Purchase Order No:	Quote Reference:
Phone: (217) 753-8911 Fax:	Project Name:	Project Manager:
Requested Due Date/TAT: 10 day	Project Number:	Profile #:

REGULATORY AGENCY

NPDES | GROUND WATER | DRINKING WATER
UST | RCRA | OTHER

Site Location STATE: IL

Valid Matrix Codes: DW drinking water; WT water; WW wastewater; P product; SL/SOLID sl; OL oil; WP wipe; AR air; OT other; TS tissue

ITEM #	Section D (Required Client Information) SAMPLE ID (A-Z, 0-9, /, -) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED Time	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test ↓ Y/N	EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S																X	X		
2	AP07S																X	X		
3	AW-01																X	X		
4	~~AW-05~~ AW-04 Dup			7/15/24	1542		4	X		X							X	X		
5	AW-06			7/15/24	1542		4	X		X							X	X		
6	AW-08																X	X		
7	AW-09																X	X		
8	AW-10																X	X		
9	AW-11																X	X		
10	AW-14																X	X		
11	AW-15																X	X		
12	AW-15S																X	X		
13	AW-16																X	X		
14	AW-17																X	X		
15	~~AW-18~~ AW-21			7/15/24	1610		4	X		X							X	X		
16	AW-19			7/15/24	1438		4	X		X							X	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q3 Rev 0	James Davis	7/15/24	1645							
				VB	7/15/24	1649		Y	Y	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: James Davis
SIGNATURE of SAMPLER: James Davis DATE Signed (MM/DD/YY): 7/15/24

15 Comments Temp Blank 10.2
3.5 3.7
Courier

HG029501 ~~HG029501/EJ~~

CHAIN-OF-CUSTODY / Analytical Request Document

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Page 1 of 2

Section A Required Client Information

Company:	Vistra Corp-Edwards
Address:	7600 Cilco Lane
	Peoria, IL 61607
Email To:	
Phone: (217) 753-8911	Fax:
Requested Due Date/TAT:	10 day

Section B Required Project Information

Report To:	Brian Voelker
Copy To:	Sam Davies: samantha.davies@vistracorp.com
	Mark Davis: Mark.Davis1@vistracorp.com
Purchase Order No:	
Project Name:	
Project Number:	

Section C Invoice Information

Attention:	Brian Voelker
Company Name:	Vistra Corp
Address:	see Section A
Quote Reference:	
Project Manager:	
Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

SAMPLE ID (A-Z, 0-9 / , -) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S																X	X		
2	AP07S	GW	G	7/16/24	1414		4	X		X							X	X		
3	AW-01	GW	G	7/16/24	1209		4	X		X							X	X		
4	AW-05	GW	G	7/16/24	1538		4	X		X							X	X		
5	~~AW-06~~ AW-07 dup	GW	G	7/16/24	1209		4	X		X							X	X		
6	AW-08																X	X		
7	AW-09	GW	G	7/16/24	1233		4	X		X							X	X		
8	AW-10																X	X		
9	AW-11																X	X		
10	AW-14																X	X		
11	AW-15																X	X		
12	~~AW-15~~ AW-16 dup	GW	G	7/16/24	1522		4	X		X							X	X		
13	AW-16	GW	G	7/16/24	1522		4	X		X							X	X		
14	AW-17	GW	G	7/16/24	1045		4	X		X							X	X		
15	AW-18	GW	G	7/16/24	1412		4	X		X							X	X		
16	AW-19																X	X		

13 14 +0.1 15 0 Counties

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q3 Rev 0		7/16/24	1016				5.2	>	>	>
				Cate P. Jones	7/16/24	1620				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: James David

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 7/16/24

HGO3219

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page 1 of 2

Section A Required Client Information

Company:	Vistra Corp-Edwards
Address:	7800 Cilco Lane
	Peoria, IL 61607
Email To:	[illegible]
Phone: (217) 753-8911	Fax:
Requested Due Date/TAT:	10 day

Section B Required Project Information

Report To:	Brian Voelker
Copy To:	Sam Davies samantha.davies@vistracorp.com
	Mark Davis Mark.Davis1@vistracorp.com
Purchase Order No.:	
Project Name:	
Project Number:	

Section C Invoice Information

Attention:	Brian Voelker
Company Name:	Vistra Corp
Address:	see Section A
Quote Reference:	
Project Manager:	
Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS

SAMPLE ID
(A-Z, 0-9, /, -)
Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S																X	X		
2	AP07S																X	X		
3	AW-01																X	X		
4	AW-05																X	X		
5	AW-06																X	X		
6	AW-08																X	X		
7	AW-09																X	X		
8	AW-10																X	X		
9	AW-11	WT	G	7/1/24	1545		4	X		X							X	X		
10	AW-14	WT	G	7/1/24	1302		4	X		X							X	X		
11	AW-15	WT	G	7/1/24	1204		4	X		X							X	X		
12	AW-15S	WT	G	7/1/24	1142		4	X		X							X	X		
13	AW-16																X	X		
14	AW-17																X	X		
15	AW-18																X	X		
16	AW-19																X	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
EDW-24Q3 Rev 0	[signature]	7/1/24	1621				
				[signature]	7/1/24	1654	

SAMPLER NAME AND SIGNATURE		
PRINT Name of SAMPLER:	Aron Lambertson	
SIGNATURE of SAMPLER: [signature]	DATE Signed (MM/DD/YY): 07/1/24	

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)
3 | Y | N | Y

HG03595
Rad = HG-03596

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 2

Section A Required Client Information:

Company:	Vistra Corp-Edwards
Address:	7800 Cilco Lane
	Peoria, IL 61607
Email To:	Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911	Fax:
Requested Due Date/TAT:	10 day

Section B Required Project Information:

Report To:	Brian Voelker
Copy To:	Sam Davies: samantha.davies@vistracorp.com
	Mark Davis: Mark.Davis1@vistracorp.com
Purchase Order No.:	
Project Name:	
Project Number:	

Section C Invoice Information:

Attention:	Brian Voelker
Company Name:	Vistra Corp
Address:	see Section A
Quote Reference:	
Project Manager:	
Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S	GW	G	07/17/24	~~0937~~ 1010		4										X	X		
2	AP07S																X	X		
3	AW-01																X	X		
4	AW-05																X	X		
5	AW-06				1333												X	X		
6	AW-08	GW	G	07/18/24	~~1228~~		4										X	X		
7	AW-09																X	X		
8	AW-10	GW	G	07/18/24	~~1100~~ 1145		4										X	X		
9	AW-11																X	X		
10	AW-14																X	X		
11	AW-15																X	X		
12	AW-15S																X	X		
13	AW-16																X	X		
14	AW-17																X	X		
15	AW-18																X	X		
16	AW-19																X	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q3 Rev 0		07/18/24	1604		7/18/24	1604	2.8	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Kaleb Deske

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 07/18/24

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 2

Section A Required Client Information:

Company: Vistra Corp-Edwards
Address: 7800 Cilco Lane
Peoria, IL 61607
Email To: Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911 Fax:
Requested Due Date/TAT: 10 day

Section B Required Project Information:

Report To: Brian Voelker
Copy To: Sam Davies: samantha.davies@vistracorp.com
Mark Davis: Mark.Davis1@vistracorp.com
Purchase Order No.:
Project Name:
Project Number:

Section C Invoice Information:

Attention: Brian Voelker
Company Name: Vistra Corp
Address: see Section A
Quote Reference:
Project Manager:
Profile #:

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test ↓ Y/N	EDW-257-301	EDW-845-301	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AW-21																X	X		
2	SG-01																X	X		
3	XPW01A																X	X		
4	XPW02																X	X		
5	XPW03																X	X		
6	Field Blank	WG	G	07/18/24	1340		4													
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q3 Rev 0		07/18/24	1604							
					7/18/24	1604	2.3	Y	N	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: KYLER DEESE
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 07/18/24

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

December 15, 2024

Brian Voelker
Vistra - Edwards
604 Pierce Boulevard
O'Fallon, IL 62269

Dear Brian Voelker:

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 General Manager, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Sincerely,

Diane Billings
Project Manager

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

SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order HJ05300

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

Pace Analytical Services, LLC
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Work Order HJ05533

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

Pace Analytical Services, LLC
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Peoria, IL 61615
(800)752-6651

Work Order HJ05652

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

Pace Analytical Services, LLC
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Case Narrative

The original report dated 12/4/24 was revised to update the sample collection date for AW-06 Dup.

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

ANALYTICAL RESULTS

Sample: HJ05300-01
Name: AW-06
Matrix: Ground Water - Grab

Sampled: 10/29/24 15:19
Received: 10/29/24 16:12
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	37	mg/L	Q4	11/04/24 16:44	5	5.0	11/04/24 16:44	JSM	EPA 300.0 REV 2.1
Fluoride	0.324	mg/L		11/04/24 16:26	1	0.250	11/04/24 16:26	JSM	EPA 300.0 REV 2.1
Sulfate	22	mg/L	Q4	11/04/24 16:44	5	5.0	11/04/24 16:44	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	28.55	Feet		10/29/24 15:19	1		10/29/24 15:19	FIELD	Field*
Dissolved oxygen, Field	0.32	mg/L		10/29/24 15:19	1		10/29/24 15:19	FIELD	Field*
Oxidation Reduction Potential	-123	mV		10/29/24 15:19	1	-500	10/29/24 15:19	FIELD	Field*
pH, Field Measured	7.35	pH Units		10/29/24 15:19	1		10/29/24 15:19	FIELD	Field*
Specific Conductance, Field Measured	900.0	umhos/cm		10/29/24 15:19	1		10/29/24 15:19	FIELD	Field*
Temperature, Field Measured	22.1	°C		10/29/24 15:19	1		10/29/24 15:19	FIELD	Field*
Turbidity, Field Measured	6.80	NTU		10/29/24 15:19	1	0.00	10/29/24 15:19	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	480	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Solids - total dissolved solids (TDS)	580	mg/L		11/04/24 09:16	1	26	11/04/24 15:52	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/07/24 07:07	5	3.0	11/08/24 11:56	TJJ	EPA 6020A
Arsenic	4.4	ug/L		11/07/24 07:07	5	1.0	11/08/24 11:56	TJJ	EPA 6020A
Barium	170	ug/L		11/07/24 07:07	5	1.0	11/08/24 11:56	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/07/24 07:07	5	1.0	11/08/24 11:56	TJJ	EPA 6020A
Boron	98	ug/L		11/07/24 07:07	5	10	11/08/24 11:56	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/07/24 07:07	5	1.0	11/08/24 11:56	TJJ	EPA 6020A
Calcium	120	mg/L	Q4	11/07/24 07:07	5	0.20	11/08/24 11:56	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/07/24 07:07	5	4.0	11/08/24 11:56	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/07/24 07:07	5	2.0	11/08/24 11:56	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/07/24 07:07	5	1.0	11/08/24 11:56	TJJ	EPA 6020A
Magnesium	46	mg/L		11/07/24 07:07	5	0.10	11/08/24 11:56	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/07/24 07:07	5	0.20	11/08/24 18:27	TJJ	EPA 6020A
Molybdenum	8.3	ug/L		11/07/24 07:07	5	1.0	11/08/24 11:56	TJJ	EPA 6020A
Potassium	0.70	mg/L		11/07/24 07:07	5	0.10	11/08/24 11:56	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/07/24 07:07	5	1.0	11/08/24 11:56	TJJ	EPA 6020A
Sodium	45	mg/L		11/07/24 07:07	5	0.10	11/08/24 11:56	TJJ	EPA 6020A

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

ANALYTICAL RESULTS

Sample: HJ05300-01
Name: AW-06
Matrix: Ground Water - Grab

Sampled: 10/29/24 15:19
Received: 10/29/24 16:12
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/07/24 07:07	5	1.0	11/08/24 11:56	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/07/24 07:07	1	20	11/07/24 11:03	BRS	EPA 6010B

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ANALYTICAL RESULTS

Sample: HJ05300-02
Name: AW-11
Matrix: Ground Water - Grab

Sampled: 10/29/24 14:35
Received: 10/29/24 16:12
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	36	mg/L		11/04/24 17:56	5	5.0	11/04/24 17:56	JSM	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/04/24 17:38	1	0.250	11/04/24 17:38	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/04/24 17:38	1	1.0	11/04/24 17:38	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	6.95	Feet		10/29/24 14:35	1		10/29/24 14:35	FIELD	Field*
Dissolved oxygen, Field	0.26	mg/L		10/29/24 14:35	1		10/29/24 14:35	FIELD	Field*
Oxidation Reduction Potential	-204	mV		10/29/24 14:35	1	-500	10/29/24 14:35	FIELD	Field*
pH, Field Measured	7.02	pH Units		10/29/24 14:35	1		10/29/24 14:35	FIELD	Field*
Specific Conductance, Field Measured	1910	umhos/cm		10/29/24 14:35	1		10/29/24 14:35	FIELD	Field*
Temperature, Field Measured	21.4	°C		10/29/24 14:35	1		10/29/24 14:35	FIELD	Field*
Turbidity, Field Measured	>1000	NTU		10/29/24 14:35	1	0.00	10/29/24 14:35	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	980	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Solids - total dissolved solids (TDS)	990	mg/L		11/04/24 09:16	1	26	11/04/24 15:52	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/04/24 10:51	5	3.0	11/05/24 15:39	TJJ	EPA 6020A
Arsenic	9.1	ug/L		11/04/24 10:51	5	1.0	11/05/24 15:39	TJJ	EPA 6020A
Barium	1000	ug/L		11/04/24 10:51	5	1.0	11/05/24 15:39	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 15:39	TJJ	EPA 6020A
Boron	240	ug/L		11/04/24 10:51	5	10	11/06/24 11:53	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 15:39	TJJ	EPA 6020A
Calcium	150	mg/L		11/04/24 10:51	5	0.20	11/05/24 15:39	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/04/24 10:51	5	4.0	11/05/24 15:39	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/04/24 10:51	5	2.0	11/05/24 15:39	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 15:39	TJJ	EPA 6020A
Magnesium	68	mg/L		11/04/24 10:51	5	0.10	11/05/24 15:39	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/04/24 10:51	5	0.20	11/05/24 15:39	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 15:39	TJJ	EPA 6020A
Potassium	2.5	mg/L		11/04/24 10:51	5	0.10	11/05/24 15:39	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 15:39	TJJ	EPA 6020A
Sodium	160	mg/L		11/04/24 10:51	5	0.10	11/05/24 15:39	TJJ	EPA 6020A

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

ANALYTICAL RESULTS

Sample: HJ05300-02
Name: AW-11
Matrix: Ground Water - Grab

Sampled: 10/29/24 14:35
Received: 10/29/24 16:12
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 15:39	TJJ	EPA 6020A
Lithium	21	ug/L		11/04/24 10:51	1	20	11/05/24 10:46	BRS	EPA 6010B

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Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: HJ05300-03
Name: AW-14
Matrix: Ground Water - Grab

Sampled: 10/29/24 13:08
Received: 10/29/24 16:12
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	26	mg/L		11/04/24 18:32	5	5.0	11/04/24 18:32	JSM	EPA 300.0 REV 2.1
Fluoride	0.695	mg/L		11/04/24 18:14	1	0.250	11/04/24 18:14	JSM	EPA 300.0 REV 2.1
Sulfate	3.3	mg/L		11/04/24 18:14	1	1.0	11/04/24 18:14	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	9.31	Feet		10/29/24 13:08	1		10/29/24 13:08	FIELD	Field*
Dissolved oxygen, Field	0.39	mg/L		10/29/24 13:08	1		10/29/24 13:08	FIELD	Field*
Oxidation Reduction Potential	-171	mV		10/29/24 13:08	1	-500	10/29/24 13:08	FIELD	Field*
pH, Field Measured	6.86	pH Units		10/29/24 13:08	1		10/29/24 13:08	FIELD	Field*
Specific Conductance, Field Measured	1940	umhos/cm		10/29/24 13:08	1		10/29/24 13:08	FIELD	Field*
Temperature, Field Measured	18.8	°C		10/29/24 13:08	1		10/29/24 13:08	FIELD	Field*
Turbidity, Field Measured	98.1	NTU		10/29/24 13:08	1	0.00	10/29/24 13:08	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	990	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Solids - total dissolved solids (TDS)	1000	mg/L		11/04/24 09:16	1	26	11/04/24 15:52	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/07/24 07:07	5	3.0	11/08/24 12:00	TJJ	EPA 6020A
Arsenic	2.6	ug/L		11/07/24 07:07	5	1.0	11/08/24 12:00	TJJ	EPA 6020A
Barium	700	ug/L		11/07/24 07:07	5	1.0	11/08/24 12:00	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/07/24 07:07	5	1.0	11/08/24 12:00	TJJ	EPA 6020A
Boron	190	ug/L		11/07/24 07:07	5	10	11/08/24 12:00	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/07/24 07:07	5	1.0	11/08/24 12:00	TJJ	EPA 6020A
Calcium	170	mg/L		11/07/24 07:07	5	0.20	11/08/24 12:00	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/07/24 07:07	5	4.0	11/08/24 12:00	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/07/24 07:07	5	2.0	11/08/24 12:00	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/07/24 07:07	5	1.0	11/08/24 12:00	TJJ	EPA 6020A
Magnesium	64	mg/L		11/07/24 07:07	5	0.10	11/08/24 12:00	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/07/24 07:07	5	0.20	11/08/24 12:00	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		11/07/24 07:07	5	1.0	11/08/24 12:00	TJJ	EPA 6020A
Potassium	2.7	mg/L		11/07/24 07:07	5	0.10	11/08/24 12:00	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/07/24 07:07	5	1.0	11/08/24 12:00	TJJ	EPA 6020A
Sodium	140	mg/L		11/07/24 07:07	5	0.10	11/08/24 12:00	TJJ	EPA 6020A

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

ANALYTICAL RESULTS

Sample: HJ05300-03
Name: AW-14
Matrix: Ground Water - Grab

Sampled: 10/29/24 13:08
Received: 10/29/24 16:12
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/07/24 07:07	5	1.0	11/08/24 12:00	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/07/24 07:07	1	20	11/07/24 10:44	BRS	EPA 6010B

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2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: HJ05300-04
Name: AW-15S
Matrix: Ground Water - Grab

Sampled: 10/29/24 11:40
Received: 10/29/24 16:12
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	31	mg/L		11/04/24 19:44	5	5.0	11/04/24 19:44	JSM	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/04/24 19:26	1	0.250	11/04/24 19:26	JSM	EPA 300.0 REV 2.1
Sulfate	520	mg/L		11/04/24 20:02	100	100	11/04/24 20:02	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	11.31	Feet		10/29/24 11:40	1		10/29/24 11:40	FIELD	Field*
Dissolved oxygen, Field	1.9	mg/L		10/29/24 11:40	1		10/29/24 11:40	FIELD	Field*
Oxidation Reduction Potential	-64.0	mV		10/29/24 11:40	1	-500	10/29/24 11:40	FIELD	Field*
pH, Field Measured	6.89	pH Units		10/29/24 11:40	1		10/29/24 11:40	FIELD	Field*
Specific Conductance, Field Measured	1840	umhos/cm		10/29/24 11:40	1		10/29/24 11:40	FIELD	Field*
Temperature, Field Measured	21.4	°C		10/29/24 11:40	1		10/29/24 11:40	FIELD	Field*
Turbidity, Field Measured	50.4	NTU		10/29/24 11:40	1	0.00	10/29/24 11:40	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	510	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Solids - total dissolved solids (TDS)	1400	mg/L		11/04/24 09:16	1	26	11/04/24 15:52	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/07/24 07:07	5	3.0	11/08/24 12:03	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		11/07/24 07:07	5	1.0	11/08/24 12:03	TJJ	EPA 6020A
Barium	78	ug/L		11/07/24 07:07	5	1.0	11/08/24 12:03	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/07/24 07:07	5	1.0	11/08/24 12:03	TJJ	EPA 6020A
Boron	6800	ug/L		11/07/24 07:07	5	10	11/08/24 12:03	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/07/24 07:07	5	1.0	11/08/24 12:03	TJJ	EPA 6020A
Calcium	270	mg/L		11/07/24 07:07	5	0.20	11/08/24 12:03	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/07/24 07:07	5	4.0	11/08/24 12:03	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/07/24 07:07	5	2.0	11/08/24 12:03	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/07/24 07:07	5	1.0	11/08/24 12:03	TJJ	EPA 6020A
Magnesium	80	mg/L		11/07/24 07:07	5	0.10	11/08/24 12:03	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/07/24 07:07	5	0.20	11/08/24 12:03	TJJ	EPA 6020A
Molybdenum	2.9	ug/L		11/07/24 07:07	5	1.0	11/08/24 12:03	TJJ	EPA 6020A
Potassium	0.71	mg/L		11/07/24 07:07	5	0.10	11/08/24 12:03	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/07/24 07:07	5	1.0	11/08/24 12:03	TJJ	EPA 6020A
Sodium	53	mg/L		11/07/24 07:07	5	0.10	11/08/24 12:03	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HJ05300-04
Name: AW-15S
Matrix: Ground Water - Grab

Sampled: 10/29/24 11:40
Received: 10/29/24 16:12
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/07/24 07:07	5	1.0	11/08/24 12:03	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/07/24 07:07	1	20	11/07/24 10:51	BRS	EPA 6010B

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ANALYTICAL RESULTS

Sample: HJ05300-05
Name: AW-15
Matrix: Ground Water - Grab

Sampled: 10/29/24 10:26
Received: 10/29/24 16:12
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	36	mg/L		11/04/24 20:39	5	5.0	11/04/24 20:39	JSM	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/04/24 20:21	1	0.250	11/04/24 20:21	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/04/24 20:21	1	1.0	11/04/24 20:21	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	9.97	Feet		10/29/24 10:26	1		10/29/24 10:26	FIELD	Field*
Dissolved oxygen, Field	0.55	mg/L		10/29/24 10:26	1		10/29/24 10:26	FIELD	Field*
Oxidation Reduction Potential	-119	mV		10/29/24 10:26	1	-500	10/29/24 10:26	FIELD	Field*
pH, Field Measured	6.81	pH Units		10/29/24 10:26	1		10/29/24 10:26	FIELD	Field*
Specific Conductance, Field Measured	2100	umhos/cm		10/29/24 10:26	1		10/29/24 10:26	FIELD	Field*
Temperature, Field Measured	19.2	°C		10/29/24 10:26	1		10/29/24 10:26	FIELD	Field*
Turbidity, Field Measured	179	NTU		10/29/24 10:26	1	0.00	10/29/24 10:26	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	1000	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Solids - total dissolved solids (TDS)	980	mg/L		11/04/24 09:16	1	26	11/04/24 15:52	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/04/24 10:51	5	3.0	11/05/24 16:02	TJJ	EPA 6020A
Arsenic	1.5	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:02	TJJ	EPA 6020A
Barium	1600	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:02	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:02	TJJ	EPA 6020A
Boron	360	ug/L		11/04/24 10:51	5	10	11/06/24 12:16	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:02	TJJ	EPA 6020A
Calcium	140	mg/L		11/04/24 10:51	5	0.20	11/05/24 16:02	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/04/24 10:51	5	4.0	11/05/24 16:02	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/04/24 10:51	5	2.0	11/05/24 16:02	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:02	TJJ	EPA 6020A
Magnesium	57	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:02	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/04/24 10:51	5	0.20	11/05/24 16:02	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:02	TJJ	EPA 6020A
Potassium	4.2	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:02	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:02	TJJ	EPA 6020A
Sodium	210	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:02	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HJ05300-05
Name: AW-15
Matrix: Ground Water - Grab

Sampled: 10/29/24 10:26
Received: 10/29/24 16:12
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:02	TJJ	EPA 6020A
Lithium	32	ug/L		11/04/24 10:51	1	20	11/05/24 10:49	BRS	EPA 6010B

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ANALYTICAL RESULTS

Sample: HJ05300-06
Name: AW-06 DUP
Matrix: Ground Water - Grab

Sampled: 10/29/24 15:19
Received: 10/29/24 16:12
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	35	mg/L		11/04/24 21:15	5	5.0	11/04/24 21:15	JSM	EPA 300.0 REV 2.1
Fluoride	0.307	mg/L		11/04/24 20:57	1	0.250	11/04/24 20:57	JSM	EPA 300.0 REV 2.1
Sulfate	24	mg/L		11/04/24 21:15	5	5.0	11/04/24 21:15	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	28.55	Feet		10/28/24 15:19	1		10/28/24 15:19	FIELD	Field*
Dissolved oxygen, Field	0.32	mg/L		10/28/24 15:19	1		10/28/24 15:19	FIELD	Field*
Oxidation Reduction Potential	-123	mV		10/28/24 15:19	1	-500	10/28/24 15:19	FIELD	Field*
pH, Field Measured	7.35	pH Units		10/28/24 15:19	1		10/28/24 15:19	FIELD	Field*
Specific Conductance, Field Measured	900.0	umhos/cm		10/28/24 15:19	1		10/28/24 15:19	FIELD	Field*
Temperature, Field Measured	22.1	°C		10/28/24 15:19	1		10/28/24 15:19	FIELD	Field*
Turbidity, Field Measured	6.80	NTU		10/28/24 15:19	1	0.00	10/28/24 15:19	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	480	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Solids - total dissolved solids (TDS)	560	mg/L		11/01/24 09:42	1	26	11/01/24 15:22	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/04/24 10:51	5	3.0	11/05/24 16:06	TJJ	EPA 6020A
Arsenic	1.3	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:06	TJJ	EPA 6020A
Barium	140	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:06	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:06	TJJ	EPA 6020A
Boron	120	ug/L		11/04/24 10:51	5	10	11/06/24 12:19	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:06	TJJ	EPA 6020A
Calcium	110	mg/L		11/04/24 10:51	5	0.20	11/05/24 16:06	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/04/24 10:51	5	4.0	11/05/24 16:06	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/04/24 10:51	5	2.0	11/05/24 16:06	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:06	TJJ	EPA 6020A
Magnesium	46	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:06	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/04/24 10:51	5	0.20	11/05/24 16:06	TJJ	EPA 6020A
Molybdenum	8.6	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:06	TJJ	EPA 6020A
Potassium	0.72	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:06	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:06	TJJ	EPA 6020A
Sodium	60	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:06	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HJ05300-06
Name: AW-06 DUP
Matrix: Ground Water - Grab

Sampled: 10/29/24 15:19
Received: 10/29/24 16:12
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:06	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/04/24 10:51	1	20	11/05/24 10:53	BRS	EPA 6010B

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ANALYTICAL RESULTS

Sample: HJ05533-01
Name: AW-01
Matrix: Ground Water - Grab

Sampled: 10/30/24 15:35
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	7.4	mg/L	Q4	11/05/24 18:57	1	1.0	11/05/24 18:57	JSM	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L	Q4	11/05/24 18:57	1	0.250	11/05/24 18:57	JSM	EPA 300.0 REV 2.1
Sulfate	47	mg/L	Q4	11/05/24 19:14	5	5.0	11/05/24 19:14	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	10.25	Feet		10/30/24 15:35	1		10/30/24 15:35	FIELD	Field*
Dissolved oxygen, Field	0.43	mg/L		10/30/24 15:35	1		10/30/24 15:35	FIELD	Field*
Oxidation Reduction Potential	-98.8	mV		10/30/24 15:35	1	-500	10/30/24 15:35	FIELD	Field*
pH, Field Measured	6.77	pH Units		10/30/24 15:35	1		10/30/24 15:35	FIELD	Field*
Specific Conductance, Field Measured	1431	umhos/cm		10/30/24 15:35	1		10/30/24 15:35	FIELD	Field*
Temperature, Field Measured	20.7	°C		10/30/24 15:35	1		10/30/24 15:35	FIELD	Field*
Turbidity, Field Measured	23.1	NTU		10/30/24 15:35	1	0.00	10/30/24 15:35	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	710	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Solids - total dissolved solids (TDS)	760	mg/L	M	11/04/24 09:16	1	26	11/04/24 15:52	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/04/24 10:51	5	3.0	11/05/24 16:09	TJJ	EPA 6020A
Arsenic	5.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:09	TJJ	EPA 6020A
Barium	100	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:09	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:09	TJJ	EPA 6020A
Boron	71	ug/L		11/04/24 10:51	5	10	11/06/24 12:23	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:09	TJJ	EPA 6020A
Calcium	180	mg/L		11/04/24 10:51	5	0.20	11/05/24 16:09	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/04/24 10:51	5	4.0	11/05/24 16:09	TJJ	EPA 6020A
Cobalt	3.3	ug/L		11/04/24 10:51	5	2.0	11/05/24 16:09	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:09	TJJ	EPA 6020A
Magnesium	82	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:09	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/04/24 10:51	5	0.20	11/05/24 16:09	TJJ	EPA 6020A
Molybdenum	2.8	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:09	TJJ	EPA 6020A
Potassium	0.32	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:09	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:09	TJJ	EPA 6020A
Sodium	19	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:09	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HJ05533-01
Name: AW-01
Matrix: Ground Water - Grab

Sampled: 10/30/24 15:35
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:09	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/04/24 10:51	1	20	11/05/24 10:54	BRS	EPA 6010B

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ANALYTICAL RESULTS

Sample: HJ05533-02
Name: AW-01 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 10/30/24 15:35
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	7.4	mg/L		11/06/24 18:13	1	1.0	11/06/24 18:13	JSM	EPA 300.0 REV 2.1
Fluoride	< 0.250	mg/L		11/06/24 18:13	1	0.250	11/06/24 18:13	JSM	EPA 300.0 REV 2.1
Sulfate	47	mg/L	Q4	11/06/24 18:30	5	5.0	11/06/24 18:30	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	10.25	Feet		10/30/24 15:35	1		10/30/24 15:35	FIELD	Field*
Dissolved oxygen, Field	0.43	mg/L		10/30/24 15:35	1		10/30/24 15:35	FIELD	Field*
Oxidation Reduction Potential	-98.8	mV		10/30/24 15:35	1	-500	10/30/24 15:35	FIELD	Field*
pH, Field Measured	6.77	pH Units		10/30/24 15:35	1		10/30/24 15:35	FIELD	Field*
Specific Conductance, Field Measured	1431	umhos/cm		10/30/24 15:35	1		10/30/24 15:35	FIELD	Field*
Temperature, Field Measured	20.7	°C		10/30/24 15:35	1		10/30/24 15:35	FIELD	Field*
Turbidity, Field Measured	23.1	NTU		10/30/24 15:35	1	0.00	10/30/24 15:35	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	740	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Solids - total dissolved solids (TDS)	720	mg/L		11/05/24 09:09	1	26	11/05/24 14:45	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/04/24 10:51	5	3.0	11/05/24 16:13	TJJ	EPA 6020A
Arsenic	4.9	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:13	TJJ	EPA 6020A
Barium	100	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:13	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:13	TJJ	EPA 6020A
Boron	72	ug/L		11/04/24 10:51	5	10	11/06/24 12:27	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:13	TJJ	EPA 6020A
Calcium	180	mg/L		11/04/24 10:51	5	0.20	11/05/24 16:13	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/04/24 10:51	5	4.0	11/05/24 16:13	TJJ	EPA 6020A
Cobalt	3.2	ug/L		11/04/24 10:51	5	2.0	11/05/24 16:13	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:13	TJJ	EPA 6020A
Magnesium	79	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:13	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/04/24 10:51	5	0.20	11/05/24 16:13	TJJ	EPA 6020A
Molybdenum	2.6	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:13	TJJ	EPA 6020A
Potassium	0.31	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:13	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:13	TJJ	EPA 6020A
Sodium	18	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:13	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HJ05533-02
Name: AW-01 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 10/30/24 15:35
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:13	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/04/24 10:51	1	20	11/05/24 10:55	BRS	EPA 6010B

Sample: HJ05533-03
Name: AW-08
Matrix: Ground Water - Grab

Sampled: 10/30/24 13:30
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - PIA									
Depth, From Measuring Point	25.41	Feet		10/30/24 13:30	1		10/30/24 13:30	FIELD	Field*
Dissolved oxygen, Field	1.5	mg/L		10/30/24 13:30	1		10/30/24 13:30	FIELD	Field*
Oxidation Reduction Potential	-151	mV		10/30/24 13:30	1	-500	10/30/24 13:30	FIELD	Field*
pH, Field Measured	6.91	pH Units		10/30/24 13:30	1		10/30/24 13:30	FIELD	Field*
Specific Conductance, Field Measured	1468	umhos/cm		10/30/24 13:30	1		10/30/24 13:30	FIELD	Field*
Temperature, Field Measured	20.6	°C		10/30/24 13:30	1		10/30/24 13:30	FIELD	Field*
Turbidity, Field Measured	0.130	NTU		10/30/24 13:30	1	0.00	10/30/24 13:30	FIELD	Field*
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/04/24 10:51	5	3.0	11/05/24 16:17	TJJ	EPA 6020A
Arsenic	14	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:17	TJJ	EPA 6020A
Barium	360	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:17	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:17	TJJ	EPA 6020A
Boron	140	ug/L		11/04/24 10:51	5	10	11/06/24 12:31	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:17	TJJ	EPA 6020A
Calcium	140	mg/L		11/04/24 10:51	5	0.20	11/05/24 16:17	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/04/24 10:51	5	4.0	11/05/24 16:17	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/04/24 10:51	5	2.0	11/05/24 16:17	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:17	TJJ	EPA 6020A
Magnesium	57	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:17	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/04/24 10:51	5	0.20	11/05/24 16:17	TJJ	EPA 6020A
Molybdenum	1.1	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:17	TJJ	EPA 6020A
Potassium	1.8	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:17	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:17	TJJ	EPA 6020A
Sodium	75	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:17	TJJ	EPA 6020A
Thallium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:17	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/04/24 10:51	1	20	11/05/24 10:56	BRS	EPA 6010B

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2231 W. Altorfer Drive
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ANALYTICAL RESULTS

Sample: HJ05533-04
Name: AW-09
Matrix: Ground Water - Grab

Sampled: 10/30/24 14:20
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	26	mg/L	Q4	11/06/24 20:30	5	5.0	11/06/24 20:30	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/06/24 19:38	1	1.0	11/06/24 19:38	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	27.23	Feet		10/30/24 14:20	1		10/30/24 14:20	FIELD	Field*
Dissolved oxygen, Field	6.8	mg/L		10/30/24 14:20	1		10/30/24 14:20	FIELD	Field*
Oxidation Reduction Potential	-116	mV		10/30/24 14:20	1	-500	10/30/24 14:20	FIELD	Field*
pH, Field Measured	6.28	pH Units		10/30/24 14:20	1		10/30/24 14:20	FIELD	Field*
Temperature, Field Measured	18.5	°C		10/30/24 14:20	1		10/30/24 14:20	FIELD	Field*
Turbidity, Field Measured	331	NTU		10/30/24 14:20	1	0.00	10/30/24 14:20	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	740	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Conductivity	1500	umho/cm @25.0°C		11/14/24 13:28	1	0.50	11/14/24 13:28	TMS	SM 2510 B-2011
Fluoride	< 0.250	mg/L		11/08/24 15:01	1	0.250	11/08/24 15:01	QTC	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	770	mg/L		11/05/24 09:09	1	26	11/05/24 14:45	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/04/24 10:51	5	3.0	11/05/24 16:21	TJJ	EPA 6020A
Arsenic	20	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:21	TJJ	EPA 6020A
Barium	380	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:21	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:21	TJJ	EPA 6020A
Boron	290	ug/L		11/04/24 10:51	5	10	11/06/24 12:34	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:21	TJJ	EPA 6020A
Calcium	120	mg/L		11/04/24 10:51	5	0.20	11/05/24 16:21	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/04/24 10:51	5	4.0	11/05/24 16:21	TJJ	EPA 6020A
Cobalt	2.4	ug/L		11/04/24 10:51	5	2.0	11/05/24 16:21	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:21	TJJ	EPA 6020A
Magnesium	51	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:21	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/04/24 10:51	5	0.20	11/05/24 16:21	TJJ	EPA 6020A
Molybdenum	18	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:21	TJJ	EPA 6020A
Potassium	2.3	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:21	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:21	TJJ	EPA 6020A
Sodium	140	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:21	TJJ	EPA 6020A

Pace Analytical Services, LLC
2231 W. Altorfer Drive
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ANALYTICAL RESULTS

Sample: HJ05533-04
Name: AW-09
Matrix: Ground Water - Grab

Sampled: 10/30/24 14:20
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:21	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/04/24 10:51	1	20	11/05/24 10:57	BRS	EPA 6010B

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ANALYTICAL RESULTS

Sample: HJ05533-05
Name: AW-10
Matrix: Ground Water - Grab

Sampled: 10/30/24 11:03
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	79	mg/L		11/06/24 21:38	25	25	11/06/24 21:38	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/06/24 21:21	1	1.0	11/06/24 21:21	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	2.84	Feet		10/30/24 11:03	1		10/30/24 11:03	FIELD	Field*
Dissolved oxygen, Field	1.2	mg/L		10/30/24 11:03	1		10/30/24 11:03	FIELD	Field*
Oxidation Reduction Potential	-134	mV		10/30/24 11:03	1	-500	10/30/24 11:03	FIELD	Field*
pH, Field Measured	7.00	pH Units		10/30/24 11:03	1		10/30/24 11:03	FIELD	Field*
Specific Conductance, Field Measured	2116	umhos/cm		10/30/24 11:03	1		10/30/24 11:03	FIELD	Field*
Temperature, Field Measured	17.3	°C		10/30/24 11:03	1		10/30/24 11:03	FIELD	Field*
Turbidity, Field Measured	75.0	NTU		10/30/24 11:03	1	0.00	10/30/24 11:03	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	1000	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		11/08/24 15:14	1	0.250	11/08/24 15:14	QTC	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	1100	mg/L		11/05/24 09:09	1	26	11/05/24 14:45	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/04/24 10:51	5	3.0	11/05/24 16:25	TJJ	EPA 6020A
Arsenic	8.2	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:25	TJJ	EPA 6020A
Barium	810	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:25	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:25	TJJ	EPA 6020A
Boron	470	ug/L		11/04/24 10:51	5	10	11/06/24 12:38	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:25	TJJ	EPA 6020A
Calcium	120	mg/L		11/04/24 10:51	5	0.20	11/05/24 16:25	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/04/24 10:51	5	4.0	11/05/24 16:25	TJJ	EPA 6020A
Cobalt	3.0	ug/L		11/04/24 10:51	5	2.0	11/05/24 16:25	TJJ	EPA 6020A
Lead	1.9	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:25	TJJ	EPA 6020A
Magnesium	67	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:25	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/04/24 10:51	5	0.20	11/05/24 16:25	TJJ	EPA 6020A
Molybdenum	1.4	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:25	TJJ	EPA 6020A
Potassium	4.2	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:25	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:25	TJJ	EPA 6020A
Sodium	280	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:25	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HJ05533-05
Name: AW-10
Matrix: Ground Water - Grab

Sampled: 10/30/24 11:03
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:25	TJJ	EPA 6020A
Lithium	38	ug/L		11/04/24 10:51	1	20	11/05/24 10:58	BRS	EPA 6010B

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ANALYTICAL RESULTS

Sample: HJ05533-06
Name: AW-16 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 10/30/24 16:40
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	46	mg/L	Q4	11/06/24 22:46	10	10	11/06/24 22:46	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/06/24 22:29	1	1.0	11/06/24 22:29	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	25.75	Feet		10/30/24 16:40	1		10/30/24 16:40	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		10/30/24 16:40	1		10/30/24 16:40	FIELD	Field*
Oxidation Reduction Potential	-100	mV		10/30/24 16:40	1	-500	10/30/24 16:40	FIELD	Field*
pH, Field Measured	6.70	pH Units		10/30/24 16:40	1		10/30/24 16:40	FIELD	Field*
Specific Conductance, Field Measured	1700	umhos/cm		10/30/24 16:40	1		10/30/24 16:40	FIELD	Field*
Temperature, Field Measured	18.0	°C		10/30/24 16:40	1		10/30/24 16:40	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		10/30/24 16:40	1	0.00	10/30/24 16:40	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	1200	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		11/08/24 15:17	1	0.250	11/08/24 15:17	QTC	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	1100	mg/L		11/05/24 09:09	1	26	11/05/24 14:45	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/04/24 10:51	5	3.0	11/05/24 16:28	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:28	TJJ	EPA 6020A
Barium	1100	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:28	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:28	TJJ	EPA 6020A
Boron	440	ug/L		11/04/24 10:51	5	10	11/06/24 12:42	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:28	TJJ	EPA 6020A
Calcium	140	mg/L		11/04/24 10:51	5	0.20	11/05/24 16:28	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/04/24 10:51	5	4.0	11/05/24 16:28	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/04/24 10:51	5	2.0	11/05/24 16:28	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:28	TJJ	EPA 6020A
Magnesium	60	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:28	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/04/24 10:51	5	0.20	11/05/24 16:28	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:28	TJJ	EPA 6020A
Potassium	5.0	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:28	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:28	TJJ	EPA 6020A
Sodium	260	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:28	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HJ05533-06
Name: AW-16 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 10/30/24 16:40
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:28	TJJ	EPA 6020A
Lithium	36	ug/L		11/04/24 10:51	1	20	11/05/24 10:59	BRS	EPA 6010B

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ANALYTICAL RESULTS

Sample: HJ05533-07
Name: AW-16
Matrix: Ground Water - Grab

Sampled: 10/30/24 16:40
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	44	mg/L		11/06/24 23:55	10	10	11/06/24 23:55	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/06/24 23:03	1	1.0	11/06/24 23:03	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	25.75	Feet		10/30/24 16:40	1		10/30/24 16:40	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		10/30/24 16:40	1		10/30/24 16:40	FIELD	Field*
Oxidation Reduction Potential	-100	mV		10/30/24 16:40	1	-500	10/30/24 16:40	FIELD	Field*
pH, Field Measured	6.70	pH Units		10/30/24 16:40	1		10/30/24 16:40	FIELD	Field*
Specific Conductance, Field Measured	1700	umhos/cm		10/30/24 16:40	1		10/30/24 16:40	FIELD	Field*
Temperature, Field Measured	18.0	°C		10/30/24 16:40	1		10/30/24 16:40	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		10/30/24 16:40	1	0.00	10/30/24 16:40	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	1200	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		11/08/24 15:19	1	0.250	11/08/24 15:19	QTC	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	1200	mg/L		11/05/24 09:09	1	26	11/05/24 14:45	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/04/24 10:51	5	3.0	11/05/24 16:32	TJJ	EPA 6020A
Arsenic	1.2	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:32	TJJ	EPA 6020A
Barium	1000	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:32	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:32	TJJ	EPA 6020A
Boron	420	ug/L		11/04/24 10:51	5	10	11/06/24 12:46	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:32	TJJ	EPA 6020A
Calcium	140	mg/L		11/04/24 10:51	5	0.20	11/05/24 16:32	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/04/24 10:51	5	4.0	11/05/24 16:32	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/04/24 10:51	5	2.0	11/05/24 16:32	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:32	TJJ	EPA 6020A
Magnesium	62	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:32	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/04/24 10:51	5	0.20	11/05/24 16:32	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:32	TJJ	EPA 6020A
Potassium	4.9	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:32	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:32	TJJ	EPA 6020A
Sodium	250	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:32	TJJ	EPA 6020A

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Peoria, IL 61615
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ANALYTICAL RESULTS

Sample: HJ05533-07
Name: AW-16
Matrix: Ground Water - Grab

Sampled: 10/30/24 16:40
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:32	TJJ	EPA 6020A
Lithium	34	ug/L		11/04/24 10:51	1	20	11/05/24 11:00	BRS	EPA 6010B

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2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

ANALYTICAL RESULTS

Sample: HJ05533-08
Name: AW-17
Matrix: Ground Water - Grab

Sampled: 10/30/24 10:05
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	48	mg/L		11/07/24 00:29	10	10	11/07/24 00:29	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/07/24 00:12	1	1.0	11/07/24 00:12	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	26.63	Feet		10/30/24 10:05	1		10/30/24 10:05	FIELD	Field*
Dissolved oxygen, Field	0.78	mg/L		10/30/24 10:05	1		10/30/24 10:05	FIELD	Field*
Oxidation Reduction Potential	-134	mV		10/30/24 10:05	1	-500	10/30/24 10:05	FIELD	Field*
pH, Field Measured	6.85	pH Units		10/30/24 10:05	1		10/30/24 10:05	FIELD	Field*
Specific Conductance, Field Measured	1809	umhos/cm		10/30/24 10:05	1		10/30/24 10:05	FIELD	Field*
Temperature, Field Measured	16.0	°C		10/30/24 10:05	1		10/30/24 10:05	FIELD	Field*
Turbidity, Field Measured	20.0	NTU		10/30/24 10:05	1	0.00	10/30/24 10:05	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	900	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		11/08/24 15:21	1	0.250	11/08/24 15:21	QTC	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	950	mg/L		11/05/24 09:09	1	26	11/05/24 14:45	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/04/24 10:51	5	3.0	11/05/24 16:36	TJJ	EPA 6020A
Arsenic	3.8	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:36	TJJ	EPA 6020A
Barium	970	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:36	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:36	TJJ	EPA 6020A
Boron	420	ug/L		11/04/24 10:51	5	10	11/06/24 12:50	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:36	TJJ	EPA 6020A
Calcium	100	mg/L		11/04/24 10:51	5	0.20	11/05/24 16:36	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/04/24 10:51	5	4.0	11/05/24 16:36	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/04/24 10:51	5	2.0	11/05/24 16:36	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:36	TJJ	EPA 6020A
Magnesium	44	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:36	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/04/24 10:51	5	0.20	11/05/24 16:36	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:36	TJJ	EPA 6020A
Potassium	4.3	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:36	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:36	TJJ	EPA 6020A
Sodium	220	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:36	TJJ	EPA 6020A

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

ANALYTICAL RESULTS

Sample: HJ05533-08
Name: AW-17
Matrix: Ground Water - Grab

Sampled: 10/30/24 10:05
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:36	TJJ	EPA 6020A
Lithium	33	ug/L		11/04/24 10:51	1	20	11/05/24 11:02	BRS	EPA 6010B

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2231 W. Altorfer Drive
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ANALYTICAL RESULTS

Sample: HJ05533-09
Name: AW-18
Matrix: Ground Water - Grab

Sampled: 10/30/24 12:35
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	77	mg/L		11/07/24 01:20	25	25	11/07/24 01:20	JSM	EPA 300.0 REV 2.1
Sulfate	7.3	mg/L		11/07/24 00:46	1	1.0	11/07/24 00:46	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	29.23	Feet		10/30/24 12:35	1		10/30/24 12:35	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		10/30/24 12:35	1		10/30/24 12:35	FIELD	Field*
Oxidation Reduction Potential	-136	mV		10/30/24 12:35	1	-500	10/30/24 12:35	FIELD	Field*
pH, Field Measured	6.64	pH Units		10/30/24 12:35	1		10/30/24 12:35	FIELD	Field*
Specific Conductance, Field Measured	1500	umhos/cm		10/30/24 12:35	1		10/30/24 12:35	FIELD	Field*
Temperature, Field Measured	17.9	°C		10/30/24 12:35	1		10/30/24 12:35	FIELD	Field*
Turbidity, Field Measured	13.7	NTU		10/30/24 12:35	1	0.00	10/30/24 12:35	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	750	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		11/08/24 15:23	1	0.250	11/08/24 15:23	QTC	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	920	mg/L		11/05/24 09:09	1	26	11/05/24 14:45	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/04/24 10:51	5	3.0	11/05/24 16:51	TJJ	EPA 6020A
Arsenic	2.4	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:51	TJJ	EPA 6020A
Barium	1100	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:51	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:51	TJJ	EPA 6020A
Boron	1500	ug/L		11/04/24 10:51	5	10	11/06/24 13:20	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:51	TJJ	EPA 6020A
Calcium	120	mg/L		11/04/24 10:51	5	0.20	11/05/24 16:51	TJJ	EPA 6020A
Chromium	17	ug/L		11/04/24 10:51	5	4.0	11/05/24 16:51	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/04/24 10:51	5	2.0	11/05/24 16:51	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:51	TJJ	EPA 6020A
Magnesium	51	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:51	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/04/24 10:51	5	0.20	11/05/24 16:51	TJJ	EPA 6020A
Molybdenum	4.7	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:51	TJJ	EPA 6020A
Potassium	3.9	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:51	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:51	TJJ	EPA 6020A
Sodium	170	mg/L		11/04/24 10:51	5	0.10	11/05/24 16:51	TJJ	EPA 6020A

Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
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ANALYTICAL RESULTS

Sample: HJ05533-09
Name: AW-18
Matrix: Ground Water - Grab

Sampled: 10/30/24 12:35
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/04/24 10:51	5	1.0	11/05/24 16:51	TJJ	EPA 6020A
Lithium	24	ug/L		11/04/24 10:51	1	20	11/05/24 11:03	BRS	EPA 6010B

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ANALYTICAL RESULTS

Sample: HJ05652-01
Name: AP05S
Matrix: Ground Water - Grab

Sampled: 10/31/24 13:39
Received: 10/31/24 14:35
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	48	mg/L	Q4	11/05/24 15:20	10	10	11/05/24 15:20	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/05/24 14:42	1	1.0	11/05/24 14:42	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	6.53	Feet		10/31/24 13:39	1		10/31/24 13:39	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		10/31/24 13:39	1		10/31/24 13:39	FIELD	Field*
Oxidation Reduction Potential	-89.0	mV		10/31/24 13:39	1	-500	10/31/24 13:39	FIELD	Field*
pH, Field Measured	6.24	pH Units		10/31/24 13:39	1		10/31/24 13:39	FIELD	Field*
Specific Conductance, Field Measured	1240	umhos/cm		10/31/24 13:39	1		10/31/24 13:39	FIELD	Field*
Temperature, Field Measured	15.7	°C		10/31/24 13:39	1		10/31/24 13:39	FIELD	Field*
Turbidity, Field Measured	16.3	NTU		10/31/24 13:39	1	0.00	10/31/24 13:39	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	850	mg/L		11/08/24 19:58	1	10	11/08/24 19:58	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 19:58	1	10	11/08/24 19:58	TMS	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		11/08/24 15:27	1	0.250	11/08/24 15:27	QTC	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	820	mg/L		11/06/24 12:58	1	26	11/06/24 16:54	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/05/24 09:15	5	3.0	11/11/24 13:30	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:30	TJJ	EPA 6020A
Barium	1000	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:30	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:30	TJJ	EPA 6020A
Boron	350	ug/L		11/05/24 09:15	5	10	11/11/24 13:30	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:30	TJJ	EPA 6020A
Calcium	100	mg/L		11/05/24 09:15	5	0.20	11/11/24 13:30	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/05/24 09:15	5	4.0	11/11/24 13:30	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/05/24 09:15	5	2.0	11/11/24 13:30	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:30	TJJ	EPA 6020A
Magnesium	45	mg/L		11/05/24 09:15	5	0.10	11/11/24 13:30	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/05/24 09:15	5	0.20	11/12/24 10:19	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:30	TJJ	EPA 6020A
Potassium	4.4	mg/L		11/05/24 09:15	5	0.10	11/11/24 13:30	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:30	TJJ	EPA 6020A
Sodium	190	mg/L	Q4	11/05/24 09:15	5	0.10	11/11/24 13:30	TJJ	EPA 6020A

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

ANALYTICAL RESULTS

Sample: HJ05652-01
Name: AP05S
Matrix: Ground Water - Grab

Sampled: 10/31/24 13:39
Received: 10/31/24 14:35
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:30	TJJ	EPA 6020A
Lithium	36	ug/L		11/05/24 09:15	1	20	11/07/24 10:00	BRS	EPA 6010B

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Sample: HJ05652-02
Name: AP07S
Matrix: Ground Water - Grab

Sampled: 10/31/24 13:50
Received: 10/31/24 14:35
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	80	mg/L		11/05/24 16:38	25	25	11/05/24 16:38	JSM	EPA 300.0 REV 2.1
Sulfate	220	mg/L		11/05/24 16:38	25	25	11/05/24 16:38	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	25.56	Feet		10/31/24 13:50	1		10/31/24 13:50	FIELD	Field*
Dissolved oxygen, Field	1.6	mg/L		10/31/24 13:50	1		10/31/24 13:50	FIELD	Field*
Oxidation Reduction Potential	-59.0	mV		10/31/24 13:50	1	-500	10/31/24 13:50	FIELD	Field*
pH, Field Measured	7.05	pH Units		10/31/24 13:50	1		10/31/24 13:50	FIELD	Field*
Specific Conductance, Field Measured	1790	umhos/cm		10/31/24 13:50	1		10/31/24 13:50	FIELD	Field*
Temperature, Field Measured	17.3	°C		10/31/24 13:50	1		10/31/24 13:50	FIELD	Field*
Turbidity, Field Measured	< 0.00	NTU		10/31/24 13:50	1	0.00	10/31/24 13:50	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	320	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		11/08/24 15:40	1	0.250	11/08/24 15:40	QTC	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	740	mg/L		11/06/24 12:58	1	26	11/06/24 16:54	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/05/24 09:15	5	3.0	11/11/24 13:34	TJJ	EPA 6020A
Arsenic	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:34	TJJ	EPA 6020A
Barium	40	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:34	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:34	TJJ	EPA 6020A
Boron	9900	ug/L		11/05/24 09:15	5	10	11/12/24 10:23	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:34	TJJ	EPA 6020A
Calcium	130	mg/L		11/05/24 09:15	5	0.20	11/11/24 13:34	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/05/24 09:15	5	4.0	11/11/24 13:34	TJJ	EPA 6020A
Cobalt	2.4	ug/L		11/05/24 09:15	5	2.0	11/11/24 13:34	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:34	TJJ	EPA 6020A
Magnesium	52	mg/L		11/05/24 09:15	5	0.10	11/11/24 13:34	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/05/24 09:15	5	0.20	11/12/24 10:23	TJJ	EPA 6020A
Molybdenum	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:34	TJJ	EPA 6020A
Potassium	0.39	mg/L		11/05/24 09:15	5	0.10	11/11/24 13:34	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:34	TJJ	EPA 6020A
Sodium	62	mg/L		11/05/24 09:15	5	0.10	11/11/24 13:34	TJJ	EPA 6020A

Pace Analytical Services, LLC
2231 W. Altorfer Drive
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ANALYTICAL RESULTS

Sample: HJ05652-02
Name: AP07S
Matrix: Ground Water - Grab

Sampled: 10/31/24 13:50
Received: 10/31/24 14:35
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:34	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/05/24 09:15	1	20	11/07/24 10:06	BRS	EPA 6010B

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ANALYTICAL RESULTS

Sample: HJ05652-03
Name: AW-05
Matrix: Ground Water - Grab

Sampled: 10/31/24 11:56
Received: 10/31/24 14:35
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	91	mg/L		11/05/24 17:36	25	25	11/05/24 17:36	JSM	EPA 300.0 REV 2.1
Sulfate	520	mg/L		11/05/24 18:34	100	100	11/05/24 18:34	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	9.2	Feet		10/31/24 11:56	1		10/31/24 11:56	FIELD	Field*
Dissolved oxygen, Field	0.0	mg/L		10/31/24 11:56	1		10/31/24 11:56	FIELD	Field*
Oxidation Reduction Potential	60.0	mV		10/31/24 11:56	1	-500	10/31/24 11:56	FIELD	Field*
pH, Field Measured	7.30	pH Units		10/31/24 11:56	1		10/31/24 11:56	FIELD	Field*
Specific Conductance, Field Measured	1360	umhos/cm		10/31/24 11:56	1		10/31/24 11:56	FIELD	Field*
Temperature, Field Measured	16.4	°C		10/31/24 11:56	1		10/31/24 11:56	FIELD	Field*
Turbidity, Field Measured	240	NTU		10/31/24 11:56	1	0.00	10/31/24 11:56	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	350	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		11/08/24 15:42	1	0.250	11/08/24 15:42	QTC	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	1100	mg/L		11/06/24 12:58	1	26	11/06/24 16:54	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/05/24 09:15	5	3.0	11/11/24 13:38	TJJ	EPA 6020A
Arsenic	2.4	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:38	TJJ	EPA 6020A
Barium	83	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:38	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:38	TJJ	EPA 6020A
Boron	12000	ug/L		11/05/24 09:15	50	100	11/12/24 10:31	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:38	TJJ	EPA 6020A
Calcium	190	mg/L		11/05/24 09:15	5	0.20	11/11/24 13:38	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/05/24 09:15	5	4.0	11/11/24 13:38	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/05/24 09:15	5	2.0	11/11/24 13:38	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:38	TJJ	EPA 6020A
Magnesium	88	mg/L		11/05/24 09:15	5	0.10	11/11/24 13:38	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/05/24 09:15	5	0.20	11/11/24 13:38	TJJ	EPA 6020A
Molybdenum	1.9	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:38	TJJ	EPA 6020A
Potassium	0.89	mg/L		11/05/24 09:15	5	0.10	11/11/24 13:38	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:38	TJJ	EPA 6020A
Sodium	83	mg/L		11/05/24 09:15	5	0.10	11/11/24 13:38	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HJ05652-03
Name: AW-05
Matrix: Ground Water - Grab

Sampled: 10/31/24 11:56
Received: 10/31/24 14:35
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:38	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/05/24 09:15	1	20	11/07/24 10:08	BRS	EPA 6010B

Sample: HJ05652-04
Name: AW-08
Matrix: Ground Water - Grab

Sampled: 10/31/24 09:40
Received: 10/31/24 14:35
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	19	mg/L		11/05/24 19:13	5	5.0	11/05/24 19:13	JSM	EPA 300.0 REV 2.1
Sulfate	< 1.0	mg/L		11/05/24 18:53	1	1.0	11/05/24 18:53	JSM	EPA 300.0 REV 2.1
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	740	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		11/08/24 15:43	1	0.250	11/08/24 15:43	QTC	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	700	mg/L		11/06/24 12:58	1	26	11/06/24 16:54	CFM	SM 2540 C-2011

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ANALYTICAL RESULTS

Sample: HJ05652-06
Name: AW-21
Matrix: Ground Water - Grab

Sampled: 10/31/24 12:30
Received: 10/31/24 14:35
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	85	mg/L		11/05/24 20:11	25	25	11/05/24 20:11	JSM	EPA 300.0 REV 2.1
Sulfate	240	mg/L		11/05/24 20:30	50	50	11/05/24 20:30	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	18.63	Feet		10/31/24 12:30	1		10/31/24 12:30	FIELD	Field*
Dissolved oxygen, Field	2.4	mg/L		10/31/24 12:30	1		10/31/24 12:30	FIELD	Field*
Oxidation Reduction Potential	21.0	mV		10/31/24 12:30	1	-500	10/31/24 12:30	FIELD	Field*
pH, Field Measured	7.25	pH Units		10/31/24 12:30	1		10/31/24 12:30	FIELD	Field*
Specific Conductance, Field Measured	1050	umhos/cm		10/31/24 12:30	1		10/31/24 12:30	FIELD	Field*
Temperature, Field Measured	16.1	°C		10/31/24 12:30	1		10/31/24 12:30	FIELD	Field*
Turbidity, Field Measured	0.800	NTU		10/31/24 12:30	1	0.00	10/31/24 12:30	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	190	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Fluoride	0.294	mg/L		11/08/24 15:49	1	0.250	11/08/24 15:49	QTC	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	620	mg/L		11/06/24 09:41	1	26	11/06/24 15:58	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/05/24 09:15	5	3.0	11/11/24 13:59	TJJ	EPA 6020A
Arsenic	1.7	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:59	TJJ	EPA 6020A
Barium	59	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:59	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:59	TJJ	EPA 6020A
Boron	10000	ug/L		11/05/24 09:15	50	100	11/12/24 10:34	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:59	TJJ	EPA 6020A
Calcium	110	mg/L		11/05/24 09:15	5	0.20	11/11/24 13:59	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/05/24 09:15	5	4.0	11/11/24 13:59	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/05/24 09:15	5	2.0	11/11/24 13:59	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:59	TJJ	EPA 6020A
Magnesium	38	mg/L		11/05/24 09:15	5	0.10	11/11/24 13:59	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/05/24 09:15	5	0.20	11/11/24 13:59	TJJ	EPA 6020A
Molybdenum	20	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:59	TJJ	EPA 6020A
Potassium	3.5	mg/L		11/05/24 09:15	5	0.10	11/11/24 13:59	TJJ	EPA 6020A
Selenium	1.7	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:59	TJJ	EPA 6020A
Sodium	49	mg/L		11/05/24 09:15	5	0.10	11/11/24 13:59	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HJ05652-06
Name: AW-21
Matrix: Ground Water - Grab

Sampled: 10/31/24 12:30
Received: 10/31/24 14:35
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 13:59	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/05/24 09:15	1	20	11/07/24 10:13	BRS	EPA 6010B

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ANALYTICAL RESULTS

Sample: HJ05652-07
Name: AW-19
Matrix: Ground Water - Grab

Sampled: 10/31/24 11:18
Received: 10/31/24 14:35
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - PIA									
Chloride	83	mg/L		11/05/24 21:09	25	25	11/05/24 21:09	JSM	EPA 300.0 REV 2.1
Sulfate	54	mg/L		11/05/24 21:09	25	25	11/05/24 21:09	JSM	EPA 300.0 REV 2.1
Field - PIA									
Depth, From Measuring Point	14.62	Feet		10/31/24 11:18	1		10/31/24 11:18	FIELD	Field*
Dissolved oxygen, Field	1.5	mg/L		10/31/24 11:18	1		10/31/24 11:18	FIELD	Field*
Oxidation Reduction Potential	-102	mV		10/31/24 11:18	1	-500	10/31/24 11:18	FIELD	Field*
pH, Field Measured	7.15	pH Units		10/31/24 11:18	1		10/31/24 11:18	FIELD	Field*
Specific Conductance, Field Measured	1180	umhos/cm		10/31/24 11:18	1		10/31/24 11:18	FIELD	Field*
Temperature, Field Measured	16.8	°C		10/31/24 11:18	1		10/31/24 11:18	FIELD	Field*
Turbidity, Field Measured	43.0	NTU		10/31/24 11:18	1	0.00	10/31/24 11:18	FIELD	Field*
General Chemistry - PIA									
Alkalinity - bicarbonate as CaCO3	480	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Alkalinity - carbonate as CaCO3	< 10	mg/L		11/08/24 17:44	1	10	11/08/24 17:44	TMS	SM 2320 B-2011*
Fluoride	< 0.250	mg/L		11/08/24 15:51	1	0.250	11/08/24 15:51	QTC	SM 4500-F C-2011
Solids - total dissolved solids (TDS)	600	mg/L		11/06/24 09:41	1	26	11/06/24 15:58	CFM	SM 2540 C-2011
Total Metals - PIA									
Antimony	< 3.0	ug/L		11/05/24 09:15	5	3.0	11/11/24 14:03	TJJ	EPA 6020A
Arsenic	10	ug/L		11/05/24 09:15	5	1.0	11/11/24 14:03	TJJ	EPA 6020A
Barium	180	ug/L		11/05/24 09:15	5	1.0	11/11/24 14:03	TJJ	EPA 6020A
Beryllium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 14:03	TJJ	EPA 6020A
Boron	3200	ug/L		11/05/24 09:15	5	10	11/11/24 14:03	TJJ	EPA 6020A
Cadmium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 14:03	TJJ	EPA 6020A
Calcium	120	mg/L		11/05/24 09:15	5	0.20	11/11/24 14:03	TJJ	EPA 6020A
Chromium	< 4.0	ug/L		11/05/24 09:15	5	4.0	11/11/24 14:03	TJJ	EPA 6020A
Cobalt	< 2.0	ug/L		11/05/24 09:15	5	2.0	11/11/24 14:03	TJJ	EPA 6020A
Lead	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 14:03	TJJ	EPA 6020A
Magnesium	57	mg/L		11/05/24 09:15	5	0.10	11/11/24 14:03	TJJ	EPA 6020A
Mercury	< 0.20	ug/L		11/05/24 09:15	5	0.20	11/11/24 14:03	TJJ	EPA 6020A
Molybdenum	6.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 14:03	TJJ	EPA 6020A
Potassium	0.88	mg/L		11/05/24 09:15	5	0.10	11/11/24 14:03	TJJ	EPA 6020A
Selenium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 14:03	TJJ	EPA 6020A
Sodium	54	mg/L		11/05/24 09:15	5	0.10	11/11/24 14:03	TJJ	EPA 6020A

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ANALYTICAL RESULTS

Sample: HJ05652-07 **Sampled:** 10/31/24 11:18
Name: AW-19 **Received:** 10/31/24 14:35
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Thallium	< 1.0	ug/L		11/05/24 09:15	5	1.0	11/11/24 14:03	TJJ	EPA 6020A
Lithium	< 20	ug/L		11/05/24 09:15	1	20	11/07/24 10:15	BRS	EPA 6010B

Sample: HJ05652-08 **Sampled:** 10/28/24 14:11
Name: XPW01A **Received:** 10/31/24 14:35
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - PIA									
Depth, From Measuring Point	12.98	Feet		10/28/24 14:11	1		10/28/24 14:11	DAB	Field*

Sample: HJ05652-09 **Sampled:** 10/28/24 13:51
Name: XPW02 **Received:** 10/31/24 14:35
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - PIA									
Depth, From Measuring Point	22.38	Feet		10/28/24 13:51	1		10/28/24 13:51	DAB	Field*

Sample: HJ05652-10 **Sampled:** 10/28/24 13:59
Name: XPW03 **Received:** 10/31/24 14:35
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - PIA									
Depth, From Measuring Point	17.79	Feet		10/28/24 13:59	1		10/28/24 13:59	DAB	Field*

Sample: HJ05652-11 **Sampled:** 10/28/24 10:24
Name: SG-01 **Received:** 10/31/24 14:35
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - PIA									
Depth, From Measuring Point	31	Feet		10/28/24 10:24	1		10/28/24 10:24	DAB	Field*

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B447420 - No Prep - SM 2540 C-2011									
Blank (B447420-BLK1)				Prepared & Analyzed: 11/01/24					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B447420-BS1)				Prepared & Analyzed: 11/01/24					
Solids - total dissolved solids (TDS)	950	mg/L		1000		95	84.4-107		
Duplicate (B447420-DUP1)	**Sample: HJ05300-06**			Prepared & Analyzed: 11/01/24					
Solids - total dissolved solids (TDS)	580	mg/L			565			3	5
Batch B447534 - No Prep - SM 2540 C-2011									
Blank (B447534-BLK1)				Prepared & Analyzed: 11/04/24					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B447534-BS1)				Prepared & Analyzed: 11/04/24					
Solids - total dissolved solids (TDS)	963	mg/L		1000		96	84.4-107		
Duplicate (B447534-DUP1)	**Sample: HJ05300-01**			Prepared & Analyzed: 11/04/24					
Solids - total dissolved solids (TDS)	560	mg/L			575			3	5
Duplicate (B447534-DUP2)	**Sample: HJ05533-01**			Prepared & Analyzed: 11/04/24					
Solids - total dissolved solids (TDS)	835	mg/L	M		765			9	5
Batch B447544 - SW 3015 - EPA 6010B									
Blank (B447544-BLK1)				Prepared: 11/04/24 Analyzed: 11/05/24					
Lithium	< 20	ug/L							
LCS (B447544-BS1)				Prepared: 11/04/24 Analyzed: 11/05/24					
Lithium	544	ug/L		555.6		98	80-120		
Matrix Spike (B447544-MS1)	**Sample: HJ05300-01**			Prepared: 11/04/24 Analyzed: 11/05/24					
Lithium	561	ug/L		555.6	12.2	99	75-125		
Matrix Spike Dup (B447544-MSD1)	**Sample: HJ05300-01**			Prepared: 11/04/24 Analyzed: 11/05/24					
Lithium	557	ug/L		555.6	12.2	98	75-125	0.6	20
Batch B447544 - SW 3015 - EPA 6020A									
Blank (B447544-BLK1)				Prepared & Analyzed: 11/04/24					
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							

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (B447544-BLK1)				Prepared & Analyzed: 11/04/24					
Thallium	< 1.0	ug/L							
LCS (B447544-BS1)				Prepared & Analyzed: 11/04/24					
Antimony	495	ug/L		555.6		89	80-120		
Arsenic	510	ug/L		555.6		92	80-120		
Barium	513	ug/L		555.6		92	80-120		
Beryllium	555	ug/L		555.6		100	80-120		
Boron	558	ug/L		555.6		100	80-120		
Cadmium	537	ug/L		555.6		97	80-120		
Calcium	5.39	mg/L		5.556		97	80-120		
Chromium	556	ug/L		555.6		100	80-120		
Cobalt	554	ug/L		555.6		100	80-120		
Lead	553	ug/L		555.6		100	80-120		
Magnesium	5.83	mg/L		5.556		105	80-120		
Mercury	51.7	ug/L		55.56		93	80-120		
Molybdenum	473	ug/L		555.6		85	80-120		
Potassium	5.47	mg/L		5.556		98	80-120		
Selenium	512	ug/L		555.6		92	80-120		
Sodium	5.91	mg/L		5.556		106	80-120		
Thallium	542	ug/L		555.6		98	80-120		
Matrix Spike (B447544-MS1)	**Sample: HJ05300-01**			Prepared: 11/04/24 Analyzed: 11/05/24					
Antimony	518	ug/L		555.6	ND	93	75-125		
Arsenic	529	ug/L		555.6	4.43	94	75-125		
Barium	659	ug/L		555.6	173	87	75-125		
Beryllium	574	ug/L		555.6	ND	103	75-125		
Boron	695	ug/L		555.6	97.5	108	75-125		
Cadmium	533	ug/L		555.6	ND	96	75-125		
Calcium	115	mg/L		5.556	122	NR	75-125		
Chromium	545	ug/L		555.6	ND	98	75-125		
Cobalt	546	ug/L		555.6	0.522	98	75-125		
Lead	547	ug/L		555.6	ND	99	75-125		
Magnesium	51.6	mg/L		5.556	46.4	95	75-125		
Mercury	55.3	ug/L		55.56	ND	100	75-125		
Molybdenum	530	ug/L		555.6	8.29	94	75-125		
Potassium	6.44	mg/L		5.556	0.698	103	75-125		
Selenium	535	ug/L		555.6	ND	96	75-125		
Sodium	60.0	mg/L		5.556	44.8	274	75-125		
Thallium	529	ug/L		555.6	ND	95	75-125		
Matrix Spike Dup (B447544-MSD1)	**Sample: HJ05300-01**			Prepared: 11/04/24 Analyzed: 11/05/24					
Antimony	512	ug/L		555.6	ND	92	75-125	1	20
Arsenic	524	ug/L		555.6	4.43	94	75-125	0.9	20
Barium	659	ug/L		555.6	173	87	75-125	0.07	20
Beryllium	569	ug/L		555.6	ND	102	75-125	0.9	20
Boron	683	ug/L		555.6	97.5	105	75-125	2	20
Cadmium	532	ug/L		555.6	ND	96	75-125	0.08	20
Calcium	115	mg/L	Q4	5.556	122	NR	75-125	0.7	20
Chromium	541	ug/L		555.6	ND	97	75-125	0.9	20
Cobalt	540	ug/L		555.6	0.522	97	75-125	1	20

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike Dup (B447544-MSD1)	**Sample: HJ05300-01**			Prepared: 11/04/24 Analyzed: 11/05/24					
Lead	548	ug/L		555.6	ND	99	75-125	0.2	20
Magnesium	51.3	mg/L		5.556	46.4	90	75-125	0.6	20
Mercury	54.8	ug/L		55.56	ND	99	75-125	0.9	20
Molybdenum	528	ug/L		555.6	8.29	94	75-125	0.3	20
Potassium	6.40	mg/L		5.556	0.698	103	75-125	0.7	20
Selenium	534	ug/L		555.6	ND	96	75-125	0.2	20
Sodium	60.1	mg/L		5.556	44.8	276	75-125	0.2	20
Thallium	530	ug/L		555.6	ND	95	75-125	0.2	20
Batch B447636 - No Prep - SM 2540 C-2011									
Blank (B447636-BLK1)				Prepared & Analyzed: 11/05/24					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B447636-BS1)				Prepared & Analyzed: 11/05/24					
Solids - total dissolved solids (TDS)	920	mg/L		1000		92	84.4-107		
Duplicate (B447636-DUP1)	**Sample: HJ05533-05**			Prepared & Analyzed: 11/05/24					
Solids - total dissolved solids (TDS)	1100	mg/L			1090			0.5	5
Duplicate (B447636-DUP2)	**Sample: HJ05533-06**			Prepared & Analyzed: 11/05/24					
Solids - total dissolved solids (TDS)	1180	mg/L			1120			5	5
Batch B447639 - SW 3015 - EPA 6010B									
Blank (B447639-BLK1)				Prepared: 11/05/24 Analyzed: 11/07/24					
Lithium	< 20	ug/L							
LCS (B447639-BS1)				Prepared: 11/05/24 Analyzed: 11/07/24					
Lithium	564	ug/L		555.6		101	80-120		
Matrix Spike (B447639-MS1)	**Sample: HJ05652-01**			Prepared: 11/05/24 Analyzed: 11/07/24					
Lithium	576	ug/L		555.6	35.8	97	75-125		
Matrix Spike Dup (B447639-MSD1)	**Sample: HJ05652-01**			Prepared: 11/05/24 Analyzed: 11/07/24					
Lithium	576	ug/L		555.6	35.8	97	75-125	0.09	20
Batch B447639 - SW 3015 - EPA 6020A									
Blank (B447639-BLK1)				Prepared: 11/05/24 Analyzed: 11/07/24					
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							

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (B447639-BLK1)				Prepared: 11/05/24 Analyzed: 11/07/24					
Thallium	< 1.0	ug/L							
LCS (B447639-BS1)				Prepared: 11/05/24 Analyzed: 11/07/24					
Antimony	528	ug/L		555.6		95	80-120		
Arsenic	525	ug/L		555.6		95	80-120		
Barium	521	ug/L		555.6		94	80-120		
Beryllium	551	ug/L		555.6		99	80-120		
Boron	570	ug/L		555.6		103	80-120		
Cadmium	531	ug/L		555.6		96	80-120		
Calcium	5.56	mg/L		5.556		100	80-120		
Chromium	553	ug/L		555.6		100	80-120		
Cobalt	555	ug/L		555.6		100	80-120		
Lead	539	ug/L		555.6		97	80-120		
Magnesium	5.96	mg/L		5.556		107	80-120		
Mercury	52.3	ug/L		55.56		94	80-120		
Molybdenum	521	ug/L		555.6		94	80-120		
Potassium	5.81	mg/L		5.556		105	80-120		
Selenium	531	ug/L		555.6		96	80-120		
Sodium	5.81	mg/L		5.556		105	80-120		
Thallium	537	ug/L		555.6		97	80-120		
Matrix Spike (B447639-MS1)	**Sample: HJ05652-01**			Prepared: 11/05/24 Analyzed: 11/11/24					
Antimony	546	ug/L		555.6	ND	98	75-125		
Arsenic	538	ug/L		555.6	0.961	97	75-125		
Barium	1540	ug/L		555.6	1030	91	75-125		
Beryllium	568	ug/L		555.6	ND	102	75-125		
Boron	913	ug/L		555.6	354	101	75-125		
Cadmium	556	ug/L		555.6	ND	100	75-125		
Calcium	104	mg/L	Q4	5.556	100	75	75-125		
Chromium	560	ug/L		555.6	ND	101	75-125		
Cobalt	571	ug/L		555.6	1.13	103	75-125		
Lead	552	ug/L		555.6	ND	99	75-125		
Magnesium	49.4	mg/L		5.556	45.0	80	75-125		
Mercury	54.1	ug/L		55.56	0.183	97	75-125		
Molybdenum	546	ug/L		555.6	ND	98	75-125		
Potassium	9.84	mg/L		5.556	4.43	97	75-125		
Selenium	533	ug/L		555.6	ND	96	75-125		
Sodium	192	mg/L	Q4	5.556	191	26	75-125		
Thallium	539	ug/L		555.6	ND	97	75-125		
Matrix Spike Dup (B447639-MSD1)	**Sample: HJ05652-01**			Prepared: 11/05/24 Analyzed: 11/11/24					
Antimony	548	ug/L		555.6	ND	99	75-125	0.3	20
Arsenic	539	ug/L		555.6	0.961	97	75-125	0.2	20
Barium	1560	ug/L		555.6	1030	96	75-125	2	20
Beryllium	572	ug/L		555.6	ND	103	75-125	0.6	20
Boron	924	ug/L		555.6	354	103	75-125	1	20
Cadmium	570	ug/L		555.6	ND	103	75-125	2	20
Calcium	105	mg/L		5.556	100	92	75-125	0.9	20
Chromium	573	ug/L		555.6	ND	103	75-125	2	20
Cobalt	573	ug/L		555.6	1.13	103	75-125	0.3	20

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QC SAMPLE RESULTS

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Matrix Spike Dup (B447639-MSD1)	**Sample: HJ05652-01**			Prepared: 11/05/24 Analyzed: 11/11/24					
Lead	552	ug/L		555.6	ND	99	75-125	0.03	20
Magnesium	50.0	mg/L		5.556	45.0	90	75-125	1	20
Mercury	55.3	ug/L		55.56	0.183	99	75-125	2	20
Molybdenum	562	ug/L		555.6	ND	101	75-125	3	20
Potassium	9.86	mg/L		5.556	4.43	98	75-125	0.2	20
Selenium	538	ug/L		555.6	ND	97	75-125	0.9	20
Sodium	194	mg/L	Q4	5.556	191	59	75-125	0.9	20
Thallium	548	ug/L		555.6	ND	99	75-125	2	20
Batch B447643 - IC No Prep - EPA 300.0 REV 2.1									
Calibration Blank (B447643-CCB1)				Prepared & Analyzed: 11/04/24					
Chloride	0.522	mg/L							
Sulfate	0.00	mg/L							
Fluoride	0.00	mg/L							
Calibration Check (B447643-CCV1)				Prepared & Analyzed: 11/04/24					
Sulfate	4.93	mg/L		5.000		99	90-110		
Chloride	4.77	mg/L		5.000		95	90-110		
Fluoride	4.97	mg/L		5.000		99	90-110		
Matrix Spike (B447643-MS1)	**Sample: HJ05300-01**			Prepared & Analyzed: 11/04/24					
Sulfate	1.00E9	mg/L	Q4	1.500	21.7	NR	80-120		
Fluoride	1.69	mg/L		1.500	0.324	91	80-120		
Chloride	1.0E9	mg/L	Q4	1.500	37	NR	80-120		
Matrix Spike Dup (B447643-MSD1)	**Sample: HJ05300-01**			Prepared & Analyzed: 11/04/24					
Sulfate	1.00E9	mg/L	Q4	1.500	21.7	NR	80-120	0	20
Chloride	1.0E9	mg/L	Q4	1.500	37	NR	80-120	0	20
Fluoride	1.69	mg/L		1.500	0.324	91	80-120	0.09	20
Batch B447775 - No Prep - SM 2540 C-2011									
Blank (B447775-BLK1)				Prepared & Analyzed: 11/06/24					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B447775-BS1)				Prepared & Analyzed: 11/06/24					
Solids - total dissolved solids (TDS)	933	mg/L		1000		93	84.4-107		
Batch B447801 - IC No Prep - EPA 300.0 REV 2.1									
Calibration Blank (B447801-CCB1)				Prepared & Analyzed: 11/05/24					
Fluoride	0.00	mg/L							
Chloride	0.00	mg/L							
Sulfate	0.00	mg/L							
Calibration Check (B447801-CCV1)				Prepared & Analyzed: 11/05/24					
Sulfate	4.77	mg/L		5.000		95	90-110		
Fluoride	5.10	mg/L		5.000		102	90-110		
Chloride	4.91	mg/L		5.000		98	90-110		
Matrix Spike (B447801-MS2)	**Sample: HJ05533-01**			Prepared & Analyzed: 11/05/24					
Chloride	9.0	mg/L		1.500	7.4	108	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	47.1	NR	80-120		
Fluoride	1.72	mg/L		1.500	0.190	102	80-120		
Matrix Spike Dup (B447801-MSD2)	**Sample: HJ05533-01**			Prepared & Analyzed: 11/05/24					

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike Dup (B447801-MSD2)	**Sample: HJ05533-01**			Prepared & Analyzed: 11/05/24					
Sulfate	1.00E9	mg/L	Q4	1.500	47.1	NR	80-120	0	20
Fluoride	1.72	mg/L		1.500	0.190	102	80-120	0.1	20
Chloride	9.0	mg/L		1.500	7.4	108	80-120	0.04	20
Batch B447805 - IC No Prep - EPA 300.0 REV 2.1									
Calibration Blank (B447805-CCB1)				Prepared & Analyzed: 11/05/24					
Sulfate	0.00	mg/L							
Chloride	0.587	mg/L							
Calibration Check (B447805-CCV1)				Prepared & Analyzed: 11/05/24					
Chloride	4.77	mg/L		5.000		95	90-110		
Sulfate	4.90	mg/L		5.000		98	90-110		
Matrix Spike (B447805-MS1)	**Sample: HJ05652-01**			Prepared & Analyzed: 11/05/24					
Chloride	1.0E9	mg/L	Q4	1.500	48	NR	80-120		
Sulfate	1.77	mg/L		1.500	0.436	89	80-120		
Matrix Spike Dup (B447805-MSD1)	**Sample: HJ05652-01**			Prepared & Analyzed: 11/05/24					
Sulfate	1.79	mg/L		1.500	0.436	90	80-120	1	20
Chloride	1.0E9	mg/L	Q4	1.500	48	NR	80-120	0	20
Batch B447819 - No Prep - SM 2540 C-2011									
Blank (B447819-BLK1)				Prepared & Analyzed: 11/06/24					
Solids - total dissolved solids (TDS)	< 17	mg/L							
LCS (B447819-BS1)				Prepared & Analyzed: 11/06/24					
Solids - total dissolved solids (TDS)	960	mg/L		1000		96	84.4-107		
Duplicate (B447819-DUP1)	**Sample: HJ05652-01**			Prepared & Analyzed: 11/06/24					
Solids - total dissolved solids (TDS)	865	mg/L			825			5	5
Batch B447872 - SW 3015 - EPA 6010B									
Blank (B447872-BLK1)				Prepared & Analyzed: 11/07/24					
Lithium	< 20	ug/L							
LCS (B447872-BS1)				Prepared & Analyzed: 11/07/24					
Lithium	556	ug/L		555.6		100	80-120		
Matrix Spike (B447872-MS1)	**Sample: HJ05300-01**			Prepared & Analyzed: 11/07/24					
Lithium	555	ug/L		555.6	12.2	98	75-125		
Matrix Spike Dup (B447872-MSD1)	**Sample: HJ05300-01**			Prepared & Analyzed: 11/07/24					
Lithium	578	ug/L		555.6	12.2	102	75-125	4	20
Batch B447872 - SW 3015 - EPA 6020A									
Blank (B447872-BLK1)				Prepared: 11/07/24 Analyzed: 11/08/24					
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							

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (B447872-BLK1)				Prepared: 11/07/24 Analyzed: 11/08/24					
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							
LCS (B447872-BS1)				Prepared: 11/07/24 Analyzed: 11/08/24					
Antimony	548	ug/L		555.6		99	80-120		
Arsenic	497	ug/L		555.6		90	80-120		
Barium	542	ug/L		555.6		98	80-120		
Beryllium	534	ug/L		555.6		96	80-120		
Boron	539	ug/L		555.6		97	80-120		
Cadmium	526	ug/L		555.6		95	80-120		
Calcium	5.48	mg/L		5.556		99	80-120		
Chromium	566	ug/L		555.6		102	80-120		
Cobalt	548	ug/L		555.6		99	80-120		
Lead	551	ug/L		555.6		99	80-120		
Magnesium	5.68	mg/L		5.556		102	80-120		
Mercury	53.6	ug/L		55.56		96	80-120		
Molybdenum	523	ug/L		555.6		94	80-120		
Potassium	5.76	mg/L		5.556		104	80-120		
Selenium	539	ug/L		555.6		97	80-120		
Sodium	5.74	mg/L		5.556		103	80-120		
Thallium	523	ug/L		555.6		94	80-120		
Matrix Spike (B447872-MS1)	**Sample: HJ05300-01**			Prepared: 11/07/24 Analyzed: 11/08/24					
Antimony	566	ug/L		555.6	ND	102	75-125		
Arsenic	552	ug/L		555.6	4.43	99	75-125		
Barium	718	ug/L		555.6	173	98	75-125		
Beryllium	553	ug/L		555.6	ND	100	75-125		
Boron	657	ug/L		555.6	97.5	101	75-125		
Cadmium	543	ug/L		555.6	ND	98	75-125		
Calcium	125	mg/L	Q4	5.556	122	57	75-125		
Chromium	583	ug/L		555.6	ND	105	75-125		
Cobalt	552	ug/L		555.6	0.522	99	75-125		
Lead	557	ug/L		555.6	ND	100	75-125		
Magnesium	50.6	mg/L		5.556	46.4	76	75-125		
Mercury	57.5	ug/L		55.56	ND	103	75-125		
Molybdenum	552	ug/L		555.6	8.29	98	75-125		
Potassium	6.50	mg/L		5.556	0.698	104	75-125		
Selenium	556	ug/L		555.6	ND	100	75-125		
Sodium	50.0	mg/L		5.556	44.8	95	75-125		
Thallium	530	ug/L		555.6	ND	95	75-125		
Matrix Spike Dup (B447872-MSD1)	**Sample: HJ05300-01**			Prepared: 11/07/24 Analyzed: 11/08/24					
Antimony	558	ug/L		555.6	ND	100	75-125	1	20
Arsenic	536	ug/L		555.6	4.43	96	75-125	3	20

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike Dup (B447872-MSD1)	**Sample: HJ05300-01**			Prepared: 11/07/24 Analyzed: 11/08/24					
Barium	724	ug/L		555.6	173	99	75-125	0.8	20
Beryllium	546	ug/L		555.6	ND	98	75-125	1	20
Boron	646	ug/L		555.6	97.5	99	75-125	2	20
Cadmium	539	ug/L		555.6	ND	97	75-125	0.7	20
Calcium	124	mg/L	Q4	5.556	122	43	75-125	0.6	20
Chromium	571	ug/L		555.6	ND	103	75-125	2	20
Cobalt	548	ug/L		555.6	0.522	99	75-125	0.8	20
Lead	557	ug/L		555.6	ND	100	75-125	0.02	20
Magnesium	50.4	mg/L	Q4	5.556	46.4	73	75-125	0.3	20
Mercury	56.1	ug/L		55.56	ND	101	75-125	3	20
Molybdenum	553	ug/L		555.6	8.29	98	75-125	0.07	20
Potassium	6.49	mg/L		5.556	0.698	104	75-125	0.2	20
Selenium	550	ug/L		555.6	ND	99	75-125	1	20
Sodium	49.6	mg/L		5.556	44.8	87	75-125	0.8	20
Thallium	523	ug/L		555.6	ND	94	75-125	1	20
Batch B447914 - IC No Prep - EPA 300.0 REV 2.1									
Calibration Blank (B447914-CCB1)				Prepared & Analyzed: 11/06/24					
Sulfate	0.00	mg/L							
Fluoride	0.00	mg/L							
Chloride	0.00	mg/L							
Calibration Check (B447914-CCV1)				Prepared & Analyzed: 11/06/24					
Fluoride	5.07	mg/L		5.000		101	90-110		
Chloride	4.89	mg/L		5.000		98	90-110		
Sulfate	4.70	mg/L		5.000		94	90-110		
Matrix Spike (B447914-MS1)	**Sample: HJ05533-02**			Prepared & Analyzed: 11/06/24					
Fluoride	1.72	mg/L		1.500	0.194	101	80-120		
Chloride	9.0	mg/L		1.500	7.4	107	80-120		
Sulfate	1.00E9	mg/L	Q4	1.500	47.3	NR	80-120		
Matrix Spike (B447914-MS2)	**Sample: HJ05533-04**			Prepared & Analyzed: 11/06/24					
Chloride	1.0E9	mg/L	Q4	1.500	26	NR	80-120		
Sulfate	1.60	mg/L		1.500	0.236	91	80-120		
Matrix Spike (B447914-MS3)	**Sample: HJ05533-05**			Prepared & Analyzed: 11/06/24					
Sulfate	1.61	mg/L		1.500	0.216	93	80-120		
Chloride	1.0E9	mg/L	Q4	1.500	79	NR	80-120		
Matrix Spike Dup (B447914-MSD1)	**Sample: HJ05533-02**			Prepared & Analyzed: 11/06/24					
Chloride	9.0	mg/L		1.500	7.4	107	80-120	0.004	20
Fluoride	1.71	mg/L		1.500	0.194	101	80-120	0.1	20
Sulfate	1.00E9	mg/L	Q4	1.500	47.3	NR	80-120	0	20
Matrix Spike Dup (B447914-MSD2)	**Sample: HJ05533-04**			Prepared & Analyzed: 11/06/24					
Chloride	1.0E9	mg/L	Q4	1.500	26	NR	80-120	0	20
Sulfate	1.59	mg/L		1.500	0.236	90	80-120	0.3	20
Matrix Spike Dup (B447914-MSD3)	**Sample: HJ05533-05**			Prepared & Analyzed: 11/06/24					
Chloride	1.0E9	mg/L	Q4	1.500	79	NR	80-120	0	20
Sulfate	1.58	mg/L		1.500	0.216	91	80-120	1	20
Batch B448099 - No Prep - SM 2320 B-2011									

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QC SAMPLE RESULTS

Parameter	Result	Unit	Qual	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Duplicate (B448099-DUP1)	**Sample: HJ05300-01**			Prepared & Analyzed: 11/08/24					
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO3	475	mg/L			475			0	10
Duplicate (B448099-DUP2)	**Sample: HJ05533-01**			Prepared & Analyzed: 11/08/24					
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO3	725	mg/L			712			2	10
Batch B448101 - No Prep - SM 2320 B-2011									
Duplicate (B448101-DUP1)	**Sample: HJ05652-01**			Prepared & Analyzed: 11/08/24					
Alkalinity - carbonate as CaCO3	< 10	mg/L			ND				10
Alkalinity - bicarbonate as CaCO3	850	mg/L			850			0	10
Batch B448134 - No Prep - SM 4500-F C-2011									
Calibration Blank (B448134-CCB1)				Prepared & Analyzed: 11/08/24					
Fluoride	0.00900	mg/L							
Calibration Blank (B448134-CCB2)				Prepared & Analyzed: 11/08/24					
Fluoride	0.0110	mg/L							
Calibration Check (B448134-CCV1)				Prepared & Analyzed: 11/08/24					
Fluoride	0.684	mg/L		0.7000		98	90-110		
Calibration Check (B448134-CCV2)				Prepared & Analyzed: 11/08/24					
Fluoride	0.695	mg/L		0.7000		99	90-110		
Matrix Spike (B448134-MS1)	**Sample: HJ05533-04**			Prepared & Analyzed: 11/08/24					
Fluoride	1.17	mg/L		1.000	ND	117	80-120		
Matrix Spike (B448134-MS2)	**Sample: HJ05652-04**			Prepared & Analyzed: 11/08/24					
Fluoride	1.23	mg/L		1.000	0.207	103	80-120		
Matrix Spike Dup (B448134-MSD1)	**Sample: HJ05533-04**			Prepared & Analyzed: 11/08/24					
Fluoride	1.18	mg/L		1.000	ND	118	80-120	1	20
Matrix Spike Dup (B448134-MSD2)	**Sample: HJ05652-04**			Prepared & Analyzed: 11/08/24					
Fluoride	1.28	mg/L		1.000	0.207	107	80-120	4	20
Batch B448570 - No Prep - SM 2510 B-2011									
LCS (B448570-BS1)				Prepared & Analyzed: 11/14/24					
Conductivity	1020	umho/cm @25.0°C		1000		102	90-110		
LCS (B448570-BS2)				Prepared & Analyzed: 11/14/24					
Conductivity	997	umho/cm @25.0°C		1000		100	90-110		
Duplicate (B448570-DUP1)	**Sample: HJ05533-04**			Prepared & Analyzed: 11/14/24					
Conductivity	1440	umho/cm @25.0°C			1460			1	20

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

NOTES

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

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050
TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

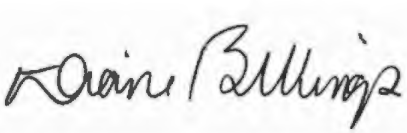
PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615
TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553
Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)
Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)
Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807
USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050
Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Qualifiers

M	Analyte failed to meet the required acceptance criteria for duplicate analysis.
Q4	The matrix spike recovery result is unusable since the analyte concentration in the sample is greater than four times the spike level. The associated blank spike was acceptable.



Certified by: Diane Billings, Project Manager

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 2

Section A Required Client Information

Company	Vistra Corp-Edwards
Address	7800 Cilco Lane
	Peoria, IL 61607
Email To	Brian.Voelker@VistraCorp.com
Phone	(217) 753-8911 Fax
Requested Due Date/TAT:	10 day

Section B Required Project Information

Report To	Brian Voelker
Copy To	Sam Davies samantha.davies@vistracorp.com
	Mark Davis Mark.Davis1@vistracorp.com
Purchase Order No	
Project Name	
Project Number	

Section C Invoice Information

Attention	Brian Voelker
Company Name	Vistra Corp
Address	see Section A
Quote Reference	
Project Manager	
Profile #	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER

UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9, -)
Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: EDW-257-301	EDW-845-301	EDW-SUP-000	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S																X	X	X		
2	AP07S																X	X	X		
3	AW-01																X	X	X		
4	AW-05																X	X	X		
5	AW-06	GW	G	10/29/24	1519		10	3	3	3		1					X	X	X		
6	AW-08																X	X	X		
7	AW-09																X	X	X		
8	AW-10																X	X	X		
9	AW-11	GW	G	10/29/24	1435		10	3	3	3		1					X	X	X		
10	AW-14	GW	G	10/29/24	1308		10	3	3	3		1					X	X	X		
11	AW-15S	GW	G	10/29/24	1140		10	3	3	3		1					X	X	X		
12	AW-15D	GW	G	10/29/24	1026		10	3	3	3		1					X	X	X		
13	AW-16																X	X	X		
14	AW-17																X	X	X		
15	AW-18																X	X	X		
16	AW-19																X	X	X		

Cooler ID: 13 Correction Factor (Deg C): 0.0

Observed Temp (Deg C): 2.1 Corrected Temp (Deg C): 2.1

Delivery Method: FedEx UPS Walk-in USPS Other

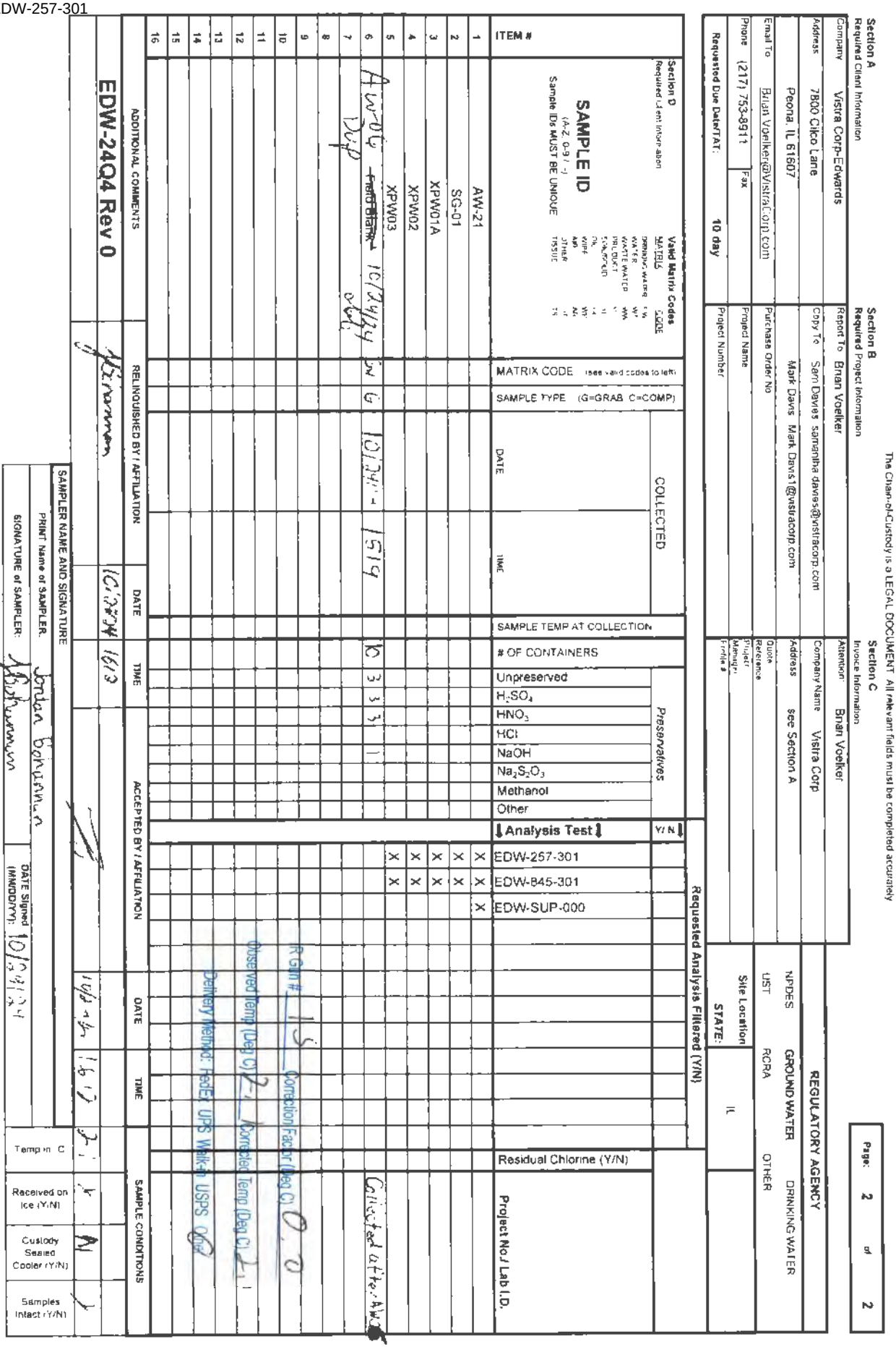
ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q4 Rev 0	JBohannan	10/29/24	1613							
					10/29/24	1612	2.1	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jordan Bohannan

SIGNATURE of SAMPLER: JBohannan DATE Signed (MM/DD/YY): 10/29/24

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT, ASH POND
EDW-257-301



CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 of 2

Section A — Required Client Information
Company: Vistra Corp-Edwards
Address: 7800 Cilco Lane, Peoria, IL 61607
Email To: Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911 Fax:
Requested Due Date/TAT: 10 day

Section B — Required Project Information
Report To: Brian Voelker
Copy To: Sam Davies samantha.davies@vistracorp.com; Mark Davis Mark.Davis1@vistracorp.com
Purchase Order No:
Project Name:
Project Number:

Section C — Invoice Information
Attention: Brian Voelker
Company Name: Vistra Corp
Address: See Section A
Quote Reference:
Site Location: STATE: IL

REGULATORY AGENCY: NPDES, GROUND WATER, DRINKING WATER, UST, RCRA, OTHER

Section D — Required Client Information
Valid Matrix Codes: MATRIX CODE (DRINKING WATER DW, WATER WT, WASTE WATER WW, PRODUCT P, SOIL/SOLID SL, OIL OL, WIPE WP, AIR AR, OTHER OT, TISSUE TS)

SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: EDW-257-301	EDW-845-301	EDW-SUP-000	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AW-21																			
2	SG-01																			
3	XPW01A																			
4	XPW02																			
5	XPW03																			
6	~~Field Blank~~	DW	G	10/24/24	1519	10	3	3	3	1						X	X	X		Collected after AW-21
7	Dup	WW	G													X	X	X		
8																X	X	X		
9																X	X	X		
10																X	X	X		
11																X	X	X		
12																X	X	X		
13																X	X	X		
14																X	X	X		
15																X	X	X		
16																X	X	X		

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS: EDW-24Q4 Rev 0

RELINQUISHED BY / AFFILIATION: [signature] DATE: 10/24/24 TIME: 1613

ACCEPTED BY / AFFILIATION: DATE: 10/25/24 TIME: 1613

SAMPLE CONDITIONS: Temp in °C: 2.1 | Received on Ice (Y/N): Y | Custody Sealed Cooler (Y/N): N | Samples Intact (Y/N): Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jordan Bohannon
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM/DD/YY): 10/24/24

IR Gun # 115 Correction Factor (Deg C) 0.0
Observed Temp (Deg C) 2.1 Corrected Temp (Deg C) 2.1
Delivery Method: FedEx UPS Walk-in USPS Other

HJ05553

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately

Page: 1 of 2

Section A Required Client Information		Section B Required Project Information		Section C Invoice Information	
Company	Vistra Corp-Edwards	Report To	Brian Voelker	Attention	Brian Voelker
Address	7800 Cilco Lane	Copy To	Sam Davres samantha.davies@vistracorp.com	Company Name	Vistra Corp
	Peoria, IL 61607		Mark Davis Mark.Davis1@vistracorp.com	Address	see Section A
Email To	Brian.Voelker@VistraCorp.com	Purchase Order No		Quote Reference	
Phone	(217) 753-8911 Fax	Project Name		Project Manager	
Requested Due Date/TAT:	10 day	Project Number		Profile #	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER

UST RCRA OTHER

Site Location STATE: IL

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9, /, -) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	EDW-257-301	EDW-845-301	EDW-SUP-000	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S																X	X	X		
2	AP07S																X	X	X		
3	AW-01			10/30/24	1535		10	X	X	X			X				X	X	X		
4	~~AW-06~~ AW-01 Dup (35 10/30)				1535		10	X	X	X			X				X	X	X		
5	AW-06																X	X	X		
6	AW-08				1335		9	X	X	X			X				X	X	X		Limited volume
7	AW-09				1420		10	X	X	X			X				X	X	X		
8	AW-10				1103		10	X	X	X			X				X	X	X		
9	AW-11																X	X	X		
10	AW-14																X	X	X		
11	AW-15																X	X	X		
12	~~AW-15S~~ AW-16 Dup				1640		10	X	X	X			X				X	X	X		
13	AW-16				1640		10	X	X	X			X				X	X	X		
14	AW-17				1645		10	X	X	X			X				X	X	X		
15	AW-18				1235		10	X	X	X			X				X	X	X		
16	AW-19			10/30/24	Lab												X	X	X		

IR Gun # 20 Correction Factor (Deg C) -0.1

Observed Temp (Deg C) 2.4 Corrected Temp (Deg C) 2.3

Delivery Method: FedEx UPS Walk-in USPS Other

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q4 Rev 0	J m Davis	10/30/24	1715							
					10/30/24	1715	2.3	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: J m Davis

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10/30/24

HJ05662 ~~SAR~~
HJ05652

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 2

Section A — Required Client Information:

Company:	Vistra Corp-Edwards
Address:	7800 Cilco Lane
	Peoria, IL 61607
Email To:	Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911	Fax:
Requested Due Date/TAT:	10 day

Section B — Required Project Information:

Report To:	Brian Voelker
Copy To:	Sam Davies: samantha.davies@vistracorp.com
	Mark Davis: Mark.Davis1@vistracorp.com
Purchase Order No.:	
Project Name:	
Project Number:	

Section C — Invoice Information:

Attention:	Brian Voelker
Company Name:	Vistra Corp
Address:	see Section A
Quote Reference:	
Project Manager:	
Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D — Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	EDW-257-301	EDW-845-301	EDW-SUP-000	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S			10/31/24	1339		10	X	X	X			X	X	X		X	X	X		
2	AP07S				1350		10	X	X	X			X	X	X		X	X	X		
3	AW-01																X	X	X		
4	AW-05				1156		10	X	X	X					X		X	X	X		
5	AW-06																X	X	X		
6	AW-08				0940		1	X									X	X	X		
7	AW-09																X	X	X		
8	AW-10																X	X	X		
9	AW-11																X	X	X		
10	AW-14																X	X	X		
11	AW-15																X	X	X		
12	AW-15S																X	X	X		
13	AW-16																X	X	X		
14	10/31/24 ~~AW-17~~ Field Blank				1400		10	X	X	X					X		X	X	X		
15	10/31/24 ~~AW-18~~ AW-21				1230		10	X	X	X					X		X	X	X		
16	AW-19				1118		10	X	X	X					X		X	X	X		

IR Gun #: 16 Correction Factor (Deg C): +.1
Observed Temp (Deg C): 1.1 Corrected Temp (Deg C): 1.2
Delivery Method: FedEx UPS Walk-in USPS Other

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q4 Rev 0	Jim Davis	10/31/24	1435		10/31/24	1435	✓	✓	✓	✓

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jim Davis
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 10/31/24

APPENDIX A
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
EDWARDS POWER PLANT, ASH POND
EDW-257-301

SAR-3: Plant Sampling and Analysis Request

Event: EDW-24Q4

Date Generated: 09/29/2024

All episodic water levels on SAR-3 and SAR-4 must be collected within a 24 hour period.

Well	Unique ID	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
AP05D	EDW_AP05&D	10/28/24	9:45	4.96		AW
AP07D	EDW_AP07&D	10/28/24	12:16	23.70		AW
AP08	EDW_AP08	10/28/24	12:57	9.69		AW
AP09	EDW_AP09	10/28/24	14:05	10.80		AW
APW-01	EDW_APW-01	10/28/24	9:51	7.02		AW
AW-12	EDW_AW-12	10/28/24	10:42	9:75	25% LEL	AW
AW-13	EDW_AW-13	10/28/24	11:12	7.30		AW
AW-15C	EDW_AW-15IC	10/28/24	11:44	8.44		AW
AW-20	EDW_AW-20	10/28/24	12:39	17.65		AW
AW-22	EDW_AW-22	10/28/24	12:28	12.79		AW
AW-23	EDW_AW-23	10/28/24	9:03	~~15~~ 7.39		AW
OW-01	EDW_OW-01	10/28/24	12:06	24.50		AW

SAR-4: Plant Sampling and Analysis Request
Event: EDW-24Q4
Date Generated: 09/29/2024
All episodic water levels on SAR-3 and SAR-4 must be collected within a 24 hour period.

Well	Unique ID	Date	Time	Measured Depth to Water (ft bmp)	Serial Number	Does Data Logger Serial No Match?	WL Reading on Transducer (ft)	Data downloaded?	Batt (H/M/L/R)	Comments	Initials
AP05S	EDW_AP05#S	10/28/24	9:38	6.55	21629301	yes	434.94	yes	M		AW
AP07S	EDW_AP07#S	10/28/24	12:13	25.48	21615552	yes	435.61	yes	M		AW
AW-01	EDW_AW-01	10/28/24	10:07	10.31	21615144	yes	454.32	yes	H		AW
AW-05	EDW_AW-05	10/28/24	9:59	7.29	21615132	yes	434.22	yes	M		AW
AW-06	EDW_AW-06	10/28/24	13:03	28.57	21615127	yes	433.33	yes	M		AW
AW-08	EDW_AW-08	10/28/24	10:34	25.42	21615722	yes	437.15	yes	M		AW
AW-09	EDW_AW-09	10/28/24	13:36	27.40	21615130	yes	434.30	yes	M		AW
AW-10	EDW_AW-10	10/28/24	11:04	2.83	21615754	yes	437.31	yes	M		AW
AW-11	EDW_AW-11	10/28/24	11:20	7.05	21615129	yes	432.62	yes	M	13% LEL	AW
AW-14	EDW_AW-14	10/28/24	11:27	9.34	21926662	yes	430.35	yes	H		AW
AW-15	EDW_AW-15	10/28/24	11:33	9.90	21615761	yes	432.07	yes	M		AW
AW-15S	EDW_AW-15#S	10/28/24	11:40	11.31	21629298	yes	429.42	yes	M		AW
AW-16	EDW_AW-16	10/28/24	13:41	25.72	21615714	yes	436.34	yes	M	25% LEL	AW
AW-17	EDW_AW-17	10/28/24	13:15	26.48	21615756	yes	435.74	yes	H		AW
AW-18	EDW_AW-18	10/28/24	13:10	29.15	21615763	yes	438.70	yes	M		AW
AW-19	EDW_AW-19	10/28/24	12:48	14.68	21615718	yes	446.24	yes	M		AW
AW-21	EDW_AW-21	10/28/24	12:34	18.71	21615514	yes	442.08	yes	H		AW
EMW-05	EDW_EMW-05	10/28/24	12:21	22.51	21615739	yes	435.09	yes	M		AW
RG-01	EDW_RG-01	10/28/24	0840	—	21628687	yes	—	yes	—	Rain Large	AF
SG-01	EDW_yILRIVER	10/28/24	10:24	31.00	21768086	yes	-9.9952	yes	H		AW
XPW01A	EDW_XPW01A_pore	10/28/24	14:11	12.98	21615740	yes	451.35	yes	H		AW
XPW02	EDW_XPW02_pore	10/28/24	13:51	22.38	21615752	yes	451.64	yes	M		AW
XPW03	EDW_XPW03_pore	10/28/24	13:59	17.79	21629300	yes	448.74	yes	M		AW

Site: Edwards Ash Pond

WELL/SAMPLE POINT AP05S **Purge Method:** BLADDER

Date: 10/3/24 Start Time: 1207 Finish/Sample Time: 1339

Well Depth (Bottom) From MP: _____ ft

Depth to Water From MP: 6.53 ft

Water Column Length: _____ ft

Well Water Volume: _____ L

Min. Purge Volume: 1000 mL

Total Purge Volume: 1100 mL

Final Depth to Water: 6.72 ft

Total Drawdown: 0.19 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1236	6.72	100	6.16	1250	15.68	-81	0.0	17.9
2	1239	6.72	100	6.23	1240	15.67	-88	0.0	16.1
3	1242	6.72	100	6.24	1240	15.67	-89	0.0	16.3
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☑ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☑ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
3	RSK-175 (A,V,U, 40mL)
1	Rad (P, 2.5L, HNO3)
1	Metals (P, 250mL, HNO3)
1	General (P, 1000mL)
1	S2 (P, 500mL, NaOH+ZnAc)

10 BOTTLES KMD

7

10

Filtered	
Qty	Bottles
1	Metals (P, 250mL, HNO3)
2	TOC (A,V, 40mL, H2SO4)

Ferrous Iron OVERRANGE mg/L

Comments

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AP07S **Purge Method:** Dedicated Bladder

Date: 10/31/24 Start Time: 12:50 Finish/Sample Time: 13:50

Well Depth (Bottom) From MP: _____ ft
Depth to Water From MP: 25.54 ft
Water Column Length: _____ ft
Well Water Volume: _____ L

Min. Purge Volume: 1000 mL
Total Purge Volume: 1300 mL
Final Depth to Water: 25.90 ft
Total Drawdown: 0.34 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	13:01	25.80	100	7.09	1790	17.31	-63	1.82	8.7
2	13:02	25.80	100	7.07	1790	17.29	-61	1.76	0.6
3	13:03	25.80	100	7.05	1790	17.28	-59	1.65	0.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

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

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

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
2	RSK-175 (A,V,U, 40mL)
1	Rad (P, 2.5L, HNO3)
1	Metals (P, 250mL, HNO3)
1	General (P, 1000mL)
1	S2 (P, 500mL, NaOH+ZnAc)

10

Filtered Qty	Filtered Bottles
3	Metals (P, 250mL, HNO3)
1	TOC (A,V, 40mL, H2SO4)

Ferrous Iron 1.817 mg/L

Comments

Sampler's Signature: Emily Wetsteen

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-01 **Purge Method:** Dedicated Bladder

Date: 10/30/24 Start Time: 13:43 Finish/Sample Time: 1535

Well Depth (Bottom) From MP: _____ ft Min. Purge Volume: 1000 mL

Depth to Water From MP: 10.25 ft Total Purge Volume: 1300 mL

Water Column Length: _____ ft Final Depth to Water: 23.44 ft

Well Water Volume: _____ L Total Drawdown: 13.19 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1354	11.78	100	6.76	1429.3	20.86	-97.4	0.49	17.93
2	1355	11.90	100	6.76	1433.6	20.79	-98.2	0.45	15.77
3	1356	12.02	100	6.77	1430.8	20.74	-98.8	0.43	23.12
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Aquatroll

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
2+2	RSK-175 (A,V,U, 40mL)
1+1	Rad (P, 2.5L, HNO3)
1+1	Metals (P, 250mL, HNO3)
1+1	General (P, 1000mL)
1+1	S2 (P, 500mL, NaOH+ZnAc)

Filtered	
Qty	Bottles
1+1	Metals (P, 250mL, HNO3)
3+3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron 4.614 mg/L

Comments Field Dup Pillel Lara

APP

Sampler's Signature: _____

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-05 **Purge Method:** BLADDER

Date: 10/3/24 Start Time: 1030 Finish/Sample Time: 1156

Well Depth (Bottom) From MP: _____ ft
Depth to Water From MP: 9.20 ft
Water Column Length: _____ ft
Well Water Volume: _____ L

Min. Purge Volume: 1000 mL
Total Purge Volume: 1100 mL
Final Depth to Water: 9.57 ft
Total Drawdown: 0.37 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1056	9.57	100	7.37	1380	16.14	70	0.0	426
2	1059	9.57	100	7.24	1380	16.42	59	0.0	276
3	1102	9.57	100	7.30	1360	16.36	60	0.0	240
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:

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

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
3	RSK-175 (A,V,U, 40mL)
1	Rad (P, 2.5L, HNO3)
1	Metals (P, 250mL, HNO3)
1	General (P, 1000mL)
1	S2 (P, 500mL, NaOH+ZnAc)

Filtered	
Qty	Bottles
1	Metals (P, 250mL, HNO3)
2	TOC (A,V, 40mL, H2SO4)

KMNO 10/3/24

Ferrous Iron 3.255 mg/L

Comments

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-06 **Purge Method:** Compressor

Date: 29-Oct-24 Start Time: 1338 Finish/Sample Time: 1519

Well Depth (Bottom) From MP: _____ ft
Depth to Water From MP: 28.55 ft
Water Column Length: _____ ft
Well Water Volume: _____ L

Min. Purge Volume: 1000 mL
Total Purge Volume: _____ mL
Final Depth to Water: 39.76 ft
Total Drawdown: 11.21 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	1352	30.25	100	7.76	918	22.30	-115	0.52	0.0
2	1355	30.60	1	7.37	913	22.13	-119	0.38	1.2
3	1358	30.95	1	7.35	900	22.10	-123	0.32	6.8
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: horiba

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☑ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☑ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
2+3	RSK-175 (A,V,U, 40mL)
1+1	Rad (P, 2.5L, HNO3)
1+1	Metals (P, 250mL, HNO3)
1+1	General (P, 1000mL)
1+1	S2 (P, 500mL, NaOH+ZnAc)

(20)

Filtered	
Qty	Bottles
1+1	Metals (P, 250mL, HNO3)
3+3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron 0.669 ppm ~~mg/L~~

Comments

Sampler's Signature: Austin Hill

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-08 **Purge Method:** Peristaltic

Date: 10/30/24 Start Time: 11:07 Finish/Sample Time: 1330

Well Depth (Bottom) From MP: _____ ft
Depth to Water From MP: 25.41 ft
Water Column Length: _____ ft
Well Water Volume: _____ L

Min. Purge Volume: 1000 mL
Total Purge Volume: 1300 mL
Final Depth to Water: 31.70 ft
Total Drawdown: 6.29 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	11:23	27.18	100	6.91	1473	20.53	-157	1.51	5.8
2	11:24	27.28	100	6.91	1473	20.57	-153	1.59	0.05
3	11:25	27.38	100	6.91	1468	20.59	-151	1.52	0.13
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Aquatroll

Sample Appearance:

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

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
2	RSK-175 (A,V,U, 40mL)
1	Rad (P, 2.5L, HNO3)
1	Metals (P, 250mL, HNO3)
	General (P, 1000mL)
1	S2 (P, 500mL, NaOH+ZnAc)

Filtered	
Qty	Bottles
1	Metals (P, 250mL, HNO3)
3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron Overrange mg/L

Comments Issues with well, Peristaltic Stopped drawing water. Still need 1 General (P, 1000mL) Filled. 10/30/24

Sampler's Signature: Ashley Wilson

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-08 **Purge Method:** Peristaltic

Date: 10/31/2024 Start Time: 0910 Finish/Sample Time: 0940

Well Depth (Bottom) From MP: _____ ft
Depth to Water From MP: 30.13 ft
Water Column Length: _____ ft
Well Water Volume: _____ L

Min. Purge Volume: 1000 mL
Total Purge Volume: 1300 mL
Final Depth to Water: 33.78 ft
Total Drawdown: 3.65 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	0924	31.08	100	6.64	1510	17.95	-101	2.56	202
2	0925	31.43	100	6.78	1510	17.95	-105	2.51	179
3	0926	31.55	100	6.81	1500	17.91	-109	2.45	168
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

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

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
	RSK-175 (A,V,U, 40mL)
	Rad (P, 2.5L, HNO3)
	Metals (P, 250mL, HNO3)
1	General (P, 1000mL)
	S2 (P, 500mL, NaOH+ZnAc)

(1)

Filtered	
Qty	Bottles
	Metals (P, 250mL, HNO3)
	TOC (A,V, 40mL, H2SO4)

Ferrous Iron over range mg/L

Comments

Sampler's Signature: [signature]

for Andrew Wetecha

AW

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-09 **Purge Method:** BLADDER

Date: 10/30/24 Start Time: 1846 Finish/Sample Time: 1420

Well Depth (Bottom) From MP: 47.32 ft
Depth to Water From MP: 27.23 ft
Water Column Length: 20.09 ft
Well Water Volume: 12.16 L

Min. Purge Volume: 1000 mL
Total Purge Volume: 1400 mL
Final Depth to Water: 38.09 ft
Total Drawdown: 10.86 ft

Reading	Time	Depth	Flow Rate	pH	Spec Cond	Temp	ORP	DO	Turb
(Units)		ft.	mL/min	s.u.	umhos/cm	deg C	mV	mg/L	NTU
1	1309	29.30	100	6.22	5	18.49	-120	6.84	307
2	1312	29.75	100	6.25	5	18.40	-118	6.82	310
3	1315	30.29	100	6.28	3	18.48	-116	6.84	331
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:

Odor: ☑ None ☐ Slight ☐ Mod. ☐ Strong

Color ☑ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☑ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
2	RSK-175 (A,V,U, 40mL)
1	Rad (P, 2.5L, HNO3)
1	Metals (P, 250mL, HNO3)
1	General (P, 1000mL)
1	S2 (P, 500mL, NaOH+ZnAc)

10

Filtered	
Qty	Bottles
1	Metals (P, 250mL, HNO3)
3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron OVERRANGE mg/L

Comments

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-10 **Purge Method:** Dedicated bladder

Date: 10/30/24 Start Time: 10:11 Finish/Sample Time: 11:03

Well Depth (Bottom) From MP: 33.53 ft
Depth to Water From MP: 2.84 ft
Water Column Length: 30.96 ft
Well Water Volume: 18.59 L

Min. Purge Volume: 1000 mL
Total Purge Volume: 1300 mL
Final Depth to Water: 7.62 ft
Total Drawdown: 4.78 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	10:24	4.84	100	7.00	2116	17.39	-134	1.27	109
2	10:25	4.96	100	7.00	2114	17.32	-134	1.25	76
3	10:26	5.00	100	7.00	2116	17.34	-134	1.23	75
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Aquatroll

Sample Appearance:

Odor: ☐ None ☒ Slight ☐ Mod. ☐ Strong

Color ☐ None ☒ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☒ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
2	RSK-175 (A,V,U, 40mL)
1	Rad (P, 2.5L, HNO3)
1	Metals (P, 250mL, HNO3)
1	General (P, 1000mL)
1	S2 (P, 500mL, NaOH+ZnAc)

10

Filtered	
Qty	Bottles
1	Metals (P, 250mL, HNO3)
3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron over range mg/L

Comments

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-11 **Purge Method:** Compressor

Date: 10/29/24 Start Time: 1329 Finish/Sample Time: 1435

Well Depth (Bottom) From MP: 30.47 ft
Depth to Water From MP: 6.95 ft
Water Column Length: 23.52 ft
Well Water Volume: 14.24 L

Min. Purge Volume: 1000 mL
Total Purge Volume: 1000 mL
Final Depth to Water: 6.95 ft
Total Drawdown: 0.00 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1347	7.03	100	7.04	1900	21.52	-202	0.32	1000+
2	1348	7.03	100	7.02	1910	21.46	-204	0.28	1000+
3	1349	7.05	100	7.02	1910	21.44	-204	0.26	1000+
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ■ None □ Slight □ Mod. □ Strong

Color □ None ■ Slight □ Mod. □ Strong

Turb: □ None ■ Slight □ Mod □ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
2	RSK-175 (A,V,U, 40mL)
1	Rad (P, 2.5L, HNO3)
1	Metals (P, 250mL, HNO3)
1	General (P, 1000mL)
1	S2 (P, 500mL, NaOH+ZnAc)

(10)

Filtered	
Qty	Bottles
1	Metals (P, 250mL, HNO3)
3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron Over Range mg/L

Comments

Sampler's Signature: J Bohannon

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-14 **Purge Method:** Dedicated bladder

Date: 10/29/24 Start Time: 12:10 Finish/Sample Time: 13:08

Well Depth (Bottom) From MP: 25.60 ft
Depth to Water From MP: 9.31 ft
Water Column Length: 16.29 ft
Well Water Volume: 9.87 L

Min. Purge Volume: 1000 mL
Total Purge Volume: 1300 mL
Final Depth to Water: 21.95 ft
Total Drawdown: 12.64 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	12:25	12.39	100	6.85	1920	19.02	-168	0.44	97.3
2	12:26	12.62	100	6.85	1920	18.86	-170	0.42	99.2
3	12:27	12.86	100	6.86	1940	18.75	-171	0.39	98.1
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

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

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

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
2	RSK-175 (A,V,U, 40mL)
1	Rad (P, 2.5L, HNO3)
1	Metals (P, 250mL, HNO3)
1	General (P, 1000mL)
1	S2 (P, 500mL, NaOH+ZnAc)

10

Filtered Qty	Filtered Bottles
3	Metals (P, 250mL, HNO3)
1	TOC (A,V, 40mL, H2SO4)

Ferrous Iron [redacted] mg/L over range
AW 10/29/24

Comments

Sampler's Signature: Emily Wheeler

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-15 **Purge Method:** Dedicated bladder

Date: 10/29/24 Start Time: 9:20 Finish/Sample Time: 10:26

Well Depth (Bottom) From MP: 34.89 ft
Depth to Water From MP: 9.97 ft
Water Column Length: 24.92 ft
Well Water Volume: 15.09 L

Min. Purge Volume: 1000 mL
Total Purge Volume: 1400 mL
Final Depth to Water: 10.11 ft
Total Drawdown: 0.14 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	9:38	10.11	100	6.86	2130	19.40	0	0.68	221
2	9:39	10.11	100	6.85	2130	19.35	-140	0.62	234
3	9:40	10.11	100	6.88	2100	19.22	-116	0.58	181
4	9:41	10.11	100	6.81	2100	19.20	-119	0.55	179
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

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

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
2	RSK-175 (A,V,U, 40mL)
1	Rad (P, 2.5L, HNO3)
1	Metals (P, 250mL, HNO3)
1	General (P, 1000mL)
1	S2 (P, 500mL, NaOH+ZnAc)

(10)

Filtered	
Qty	Bottles
1	Metals (P, 250mL, HNO3)
3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron 5.862 mg/L

Comments

Sampler's Signature: Kinley Wheeler

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-15S **Purge Method:** Dedicated bladder

Date: 10/29/24 Start Time: 10:30 Finish/Sample Time: 1140

Well Depth (Bottom) From MP:	18.52 ft	Min. Purge Volume:	1000 mL
Depth to Water From MP:	11.31 ft	Total Purge Volume:	1300 mL
Water Column Length:	7.21 ft	Final Depth to Water:	14.90 ft
Well Water Volume:	4.37 L	Total Drawdown:	3.59 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	10:41	11.80	100	6.96	1860	21.73	-55	2.24	45.2
2	10:42	11.89	100	6.91	1840	21.56	-62	2.10	49.3
3	10:43	11.90	100	6.89	1840	21.42	-64	1.92	50.4
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ■ None ☐ Slight ☐ Mod. ☐ Strong

Color ■ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ■ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
2	RSK-175 (A,V,U, 40mL)
1	Rad (P, 2.5L, HNO3)
1	Metals (P, 250mL, HNO3)
1	General (P, 1000mL)
1	S2 (P, 500mL, NaOH+ZnAc)

10

Filtered Qty	Filtered Bottles
1	Metals (P, 250mL, HNO3)
3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron Under range mg/L

Comments

Sampler's Signature: [signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT: AW-16 Purge Method: BLADDER

Date: 10/30/24 Start Time: ~~1100~~ 1447 Finish/Sample Time: 1640

Well Depth (Bottom) From MP:	ft	Min. Purge Volume:	1000 mL
Depth to Water From MP:	25.75 ft	Total Purge Volume:	1200 mL
Water Column Length:	ft	Final Depth to Water:	26.30 ft
Well Water Volume:	L	Total Drawdown:	0.55 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	1504	26.33	100	6.73	1680	18.07	-97	0.0	0.0
2	1507	26.30	100	6.68	1720	18.03	-103	0.0	0.0
3	1510	26.30	100	6.70	1700	18.05	-100	0.0	0.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:

Odor: ☐ None ☑ Slight ☐ Mod. ☐ Strong

Color ☐ None ☑ Slight ☐ Mod. ☐ Strong

Turb: ☐ None ☐ Slight ☐ Mod ☑ Strong

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

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
2+2	RSK-175 (A,V,U, 40mL)
1+1	Rad (P, 2.5L, HNO3)
1+1	Metals (P, 250mL, HNO3)
1+1	General (P, 1000mL)
1+1	S2 (P, 500mL, NaOH+ZnAc)

20

Filtered Qty	Filtered Bottles
1+1	Metals (P, 250mL, HNO3)
3+3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron 4.679 mg/L

Comments: FIELD DUPE TAKEN HERE

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-17 **Purge Method:** Dedicated bladder

Date: 10/30/24 Start Time: 9:02 Finish/Sample Time: 1005

Well Depth (Bottom) From MP: _____ ft
Depth to Water From MP: 26.63 ft
Water Column Length: _____ ft
Well Water Volume: _____ L

Min. Purge Volume: 1000 mL
Total Purge Volume: 1400 mL
Final Depth to Water: 28.17' ft
Total Drawdown: 1.54 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	9:14	27.42	100	6.86	1825	15.99	-133	0.72	27.1
2	9:15	27.45	100	6.85	1823	16.00	-134	0.78	26.0
3	9:16	27.45	100	6.85	1809	16.04	-134	0.78	20.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: ~~Horiba~~ Aquatroll AW 10/30/24

Sample Appearance:

Odor: ☐ None ☑ Slight ☐ Mod. ☐ Strong

Color ☐ None ☑ Slight ☐ Mod. ☐ Strong

Turb: ☑ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
2	RSK-175 (A,V,U, 40mL)
1	Rad (P, 2.5L, HNO3)
1	Metals (P, 250mL, HNO3)
1	General (P, 1000mL)
1	S2 (P, 500mL, NaOH+ZnAc)

Filtered	
Qty	Bottles
1	Metals (P, 250mL, HNO3)
3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron overrange mg/L

Comments FDTW = 28.17'

Sampler's Signature: [signature]

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-18 — **Purge Method:** BLADDER

Date: 10/30/24 — Start Time: 1100 — Finish/Sample Time: 1235

Well Depth (Bottom) From MP: 50.68 ft — Min. Purge Volume: 1000 mL

Depth to Water From MP: 29.23 ft — Total Purge Volume: 1300 mL

Water Column Length: 21.45 ft — Final Depth to Water: 50.63 ft

Well Water Volume: 12.99 L — Total Drawdown: 0.05 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	1143	50.63	100	6.66	1510	17.96	-132	0.00	3.60
2	1146	50.63	100	6.65	1500	17.85	-134	0.00	6.8
3	1149	50.63	100	6.64	1500	17.94	-136	0.00	13.7
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: HORIBA

Sample Appearance:

Odor: ☐ None ☑ Slight ☐ Mod. ☐ Strong

Color ☐ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☑ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
2	RSK-175 (A,V,U, 40mL)
1	Rad (P, 2.5L, HNO3)
1	Metals (P, 250mL, HNO3)
1	General (P, 1000mL)
1	S2 (P, 500mL, NaOH+ZnAc)

10

Filtered	
Qty	Bottles
1	Metals (P, 250mL, HNO3)
3	TOC (A,V, 40mL, H2SO4)

Ferrous Iron OVER RANGE mg/L

Comments WATER LEVEL BELOW PUMP

Sampler's Signature:

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-19 **Purge Method:** Dedicated Bladder

Date: 10/21/24 Start Time: 10:14 Finish/Sample Time: 11:18

Well Depth (Bottom) From MP: _____ ft

Depth to Water From MP: 14.62 ft

Water Column Length: _____ ft

Well Water Volume: _____ L

Min. Purge Volume: 1000 mL

Total Purge Volume: 1300 mL

Final Depth to Water: 18.45 ft

Total Drawdown: 3.83 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	10:27	15.59	100	7.16	1180	16.78	-99	1.65	47.6
2	10:28	15.65	100	7.15	1180	16.80	-100	1.50	46.1
3	10:29	15.70	100	7.15	1180	16.77	-102	1.50	43.0
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

10/31/24

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered Qty	Unfiltered Bottles
2	RSK-175 (A,V,U, 40mL)
1	Rad (P, 2.5L, HNO3)
1	Metals (P, 250mL, HNO3)
1	General (P, 1000mL)
1	S2 (P, 500mL, NaOH+ZnAc)

10

Filtered Qty	Filtered Bottles
3	Metals (P, 250mL, HNO3)
1	TOC (A,V, 40mL, H2SO4)

Ferrous Iron 2.351 mg/L

Comments _____

Sampler's Signature: Haley Pittetto

Site: Edwards Ash Pond

WELL/SAMPLE POINT AW-21 **Purge Method:** Dedicated Bladder

Date: 10/31/24 Start Time: 11:39 Finish/Sample Time: 12:30

Well Depth (Bottom) From MP: _____ ft
Depth to Water From MP: 18.63 ft
Water Column Length: _____ ft
Well Water Volume: _____ L

Min. Purge Volume: 1000 mL
Total Purge Volume: 1300 mL
Final Depth to Water: 20.71 ft
Total Drawdown: 2.08 ft

Reading (Units)	Time	Depth ft.	Flow Rate mL/min	pH s.u.	Spec Cond umhos/cm	Temp deg C	ORP mV	DO mg/L	Turb NTU
1	11:53	19.46	100	7.27	1050	16.10	37	2.47	1.1
2	11:54	19.50	100	7.26	1040	16.09	24	2.46	0.2
3	11:55	19.59	100	7.25	1050	16.08	21	2.35	0.8
4									
5									
Stabilization	NA	NA	NA	± 0.2	± 3%	± 0.2	± 20	± 10% or 0.2	NA

Field Meter: Horiba

Sample Appearance:

Odor: ☒ None ☐ Slight ☐ Mod. ☐ Strong

Color ☒ None ☐ Slight ☐ Mod. ☐ Strong

Turb: ☒ None ☐ Slight ☐ Mod ☐ Strong

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

BOTTLE INFORMATION:

Unfiltered	
Qty	Bottles
2	RSK-175 (A,V,U, 40mL)
1	Rad (P, 2.5L, HNO3)
1	Metals (P, 250mL, HNO3)
1	General (P, 1000mL)
1	S2 (P, 500mL, NaOH+ZnAc)

(10)

Filtered	
Qty	Bottles
3	Metals (P, 250mL, HNO3)
1	TOC (A,V, 40mL, H2SO4)

Ferrous Iron 0.346 mg/L

Comments _____

Sampler's Signature: Emily Wheeler

Multiparameter Meter Field Calibration Checklist

Field Personnel:	AW	Location:	Edwards
Weather:	Sunny 67°-81° 15mph Wind S	Environment:	grassy, muddy
Multiparameter Water Meter	Make: Horiba	Model: U-5000	Serial Number: V7320PKK
Water Level Meter	Make: Heron	Model: Dipper-T	Serial Number: 3717-T

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.11	s.u.	±0.1 s.u.	F	yes	4.00	MSI	023310-01	11/10/2025
pH 7.00a	6.88	s.u.	±0.1 s.u.	F	yes	7.00	MSI	024145-01	5/29/2026
pH 10.00a	10.00	s.u.	±0.1 s.u.	P	NO	N/A	MSI	024072-02	3/21/2026
SC Zero (DI)	0.0	µS/cm	0<25 µS/cm	P	NO		Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2040	µS/cm	±5%	P	NO		Proactive	3GJ1438	Oct-24
ORP	207	mV	±15 mV	P	NO		In-Situ	4GJ0045	Jul-25
DO (Zero pt)	0.0	mg/L	±0.1	P	NO		Macron	#000228049	8/26/2025
DO (Saturated)	99.7	%	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 8 hrs, unless only one well

ICV (Initial Calibration Verification) Time: 8:41

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	3.94	s.u.	±0.15 s.u.	P	NO	Proactive	3GE1074	May-25
pH 7.00b	6.93	s.u.	±0.15 s.u.	P	NO	Proactive	3GE1252	May-25
pH 10.00b	9.96	s.u.	±0.15 s.u.	P	NO	Geotech	3GA1134	Jan-25
SC 1000	1010	µS/cm	±5%	P	NO	Spectrum	2NA0056	Dec-25

Approx. every 8 hrs, unless only one well

CCV (Continued Calibration Verification): Time: 9:30

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	3.98	s.u.	±0.1 s.u.	P	NO	N/A	MSI	023310-01	11/10/2025
pH 7.00a	6.97	s.u.	±0.1 s.u.	P			MSI	024145-01	5/29/2026
pH 10.00a	10.02	s.u.	±0.1 s.u.	P			MSI	024072-02	3/21/2026
SC 1000	1030	µS/cm	±5%	P			Spectrum	2NA0024	Dec-25
DO (Zero pt)	0.0	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 8 hrs, unless only one well

Comments:

Signature: [signature] Date: 10/29/24

Multiparameter Meter Field Calibration Checklist

Field Personnel:	JD, MAW	Location:	Edwards
Weather:	70-80'F a. cloudy wind S 20-25mph	Environment:	grass, rocks

Multiparameter Water Meter	Make: Aquaread	Model: 600	Serial Number:	76225	
Water Level Meter	Make: Heron	Model: Dipper-T	Serial Number:	3717-T	

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.12	s.u.	±0.1 s.u.	F	Y	4.00	MSI	023310-01	11/10/2025
pH 7.00a	7.06	s.u.	±0.1 s.u.	P	N	NA	MSI	024145-01	5/29/2026
pH 10.00a	10.02	s.u.	±0.1 s.u.				MSI	024072-02	3/21/2026
SC Zero (DI)	2.70	µS/cm	0<25 µS/cm				Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2043.7	µS/cm	±5%				Proactive	3GJ1438	Oct-24
ORP	224.7	mV	±15 mV				In-Situ	4GJ0045	Jul-25
DO (Zero pt)	0.08	mg/L	±0.1				Macron	#000228049	8/26/2025
DO (Saturated)	99.15	%	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 8 hrs, unless only one well

ICV (Initial Calibration Verification) Time: 0837

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.01	s.u.	±0.15 s.u.	P	NA	Proactive	3GE1074	May-25
pH 7.00b	6.93	s.u.	±0.15 s.u.			Proactive	3GE1252	May-25
pH 10.00b	9.99	s.u.	±0.15 s.u.			Geotech	3GA1134	Jan-25
SC 1000	1042.8	µS/cm	±5%			Spectrum	2NA0056	Dec-25

Approx. every 8 hrs, unless only one well

CCV (Continued Calibration Verification): Time: 1545

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.04	s.u.	±0.1 s.u.	P	N	NA	MSI	023310-01	11/10/2025
pH 7.00a	7.08	s.u.	±0.1 s.u.				MSI	024145-01	5/29/2026
pH 10.00a	10.05	s.u.	±0.1 s.u.				MSI	024072-02	3/21/2026
SC 1000	1045.5	µS/cm	±5%				Spectrum	2NA0024	Dec-25
DO (Zero pt)	0.09	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 8 hrs, unless only one well

Comments:

Signature:	[signature]	Date:	10/30/24

Multiparameter Meter Field Calibration Checklist

Field Personnel:	KALEB DESKE	Location:	PEORIA
Weather:	70°F WINDY 18 MPH S	Environment:	GRASS

Multiparameter Water Meter	Make: SOLINST	Model: WT	Serial Number:	353459	
Water Level Meter	Make: HORIBA	Model: WATER METER	Serial Number:	AGJTK4XG	

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.00	s.u.	±0.1 s.u.	PASS	NO	N/A	MSI	023310-01	11/10/2025
pH 7.00a	7.01	s.u.	±0.1 s.u.				MSI	024145-01	5/29/2026
pH 10.00a	9.99	s.u.	±0.1 s.u.				MSI	024072-02	3/21/2026
SC Zero (DI)	0	µS/cm	0<25 µS/cm				Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2000	µS/cm	±5%				Proactive	3GJ1438	Oct-24
ORP	231	mV	±15 mV				In-Situ	4GJ0045	Jul-25
DO (Zero pt)	0.0	mg/L	±0.1				Macron	#000228049	8/26/2025
DO (Saturated)	98	%	97-100%				Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	0.14	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 8 hrs, unless only one well

ICV (Initial Calibration Verification) Time: 1006

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.03	s.u.	±0.15 s.u.	PASS	NO	Proactive	3GE1074	May-25
pH 7.00b	7.04	s.u.	±0.15 s.u.			Proactive	3GE1252	May-25
pH 10.00b	10.01	s.u.	±0.15 s.u.			Geotech	3GA1134	Jan-25
SC 1000	998	µS/cm	±5%			Spectrum	2NA0056	Dec-25

Approx. every 8 hrs, unless only one well

CCV (Continued Calibration Verification): Time: 1645

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	023310-01	11/10/2025
pH 7.00a	7.02	s.u.	±0.1 s.u.				MSI	024145-01	5/29/2026
pH 10.00a	9.98	s.u.	±0.1 s.u.				MSI	024072-02	3/21/2026
SC 1000	1000	µS/cm	±5%				Spectrum	2NA0024	Dec-25
DO (Zero pt)	0.0	mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)	0.13	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 8 hrs, unless only one well

Comments:

Signature: [signature] Date: 10/30/24

Multiparameter Meter Field Calibration Checklist

Field Personnel:	JD	Location:	Edwards
Weather:	63-57°F cloudy wind 5 21-32 mph	Environment:	grass, rocks
Multiparameter Water Meter	Make: Aquatroll	Model: 600	Serial Number: 702215
Water Level Meter	Make: Solinst	Model: 101	Serial Number: 252879

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	N	NA	MSI	023310-01	11/10/2025
pH 7.00a	7.03	s.u.	±0.1 s.u.	↓	↓	↓	MSI	024145-01	5/29/2026
pH 10.00a	10.05	s.u.	±0.1 s.u.	↓	↓	↓	MSI	024072-02	3/21/2026
SC Zero (DI)	2.76	µS/cm	0<25 µS/cm	↓	↓	↓	Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2042.0	µS/cm	±5%	↓	↓	↓	Proactive	3GJ1438	Oct-24
ORP	227.5	mV	±15 mV	↓	↓	↓	In-Situ	4GJ0045	Jul-25
DO (Zero pt)	0.08	mg/L	±0.1	↓	↓	↓	Macron	#000228049	8/26/2025
DO (Saturated)	98.89	%	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 8 hrs, unless only one well

ICV (Initial Calibration Verification) Time: 0825

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	3.99	s.u.	±0.15 s.u.	P	NA	Proactive	3GE1074	May-25
pH 7.00b	6.94	s.u.	±0.15 s.u.	↓	↓	Proactive	3GE1252	May-25
pH 10.00b	9.99	s.u.	±0.15 s.u.	↓	↓	Geotech	3GA1134	Jan-25
SC 1000	1031.7	µS/cm	±5%	↓	↓	Spectrum	2NA0056	Dec-25

Approx. every 8 hrs, unless only one well

CCV (Continued Calibration Verification): Time: 1350

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	N	NA	MSI	023310-01	11/10/2025
pH 7.00a	7.05	s.u.	±0.1 s.u.	↓	↓	↓	MSI	024145-01	5/29/2026
pH 10.00a	10.06	s.u.	±0.1 s.u.	↓	↓	↓	MSI	024072-02	3/21/2026
SC 1000	1047.2	µS/cm	±5%	↓	↓	↓	Spectrum	2NA0024	Dec-25
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 8 hrs, unless only one well

Comments:

Signature: [signature] Date: 10/31/24

Multiparameter Meter Field Calibration Checklist

Field Personnel:	AW	Location:	Edwards
Weather:	66°-57° 16 mph wind SW	Environment:	rainy, muddy, windy
Multiparameter Water Meter	Make: Horiba	Model: U-5000	Serial Number:
Water Level Meter	Make: Heron	Model: Dipper-T	Serial Number: 3717-T

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.13	s.u.	±0.1 s.u.	F	yes	4.00	MSI	023310-01	11/10/2025
pH 7.00a	6.70	s.u.	±0.1 s.u.	F	yes	7.00	MSI	024145-01	5/29/2026
pH 10.00a	9.96	s.u.	±0.1 s.u.	P	NO	N/A	MSI	024072-02	3/21/2026
SC Zero (DI)	0.0	µS/cm	0<25 µS/cm	P	NO		Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2020	µS/cm	±5%	P	NO		Proactive	3GJ1438	Oct-24
ORP	203	mV	±15 mV	P	NO		In-Situ	4GJ0045	Jul-25
DO (Zero pt)	0.0	mg/L	±0.1	P	NO		Macron	#000228049	8/26/2025
DO (Saturated)	99.2	%	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 8 hrs, unless only one well

ICV (Initial Calibration Verification) Time: 8:22

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.08	s.u.	±0.15 s.u.	P	NO	Proactive	3GE1074	May-25
pH 7.00b	7.08	s.u.	±0.15 s.u.	P	NO	Proactive	3GE1252	May-25
pH 10.00b	10.12	s.u.	±0.15 s.u.	F	yes/10.00	Geotech	3GA1134	Jan-25
SC 1000	1040	µS/cm	±5%	P	NO	Spectrum	2NA0056	Dec-25

Approx. every 8 hrs, unless only one well

CCV (Continued Calibration Verification): Time: 14:00

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	023310-01	11/10/2025
pH 7.00a	7.02	s.u.	±0.1 s.u.	P			MSI	024145-01	5/29/2026
pH 10.00a	10.03	s.u.	±0.1 s.u.	P			MSI	024072-02	3/21/2026
SC 1000	1010	µS/cm	±5%	P			Spectrum	2NA0024	Dec-25
DO (Zero pt)	0.0	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 8 hrs, unless only one well

Comments:

Signature: Andy Waters Date: 10/31/24

Multiparameter Meter Field Calibration Checklist

Field Personnel:	KALEB DESKE	Location:	EDWARDS
Weather:	62° WIND 20 MPH WSW	Environment:	GRASS RAIN
Multiparameter Water Meter	Make: HORIBA	Model: U5000	Serial Number: AQJTK4IXG
Water Level Meter	Make: HERON	Model: WT	Serial Number: 11FF2209305HL

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	NO	N/A	MSI	023310-01	11/10/2025
pH 7.00a	7.04	s.u.	±0.1 s.u.				MSI	024145-01	5/29/2026
pH 10.00a	10.03	s.u.	±0.1 s.u.				MSI	024072-02	3/21/2026
SC Zero (DI)	0.0	µS/cm	0<25 µS/cm				Pace Labs	N/A (DI)	N/A (DI)
SC 2000	2000	µS/cm	±5%				Proactive	3GJ1438	Oct-24
ORP	232	mV	±15 mV				In-Situ	4GJ0045	Jul-25
DO (Zero pt)	0.0	mg/L	±0.1				Macron	#000228049	8/26/2025
DO (Saturated)	98	%	97-100%				Pace Labs	N/A (DI)	N/A (DI)
Turbidity (DI)	1.23	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 8 hrs, unless only one well

ICV (Initial Calibration Verification) Time: 1012

Buffer	Check Value	Units	Range	Pass/Fail	Action Taken?	Manufacturer	Lot#	Exp.
pH 4.00b	4.01	s.u.	±0.15 s.u.	Pass	NO	Proactive	3GE1074	May-25
pH 7.00b	7.00	s.u.	±0.15 s.u.			Proactive	3GE1252	May-25
pH 10.00b	10.00	s.u.	±0.15 s.u.			Geotech	3GA1134	Jan-25
SC 1000	996	µS/cm	±5%			Spectrum	2NA0056	Dec-25

Approx. every 8 hrs, unless only one well

CCV (Continued Calibration Verification): Time: 1340

Buffer	Check Value	Units	Range	Pass/Fail	Calibrate?	Adjusted Reading	Manufacturer	Lot#	Exp.
pH 4.00a	4.00	s.u.	±0.1 s.u.	Pass	NO	N/A	MSI	023310-01	11/10/2025
pH 7.00a	7.03	s.u.	±0.1 s.u.				MSI	024145-01	5/29/2026
pH 10.00a	10.05	s.u.	±0.1 s.u.				MSI	024072-02	3/21/2026
SC 1000	1000	µS/cm	±5%				Spectrum	2NA0024	Dec-25
DO (Zero pt)	0.0	mg/L	±0.1 mg/L				Macron	#000228049	8/26/2025
Turbidity (DI)	0.83	NTU	<2 NTU				Pace Labs	N/A (DI)	N/A (DI)

Approx. every 8 hrs, unless only one well

Comments:

Signature: [signature] Date: 10/31/24

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

December 15, 2024

Brian Voelker
Vistra - Edwards
604 Pierce Boulevard
O'Fallon, IL 62269

Dear Brian Voelker:

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 General Manager, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

Sincerely,

Diane Billings
Project Manager

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

SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order HJ05301

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

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Work Order HJ05535

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

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Work Order HJ05664

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
NO	Trip blank(s) received
NO	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
YES	Case narrative provided

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Case Narrative

The original report dated 11/22/24 was revised to update the sample collection date for AW-06 Dup.

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Sample: HJ05301-01
Name: AW-06
Matrix: Ground Water - Grab

Sampled: 10/29/24 15:19
Received: 10/29/24 16:12
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.545	pCi/L			1	0.542	11/14/24 16:03	PACE	904.0 903.0

Sample: HJ05301-02
Name: AW-11
Matrix: Ground Water - Grab

Sampled: 10/29/24 14:35
Received: 10/29/24 16:12
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.62 J	pCi/L			1	1.77	11/14/24 16:03	PACE	904.0 903.0

Sample: HJ05301-03
Name: AW-14
Matrix: Ground Water - Grab

Sampled: 10/29/24 13:08
Received: 10/29/24 16:12
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	5.62	pCi/L			1	1.48	11/14/24 16:03	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HJ05301-04 **Sampled:** 10/29/24 11:40
Name: AW-15S **Received:** 10/29/24 16:12
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.489 J	pCi/L			1	0.696	11/14/24 16:03	PACE	904.0 903.0

Sample: HJ05301-05 **Sampled:** 10/29/24 10:26
Name: AW-15 **Received:** 10/29/24 16:12
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	5.08	pCi/L			1	1.33	11/14/24 16:03	PACE	904.0 903.0

Sample: HJ05301-06 **Sampled:** 10/29/24 15:19
Name: AW-06 DUP **Received:** 10/29/24 16:12
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.101 U	pCi/L			1	0.616	11/14/24 16:03	PACE	904.0 903.0

Sample: HJ05535-01 **Sampled:** 10/30/24 15:35
Name: AW-01 **Received:** 10/30/24 17:15
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.359 J	pCi/L			1	0.517	11/13/24 17:43	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HJ05535-02 **Sampled:** 10/30/24 15:35
Name: AW-01 DUP **Received:** 10/30/24 17:15
Matrix: Ground Water - Field Duplicate **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.1	pCi/L			1	0.594	11/13/24 17:43	PACE	904.0 903.0

Sample: HJ05535-03 **Sampled:** 10/30/24 13:30
Name: AW-08 **Received:** 10/30/24 17:15
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.863	pCi/L			1	0.598	11/13/24 17:43	PACE	904.0 903.0

Sample: HJ05535-04 **Sampled:** 10/30/24 14:20
Name: AW-09 **Received:** 10/30/24 17:15
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.3	pCi/L			1	1.04	11/13/24 17:43	PACE	904.0 903.0

Sample: HJ05535-05 **Sampled:** 10/30/24 11:03
Name: AW-10 **Received:** 10/30/24 17:15
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.75	pCi/L			1	1.3	11/13/24 17:43	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HJ05535-06
Name: AW-16 DUP
Matrix: Ground Water - Field Duplicate

Sampled: 10/30/24 16:40
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	2.08	pCi/L			1	1.03	11/13/24 17:43	PACE	904.0 903.0

Sample: HJ05535-07
Name: AW-16
Matrix: Ground Water - Grab

Sampled: 10/30/24 16:40
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	2.78	pCi/L			1	1.12	11/13/24 17:43	PACE	904.0 903.0

Sample: HJ05535-08
Name: AW-17
Matrix: Ground Water - Grab

Sampled: 10/30/24 10:05
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	3.03	pCi/L			1	0.671	11/13/24 17:43	PACE	904.0 903.0

Sample: HJ05535-09
Name: AW-18
Matrix: Ground Water - Grab

Sampled: 10/30/24 12:35
Received: 10/30/24 17:15
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	2.38	pCi/L			1	0.635	11/13/24 17:43	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HJ05664-01 **Sampled:** 10/31/24 13:39
Name: AP05S **Received:** 10/31/24 14:35
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	3.09	pCi/L			1	0.936	11/16/24 14:09	PACE	904.0 903.0

Sample: HJ05664-02 **Sampled:** 10/31/24 13:50
Name: AP07S **Received:** 10/31/24 14:35
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.796	pCi/L			1	0.747	11/16/24 14:09	PACE	904.0 903.0

Sample: HJ05664-03 **Sampled:** 10/31/24 11:56
Name: AW-05 **Received:** 10/31/24 14:35
Matrix: Ground Water - Grab **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.619 J	pCi/L			1	0.769	11/16/24 14:09	PACE	904.0 903.0

Sample: HJ05664-05 **Sampled:** 10/31/24 14:00
Name: FIELD BLANK **Received:** 10/31/24 14:35
Matrix: DI Water - Field Blank **PO #:** 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.379 J	pCi/L			1	0.526	11/16/24 14:09	PACE	904.0 903.0

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ANALYTICAL RESULTS

Sample: HJ05664-06
Name: AW-21
Matrix: Ground Water - Grab

Sampled: 10/31/24 12:30
Received: 10/31/24 14:35
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	0.679	pCi/L			1	0.546	11/16/24 14:09	PACE	904.0 903.0

Sample: HJ05664-07
Name: AW-19
Matrix: Ground Water - Grab

Sampled: 10/31/24 11:18
Received: 10/31/24 14:35
PO #: 2450166

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Mt Juliet, Tn									
Rad 226 and 228-Subcontract	1.06	pCi/L			1	0.492	11/16/24 14:09	PACE	904.0 903.0

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(800)752-6651

NOTES

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

* Not a TNI accredited analyte

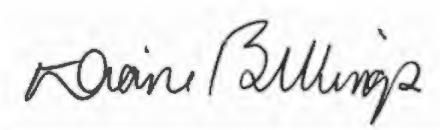
Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050
TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615
TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553
Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)
Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)
Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807
USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050
Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050



Certified by: Diane Billings, Project Manager

ANALYTICAL REPORT

December 09, 2024

Revised Report

Pace IR - Peoria, IL

Sample Delivery Group:	L1794357
Samples Received:	10/31/2024
Project Number:	
Description:	

Report To: Diane Billings
2231 W. Altorfer Drive
Peoria, IL 61615

Entire Report Reviewed By:

[Preliminary Report]

Haley Torrence
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.

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SAMPLE SUMMARY

HJ05301-01 L1794357-01 Non-Potable Water

Collected by	Collected date/time	Received date/time
	10/29/24 15:19	10/31/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2393313	1	11/11/24 22:56	11/14/24 16:03	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2395661	1	11/06/24 09:16	11/14/24 16:03	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN

HJ05301-02 L1794357-02 Non-Potable Water

Collected by	Collected date/time	Received date/time
	10/29/24 14:35	10/31/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2393313	1	11/11/24 23:04	11/14/24 16:03	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2395661	1	11/06/24 09:16	11/14/24 16:03	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN

HJ05301-03 L1794357-03 Non-Potable Water

Collected by	Collected date/time	Received date/time
	10/29/24 13:08	10/31/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2393313	1	11/11/24 22:56	11/14/24 16:03	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2395661	1	11/06/24 09:16	11/14/24 16:03	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN

HJ05301-04 L1794357-04 Non-Potable Water

Collected by	Collected date/time	Received date/time
	10/29/24 11:40	10/31/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2393313	1	11/11/24 22:56	11/14/24 16:03	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2395661	1	11/06/24 09:16	11/14/24 16:03	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN

HJ05301-05 L1794357-05 Non-Potable Water

Collected by	Collected date/time	Received date/time
	10/29/24 10:26	10/31/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2393313	1	11/11/24 23:04	11/14/24 16:03	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2395661	1	11/06/24 09:16	11/14/24 16:03	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN

HJ05301-06 L1794357-06 Non-Potable Water

Collected by	Collected date/time	Received date/time
	10/29/24 15:19	10/31/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2393313	1	11/11/24 22:56	11/14/24 16:03	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2395661	1	11/06/24 09:16	11/14/24 16:03	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	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.

[Preliminary Report]

Haley Torrence
Project Manager

Report Revision History

Level II Report - Version 1: 11/20/24 10:55

Project Narrative

SAMPLE RESULTS - 01

HJ05301-01
Collected date/time: 10/29/24 15:49
L1794357

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.390	J	0.276	0.510	0.471	0.250	11/14/2024 16:03	WG2393313
(T) Barium	*79.1*					*30.0-143*	*11/14/2024 16:03*	WG2393313
(T) Yttrium	*91.5*					*30.0-136*	*11/14/2024 16:03*	WG2393313

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.545		0.336	0.542	11/14/2024 16:03	WG2395661

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.155	J	0.192	0.464	0.269	0.183	11/13/2024 17:43	WG2395661
(T) Barium-133	*96.3*					*30.0-143*	*11/13/2024 17:43*	WG2395661

HJ053015-02 SAMPLE RESULTS - 02

Collected date/time: 10/29/24 14:35 L1794357

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.659	U	1.01	1.58	1.73	0.902	11/14/2024 16:03	WG2393313
(T) Barium	*84.1*					*30.0-143*	*11/14/2024 16:03*	WG2393313
(T) Yttrium	*77.2*					*30.0-136*	*11/14/2024 16:03*	WG2393313

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.62	J	1.10	1.77	11/14/2024 16:03	WG2395661

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.958		0.433	0.899	0.386	0.252	11/13/2024 17:43	WG2395661
(T) Barium-133	*90.8*					*30.0-143*	*11/13/2024 17:43*	WG2395661

HJ053015-03 SAMPLE RESULTS - 03

Collected date/time: 10/29/24 13:08 L1794357

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	4.64		0.909	1.50	1.43	0.755	11/14/2024 16:03	WG2393313
(T) Barium	*74.3*					*30.0-143*	*11/14/2024 16:03*	WG2393313
(T) Yttrium	*81.5*					*30.0-136*	*11/14/2024 16:03*	WG2393313

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	5.62		1.01	1.48	11/14/2024 16:03	WG2395661

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.972		0.436	0.940	0.366	0.246	11/13/2024 17:43	WG2395661
(T) Barium-133	*89.9*					*30.0-143*	*11/13/2024 17:43*	WG2395661

HJ05301-04 SAMPLE RESULTS - 04

Collected date/time: 10/29/24 11:40 L1794357

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.413	J	0.331	0.560	0.563	0.295	11/14/2024 16:03	WG2393313
(T) Barium	*82.7*					*30.0-143*	*11/14/2024 16:03*	WG2393313
(T) Yttrium	*90.5*					*30.0-136*	*11/14/2024 16:03*	WG2393313

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.489	J	0.401	0.696	11/14/2024 16:03	WG2395661

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.0757	U	0.227	0.348	0.409	0.286	11/13/2024 17:43	WG2395661
(T) Barium-133	*73.8*					*30.0-143*	*11/13/2024 17:43*	WG2395661

HJ053015-05 SAMPLE RESULTS - 05

Collected date/time: 10/29/24 10:26 L1794357

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	3.02		0.785	1.32	1.27	0.668	11/14/2024 16:03	WG2393313
(T) Barium	*93.6*					*30.0-143*	*11/14/2024 16:03*	WG2393313
(T) Yttrium	*80.4*					*30.0-136*	*11/14/2024 16:03*	WG2393313

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	5.08		0.997	1.33	11/14/2024 16:03	WG2395661

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	2.06		0.615	1.66	0.387	0.258	11/13/2024 17:43	WG2395661
(T) Barium-133	*90.6*					*30.0-143*	*11/13/2024 17:43*	WG2395661

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.230	U	0.315	0.611	0.562	0.298	11/14/2024 16:03	WG2393313
(T) Barium	*109*					*30.0-143*	*11/14/2024 16:03*	WG2393313
(T) Yttrium	*88.3*					*30.0-136*	*11/14/2024 16:03*	WG2393313

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.101	U	0.354	0.616	11/14/2024 16:03	WG2395661

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.101	J	0.162	0.225	0.251	0.180	11/13/2024 17:43	WG2395661
(T) Barium-133	*95.5*					*30.0-143*	*11/13/2024 17:43*	WG2395661

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

WG2393313 QUALITY CONTROL SUMMARY

Radiochemistry by Method 904/9320 L1794357-01,02,03,04,05,06

Method Blank (MB)

(MB) R4147538-1 11/14/24 16:03

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	-0.707	U	0.455	0.819	0.431
(T) Barium	*45.7*		*45.7*		
(T) Yttrium	*70.1*		*70.1*		

L1794357-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1794357-06 11/14/24 16:03 • (DUP) R4147538-4 11/14/24 16:03

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	-0.230	0.315	0.562	0.298	1.32	0.548	0.913	0.476	200	2.45		20	3
(T) Barium	*109*				*86.4*	*86.4*							
(T) Yttrium	*88.3*				*81.4*	*81.4*							

Laboratory Control Sample (LCS)

(LCS) R4147538-5 11/15/24 14:02

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.63	113	80.0-120	
(T) Barium			*103*		
(T) Yttrium			*96.4*		

L1790747-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1790747-03 11/14/24 16:03 • (MS) R4147538-2 11/14/24 16:03 • (MSD) R4147538-3 11/14/24 16:03

Analyte	Spike Amount pCi/l	Original Result Bq/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	0.0647	21.7	19.0	130	114	1	70.0-130			13.3		20
(T) Barium		*90.5*			*87.7*	*91.6*							
(T) Yttrium		*82.7*			*77.5*	*86.9*							

Radiochemistry by Method SM7500Ra-B M

Method Blank (MB)

(MB) R4145996-1 11/12/24 21:39

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	-0.00464	U	0.0157	0.0403	0.0272
(T) Barium-133	*67.8*		*67.8*		

L1794754-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1794754-02 11/13/24 17:43 • (DUP) R4145996-5 11/13/24 17:43

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.666	0.447	0.492	0.324	0.231	0.337	0.496	0.331	97.2	0.778	J	20	3
(T) Barium-133	*63.7*				*62.2*	*62.2*							

Laboratory Control Sample (LCS)

(LCS) R4145996-2 11/13/24 17:43

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.16	103	80.0-120	
(T) Barium-133			*78.9*		

L1790747-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1790747-01 11/13/24 17:43 • (MS) R4145996-3 11/13/24 17:43 • (MSD) R4145996-4 11/13/24 17:43

Analyte	Spike Amount Bq/l	Original Result Bq/l	MS Result Bq/l	MSD Result Bq/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	0.740	0.0357	0.607	0.690	77.2	88.5	1	75.0-125			12.8		20
(T) Barium-133		*72.3*			*80.6*	*86.5*							

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	LAO000356
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.

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HJ05301

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, T
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

B038

LL94357

Sample: HJ05301-01
Name: AW-06

Sampled: 10/29/24 15:19
Matrix: Ground Water
Preservative: HNO3, pH <2 -01

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/11/24 16:00	04/27/25 15:19	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HJ05301-02
Name: AW-11

Sampled: 10/29/24 14:35
Matrix: Ground Water
Preservative: HNO3, pH <2 -02

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/11/24 16:00	04/27/25 14:35	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HJ05301-03
Name: AW-14

Sampled: 10/29/24 13:08
Matrix: Ground Water
Preservative: HNO3, pH <2 -03

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/11/24 16:00	04/27/25 13:08	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HJ05301-04
Name: AW-15S

Sampled: 10/29/24 11:40
Matrix: Ground Water
Preservative: HNO3, pH <2 -04

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/11/24 16:00	04/27/25 11:40	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HJ05301

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L1794357

Sample: HJ05301-05
Name: AW-15

Sampled: 10/29/24 10:26
Matrix: Ground Water
Preservative: HNO3, pH <2

-05

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/11/24 16:00	04/27/25 10:26	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

10/29/24 dmb

Sample: HJ05301-06
Name: AW-06 DUP

Sampled: ~~10/28/24~~ 15:19
Matrix: Ground Water
Preservative: HNO3, pH <2

-06

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/11/24 16:00	04/26/25 15:19	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

AM6

Sample Receipt Checklist

		If Applicable	
COC Seal Present/Intact:	Y N	VOA Zero Headspace:	Y N
COC Signed/Accurate:	Y N	Pres. Correct/Check:	Y N
Bottles arrive intact:	Y N		
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
RAD Screen <0.5 mR/hr:	Y N		

TAL 2016 9221

Please email results to Diane Billings at diane.billings@pacelabs.com

Date Shipped: 10/30/24 Total # of Containers: 6 Sample Origin (State): IL PO #: _____

Turn-Around Time Requested ☐ NORMAL ☐ RUSH Date Results Needed: _____

Relinquished By	Date/Time	Received By	Date/Time
[signature]	10/30/24 1330		
		Hailey Robertson	10/31/24 0900

Sample Temperature Upon Receipt	____ °C
Sample(s) Received on Ice	Y or N
Proper Bottles Received in Good Condition	Y or N
Bottles Filled with Adequate Volume	Y or N
Samples Received Within Hold Time	Y or N
Date/Time Taken From Sample Bottle	Y or N

ANALYTICAL REPORT

November 14, 2024

Pace IR - Peoria, IL

Sample Delivery Group:	L1794754
Samples Received:	11/01/2024
Project Number:	
Description:	
Site:	001
Report To:	Diane Billings 2231 W. Altorfer Drive Peoria, IL 61615

Entire Report Reviewed By:

[Preliminary Report]

Haley Torrence
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.

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SAMPLE SUMMARY

HJ05535-01 L1794754-01 Non-Potable Water

Collected by	Collected date/time	Received date/time
	10/30/24 15:35	11/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2395235	1	11/06/24 17:17	11/11/24 17:13	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN

HJ05535-02 L1794754-02 Non-Potable Water

Collected by	Collected date/time	Received date/time
	10/30/24 15:35	11/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2395235	1	11/06/24 17:17	11/11/24 17:13	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN

HJ05535-03 L1794754-03 Non-Potable Water

Collected by	Collected date/time	Received date/time
	10/30/24 13:30	11/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2395235	1	11/06/24 17:17	11/11/24 17:13	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN

HJ05535-04 L1794754-04 Non-Potable Water

Collected by	Collected date/time	Received date/time
	10/30/24 14:20	11/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2395235	1	11/06/24 17:17	11/11/24 17:13	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN

HJ05535-05 L1794754-05 Non-Potable Water

Collected by	Collected date/time	Received date/time
	10/30/24 11:03	11/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2395235	1	11/06/24 17:17	11/11/24 17:13	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN

HJ05535-06 L1794754-06 Non-Potable Water

Collected by	Collected date/time	Received date/time
	10/30/24 16:40	11/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2395235	1	11/06/24 17:17	11/11/24 17:13	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN

SAMPLE SUMMARY

HJ05535-07 L1794754-07 Non-Potable Water

Collected by	Collected date/time	Received date/time
	10/30/24 16:40	11/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2395235	1	11/06/24 17:17	11/11/24 17:13	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN

HJ05535-08 L1794754-08 Non-Potable Water

Collected by	Collected date/time	Received date/time
	10/30/24 10:05	11/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2395235	1	11/06/24 17:17	11/11/24 17:13	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN

HJ05535-09 L1794754-09 Non-Potable Water

Collected by	Collected date/time	Received date/time
	10/30/24 12:35	11/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2395235	1	11/06/24 17:17	11/11/24 17:13	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2395661	1	11/06/24 09:16	11/13/24 17:43	ZRG	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.

[Preliminary Report]

Haley Torrence
Project Manager

HJ05535-01 SAMPLE RESULTS - 01

Collected date/time: 10/30/24 15:35 L1794754

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.109	U	0.241	0.442	0.441	0.232	11/11/2024 17:13	WG2395235
(T) Barium	*116*					*30.0-143*	*11/11/2024 17:13*	WG2395235
(T) Yttrium	*97.4*					*30.0-136*	*11/11/2024 17:13*	WG2395235

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.359	J	0.336	0.517	11/13/2024 17:43	WG2395661

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.251	J	0.234	0.365	0.269	0.204	11/13/2024 17:43	WG2395661
(T) Barium-133	*82.0*					*30.0-143*	*11/13/2024 17:43*	WG2395661

HJ05535-02 SAMPLE RESULTS - 02

Collected date/time: 10/30/24 15:35 L1794754

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.435		0.187	0.386	0.332	0.176	11/11/2024 17:13	WG2395235
(T) Barium	*126*					*30.0-143*	*11/11/2024 17:13*	WG2395235
(T) Yttrium	*108*					*30.0-136*	*11/11/2024 17:13*	WG2395235

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.10		0.485	0.594	11/13/2024 17:43	WG2395661

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.666		0.447	0.932	0.492	0.324	11/13/2024 17:43	WG2395661
(T) Barium-133	*63.7*					*30.0-143*	*11/13/2024 17:43*	WG2395661

HJ05535-05 SAMPLE RESULTS - 03

Collected date/time: 10/30/24 13:30 L1794754

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.380	J	0.268	0.545	0.484	0.257	11/11/2024 17:13	WG2395235
(T) Barium	*121*					*30.0-143*	*11/11/2024 17:13*	WG2395235
(T) Yttrium	*105*					*30.0-136*	*11/11/2024 17:13*	WG2395235

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.863		0.429	0.598	11/13/2024 17:43	WG2395661

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.483		0.335	0.709	0.351	0.245	11/13/2024 17:43	WG2395661
(T) Barium-133	*68.2*					*30.0-143*	*11/13/2024 17:43*	WG2395661

HJ05535-04 SAMPLE RESULTS - 04

Collected date/time: 10/30/24 14:30 L1794754

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.09		0.553	1.08	0.988	0.524	11/11/2024 17:13	WG2395235
(T) Barium	*127*					*30.0-143*	*11/11/2024 17:13*	WG2395235
(T) Yttrium	*79.7*					*30.0-136*	*11/11/2024 17:13*	WG2395235

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.30		0.605	1.04	11/13/2024 17:43	WG2395661

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.211	J	0.245	0.371	0.334	0.236	11/13/2024 17:43	WG2395661
(T) Barium-133	*69.7*					*30.0-143*	*11/13/2024 17:43*	WG2395661

HJ05535-05 SAMPLE RESULTS - 05

Collected date/time: 10/30/24 11:03 L1794754

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.499	U	0.680	1.16	1.23	0.643	11/11/2024 17:13	WG2395235
(T) Barium	*93.0*					*30.0-143*	*11/11/2024 17:13*	WG2395235
(T) Yttrium	*98.6*					*30.0-136*	*11/11/2024 17:13*	WG2395235

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.75		0.862	1.30	11/13/2024 17:43	WG2395661

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	1.26		0.530	1.20	0.421	0.285	11/13/2024 17:43	WG2395661
(T) Barium-133	*79.6*					*30.0-143*	*11/13/2024 17:43*	WG2395661

HJ05535-06 SAMPLE RESULTS - 06

Collected date/time: 10/30/24 16:40 L1794754

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.307	U	0.480	0.951	0.903	0.477	11/11/2024 17:13	WG2395235
(T) Barium	*96.8*					*30.0-143*	*11/11/2024 17:13*	WG2395235
(T) Yttrium	*99.7*					*30.0-136*	*11/11/2024 17:13*	WG2395235

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	2.08		0.836	1.03	11/13/2024 17:43	WG2395661

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	2.08		0.685	1.93	0.493	0.322	11/13/2024 17:43	WG2395661
(T) Barium-133	*84.4*					*30.0-143*	*11/13/2024 17:43*	WG2395661

HJ05535-07 SAMPLE RESULTS - 07

Collected date/time: 10/30/24 16:40 L1794754

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.775	J	0.578	1.06	1.04	0.547	11/11/2024 17:13	WG2395235
(T) Barium	*96.3*					*30.0-143*	*11/11/2024 17:13*	WG2395235
(T) Yttrium	*97.8*					*30.0-136*	*11/11/2024 17:13*	WG2395235

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	2.78		0.856	1.12	11/13/2024 17:43	WG2395661

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	2.00		0.631	1.58	0.421	0.279	11/13/2024 17:43	WG2395661
(T) Barium-133	*92.4*					*30.0-143*	*11/13/2024 17:43*	WG2395661

HJ05535-08 SAMPLE RESULTS - 08

Collected date/time: 10/30/24 10:05 L1794754

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	1.72		0.344	0.621	0.579	0.304	11/11/2024 17:13	WG2395235
(T) Barium	*135*					*30.0-143*	*11/11/2024 17:13*	WG2395235
(T) Yttrium	*103*					*30.0-136*	*11/11/2024 17:13*	WG2395235

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	3.03		0.603	0.671	11/13/2024 17:43	WG2395661

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	1.31		0.495	1.09	0.340	0.236	11/13/2024 17:43	WG2395661
(T) Barium-133	*91.2*					*30.0-143*	*11/13/2024 17:43*	WG2395661

HJ05535-09 SAMPLE RESULTS - 09

Collected date/time: 10/30/24 12:35 L1794754

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.45		0.312	0.597	0.524	0.277	11/11/2024 17:13	WG2395235
(T) Barium	*116*					*30.0-143*	*11/11/2024 17:13*	WG2395235
(T) Yttrium	*94.5*					*30.0-136*	*11/11/2024 17:13*	WG2395235

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	2.38		0.521	0.635	11/13/2024 17:43	WG2395661

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.932		0.417	0.863	0.359	0.238	11/13/2024 17:43	WG2395661
(T) Barium-133	*101*					*30.0-143*	*11/13/2024 17:43*	WG2395661

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

Method Blank (MB)

(MB) R4145723-1 11/11/24 17:13

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	-0.0721	U	0.142	0.266	0.140
(T) Barium	*116*		*116*		
(T) Yttrium	*110*		*110*		

L1794754-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1794754-08 11/11/24 17:13 • (DUP) R4145723-5 11/11/24 17:13

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	1.72	0.344	0.579	0.304	1.24	0.382	0.668	0.348	32.8	0.943		20	3
(T) Barium	*135*				*117*	*117*							
(T) Yttrium	*103*				*95.4*	*95.4*							

Laboratory Control Sample (LCS)

(LCS) R4145723-2 11/11/24 17:13

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.38	87.6	80.0-120	
(T) Barium			*102*		
(T) Yttrium			*109*		

L1790823-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1790823-01 11/11/24 17:13 • (MS) R4145723-3 11/11/24 17:13 • (MSD) R4145723-4 11/11/24 17:13

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	0.786	17.3	16.4	99.1	93.2	1	70.0-130			5.88		20
(T) Barium		*124*			*117*	*130*							
(T) Yttrium		*99.7*			*88.6*	*93.8*							

WG2395661 QUALITY CONTROL SUMMARY

Radiochemistry by Method SM7500Ra-B,M

L1794754-01,02,03,04,05,06,07,08,09

Method Blank (MB)

(MB) R4145996-1 11/12/24 21:39

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	-0.00464	U	0.0157	0.0403	0.0272
(T) Barium-133	*67.8*		*67.8*		

L1794754-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1794754-02 11/13/24 17:43 • (DUP) R4145996-5 11/13/24 17:43

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.666	0.447	0.492	0.324	0.231	0.337	0.496	0.331	97.2	0.778	J	20	3
(T) Barium-133	*63.7*				*62.2*	*62.2*							

Laboratory Control Sample (LCS)

(LCS) R4145996-2 11/13/24 17:43

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.16	103	80.0-120	
(T) Barium-133			*78.9*		

L1790747-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1790747-01 11/13/24 17:43 • (MS) R4145996-3 11/13/24 17:43 • (MSD) R4145996-4 11/13/24 17:43

Analyte	Spike Amount Bq/l	Original Result Bq/l	MS Result Bq/l	MSD Result Bq/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	0.740	0.0357	0.607	0.690	77.2	88.5	1	75.0-125			12.8		20
(T) Barium-133		*72.3*			*80.6*	*86.5*							

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	LAO000356
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.

SUBCONTRACT ORDER
Transfer Chain of Custody

B084

Pace Analytical Services, LLC
HJ05535

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L1794754

Sample: HJ05535-01
Name: AW-01

Sampled: 10/30/24 15:35
Matrix: Ground Water
Preservative: HNO3, pH <2

-01

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/12/24 16:00	04/28/25 15:35	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HJ05535-02
Name: AW-01 DUP

Sampled: 10/30/24 15:35
Matrix: Ground Water
Preservative: HNO3, pH <2

-02

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/12/24 16:00	04/28/25 15:35	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HJ05535-03
Name: AW-08

Sampled: 10/30/24 13:30
Matrix: Ground Water
Preservative: HNO3, pH <2

-03

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/12/24 16:00	04/28/25 13:30	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HJ05535-04
Name: AW-09

Sampled: 10/30/24 14:20
Matrix: Ground Water
Preservative: HNO3, pH <2

-04

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/12/24 16:00	04/28/25 14:20	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HJ05535

L7947547

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

Sample: HJ05535-05
Name: AW-10

Sampled: 10/30/24 11:03
Matrix: Ground Water
Preservative: HNO3, pH <2

-05

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/12/24 16:00	04/28/25 11:03	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HJ05535-06
Name: AW-16 DUP

Sampled: 10/30/24 16:40
Matrix: Ground Water
Preservative: HNO3, pH <2

-06

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/12/24 16:00	04/28/25 16:40	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HJ05535-07
Name: AW-16

Sampled: 10/30/24 16:40
Matrix: Ground Water
Preservative: HNO3, pH <2

-07

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/12/24 16:00	04/28/25 16:40	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HJ05535-08
Name: AW-17

Sampled: 10/30/24 10:05
Matrix: Ground Water
Preservative: HNO3, pH <2

-08

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/12/24 16:00	04/28/25 10:05	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

SUBCONTRACT ORDER
Transfer Chain of Custody
Pace Analytical Services, LLC
HJ05535

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L7947541

Sample: HJ05535-09
Name: AW-18

Sampled: 10/30/24 12:35
Matrix: Ground Water
Preservative: HNO3, pH <2

-09

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/12/24 16:00	04/28/25 12:35	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

CRazelb 11.01.24 0900
7796 5167 4476

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		
RA Screen <0.5 mR/hr:	Y N		

16.1+0.3=16.4 MSAF

Please email results to Diane Billings at diane.billings@pacelabs.com

Date Shipped: 10/31/24 Total # of Containers: 9 Sample Origin (State): IL PO #: _____

Turn-Around Time Requested ☐ NORMAL ☐ RUSH Date Results Needed: _____

Relinquished By	Date/Time	Received By	Date/Time
	10/31/24 1020		
Relinquished By	Date/Time	Received By	Date/Time

Sample Temperature Upon Receipt	____ °C
Sample(s) Received on Ice	Y or N
Proper Bottles Received in Good Condition	Y or N
Bottles Filled with Adequate Volume	Y or N
Samples Received Within Hold Time	Y or N
Date/Time Taken From Sample Bottle	Y or N

ANALYTICAL REPORT

November 20, 2024

Pace IR - Peoria, IL

Sample Delivery Group:	L1795811
Samples Received:	11/05/2024
Project Number:	HJ05664
Description:	
Site:	001
Report To:	Diane Billings 2231 W. Altorfer Drive Peoria, IL 61615

Entire Report Reviewed By:

[Preliminary Report]

Haley Torrence
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.

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SAMPLE SUMMARY

HJ05664-01 L1795811-01 Non-Potable Water

			Collected by	Collected date/time	Received date/time
				10/31/24 13:39	11/05/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2397041	1	11/11/24 14:23	11/16/24 14:09	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2399468	1	11/11/24 12:35	11/16/24 14:09	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2399468	1	11/11/24 12:35	11/14/24 19:33	ZRG	Mt. Juliet, TN

HJ05664-02 L1795811-02 Non-Potable Water

			Collected by	Collected date/time	Received date/time
				10/31/24 13:50	11/05/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2397041	1	11/11/24 14:23	11/16/24 14:09	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2399468	1	11/11/24 12:35	11/16/24 14:09	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2399468	1	11/11/24 12:35	11/14/24 19:33	ZRG	Mt. Juliet, TN

HJ05664-03 L1795811-03 Non-Potable Water

			Collected by	Collected date/time	Received date/time
				10/31/24 11:56	11/05/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2397041	1	11/11/24 14:23	11/16/24 14:09	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2399468	1	11/11/24 12:35	11/16/24 14:09	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2399468	1	11/11/24 12:35	11/14/24 19:33	ZRG	Mt. Juliet, TN

HJ05664-05 L1795811-04 Non-Potable Water

			Collected by	Collected date/time	Received date/time
				10/31/24 14:00	11/05/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2397041	1	11/11/24 14:23	11/16/24 14:09	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2399468	1	11/11/24 12:35	11/16/24 14:09	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2399468	1	11/11/24 12:35	11/14/24 19:33	ZRG	Mt. Juliet, TN

HJ05664-06 L1795811-05 Non-Potable Water

			Collected by	Collected date/time	Received date/time
				10/31/24 12:30	11/05/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2397041	1	11/11/24 14:23	11/16/24 14:09	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2399468	1	11/11/24 12:35	11/16/24 14:09	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2399468	1	11/11/24 12:35	11/14/24 19:33	ZRG	Mt. Juliet, TN

HJ05664-07 L1795811-06 Non-Potable Water

			Collected by	Collected date/time	Received date/time
				10/31/24 11:18	11/05/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2397041	1	11/11/24 14:23	11/16/24 14:09	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2399468	1	11/11/24 12:35	11/16/24 14:09	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2399468	1	11/11/24 12:35	11/14/24 19:33	ZRG	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.

[Preliminary Report]

Haley Torrence
Project Manager

SAMPLE RESULTS - 01

HJ05664-01
Collected date/time: 10/31/24 13:39
L1795811

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	2.50		0.488	0.804	0.862	0.449	11/16/2024 14:09	WG2397041
(T) Barium	*102*					*30.0-143*	*11/16/2024 14:09*	WG2397041
(T) Yttrium	*79.3*					*30.0-136*	*11/16/2024 14:09*	WG2397041

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	3.09		0.603	0.936	11/16/2024 14:09	WG2399468

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.591		0.354	0.648	0.364	0.241	11/14/2024 19:33	WG2399468
(T) Barium-133	*103*					*30.0-143*	*11/14/2024 19:33*	WG2399468

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.796		0.352	0.583	0.649	0.338	11/16/2024 14:09	WG2397041
(T) Barium	*81.9*					*30.0-143*	*11/16/2024 14:09*	WG2397041
(T) Yttrium	*90.1*					*30.0-136*	*11/16/2024 14:09*	WG2397041

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.796		0.393	0.747	11/16/2024 14:09	WG2399468

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	-0.0601	U	0.174	0.236	0.370	0.242	11/14/2024 19:33	WG2399468
(T) Barium-133	*88.5*					*30.0-143*	*11/14/2024 19:33*	WG2399468

HJ05664-03 SAMPLE RESULTS - 03

Collected date/time: 10/31/24 11:56 L1795811

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.354	J	0.393	0.694	0.742	0.387	11/16/2024 14:09	WG2397041
(T) Barium	*86.1*					*30.0-143*	*11/16/2024 14:09*	WG2397041
(T) Yttrium	*99.7*					*30.0-136*	*11/16/2024 14:09*	WG2397041

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.619	J	0.441	0.769	11/16/2024 14:09	WG2399468

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.265		0.199	0.328	0.201	0.149	11/14/2024 19:33	WG2399468
(T) Barium-133	*91.0*					*30.0-143*	*11/14/2024 19:33*	WG2399468

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.353	J	0.253	0.462	0.474	0.248	11/16/2024 14:09	WG2397041
(T) Barium	*103*					*30.0-143*	*11/16/2024 14:09*	WG2397041
(T) Yttrium	*90.7*					*30.0-136*	*11/16/2024 14:09*	WG2397041

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.379	J	0.277	0.526	11/16/2024 14:09	WG2399468

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.0261	U	0.114	0.155	0.227	0.162	11/14/2024 19:33	WG2399468
(T) Barium-133	*98.8*					*30.0-143*	*11/14/2024 19:33*	WG2399468

HJ05664-06 SAMPLE RESULTS - 05

Collected date/time: 10/31/24 12:30 L1795811

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.632		0.228	0.429	0.417	0.219	11/16/2024 14:09	WG2397041
(T) Barium	*97.7*					*30.0-143*	*11/16/2024 14:09*	WG2397041
(T) Yttrium	*101*					*30.0-136*	*11/16/2024 14:09*	WG2397041

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.679		0.303	0.546	11/16/2024 14:09	WG2399468

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.0468	U	0.199	0.256	0.352	0.235	11/14/2024 19:33	WG2399468
(T) Barium-133	*87.6*					*30.0-143*	*11/14/2024 19:33*	WG2399468

HJ05664-07 SAMPLE RESULTS - 06

Collected date/time: 10/31/24 11:18 L1795811

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.583		0.209	0.418	0.381	0.201	11/16/2024 14:09	WG2397041
(T) Barium	*109*					*30.0-143*	*11/16/2024 14:09*	WG2397041
(T) Yttrium	*90.1*					*30.0-136*	*11/16/2024 14:09*	WG2397041

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.06		0.368	0.492	11/16/2024 14:09	WG2399468

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.477		0.303	0.572	0.311	0.212	11/14/2024 19:33	WG2399468
(T) Barium-133	*95.4*					*30.0-143*	*11/14/2024 19:33*	WG2399468

Method Blank (MB)

(MB) R4148063-1 11/16/24 10:58

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	-0.190	U	0.142	0.288	0.151
(T) Barium	*94.6*		*94.6*		
(T) Yttrium	*97.4*		*97.4*		

L1792020-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1792020-08 11/16/24 14:09 • (DUP) R4148063-5 11/16/24 10:58

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.874	0.307	0.561	0.293	0.150	0.363	0.704	0.367	141	1.52	U	20	3
(T) Barium	*89.2*				*91.6*	*91.6*							
(T) Yttrium	*86.4*				*99.2*	*99.2*							

Laboratory Control Sample (LCS)

(LCS) R4148063-2 11/16/24 10:58

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.77	115	80.0-120	
(T) Barium			*87.9*		
(T) Yttrium			*100*		

L1792020-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1792020-05 11/16/24 14:09 • (MS) R4148063-3 11/16/24 10:58 • (MSD) R4148063-4 11/16/24 10:58

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	0.277	9.88	11.0	96.0	107	1	70.0-130			10.5		20
(T) Barium		*97.4*			*92.2*	*83.5*							
(T) Yttrium		*111*			*100*	*118*							

Method Blank (MB)

(MB) R4147734-1 11/14/24 19:33

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.00165	U	0.0217	0.0514	0.0381
(T) Barium-133	*95.2*		*95.2*		

L1795811-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1795811-06 11/14/24 19:33 • (DUP) R4147734-5 11/14/24 19:33

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.477	0.303	0.311	0.212	0.207	0.267	0.377	0.247	78.8	0.667	J	20	3
(T) Barium-133	*95.4*				*92.9*	*92.9*							

Laboratory Control Sample (LCS)

(LCS) R4147734-2 11/14/24 19:33

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.18	104	80.0-120	
(T) Barium-133			*90.3*		

L1791381-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1791381-02 11/14/24 19:33 • (MS) R4147734-3 11/14/24 19:33 • (MSD) R4147734-4 11/14/24 19:33

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	-0.139	19.2	20.2	96.0	101	1	75.0-125			4.93		20
(T) Barium-133		*90.5*			*97.8*	*89.9*							

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	LAO000356
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.

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HJ05664

A012

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

L1795811

Sample: HJ05664-01
Name: AP05S

Sampled: 10/31/24 13:39
Matrix: Ground Water
Preservative: HNO3, pH <2 -01

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/13/24 16:00	04/29/25 13:39	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HJ05664-02
Name: AP07S

Sampled: 10/31/24 13:50
Matrix: Ground Water
Preservative: HNO3, pH <2 -02

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/13/24 16:00	04/29/25 13:50	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HJ05664-03
Name: AW-05

Sampled: 10/31/24 11:56
Matrix: Ground Water
Preservative: HNO3, pH <2 -03

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/13/24 16:00	04/29/25 11:56	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HJ05664-05
Name: FIELD BLANK

Sampled: 10/31/24 14:00
Matrix: DI Water
Preservative: HNO3, pH <2 -04

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/13/24 16:00	04/29/25 14:00	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

SUBCONTRACT ORDER
Transfer Chain of Custody

Pace Analytical Services, LLC

HJ05664

SENDING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(800) 752-6651

RECEIVING LABORATORY

Pace Analytical - Mt Juliet, Tn
12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858

LIP5811

Sample: HJ05664-06
Name: AW-21

Sampled: 10/31/24 12:30
Matrix: Ground Water
Preservative: HNO3, pH <2

-05

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/13/24 16:00	04/29/25 12:30	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

Sample: HJ05664-07
Name: AW-19

Sampled: 10/31/24 11:18
Matrix: Ground Water
Preservative: HNO3, pH <2

-06

Analysis	Due	Expires	Comments
01-Radium 226/228 combined	11/13/24 16:00	04/29/25 11:18	need Ra-226 , Ra-228, total combined and QC. 10 Day TAT

178103-181 MSA9

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	7797 1773 4921	
RA Screen <0.5 mR/hr:	Y N		

(6)

Please email results to Diane Billings at diane.billings@pacelabs.com

Date Shipped: 11/4/24 Total # of Containers: 6 Sample Origin (State): IL PO #: _____

Turn-Around Time Requested ☐ NORMAL ☐ RUSH Date Results Needed: _____

Relinquished By	Date/Time	Received By	Date/Time
	11/4/24 0810	Damanti	11.5.24 0900

Sample Temperature Upon Receipt	____ °C
Sample(s) Received on Ice	Y or N
Proper Bottles Received in Good Condition	Y or N
Bottles Filled with Adequate Volume	Y or N
Samples Received Within Hold Time	Y or N
Date/Time Taken From Sample Bottle	Y or N

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 2

Section A Required Client Information:
Company: Vistra Corp-Edwards
Address: 7800 Cilco Lane
Peoria, IL 61607
Email To: Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911 Fax:
Requested Due Date/TAT: 10 day

Section B Required Project Information:
Report To: Brian Voelker
Copy To: Sam Davies: samantha.davies@vistracorp.com
Mark Davis: Mark.Davis1@vistracorp.com
Purchase Order No.:
Quote Reference:
Project Name:
Project Manager:
Project #:
Project Number:

Section C Invoice Information:
Attention: Brian Voelker
Company Name: Vistra Corp
Address: see Section A

REGULATORY AGENCY: NPDES, GROUND WATER, DRINKING WATER, UST, RCRA, OTHER
Site Location STATE: IL

EDW-2404 Rev 0

Item #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes: MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test ↓ Y/N	Requested Analysis Filtered (Y/N): EDW-257-301	EDW-845-301	EDW-SUP-000	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S	GW	G	10/29/24	1519		10	3	3	3		1					X	X	X		
2	AP07S																X	X	X		
3	AW-01																X	X	X		
4	AW-05																X	X	X		
5	~~AW-06~~	GW	G	10/29/24	1435		10	3	3	3		1					X	X	X		
6	AW-08																X	X	X		
7	AW-09																X	X	X		
8	AW-10																X	X	X		
9	~~AW-11~~	GW	G	10/29/24	1435		10	3	3	3		1					X	X	X		
10	~~AW-13~~	GW	G	10/29/24	1308		10	3	3	3		1					X	X	X		
11	~~AW-15S~~	GW	G	10/29/24	1140		10	3	3	3		1					X	X	X		
12	~~AW-15I~~	GW	G	10/29/24	1036		10	3	3	3		1					X	X	X		
13	AW-16																X	X	X		
14	AW-17																X	X	X		
15	AW-18																X	X	X		
16	AW-19																X	X	X		

ADDITIONAL COMMENTS: EDW-2404 Rev 0

RELINQUISHED BY / AFFILIATION: Brian Voelker — DATE: 10/29/24 — TIME: 1612

ACCEPTED BY / AFFILIATION: Z — DATE: 10/29/24 — TIME: 1612

SAMPLE CONDITIONS: Samples Intact (Y/N): Y; Custody Sealed Cooler (Y/N): N; Received on Ice (Y/N): Y; Temp in °C: 2.1

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jordan Bohannon
SIGNATURE of SAMPLER: JBohannon
DATE Signed (MM/DD/YY): 10/29/24

Observed Temp (Deg C): 2.1 Corrected Temp (Deg C): 2.1
Correction Factor (Deg C): 0.0
# of Coolers: 1
Delivery Method: FedEx UPS Walk-in USPS Other

HJ25201

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 2

Section A Required Client Information:

Company:	Vistra Corp-Edwards
Address:	7600 Cilco Lane
	Peoria, IL 61607
Email To:	Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911	Fax:
Requested Due Date/TAT:	10 day

Section B Required Project Information:

Report To:	Brian Voelker
Copy To:	Sam Davies: samantha.davies@vistracorp.com
	Mark Davis: Mark.Davis1@vistracorp.com
Purchase Order No.:	
Project Name:	
Project Number:	

Section C Invoice Information:

Attention:	Brian Voelker
Company Name:	Vistra Corp
Address:	see Section A
Quote Reference:	
Project Manager:	
Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	EDW-257-301	EDW-845-301	EDW-SUP-000	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AW-21																X	X	X		
2	SG-01																X	X			
3	XPW01A																X	X			
4	XPW02																X	X			
5	XPW03																X	X			
6	AW-06 Dup	GW	G	10/29/24	1519		10	3	3	3		1									Collected after AW-06
7				10/29/24																	
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					
16																					

IR Gun #: 15 Correction Factor (Deg C): 0.0

Observed Temp (Deg C): 2.1 Corrected Temp (Deg C): 2.1

Delivery Method: FedEx UPS Walk-in USPS Other

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q4 Rev 0	JBohannan	10/29/24	1612							
					10/29/24	1617	2.1	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jordan Bohannan

SIGNATURE of SAMPLER: JBohannan DATE Signed (MM/DD/YY): 10/29/24

~~HJ05533~~
HJ05535

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Vistra Corp-Edwards	Report To:	Brian Voelker	Attention:	Brian Voelker
Address:	7800 Cilco Lane	Copy To:	Sam Davies: samantha.davies@vistracorp.com	Company Name:	Vistra Corp
	Peoria, IL 61607		Mark Davis: Mark.Davis1@vistracorp.com	Address:	see Section A
Email To:	Brian.Voelker@VistraCorp.com	Purchase Order No.:		Quote Reference:	
Phone:	(217) 753-8911 Fax:	Project Name:		Project Manager:	
Requested Due Date/TAT:	10 day	Project Number:		Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	EDW-257-301	EDW-845-301	EDW-SUP-000	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S																X	X	X		
2	AP07S																X	X	X		
3	AW-01			10/30/24	1535		10	X	X	X			X				X	X	X		
4	~~AW-05~~ AW-61 Dup				1535		10	X	X	X			X				X	X	X		
5	AW-06																X	X	X		
6	AW-08				1330		9	X	X	X			X				X	X	X		Limited volume
7	AW-09				1420		10	X	X	X			X				X	X	X		
8	AW-10				1103		10	X	X	X			X				X	X	X		
9	AW-11																X	X	X		
10	AW-14																X	X	X		
11	AW-15																X	X	X		
12	~~AW-16S~~ AW-16 Dup				1640		10	X	X	X			X				X	X	X		
13	AW-16				1640		10	X	X	X			X				X	X	X		
14	AW-17				1005		10	X	X	X			X				X	X	X		
15	AW-18				1235		10	X	X	X			X				X	X	X		
16	AW-19			10/30/24													X	X	X		

IR Gun # 30 Correction Factor (Deg C) -0.1

Observed Temp (Deg C) 2.4 Corrected Temp (Deg C) 2.3

Delivery Method: FedEx UPS Walk-in USPS Other

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q4 Rev 0	Jim Davis	10/30/24	1715							
					10/30/24	1715	2.3	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jim Davis

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10/30/24

HJ05664

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 2

Section A Required Client Information:

Company:	Vistra Corp-Edwards
Address:	7800 Cilco Lane
	Peoria, IL 61607
Email To:	Brian.Voelker@VistraCorp.com
Phone: (217) 753-8911	Fax:
Requested Due Date/TAT:	10 day

Section B Required Project Information:

Report To:	Brian Voelker
Copy To:	Sam Davies: samantha.davies@vistracorp.com
	Mark Davis: Mark.Davis1@vistracorp.com
Purchase Order No.:	
Project Name:	
Project Number:	

Section C Invoice Information:

Attention:	Brian Voelker
Company Name:	Vistra Corp
Address:	see Section A
Quote Reference:	
Project Manager:	
Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: IL

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	EDW-257-301	EDW-845-301	EDW-SUP-000	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	AP05S			10/31/24	1339		10	X	X	X			X	X	X		X	X	X		
2	AP07S				1350		16	X	X	X				100	X		X	X	X		
3	AW-01																X	X	X		
4	AW-05				1156		10	X	X	X					X		X	X	X		
5	AW-06																X	X	X		
6	AW-08				0940		8	X									X	X	X		
7	AW-09																X	X	X		
8	AW-10																X	X	X		
9	AW-11																X	X	X		
10	AW-14																X	X	X		
11	AW-15																X	X	X		
12	AW-15S																X	X	X		
13	AW-16																X	X	X		
14	~~AW-17~~ Field Blank				1400		16	X	X	X					X		X	X	X		
15	~~AW-18~~ AW-21				1230		10	X	X	X					X		X	X	X		
16	AW-19				1118		10	X	X	X					X		X	X	X		

TR Gun #: 16 Correction Factor (Deg C): +.1

Observed Temp (Deg C): 1.1 Corrected Temp (Deg C): 1.2

Delivery Method: FedEx UPS Walk-in USPS Other 3

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDW-24Q4 Rev 0	Jim Dwell 10/31/24	10/31/24	1435		10/31/24	1435	✓	✓	✓	✓

SAMPLER NAME AND SIGNATURE

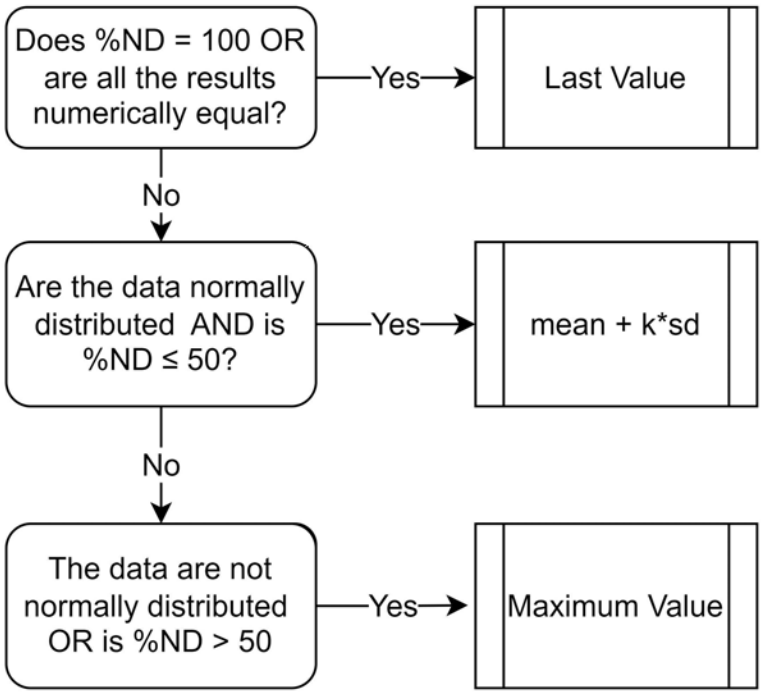
PRINT Name of SAMPLER: Jim Dwell

SIGNATURE of SAMPLER: Jim Dwell

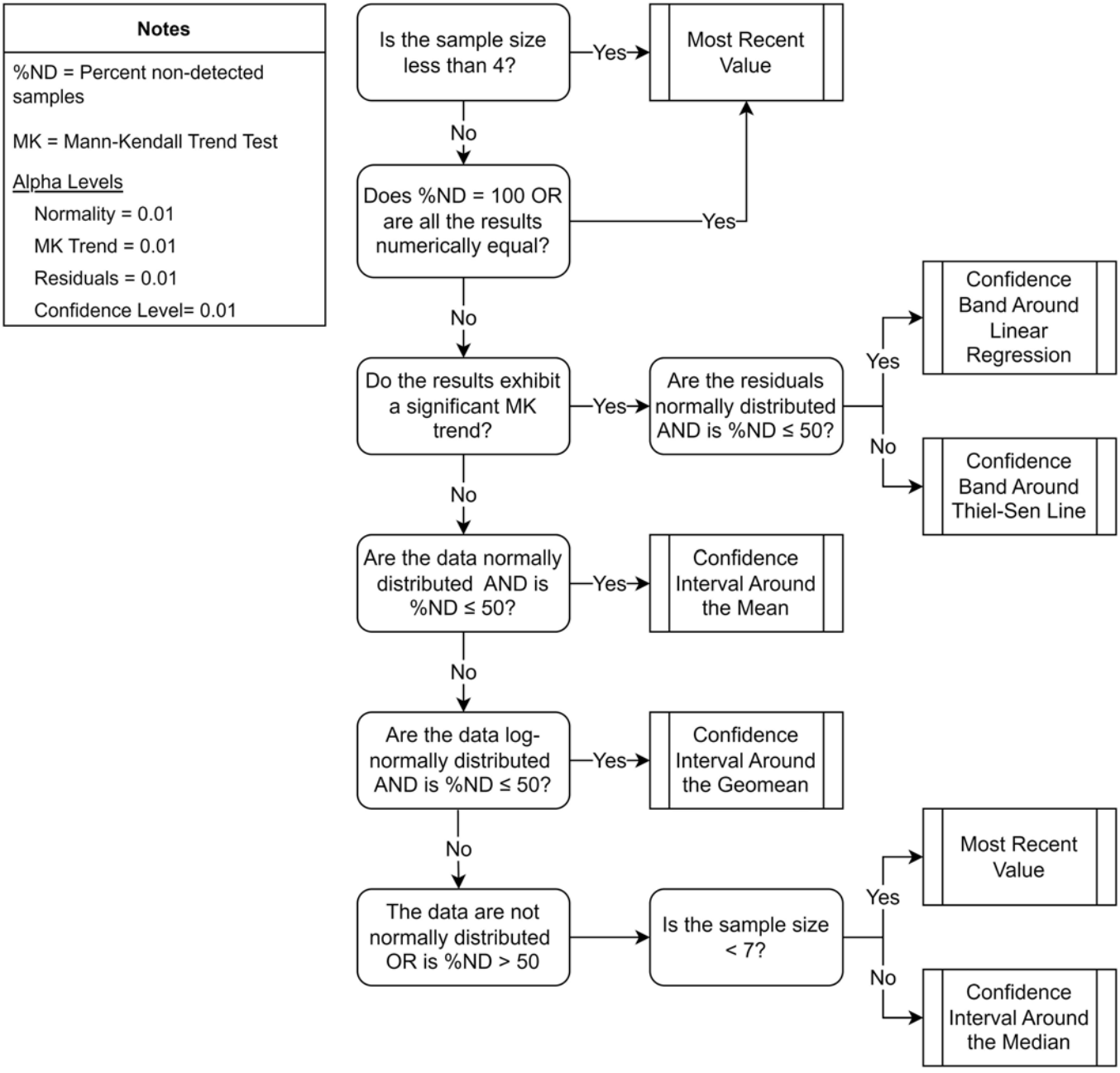
DATE Signed (MM/DD/YY): 10/31/24

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 METHODOLGY FOR DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS


Notes
%ND = Percent non-detected samples
MK = Mann-Kendall Trend Test
Alpha Levels
Normality = 0.01
MK Trend = 0.01
Residuals = 0.01
Confidence Level= 0.01
Is the sample size less than 4?
Yes
Most Recent Value
No
Does %ND = 100 OR are all the results numerically equal?
Yes
No
Do the results exhibit a significant MK trend?
Yes
Are the residuals normally distributed AND is %ND ≤ 50?
Yes
Confidence Band Around Linear Regression
No
Confidence Band Around Thiel-Sen Line
No
Are the data normally distributed AND is %ND ≤ 50?
Yes
Confidence Interval Around the Mean
No
Are the data log-normally distributed AND is %ND ≤ 50?
Yes
Confidence Interval Around the Geomean
No
The data are not normally distributed OR is %ND > 50
Is the sample size < 7?
Yes
Most Recent Value
No
Confidence Interval Around the Median